

The New
GUIDE



Fuses – Fusegear

To reach
Technical Support
please dial:
+33 4 26 29 29 29
or mail to:
ts@fr.ferrazshawmut.com

Consult the e-Advisor
<http://www.ferrazshawmut.com/products/index.html>

An optimized industrial tool

Since Ferraz and Gould Shawmut fused in 1999, our strategy of streamlining industrial operations has resulted in a consistent industrial set-up around our processes:

- In North America, the Newburyport, Toronto and Juarez locations are focused on manufacturing fuses and gear to UL and CSA standards.
- In Europe and around the Mediterranean, the Saint Bonnet de Mure and El Fahs locations build fuses and gear to European and other international standards, while the Provins and La Mure locations house the power interconnection and thermal management activities.
- In Asia, plants at Bangalore, Shanghai and Nagahama serve the major markets of that continent. All of those locations are united around a global quality, safety and environment policy.

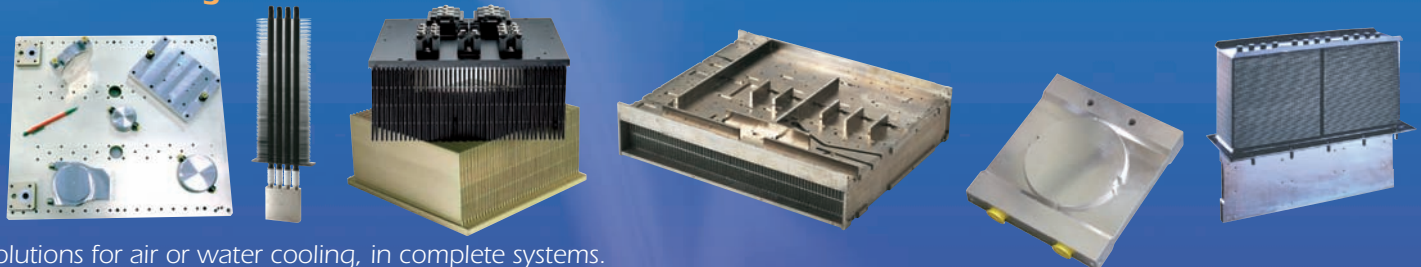
A full basket of solutions around the fuse

Low voltage fuses and fusegear



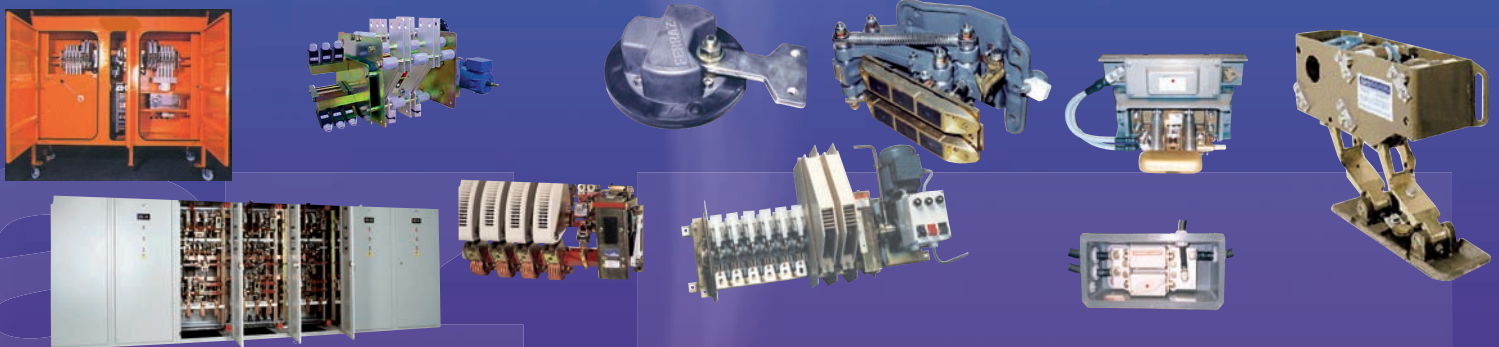
LV fuses and fusegear meeting the world's standards, whether UL-CSA (Smart Spot, Amp Trap 2000), BS88 (Blue Dot), NF (Modulostar), or DIN (Lindner, Linocur, Innozed). Power semi-conductor protection fuses (Protistor).

Thermal Management



Solutions for air or water cooling, in complete systems.

Power interconnection



High power disconnectors, switches and shunting switches. Current collector devices and earth return current units. Low voltage contactors, customized cabinets

Medium voltage fuses and fusegear



MV fuses.
Fault indicators on power lines.

Know-how

To start with, Ferraz Shawmut has outstanding technical know-how. The company's reputation around the world is based on technical mastery.

But that's not enough in today's world, where the customer expects much more than just the product and how it's used. So Ferraz Shawmut's know-how is now exercised in every process within the company.

Ferraz Shawmut is the undisputed leader in the field of circuit protection and fuses. A fuse is the ultimate solution in an industrial setting: safer, cheaper and more adaptable to changes.



Le fusible - Estampillé sûr et fiable !

The fuse hallmark - safe and reliable!

A fuse acts fast. The sheer speed at which it clears a fault makes it the most energy limiting protection device in short circuit conditions.

A fuse can clear very high fault currents. Its breaking capacity is its second essential characteristic.

Some models can clear short circuit currents up to 250 kA, without breaking. No other circuit protection device can do that.

A fuse is safe. The principle on which it operates is the best proof of that. Inside the fuse body, a metal element melts down when current is too high. There is no outside sign when that happens, because the electrical arc generated when the fuse blows is trapped inside it.

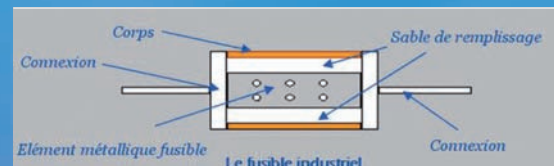
The resulting energy is absorbed by the sand filling.

A fuse is reliable. The physics it is based on make its characteristics extremely stable over time. In the vast majority of cases a fuse won't age.

A fuse is easy to coordinate. Fuses can be selectively coordinated.

Only the smallest fuse closest to the short circuit will open.

Fuses higher up in the installation are not affected.



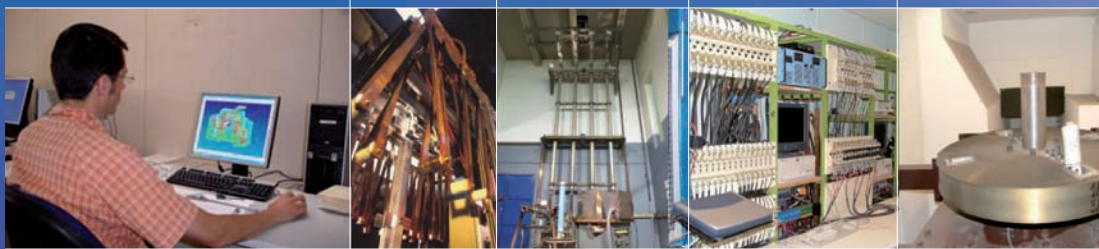
For further information,
ask our sales team for our
Simply Perfect video.



Operational Quality

The customer in our workshop! The customer in our workshop is a real watchword for our operational team.

Customer requirements, relating to both product and service, are taken into account all along the Supply Chain. It's this department's responsibility to enforce those requirements day to day. That's know-how, too.



Convenience

"The closer we are, the better we can serve you", that's our motto and goal.

Points of sale

The Ferraz Shawmut brand is available somewhere near any customer through 500 professional distributor points of sale in France and more than 4500 of them worldwide. That determination to remain as close as possible is accentuated by the strong commitment of our people in the field to driving and training our network of distributors.



Technical Support

We have set up specific technical support resources – our hotline (**call 0820 820 846**) and technical support over the Web (**ts@fr.ferrazshawmut.com**) – to make sure Ferraz Shawmut's technical knowledge is always conveniently available.

Through those channels you can get or confirm product cross-references, approve solutions with our specialists or ask any questions of a technical nature.

People who've tried this direct service keep coming back!

Logistics

One of our major efforts is to have a worldwide logistics organization for fast, reliable service.

Supply and delivery logistics are an integral part of our goal of convenience.

So Ferraz Shawmut has invented the TOP STARS.

These are fast moving products that should never suffer a stockout.

In this document, they are highlighted via orange rectangle.

TOP STARS are our customer focus in logistics!



Size	Current (A)	Voltage (V)	Cat.number w/o indicator	Ref.number w/o indicator	Voltage (V)	Cat.number with striker	Ref.number with striker	Pckg
22 x 58	2	690	FR22GG69V2	F219241J	-	-		10
22 x 58	4	690	FR22GG69V4	H219772J	690	FR22GG69V4P	R214628J	10
22 x 58	6	690	FR22GG69V6	P222216J	690	FR22GG69V6P	A215648J	10
22 x 58	8	690	FR22GG69V8	L222972J	690	FR22GG69V8P	F216665J	10
22 x 58	10	690	FR22GG69V10	T200761J	690	FR22GG69V10P	W217691J	10

Communication

Ferraz Shawmut didn't wait for the kaleidoscope of new communication technologies to get the message out. It's in our business culture to explain, advise and train.



The three major resources to inform you about Ferraz Shawmut's offering are:

- **the Fuse & Fusegear Guide** you're holding.

It gives a simplified presentation of our basic products,

- **the Advisor**, our complete catalog on CD-ROM and on line in the e-Advisor version on Internet. It will give you the most exhaustive technical data on all our product lines,

- **the Web site at www.ferrazshawmut.com**



Training








Spreading the message of our know-how

It's vital to train our customers – OEMs, end users, or distributors – in circuit protection.

That's the mission of some members of the Ferraz Shawmut Technical Support team. Using the appropriate resources for the audience, via our training program EduPack, our sales engineers provide training in the notions behind circuit protection, Ferraz Shawmut's offering, and the standards in the field.



Fuses for what applications?

	A Medium Voltage	B Low Voltage	C Printed circuit boards	D Power electronics	E Forklift batteries
1 Ferrule-style fuses					
2 Blade-style fuses					
3 Square body fuses					
4 Special purpose fuses					
Infrastructure / Construction					
MV electrical systems	■				
MV/LV transformers	■				
LV electrical systems		■			
LV mains / branch circuits		■			
Manufacturing equipment and automatic control for industry					
MV electric motors	■				
LV electric motors		■			
Soft starters				■	
Speed controllers				■	
Uninterrupted power supplies (UPS)				■	
Rectifiers				■	
Converters				■	
Printed circuit boards			■		
Point of use equipment		■			
Logistics					
Forklift trucks					■
Electric pallet-forks					■
Motorized platforms					■

Fuses or circuit breakers?

The miniature fuse solution is the best choice to protect printed circuit boards.

Protection by ultrafast fuses is the best choice for power electronics (e.g. thyristors).

To protect low voltage general distribution circuits, two alternatives share the market: fuses and circuit breakers.

In residential applications, an easy-to-use circuit breaker is often chosen over the more economical fuse.

But in industrial applications, the fuse offers better performances than the circuit breaker and remains the best solution:

- to protect against short circuits, thanks to a high breaking capacity, up to 250 kA
- to guarantee the circuit will open, thanks to the simple physical principle behind the fuse
- for risk-free interchangeability thanks to IEC standard 269, which defines melting time/current data
- for the range of mounting techniques: on clips, in disconnectors, on busbars, on threaded rods, by welding, etc.

Selection guidelines

Ask the right questions to choose the right fuse

What type of application?

- A** : MV protection
- B** : LV protection
- C** : PCB protection
- D** : Power electronics protection
- E** : Forklift battery protection

What type of fuse?

- 1** : Ferrule-style fuses
- 2** : Blade-style fuses
- 3** : Square body fuses
- 4** : Special purpose fuses

What operating class?

- Class gG for general purpose use fuses on distribution circuits
- Class aM for back-up fuses on direct-on-line motors
- Class gR, ultrafast fuses (UR), to break all types of overload and short-circuit current
- Class aR, ultrafast fuses (UR), to break all types of short-circuit current requiring an outside device to clear small overloads

What size fuse?

Diameter in mm for fuses with cylindrical bodies

- 8, 10, 14, 22

Cross section in mm for fuses with rectangular bodies

- 40 x 21 size 000
- 46 x 30 size 00
- 46 x 36 size 0
- 52 x 47 size 1
- 74 x 60 size 2
- 75 x 75 size 3
- 107 x 90 size 4

Cross section in mm for fuses with square bodies

- 40 x 40 size 30
- 51 x 51 size 31
- 60 x 60 size 32
- 75 x 75 size 33

What operating voltage?

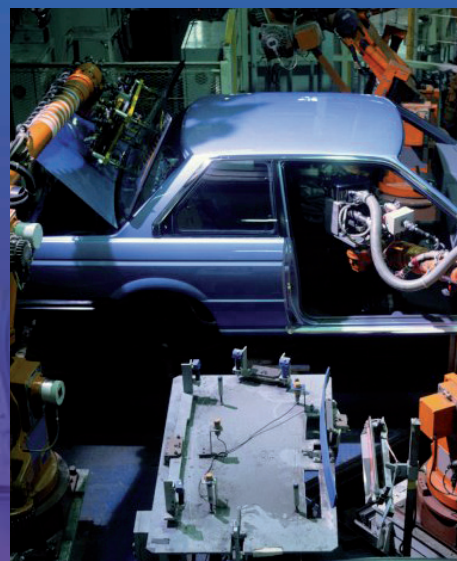
400, 500, 690 ...

What fuse rating in Amperes?

1, 2, 4, 6, 8, 10 ...

What type of blown fuse indication?

- w/o indicator
- with indicator
- with striker



Cross-reference chart at your disposal

If the fuse you've got isn't the Ferraz Shawmut brand, use our cross-reference software SAF/X-Refs on line at the Ferraz Shawmut Web site at:

http://www.ferraz-shawmut.com/xref/index.php?lan_code=gb



The Catalog Number

A new, more explicit, customer focused way of classifying items

Taille 0

0	40	500	K095114C	NH0AM50V40-3	N095232C	NH0AM50V40-4	3
0	50	500	L095115C	NH0AM50V50-3	N095233C	NH0AM50V50-4	3
0	63	500	M095116C	NH0AM50V63-3	X095240C	NH0AM50V63-4	3
0	80	500	P095118C	NH0AM50V80-3	Z095242C	NH0AM50V80-4	3
0	100	500	R095120C	NH0AM50V100-3	A095243C	NH0AM50V100-4	3
0	125	500	T095122C	NH0AM50V125-3	B095244C	NH0AM50V125-4	3
0	160	500	U095124C	NH0AM50V160-3	C095245C	NH0AM50V160-4	3

At present:

K095114C

In the future:

NH0AM50V40-3

Technology

NH =
Niederspannung-
Hochleistung

Size

Curve

**Voltage in
V /10**

**Current in
A**

Miscellaneous:
connections,
indicator,
striker, etc.

NH for Niederspannung-Hochleistung

NH0AM50V40-3



FR for FRENCH standard

FR14GG69V10



PC for Protection of semi-Conductors

PC30UD69V125TF



MI for Miniatures

MI6SB25V0,5



Contents

▪ IEC General Purpose Fuses	
▪ gG ferrule-style fuses	9 - 11
▪ aM ferrule-style fuses	12 - 13
▪ Modulostar for IEC Ferrule Fuses (CMS).....	14 - 18
▪ NH 400V - 500V & 600V gG/aM fuses	19 - 32
▪ Fuse holders for plain blade fuses.....	30
▪ Fuse holders for plain blade fuses with striker.....	33
▪ Master Fuse.....	34
▪ DIN D gG fuses systems (fuses & bases).....	35 - 38
▪ DIN DO Neozed® gG fuses systems.....	39 - 45
▪ BS 88 -1 -2 & 6 Low Voltage fuses.....	48 - 50
▪ UL-CSA General Purpose Fuses	
▪ Product Selector	52
▪ Fuses links	53 - 66
▪ Modulostar® Fuse holders	67 - 72
▪ FSPDB connections.....	73
▪ Miniature Fuses	
▪ Miniature Fuses	75 - 79
▪ Convenience Fuses.....	80 - 84
▪ Semiconductor Protection Fuses	
▪ Protistor® Mapping	86 - 87
▪ European Ferrule-style Protistor® fuses	88 - 89
▪ Modulostar® for Semiconductor ferrule fuses.....	90 - 94
▪ DIN D & DO gR fuses	95
▪ Protistor® DIN 80 mm standard fuse sizes 000-00	96 - 97
▪ Protistor® DIN blade-style fuses	98 - 102
▪ Protistor® BS 88-4 fuses.....	103 - 106
▪ Square body Protistor® fuses	107 - 121
▪ American Round Fuses Protistor®	121 - 132
▪ Medium Voltage Fuses	
▪ Fuses for Street lighting - HVI distribution	134 - 136
▪ Fuses for Power Utilities.....	136 - 137
▪ Other Fuses	
▪ aD Fuses	139
▪ CNL CNN fuses for Fork Truck protection.....	139 - 140
▪ VSP for MOV Protection.....	140 - 141
▪ Multi-meter fuse	141
▪ Other Products	
▪ Surge Trap DIN rail TVSS.....	143
▪ Drive Protection Module.....	144
▪ Other solutions	
▪ Power Interconnection	146 - 149
▪ Thermal Management	150 - 153
▪ Traction products	154 - 156

IEC General Purpose Fuses

- **gG ferrule-style fuses** 9 - 11
- **aM ferrule-style fuses** 12 - 13
- **Modulostar for IEC Ferrule Fuses (CMS)** 14 - 18
- **NH 400V - 500V & 600V gG/aM fuses** 19 - 32
 - NH 500V gG fuses 19 - 21
 - NH 400V gG Fuses Isolated Lug 22 - 23
 - NH 500V gG Fuses Isolated Lug 23 - 24
 - NH 500V aM fuses 25 - 26
 - NH 690V aM fuses 27 - 28
 - NH 400V gTR fuses 29
 - NH 690V gG/aM with striker 31 - 32
- **Fuse holders for plain blade fuses** 30
- **Fuse holders for plain blade fuses with striker** 33
- **Master Fuse** 34
- **DIN D gG fuses systems (fuses & bases)** 35 - 38
- **DIN DO Neozed[®] gG fuses systems** 39 - 45
 - Fuses gG/aM 39 - 40
 - Scew caps - gauges rings 40 - 41
 - Other bases for Neozed[®] 42
 - Accessories for Neozed[®] bases 43 - 44
 - Linocur - Linobloc Switch disconnectors fuses 45
- **BS 88 -1 -2 & 6 Low Voltage fuses** 48 - 50

gG 8.5 x 31.5 - 400V



Size	Current (A)	Voltage (V)	Cat. number w/o indicator	Ref. number w/o indicator	Cat. number with indicator	Ref. number with indicator	Voltage (V)	Ref. number with striker	Cat. number with striker	Pckg
8,5 x 31,5	0,5	400	FR8GG40V0.5	P218191J	-					10
8,5 x 31,5	1	400	FR8GG40V1	C218709J	-					10
8,5 x 31,5	2	400	FR8GG40V2	Q219227J	FR8GG40V2I	B222204J				10
8,5 x 31,5	4	400	FR8GG40V4	W222958J	FR8GG40V4I	X222959J				10
8,5 x 31,5	6	400	FR8GG40V6	A211025J	FR8GG40V6I	V201291J				10
8,5 x 31,5	8	400	FR8GG40V8	B213096J	FR8GG40V8I	B211026J				10
8,5 x 31,5	10	400	FR8GG40V10	A214613J	FR8GG40V10I	A212060J				10
8,5 x 31,5	12	400	FR8GG40V12	R216146J	FR8GG40V12I	C213097J				10
8,5 x 31,5	16	400	FR8GG40V16	P216650J	FR8GG40V16I	Y214105J				10
8,5 x 31,5	20	400	FR8GG40V20	F217677J	FR8GG40V20I	J215127J				10
8,5 x 31,5	25	400	FR8GG40V25	D218710J	FR8GG40V25I	S216147J				10
8,5 x 31,5	Neutral		FRN832	X211045J	FRN832	X211045J				10

gG 10.3 x 38 - 400/500V



Size	Current (A)	Voltage (V)	Cat. number w/o indicator	Ref. number w/o indicator	Cat. number with indicator	Ref. number with indicator	Voltage (V)	Cat. number with striker	Ref. number with striker	Pckg
10,3 x 38	0,5	500	FR10GG50V0.5	C211027J						10
10,3 x 38	1	500	FR10GG50V1	B212061J						10
10,3 x 38	2	500	FR10GG50V2	D213098J	FR10GG50V2I	S216653J	400	FR10GG40V2P	G083703J	10
10,3 x 38	4	500	FR10GG50V4	X213598J	FR10GG50V4I	E217170J	400	FR10GG40V4P	D084758J	10
10,3 x 38	6	500	FR10GG50V6	K215128J	FR10GG50V6I	T218195J	400	FR10GG40V6P	Y084799J	10
10,3 x 38	8	500	FR10GG50V10	D217169J	FR10GG50V8I	V219231J	400	FR10GG40V8P	F083955J	10
10,3 x 38	10	500	FR10GG50V10	S218194J	FR10GG50V10I	E222207J	400	FR10GG40V10P	A084801J	10
10,3 x 38	12	500	FR10GG50V12	W219761J	FR10GG50V12I	H200751J	400	FR10GG40V12P	G083956J	10
10,3 x 38	16	500	FR10GG50V16	G200750J	FR10GG50V16I	H201809J	400	FR10GG40V16P	X084798J	10
10,3 x 38	20	500	FR10GG50V20	D211028J	FR10GG50V20I	X211551J	400	FR10GG40V20P	Z084800J	10
10,3 x 38	25	400	FR10GG40V25	E213099J	FR10GG40V25I	W212585J	250	FR10GG25V25P	H083957J	10
10,3 x 38	32	400	FR10GG40V32	A214107J	FR10GG40V32I	Z213600J	250	FR10GG25V32P	E083954J	10
10,3 x 38	Neutral		FRN1038	R211569J	FRN1038	R211569J				10

gG 10.3 x 38 - 690V



Size	Current (A)	Voltage (V)	Cat. number w/o indicator	Ref. number w/o indicator	Cat. number with indicator	Ref. number with indicator	Voltage (V)	Cat. number with striker	Ref. number with striker	Pckg
10,3 x 38	1	690	FR10GG69V1	R302787J						10
10,3 x 38	2	690	FR10GG69V2	S302788J						10
10,3 x 38	4	690	FR10GG69V4	T302789J						10
10,3 x 38	6	690	FR10GG69V6	V302790J						10
10,3 x 38	8	690	FR10GG69V8	W302791J						10
10,3 x 38	10	690	FR10GG69V10	X302792J						10
10,3 x 38	12	690	FR10GG69V12	Y302793J						10
10,3 x 38	16	690	FR10GG69V16	Z302794J						10

gG 14 x 51 - 400 to 690V



Size	Current (A)	Voltage (V)	Cat.number w/o indicator	Ref.number w/o indicator	Voltage (V)	Cat.number with striker	Ref.number with striker	Pckg
14 x 51	1	690	FR14GG69V1	K218716J	500	-	-	10
14 x 51	2	690	FR14GG69V2	Y219234J	500	FR14GG50V2P	J211033J	10
14 x 51	4	690	FR14GG69V4	A219765J	500	FR14GG50V4P	H212067J	10
14 x 51	6	690	FR14GG69V6	H222210J	500	FR14GG50V6P	G214113J	10
14 x 51	8	690	FR14GG69V8	D222965J	500	FR14GG50V8P	R215134J	10
14 x 51	10	690	FR14GG69V10	L200754J	500	FR14GG50V10P	Z216153J	10
14 x 51	12	690	FR14GG69V12	L201812J	500	FR14GG50V12P	L217176J	10
14 x 51	16	690	FR14GG69V16	A211554J	500	FR14GG50V16P	Z218200J	10
14 x 51	20	690	FR14GG69V20	Z212588J	500	FR14GG50V20P	B219237J	10
14 x 51	25	690	FR14GG69V25	C213603J	500	FR14GG50V25P	L222213J	10
14 x 51	32	500	FR14GG50V32	W216656J	500	FR14GG50V32P	P200757J	10
14 x 51	40	500	FR14GG50V40	X218198J	500	FR14GG50V40P	P201815J	10
14 x 51	50	400	FR14GG40V50	Z219235J	400	FR14GG40V50P	D211557J	10
14 x 51	Neutral		FRN1451	M212600J		FRN1451	M212600J	10
Fuse extractor			PMCP 14	M097554A		PMCP 14	M097554A	1

gG 22 x 58 - 400 to 690V

Size	Current (A)	Voltage (V)	Cat.number w/o indicator	Ref.number w/o indicator	Voltage (V)	Cat.number with striker	Ref.number with striker	Pckg
22 x 58	2	690	FR22GG69V2	F219241J	-	-		10
22 x 58	4	690	FR22GG69V4	H219772J	690	FR22GG69V4P	R214628J	10
22 x 58	6	690	FR22GG69V6	P222216J	690	FR22GG69V6P	A215648J	10
22 x 58	8	690	FR22GG69V8	L222972J	690	FR22GG69V8P	F216665J	10
22 x 58	10	690	FR22GG69V10	T200761J	690	FR22GG69V10P	W217691J	10
22 x 58	12	690	FR22GG69V12	J201304J	690	FR22GG69V12P	W218726J	10
22 x 58	16	690	FR22GG69V16	S201818J	690	FR22GG69V16P	L219775J	10
22 x 58	20	690	FR22GG69V20	P211038J	690	FR22GG69V20P	P222975J	10
22 x 58	25	690	FR22GG69V25	N212072J	690	FR22GG69V25P	M201307J	10
22 x 58	32	690	FR22GG69V32	F212594J	690	FR22GG69V32P	S211041J	10
22 x 58	40	690	FR22GG69V40	J213609J	690	FR22GG69V40P	R212075J	10
22 x 58	50	690	FR22GG69V50	P214626J	690	FR22GG69V50P	M213612J	10
22 x 58	63	690	FR22GG69V63	Y215646J	500	FR22GG50V63P	S214629J	10
22 x 58	80	690	FR22GG69V80	Q217180J	500	FR22GG50V80P	F216159J	10
22 x 58	100	500	FR22GG50V100	E218205J	500	FR22GG50V100P	T217183J	10
22 x 58	125	400	FR22GG40V125	J219773J	400	FR22GG40V125P	H218208J	10
22 x 58	Neutral		FRN2258	R213616J		FRN2258	R213616J	10
Fuse extractor			PMCP20+22	K100036A		PMCP20+22	K100036A	1

Functions

gG curve industrial fuse (black marking) – NF EN 60269-1 and 2-1 compliant.
Protection for power cables and equipment except motors.
Selective coordination between two fuses two ratings apart (e.g. 160A and 100A).
Breaking capacity: 20 kA for 8.5 x 31.5 fuses - 80 to 120 kA for other sizes at rated voltage.

Applications

Protection from overloads and short circuits at all levels in power distribution.
Mains, branch circuits, service entrance equipment.



for sizes 10, 14 and 22

To select a fuse holder, fuse disconnecter or fuse switch-disconnector for our ferrule-style fuses, turn to pages 14 to 18.

For further information on our ferrule fuse lines, consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

**under the heading IEC general purpose fuses
> ferrule fuses**

Modulostar breakthrough
a range for every kind of protection now on the shelves!

- Modulostar fuse holders and fuse disconnectors meet every need for ferrule-style fuses, from 8mm to 27mm in diameter. And they cover applications from low voltage power distribution in residential and office environments to protection of high power electronic devices in enclosures. Only a brand name signed by a global leader in the industry can guarantee an OEM or electrical contractor that his customer is getting top-quality components.
- CMS 8, 10, 14, 22, 27 and USFM models are now available on the shelves.

www.ferrazshawmut.com/Modulostar

Compatible

Standard width for a perfect fit in enclosures

Easy to use

Dual position DIN rail snap for easier mounting and dismounting

Connections

Upstream comb busbar connection

Flexibility

Accessory kit for multi-pole assemblies

Communication

The Ferraz Shawmut indicator eye for instant blown fuse detection

Ergonomic

A new ergonomically designed handle for easier opening

FERRAZ SHAWMUT SAS
1, rue Jean Novel
69626 Villeurbanne Cedex
France
Tél. + 33 (0)4 72 22 66 11
Fax + 33 (0)4 72 22 67 13
www.ferrazshawmut.com

FERRAZ SHAWMUT Inc
374, Merrimac Street,
Newburyport, MA 01950 - 1998
USA
Phone - 978-462-6662
Fax - 978-462-0181
www.ferrazshawmut.com

aM 8.5 x 31,5 - 400V

Size	Current (A)	Voltage (V)	Cat. number w/o indicator	Ref. number w/o indicator	Cat. number with indicator	Ref. number with indicator	Voltage (V)	Cat. number with striker	Ref. number with striker	Pckg
8,5 x 31,5	1	400	FR8AM40V1	C217168J						10
8,5 x 31,5	2	400	FR8AM40V2	R218193J						10
8,5 x 31,5	4	400	FR8AM40V4	S219229J						10
8,5 x 31,5	6	400	FR8AM40V6	C222205J						10
8,5 x 31,5	8	400	FR8AM40V8	F200749J						10
8,5 x 31,5	10	400	FR8AM40V10	W201292J						10
8,5 x 31,5	Neutral		FRN832	X211045J						10

aM 10.3 x 38 - 400 to 690V

10,3 x 38	0,16	500	FR10AM50V0.16	E214617J		-				10
10,3 x 38	0,25	500	FR10AM50V0.25	M215130J		-				10
10,3 x 38	0,5	500	FR10AM50V0.5	W216150J		-				10
10,3 x 38	1	500	FR10AM50V1	F217171J	FR10AM50V1I	X219233J				10
10,3 x 38	2	500	FR10AM50V2	H218714J	FR10AM50V2I	G222209J	400	FR10AM40V2P	Z084984J	10
10,3 x 38	4	500	FR10AM50V4	W219232J	FR10AM50V4I	K200753J	400	FR10AM40V4P	Y085259J	10
10,3 x 38	6	500	FR10AM50V6	F222208J	FR10AM50V6I	K201811J	400	FR10AM40V6P	W085257J	10
10,3 x 38	8	500	FR10AM50V8	Z201295J	FR10AM50V8I	Z211553J	400	FR10AM40V8P	A084985J	10
10,3 x 38	10	500	FR10AM50V10	Y211552J	FR10AM50V10I	H213102J	400	FR10AM40V10P	B084986J	10
10,3 x 38	12	500	FR10AM50V12	A213601J	FR10AM50V12I	D214110J	400	FR10AM40V12P	X085258J	10
10,3 x 38	16	500	FR10AM50V16	F214618J	FR10AM50V16I	P215132J	400	FR10AM40V16P	C084757J	10
10,3 x 38	20	500	FR10AM50V20	X216151J	FR10AM50V20I	V216655J	400	FR10AM40V20P	V085256J	10
10,3 x 38	25	400	FR10AM40V25	G217172J	FR10AM40V25I	L217682J	250	FR10AM25V25P	A076038J	10
10,3 x 38	32	400	FR10AM40V32	J218715J		-	250	FR10AM25V32P	B076039J	10



10,3 x 38	1	690	FR10AM69V1	H302779J						10
10,3 x 38	2	690	FR10AM69V2	J302780J						10
10,3 x 38	4	690	FR10AM69V4	K302781J						10
10,3 x 38	6	690	FR10AM69V6	L302782J						10
10,3 x 38	8	690	FR10AM69V8	M302783J						10
10,3 x 38	10	690	FR10AM69V10	N302784J						10
10,3 x 38	12	690	FR10AM69V12	P302785J						10
10,3 x 38	Neutral		FRN1038	R211569J	FRN1038	R211569J				10

aM 14 x 51 - 400 to 690V

14 x 51	0,25	690	FR14AM69V0.25	B212590J		-				10
14 x 51	0,5	690	FR14AM69V0.5	L213105J		-				10
14 x 51	1	690	FR14AM69V1	E213605J			500	FR14AM50V1P	W215644J	10
14 x 51	2	690	FR14AM69V2	H214114J			500	FR14AM50V2P	B216661J	10
14 x 51	4	690	FR14AM69V4	K214622J			500	FR14AM50V4P	C218203J	10
14 x 51	6	690	FR14AM69V6	S215135J			500	FR14AM50V6P	E219240J	10
14 x 51	8	690	FR14AM69V8	T215642J			500	FR14AM50V8P	N222215J	10
14 x 51	10	690	FR14AM69V10	Z216659J			500	FR14AM50V10P	S200760J	10
14 x 51	12	690	FR14AM69V12	M217177J			500	FR14AM50V12P	R201817J	10
14 x 51	16	690	FR14AM69V16	Q217686J			500	FR14AM50V16P	G211560J	10
14 x 51	20	690	FR14AM69V20	P218720J			500	FR14AM50V20P	E212593J	10
14 x 51	25	690	FR14AM69V25	E219769J			500	FR14AM50V25P	H213608J	10
14 x 51	32	500	FR14AM50V32	M222214J			500	FR14AM50V32P	N214625J	10
14 x 51	40	500	FR14AM50V40	Q200758J			500	FR14AM50V40P	X215645J	10
14 x 51	45	500	FR14AM50V45	L211035J			500	FR14AM50V45P	C216662J	10
14 x 51	50	400	FR14AM40V50	E211558J			400	FR14AM40V50P	D218204J	10
14 x 51	Neutral		FRN1451	M212600J				FRN1451	M212600J	10
Fuse extractor			PMCP 14	M097554A				PMCP 14	M097554A	1

aM 22 x 58 - 400 to 690V

Size	Current (A)	Voltage (V)	Cat. number w/o indicator	Ref. number w/o indicator	Cat. number with indicator	Ref. number with indicator	Voltage (V)	Cat. number with striker	Ref. number with striker	Pckg
22 x 58	1	690	FR22AM69V1	M219776J			690	FR22AM69V1P	E215652J	10
22 x 58	2	690	FR22AM69V2	T222220J			690	FR22AM69V2P	J216162J	10
22 x 58	4	690	FR22AM69V4	Q222976J			690	FR22AM69V4P	A217695J	10
22 x 58	6	690	FR22AM69V6	Y200765J			690	FR22AM69V6P	Y218728J	10
22 x 58	8	690	FR22AM69V8	N201308J			690	FR22AM69V8P	Q219779J	10
22 x 58	10	690	FR22AM69V10	X201822J			690	FR22AM69V10P	S222978J	10
22 x 58	12	690	FR22AM69V12	T211042J			690	FR22AM69V12P	R201311J	10
22 x 58	16	690	FR22AM69V16	M211565J			690	FR22AM69V16P	W211044J	10
22 x 58	20	690	FR22AM69V20	S212076J			690	FR22AM69V20P	W212079J	10
22 x 58	25	690	FR22AM69V25	J212597J			690	FR22AM69V25P	Q213615J	10
22 x 58	32	690	FR22AM69V32	V213113J			690	FR22AM69V32P	X214633J	10
22 x 58	40	690	FR22AM69V40	N213613J			690	FR22AM69V40P	F215653J	10
22 x 58	50	690	FR22AM69V50	R214122J			690	FR22AM69V50P	K216669J	10
22 x 58	63	690	FR22AM69V63	C215650J			500	FR22AM50V63P	B217696J	10
22 x 58	80	690	FR22AM69V80	H216667J			500	FR22AM50V80P	Z218729J	10
22 x 58	100	500	FR22AM50V100	Y217693J			500	FR22AM50V100P	T222979J	10
22 x 58	125	400	FR22AM40V125	J218209J			400	FR22AM40V125P	S201312J	10
22 x 58	Neutral		FRN2258	R213616J				FRN2258	R213616J	10
Fuse extractor			PMCP20+22	K100036A				PMCP20+22	K100036A	1

Functions

aM curve industrial fuse (green marking) – NF EN 60269-1 and 2-1 compliant.

Direct protection for electrical motors, must be used in combination with another protection device (thermal relay).

Easy selective coordination with upstream gG fuses.

Selective coordination between two fuses two ratings apart (i.e. 160A and 100A).

Breaking capacity: 20 kA for 8.3 x 31.5 fuses - 80 to 120 kA for other sizes at rated voltage.

Applications

Protection for all low voltage electrical motors with direct-on-line start.



for sizes 10, 14 and 22

For further information on our ferrule fuse lines, consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

**under the heading IEC general purpose fuses
> ferrule fuses**

Modulostar CMS8



Size	CCD configurations	Cat. number w/o indicator light	Ref. number	Cat. number with indicator light	Ref. number	Pckg
8 x 31,5	1	CMS81	X305000K	CMS81I	E305007K	12
8 x 31,5	1+N	CMS81N	Y305001F	CMS81NI	F305008F	6
8 x 31,5	2	CMS82	Z305002F	CMS82I	G305009F	6
8 x 31,5	3	CMS83	A305003D	CMS83I	H305010D	4
8 x 31,5	3+N	CMS83N	B305004C	CMS83NI	J305011C	3
8 x 31,5	4	CMS84	C305005C	CMS84I	K305012C	3
8 x 31,5	N *	CMS810N	D305006K			12

Modulostar CMS10



Size	CCD configurations	Cat. number w/o indicator light	Ref. number	Cat. number with indicator light	Ref. number	Pckg
10 x 38	1	CMS101	T305020K	CMS101I	A305026K	12
10 x 38	1+N	CMS101N	V305021F	CMS101NI	B305027F	6
10 x 38	2	CMS102	W305022F	CMS102I	C305028F	6
10 x 38	3	CMS103	X305023D	CMS103I	D305029D	4
10 x 38	3+N	CMS103N	Y305024C	CMS103NI	E305030C	3
10 x 38	4	CMS104	Z305025C	CMS104I	F305031C	3

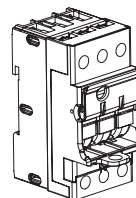
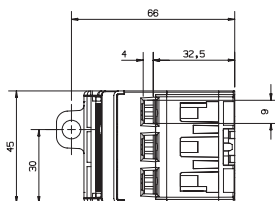
Modulostar CMSFM10



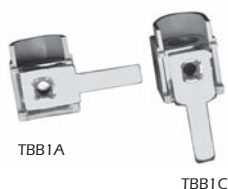
Compact Fusegear for Motor starter 3pole/45mm

Nb of pole	Cat Number	Ref. Number	Fonction		Pack
			Fuse Holder	Fuse Discon.	
3 poles	CMSFM10	S302765A	w/o Indicator		1
system /	CMSFM10M	T302766A		w/o Indicator	1
45 mm	CMSFM10I	W302768A	with Indicator		1
width	CMSFM10MI	V302767A		with Indicator	1

Fuse holder is without Prebreaking Microswitch (see accessories)
Fuse disconnector is with mounted Prebreaking Microswitch

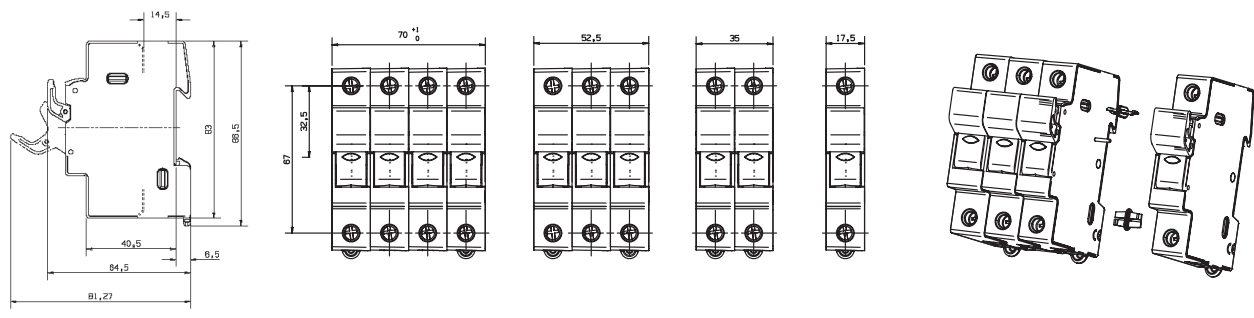


Accessories for CMS8, CMS10

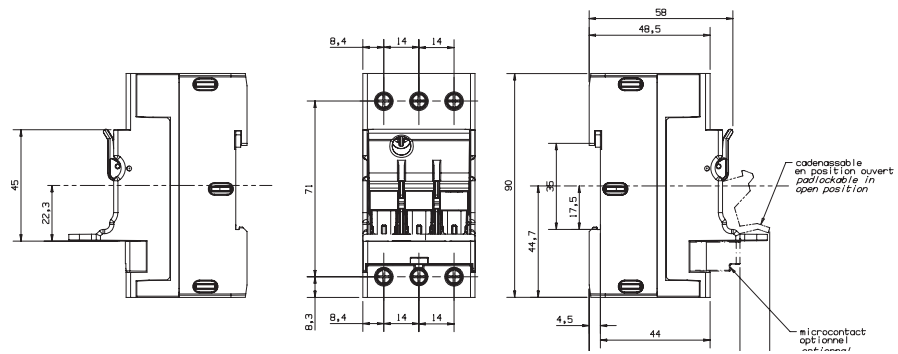


Description	Cat. number	Ref. number	Nb. Modules 17,5 mm	Courant maxi RMS (A)	Nb. of pole	Pckg
Multi-pole assembly kit	CMS810PAK	Z233725K				12
Lock	LOCK	M223525A				1
Locking kit	TAGLOCKCMS810	A235773A				1
Single-phase size 8/10 comb connection	CMS810BB1F13	T210306J	13	63	1	10
2-phase size 8/10 comb connection	CMS810BB2F6	V210307J	6	63	2	10
3-phase size 8/10 comb connection	CMS810BB3F4	W210308J	4	100	3	10
4-phase size 8/10 comb connection	CMS810BB4F3	X210309J	3	100	4	10
Single-pole terminal, side	TBB1C	E210316P		90		50
2/3-pole terminal, side	TBB23C	G210318P		90		50
Single-pole terminal, axial	TBB1A	D210315P		90		50
2/3-pole terminal, axial	TBB23A	F210317P		90		50

Drawings for CMS8-10



Drawings for compact fusegear Motor starter



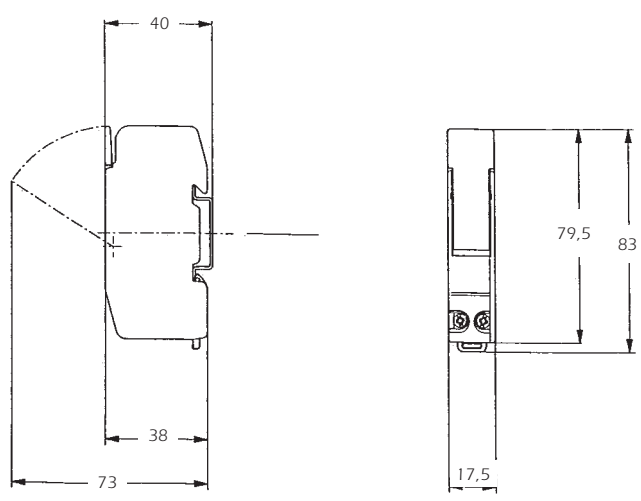
Accessories

Catalog Number	Reference	Cond.
PLUG3CMSFM	B264041E	5
WBAR2CMSFM	C264042E	5
RDINCCMSFM	D264043A	1
WIRCMSFMC	E264044E	5

CCR fuse holder

Size	Number of pole	Cat.number	Reference Number	Number of Mod.	Pckg
10x38	N	CCR810N	Z214635K	1	12
10x38	1	CCR101	N218213K	1	12
10x38	1+N	CCR1N1M	H215655K	1	12
10x38	2	CCR102	X233723F	2	6
10x38	3	CCR103	Y233724D	3	4

Assembly accessories	Cat. Number	Ref.Number	Pckg
CCR multi-pole assembly kit	CMS810PAK	Z233725K	12*



- Direct mounting on symmetrical DIN rail
- Wire cross sections: 1 x 10mm².
- Compact footprint.
- Insulated to IP 20 standard
- Single-pole weight
 - 8x31 ; 58g
 - 10x38 ; 63g
- Neutral tubes are systematically built in

With the indicator light a blown fuse can be quickly located if power is still on

MSC 10 fuse holder Phase + Neutral (1 mod.)

Fuse holder phase+neutral in a 17.5 mm - width compact module

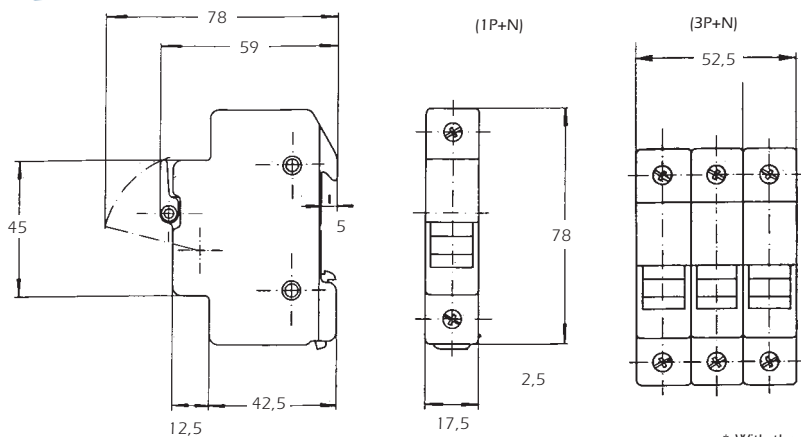


Compact Fuse Holder

Nb. of Poles	Model without blown fuse indicator light		Model with blown fuse indicator light		Nb Mod	Pckg
	Cat. Number	Ref. number	Cat. Number	Ref. Number		
1+N	MSC101N1M	Y201317K	MSC101N1MI	C211050K	1	12
3+N	MSC103N3M	S218217D	MSC103N3MI	S226612D	3	4

Assembly accessories	Cat. Number	Ref. Number	Pckg
2-pole pin	MSCMSDMAASS2	G215125J	10*
3-pole pin	MSCMSDMAASS3	Q216145J	10*
4-pole pin	MSCMSDMAASS4	A217166J	10*

* 10 Pins per bag



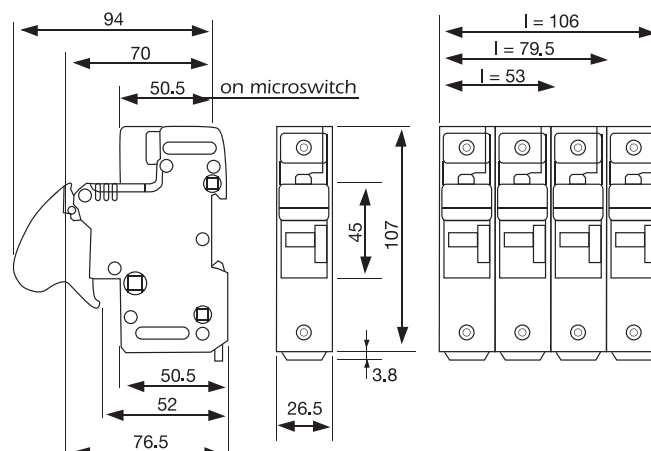
- Direct mounting on symmetrical DIN rail
- Indicator light (120/690V)*
- Wiring cross sections:
 - single-pole: 1 x 16mm²
 - single-pole + neutral: 1 x 10 mm²
- Insulated to IP 20 standard
- Single-pole weight
 - 8x31 ; 63 g
 - 8x31 - Ph + N1M ; 63 g
 - 10x38 ; 63 g
 - 10x38 - Ph + N1M ; 68 g

* With the indicator light a blown fuse can be quickly located if power is still on

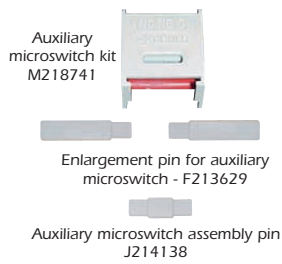
Modulostar CMS14



Size	CCD configurations	Cat. number w/o indicator light	Ref. number	Cat. number with indicator light	Ref. number	Pckg
14 x 51	1	CMS141	A331016F	CMS141I	L331049F	6
14 x 51	1+N	CMS141N	T331010C	CMS141NI	M331050C	3
14 x 51	2	CMS142	R331031C	CMS142I	M331004C	3
14 x 51	3	CMS143	J212091B	CMS143I	K331071B	2
14 x 51	3+N	CMS143N	D331042A	CMS143NI	Q331007A	1
14 x 51	4	CMS144	F331021A			1
14 x 51	N	CMS14N	T331056F			6
14 x 51 for fuses with striker	1			CMS141AC	F331044F	6
14 x 51 with microswitches (+ pre-isolation) (for fuses with striker)	1	CMS141M	Z331038F	CMS141MI	S331055F	6
	2 (2 switches)	CMS142M	A331062C	CMS142MI	X331036C	3
	3	CMS143M	F331067B	CMS143MI	P331006B	2
	3 (2 switches)	CMS143M2	H331069B	CMS143M2I	Y331037B	2
	3+N	CMS143NM	E331043A	CMS143NMI	Y331037A	1



Accessories for CMS14



Description	Cat.number	Ref. number	Nb.Modules 17,5 mm	Pckg
Single-pole CMS14 auxiliary microswitch kit	CMS14W1	M218741	1.5	1
3-pole CMS14 auxiliary microswitch kit	CMS14W2	C219261	4.5	1
3-pole CMS14 2 auxiliary microswitch kit	CMS14W3	D219791	4.5	1
Auxiliary microswitch assembly pin (between 2 auxiliary microswitch kits)	CMS1422PTH	J214138		10
Enlargement pin for auxiliary microswitches	CMS14BP	F213629		10
Multi-pole assembly kit	CMS1422PAK	Z218223		10
Indicator light kit	CMS14LIH	A225653		1
Lock	CMS14LOK	M223525		1

Modulostar CMS22



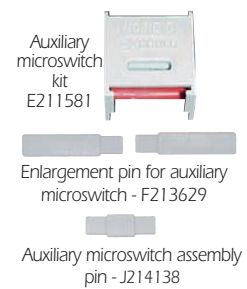
Size	CCD configurations	Cat. number w/o indicator light	Ref.number	Cat. number with indicator light	Ref.number	Pckg
22 x 58	1	CMS221	T331079F	CMS221I	B331086F	6
22 x 58	1+N	CMS221N	H331092C	CMS221NI	S215158C	3
22 x 58	2	CMS222	Q331122C	CMS222I	D331134C	3
22 x 58	3	CMS223	E331135B	CMS223I	D331134B	2
22 x 58	3+N	CMS223N	A331108A	CMS223NI	A218224A	1
22 x 58	4	CMS224	Q331099A			1
22 x 58	N	CMS22N	K331094F			6
22 x 58 for fuses with striker	1			CMS22AC	V331103F	6
22 x 58 with microswitches	1	CMS221M	D219262F	CMS221MI	N331074F	6
(+ pre- isolation)	2 (2 switches)	CMS222M	E219792C	CMS222MI	P331098C	3
(for fuses with striker)	3	CMS223M	Q222470B	CMS223MI	E331112B	2
	3 (2 switches)	CMS223M2	H222992B	CMS223M2I	E331112B	2
	3+N	CMS223NM	P200780A	CMS223NMI	W331104A	1



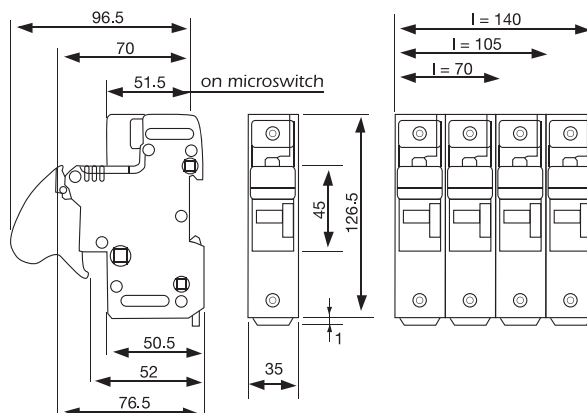
Fuse Holder

Accessories CMS22

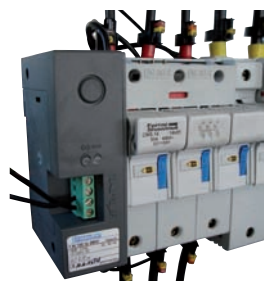
Description	Cat.number	Ref. number	Nb.Modules 17,5 mm	Pckg
Single-pole CMS22 auxiliary microswitch kit	CMS22W1	E211581	2	1
3-pole CMS22 auxiliary microswitch kit	CMS22W2	L212093	6	1
3-pole CMS22 2 auxiliary microswitch kit	CMS22W3	B212613	6	1
Auxiliary microswitch assembly pin (between 2 auxiliary microswitch kits)	CMS1422PTH	J214138		10
Enlargement pin for auxiliary microswitches	CMS14BP	F213629		10
Multi-pole assembly kit	CMS1422PAK	Z218223		10
Indicator light kit	CMS14LIH	A225653		1
Lock	CMS14LOK	M223525		1



Drawings for CMS22



Fuse Monitoring for DIN Rail mounting



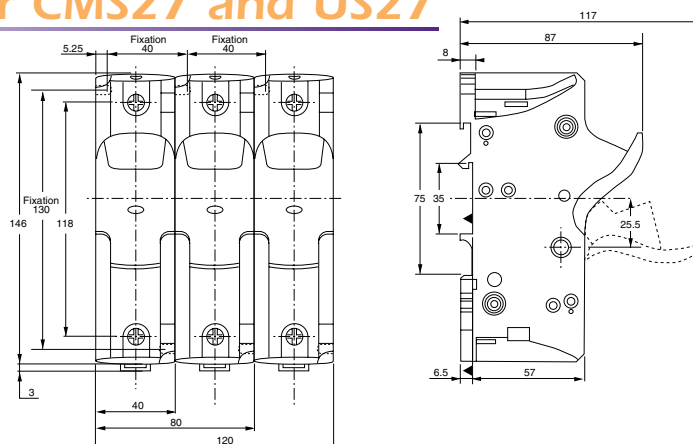
Cat Number	Ref.number	Rated voltage [Vac]	Mounting on	Weight [kg]	Pack [pcs]
FM100/260RD	S236824A	100...260	Rail DIN	0.19	1
FM380/690RD	T236825A	380...690	Rail DIN	0.19	1

Modulostar CMS27



Size	CCD configurations	Cat. number w/o indicator light	Ref.number	Pckg
27 x 60	1	CMS271	R210580C	3
27 x 60	1+N	CMS271N	S210581A	1
27 x 60	N	CMS27N	B210152C	3
27 x 60	2	CMS272	T210582A	1
27 x 60	3	CMS273	V210583A	1

Drawings for CMS27 and US27



For further information on our brand new Modulostar range for ferrule-style fuses, consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

under the heading **Gears & Fuse Gears**

> for IEC general purpose fuses

> for ferrule-style fuses

Size 000/00C - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
000/00C	2	500	NH000GG50V2	B211946C	3
000/00C	4	500	NH000GG50V4	M212462C	3
000/00C	6	500	NH000GG50V6	D213995C	3
000/00C	10	500	NH000GG50V10	B219651C	3
000/00C	16	500	NH000GG50V16	K222097H	9
000/00C	20	500	NH000GG50V20	A222847H	9
000/00C	25	500	NH000GG50V25	E201185H	9
000/00C	32	500	NH000GG50V32	Z211438H	9
000/00C	35	500	NH000GG50V35	C211947H	9
000/00C	40	500	NH000GG50V40	N212463H	9
000/00C	50	500	NH000GG50V50	T212974H	9
000/00C	63	500	NH000GG50V63	E213996H	9
000/00C	80	500	NH000GG50V80	Y216543H	9
000/00C	100	500	NH000GG50V100	B219122H	9
000/00C	Neutral		NH00NEUTRAL	Z218269J	10
000/00C	Pulling handle		NHHANDLE	P215592A	1



Size 00 - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
00	125	500	NH00GG50V125	R201863C	3
00	160	500	NH00GG50V160	P211084C	3
00	Neutral		NH00DKNIFESGP	W216058J	10
00	Pulling handle		NHHANDLE	P215592A	1



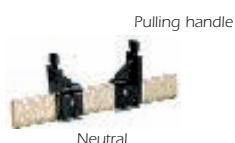
Size 0 - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
0	6	500	NH0GG50V6	H213148C	3
0	10	500	NH0GG50V10	G214159C	3
0	16	500	NH0GG50V16	O215179C	3
0	20	500	NH0GG50V20	R215686C	3
0	25	500	NH0GG50V25	Y216198C	3
0	32	500	NH0GG50V32	W216702C	3
0	35	500	NH0GG50V35	J217220C	3
0	40	500	NH0GG50V40	P217731C	3
0	50	500	NH0GG50V50	Z218246C	3
0	63	500	NH0GG50V63	N218765C	3
0	80	500	NH0GG50V80	C219284C	3
0	100	500	NH0GG50V100	D219814C	3
0	125	500	NH0GG50V125	P222492C	3
0	160	500	NH0GG50V160	F223013C	3
0	200	500	NH0GG50V200	C229611C	3
0	224	500	NH0GG50V224	D229612C	3
0	250	500	NH0GG50V250	E229613C	3
0	Neutral		NH0NEUTRAL	Z219304J	10
0	Pulling handle		NHHANDLE	P215592A	1



NH 500V qG fuses

Size 1 - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
1	16	500	NH1GG50V16	M200801C	3
1	20	500	NH1GG50V20	C201344C	3
1	25	500	NH1GG50V25	N201860C	3
1	32	500	NH1GG50V32	L211081C	3
1	35	500	NH1GG50V35	A211600C	3
1	40	500	NH1GG50V40	Y212633C	3
1	50	500	NH1GG50V50	B213648C	3
1	63	500	NH1GG50V63	L214669C	3
1	80	500	NH1GG50V80	S215687C	3
1	100	500	NH1GG50V100	X216703C	3
1	125	500	NH1GG50V125	Q217732C	3
1	160	500	NH1GG50V160	A218247C	3
1	200	500	NH1GG50V200	P218766C	3
1	224	500	NH1GG50V224	D219285C	3
1	250	500	NH1GG50V250	E219815C	3
1	315	500	NH1GG50V315	Q228519C	3
1	355	500	NH1GG50V350	R228520C	3
1	Neutral		NH1NEUTRAL	A219834E	5
1	Pulling handle		NHHANDLE	P215592A	1

Size 2 - 500V gG



Dual Indication

2	25	500	NH2GG50V25	N200802C	3
2	32	500	NH2GG50V32	D201345C	3
2	35	500	NH2GG50V35	P201861C	3
2	40	500	NH2GG50V40	M211082C	3
2	50	500	NH2GG50V50	B211601C	3
2	63	500	NH2GG50V63	Z212634C	3
2	80	500	NH2GG50V80	C213649C	3
2	100	500	NH2GG50V100	M214670C	3
2	125	500	NH2GG50V125	T215688C	3
2	160	500	NH2GG50V160	Y216704C	3
2	200	500	NH2GG50V200	R217733C	3
2	224	500	NH2GG50V224	Q218767C	3
2	250	500	NH2GG50V250	R222494C	3
2	315	500	NH2GG50V315	E201346C	3
2	350	500	NH2GG50V355	Q201862C	3
2	400	500	NH2GG50V400	N211083C	3
2	425	500	NH2GG50V425	S228521C	3
2	500	500	NH2GG50V500	T228522C	3
2	Neutral		NH2NEUTRAL	N222514E	5
2	Pulling handle		NHHANDLE	P215592A	1

Size 3 - 500V gG



3	250	500	NH3GG50V250	C211602A	1
3	300	500	NH3GG50V300	A212635A	1
3	315	500	NH3GG50V315	L213151A	1
3	355	500	NH3GG50V355	K214162A	1
3	400	500	NH3GG50V400	T215182A	1
3	425	500	NH3GG50V425	B216201A	1
3	450	500	NH3GG50V450	Z216705A	1
3	500	500	NH3GG50V500	M217223A	1
3	630	500	NH3GG50V630	S217734A	1
3	800	500	NH3GG50V800	V228523A	1
3	Neutral		NH3NEUTRAL	E223035E	5
3	Pulling handle		NHHANDLE	P215592A	1

Size 4 with indicator on top - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
4	400	500	NH4GG50V400	A216039A	1
4	500	500	NH4GG50V500	X216542A	1
4	630	500	NH4GG50V630	W217576A	1
4	800	500	NH4GG50V800	E218090A	1
4	1000	500	NH4GG50V1000	H201694A	1
4	1250	500	NH4GG50V1250	C213994A	1

Size 4a with indicator on top - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
4a	500	500	NH4AGG50V500	D201184A	1
4a	630	500	NH4AGG50V630	T205752A	1
4a	800	500	NH4AGG50V800	Y211437A	1
4a	1000	500	NH4AGG50V1000	A219650A	1
4a	1250	500	NH4AGG50V1250	J200637A	1

For 690V gG: consult us

For further information on NH 690V , consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

under the heading **Gears & Fuse Gears**

> for IEC general purpose fuses

> for ferrule-style fuses

Size 000 - 400V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
000	2	400	NH000GG40V2-1	P223688C	3
000	4	400	NH000GG40V4-1	O223689C	3
000	6	400	NH000GG40V6-1	R223690C	3
000	10	400	NH000GG40V10-1	S223691C	3
000	16	400	NH000GG40V16-1	T223692H	9
000	20	400	NH000GG40V20-1	V223693H	9
000	25	400	NH000GG40V25-1	W223694H	9
000	32	400	NH000GG40V32-1	X223695H	9
000	35	400	NH000GG40V35-1	Y223696H	9
000	40	400	NH000GG40V40-1	Z223697H	9
000	50	400	NH000GG40V50-1	A223698H	9
000	63	400	NH000GG40V63-1	B223699H	9
000	80	400	NH000GG40V80-1	C223700H	9
000	100	400	NH000GG40V100-1	D223701H	9

Size 00 - 400V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
00	125	400	NH00GG40V125-1	G223704C	3
00	160	400	NH00GG40V160-1	H223705C	3

Size 1 - 400V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
1	35	400	NH1GG40V35-1	V223716C	3
1	50	400	NH1GG40V50-1	W223717C	3
1	63	400	NH1GG40V63-1	X223718C	3
1	80	400	NH1GG40V80-1	Y223719C	3
1	100	400	NH1GG40V100-1	Z223720C	3
1	125	400	NH1GG40V125-1	A223721C	3
1	160	400	NH1GG40V160-1	B223722C	3
1	200	400	NH1GG40V200-1	C223723C	3
1	224	400	NH1GG40V224-1	D223724C	3
1	250	400	NH1GG40V250-1	E223725C	3

Size 2 - 400V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
2	35	400	NH2GG40V35-1	L227250C	3
2	50	400	NH2GG40V50-1	M227251C	3
2	63	400	NH2GG40V63-1	N227252C	3
2	80	400	NH2GG40V80-1	X223741C	3
2	100	400	NH2GG40V100-1	Y223742C	3
2	125	400	NH2GG40V125-1	Z223743C	3
2	160	400	NH2GG40V160-1	A223744C	3
2	200	400	NH2GG40V200-1	B223745C	3
2	224	400	NH2GG40V224-1	C223746C	3
2	250	400	NH2GG40V250-1	D223747C	3
2	315	400	NH2GG40V315-1	E223748C	3
2	355	400	NH2GG40V355-1	F223749C	3
2	400	400	NH2GG40V400-1	G223750C	3

Size 3 - 400V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
3	250	19,9	NH3GG40V250-1	H223751A	1
3	315	22,7	NH3GG40V315-1	J223752A	1
3	400	28,0	NH3GG40V400-1	K223753A	1
3	500	30,8	NH3GG40V500-1	L223754A	1
3	630	43,0	NH3GG40V630-1	M223755A	1



Size 000 - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
000	2	500	NH00GG50V2-1	C219652C	3
000	4	500	NH00GG50V4-1	N205770C	3
000	6	500	NH00GG50V6-1	P212464C	3
000	10	500	NH00GG50V10-1	V215528C	3
000	16	500	NH00GG50V16-1	F213997H	9
000	20	500	NH00GG50V20-1	F218091H	9
000	25	500	NH00GG50V25-1	K200638H	9
000	32	500	NH00GG50V32-1	D213489H	9
000	35	500	NH00GG50V35-1	G201187H	9
000	40	500	NH00GG50V40-1	D219653H	9
000	50	500	NH00GG50V50-1	C222849H	9
000	63	500	NH00GG50V63-1	R212466H	9
000	80	500	NH00GG50V80-1	N215016H	9
000	100	500	NH00GG50V100-1	J201189H	9



Size 00 - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
00	125	500	NH00GG40V125-1	V200808C	3
00	160	500	NH00GG40V160-1	W201867C	3



Size 0 - 500V qG

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
0	6	500	NH0GG50V6-1	B212636C	3
0	10	500	NH0GG50V10-1	M213152C	3
0	16	500	NH0GG50V16-1	E213651C	3
0	20	500	NH0GG50V20-1	L214163C	3
0	25	500	NH0GG50V25-1	P214672C	3
0	32	500	NH0GG50V32-1	V215183C	3
0	35	500	NH0GG50V35-1	W215690C	3
0	40	500	NH0GG50V40-1	C216202C	3
0	50	500	NH0GG50V50-1	A216706C	3
0	63	500	NH0GG50V63-1	N217224C	3
0	80	500	NH0GG50V80-1	T217735C	3
0	100	500	NH0GG50V100-1	D218250C	3
0	125	500	NH0GG50V125-1	S218769C	3
0	160	500	NH0GG50V160-1	F219287C	3



NH 400V and 500V qG fuses - Isolated Lug

Size 1 - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
1	16	500	NH1GG50V16-1	H219818 C	3
1	20	500	NH1GG50V20-1	T222496C	3
1	25	500	NH1GG50V25-1	K223017C	3
1	32	500	NH1GG50V32-1	R200805C	3
1	35	500	NH1GG50V35-1	G201348C	3
1	40	500	NH1GG50V40-1	O211085C	3
1	50	500	NH1GG50V50-1	L212116C	3
1	63	500	NH1GG50V63-1	N213153C	3
1	80	500	NH1GG50V80-1	M214164C	3
1	100	500	NH1GG50V100-1	W215184C	3
1	125	500	NH1GG50V125-1	D216203C	3
1	160	500	NH1GG50V160-1	B216707C	3
1	200	500	NH1GG50V200-1	P217225C	3
1	224	500	NH1GG50V224-1	V217736C	3
1	250	500	NH1GG50V250-1	E218251C	3

Size 2 - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
2	25	500	NH2GG50V25-1	J219819C	3
2	32	500	NH2GG50V32-1	V222497C	3
2	35	500	NH2GG50V35-1	L223018C	3
2	40	500	NH2GG50V40-1	S200806C	3
2	50	500	NH2GG50V50-1	H201349C	3
2	63	500	NH2GG50V63-1	T201865C	3
2	80	500	NH2GG50V80-1	F211605C	3
2	100	500	NH2GG50V100-1	P213154C	3
2	125	500	NH2GG50V125-1	N214165C	3
2	160	500	NH2GG50V160-1	X215185C	3
2	200	500	NH2GG50V200-1	E216204C	3
2	224	500	NH2GG50V224-1	O217226C	3
2	250	500	NH2GG50V250-1	F218252C	3
2	300	500	NH2GG50V300-1	H219289C	3
2	315	500	NH2GG50V315-1	K219820C	3
2	355	500	NH2GG50V355-1	M223019C	3
2	400	500	NH2GG50V400-1	T200807C	3

Size 3 - 500V gG



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
3	250	500	NH3GG50V250-1	J201350A	1
3	300	500	NH3GG50V300-1	S211087A	1
3	315	500	NH3GG50V315-1	G211606A	1
3	355	500	NH3GG50V355-1	E212639A	1
3	400	500	NH3GG50V400-1	H213654A	1
3	425	500	NH3GG50V425-1	S214675A	1
3	450	500	NH3GG50V450-1	Z215693A	1
3	500	500	NH3GG50V500-1	F216205A	1
3	630	500	NH3GG50V630-1	D216709A	1

Size 000 - 500V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
000	2	500	NH000AM50V2	K232493C	3
000	4	500	NH000AM50V4	L232494C	3
000	6	500	NH000AM50V6	M232495C	3
000	10	500	NH000AM50V10	N232496C	3
000	16	500	NH000AM50V16	P232497C	3
000	20	500	NH000AM50V20	Q232498C	3
000	25	500	NH000AM50V25	R232499C	3
000	32	500	NH000AM50V32	S232500C	3
000	35	500	NH000AM50V35	T232501C	3
000	40	500	NH000AM50V40	V232502C	3
000	50	500	NH000AM50V50	W232503C	3
000	63	500	NH000AM50V63	X232504C	3
000	80	500	NH000AM50V80	C227863C	3



Size 00 - 500V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
00	100	500	NH00AM50V100	Y232505C	3
00	125	500	NH00AM50V125	Z232506C	3
00	160	500	NH00AM50V160	J227869C	3



Size 0 - 500V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
0	100	500	NH0AM50V100	A232507C	3
0	125	500	NH0AM50V125	B232508C	3
0	160	500	NH0AM50V160	C232509C	3
0	200	500	NH0AM50V200	A227884C	3



Size 1 - 500V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
1	100	500	NH1AM50V100	D232510C	3
1	125	500	NH1AM50V125	E232511C	3
1	160	500	NH1AM50V160	F232512C	3
1	200	500	NH1AM50V200	G232513C	3
1	224	500	NH1AM50V224	H232514C	3
1	250	500	NH1AM50V250	J232515C	3
1	315	500	NH1AM50V315	K227962C	3



Size 2 - 500V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
2	250	500	NH2AM50V250	K232516C	3
2	315	500	NH2AM50V315	L232517C	3
2	355	500	NH2AM50V355	M232518C	3
2	400	500	NH2AM50V400	N232519C	3
2	500	500	NH2AM50V500	C227978C	3



NH 500V aM fuses

Size 3 - 500V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
3	315	500	NH3AM50V315	P232520A	1
3	355	500	NH3AM50V355	O232521A	1
3	400	500	NH3AM50V400	R232522A	1
3	425	500	NH3AM50V425	S232523A	1
3	450	500	NH3AM50V450	T232524A	1
3	500	500	NH3AM50V500	V232525A	1
3	630	500	NH3AM50V630	M227987A	1

Size 4 with screw contact - 500V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
4	400	500	NH4AM50V400-8	P233555A	1
4	500	500	NH4AM50V500-8	O233556A	1
4	630	500	NH4AM50V630-8	E222115A	1
4	800	500	NH4AM50V800-8	V222865A	1
4	1000	500	NH4AM50V1000-8	S219137A	1
4	1250	500	NH4AM50V1250-8	V219668A	1

Size 4a contact blades for NH-bottom with swivel unit - 500V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
4a	500	500	NH4AAM50V500-8	R233557A	1
4a	630	500	NH4AAM50V630-8	S233558A	1
4a	800	500	NH4AAM50V800-8	T233559A	1
4a	1000	500	NH4AAM50V1000-8	V233560A	1
4a	1250	500	NH4AAM50V1250-8	W233561A	1

Size 000 - 690V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
000	2	690	NH000AM69V2	P227851C	3
000	4	690	NH000AM69V4	Q227852C	3
000	6	690	NH000AM69V6	R227853C	3
000	10	690	NH000AM69V10	S227854C	3
000	16	690	NH000AM69V16	T227855C	3
000	20	690	NH000AM69V20	V227856C	3
000	25	690	NH000AM69V25	W227857C	3
000	32	690	NH000AM69V32	X227858C	3
000	35	690	NH000AM69V35	Y227859C	3
000	40	690	NH000AM69V40	Z227860C	3
000	50	690	NH000AM69V50	A227861C	3
000	63	690	NH000AM69V63	B227862C	3
000	Neutral		NH00NEUTRAL	Z218269J	10
000	Pulling handle		NHHANDLE	P215592A	1



Size 00 - 690V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
00	50	690	NH00AM69V50	D227864C	3
00	63	690	NH00AM69V63	E227865C	3
00	80	690	NH00AM69V80	F227866C	3
00	100	690	NH00AM69V100	G227867C	3
00	125	690	NH00AM69V125	H227868C	3
00	Neutral		NH00NEUTRAL	Z218269J	10
00	Pulling handle		NHHANDLE	P215592A	1



Size 0 - 690V aM

Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
0	690	6	NH0AM69V6	K227870C	3
0	690	10	NH0AM69V10	L227871C	3
0	690	16	NH0AM69V16	M227872C	3
0	690	20	NH0AM69V20	N227873C	3
0	690	25	NH0AM69V25	P227874C	3
0	690	32	NH0AM69V32	Q227875C	3
0	690	35	NH0AM69V35	R227876C	3
0	690	40	NH0AM69V40	S227877C	3
0	690	50	NH0AM69V50	T227878C	3
0	690	63	NH0AM69V63	V227879C	3
0	690	80	NH0AM69V80	W227880C	3
0	690	100	NH0AM69V100	X227881C	3
0	690	125	NH0AM69V125	Y227882C	3
0	690	160	NH0AM69V160	Z227883C	3
0	Neutral		NH0NEUTRAL	Z219304J	10
0	Pulling handle		NHHANDLE	P215592A	1



NH 690V aM fuses

Size 1 - 690V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
1	16	690	NH1AM69V16	B227885C	3
1	20	690	NH1AM69V20	C227886C	3
1	25	690	NH1AM69V25	D227887C	3
1	32	690	NH1AM69V32	E227888C	3
1	35	690	NH1AM69V35	F227889C	3
1	40	690	NH1AM69V40	G227890C	3
1	50	690	NH1AM69V50	H227891C	3
1	63	690	NH1AM69V63	J227892C	3
1	80	690	NH1AM69V80	K227893C	3
1	100	690	NH1AM69V100	L227894C	3
1	125	690	NH1AM69V125	M227895C	3
1	160	690	NH1AM69V160	N227896C	3
1	200	690	NH1AM69V200	P227897C	3
1	224	690	NH1AM69V224	Q227898C	3
1	250	690	NH1AM69V250	R227899C	3
1	Neutral		NH1NEUTRAL	A219834E	5
1	Pulling handle		NHHANDLE	P215592A	1

Size 2 - 690V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
2	35	690	NH2AM69V35	L227963C	3
2	40	690	NH2AM69V40	M227964C	3
2	50	690	NH2AM69V50	N227965C	3
2	63	690	NH2AM69V63	P227966C	3
2	80	690	NH2AM69V80	Q227967C	3
2	100	690	NH2AM69V100	R227968C	3
2	125	690	NH2AM69V125	S227969C	3
2	160	690	NH2AM69V160	T227970C	3
2	200	690	NH2AM69V200	V227971C	3
2	224	690	NH2AM69V224	W227972C	3
2	250	690	NH2AM69V250	X227973C	3
2	300	690	NH2AM69V300	Y227974C	3
2	315	690	NH2AM69V315	Z227975C	3
2	355	690	NH2AM69V355	A227976C	3
2	400	690	NH2AM69V400	B227977C	3
2	Neutral		NH2NEUTRAL	N222514E	5
2	Pulling handle		NHHANDLE	P215592A	1

Size 3 - 690V aM



Size	Current rating (A)	Voltage rating (V)	Cat. Number	Reference	Pack.
3	250	690	NH3AM69V250	D227979A	1
3	300	690	NH3AM69V300	E227980A	1
3	315	690	NH3AM69V315	F227981A	1
3	355	690	NH3AM69V355	G227982A	1
3	400	690	NH3AM69V400	H227983A	1
3	425	690	NH3AM69V425	J227984A	1
3	450	690	NH3AM69V450	K227985A	1
3	500	690	NH3AM69V500	L227986A	1
3	Neutral		NH3NEUTRAL	E223035E	5
3	Pulling handle		NHHANDLE	P215592A	1

Size 2 to 4a from 50 to 800kVA

Size	Voltage rating (V)	RVA transformer Capacity	Current rating (V)	Cat. Number	Reference	Pack.
2	400	200	289	NH2GTR200KVA	E232810A ⁽¹⁾	1
2	400	250	361	NH2GTR250KVA	F232811A ⁽¹⁾	1
3	400	250	361	NH3GTR250KVA	J232814A ⁽¹⁾	1
3	400	315	455	NH3GTR315KVA	K232815A ⁽¹⁾	1
3	400	400	578	NH3GTR400KVA	L232816A ⁽¹⁾	1
4a	400	100	145	NH4AGTR100KVA-8	T212997A ⁽²⁾	1
4a	400	125	181	NH4AGTR125KVA-8	Y213507A ⁽²⁾	1
4a	400	160	231	NH4AGTR160KVA-8	Z214014A ⁽²⁾	1
4a	400	200	289	NH4AGTR200KVA-8	C214523A ⁽²⁾	1
4a	400	250	361	NH4AGTR250KVA-8	F215032A ⁽²⁾	1
4a	400	315	455	NH4AGTR315KVA-8	M215544A ⁽²⁾	1
4a	400	400	578	NH4AGTR400KVA-8	S216055A ⁽²⁾	1
4a	400	500	723	NH4AGTR500KVA-8	V216563A ⁽²⁾	1
4a	400	630	910	NH4AGTR630KVA-8	E217078A ⁽²⁾	1
4a	400	800	1155	NH4AGTR800KVA-8	R217595A ⁽²⁾	1



NH 400V gTR fuses

(1) These fuses are able to operate at 500Vac (tested at 550V +0 +5%).
(2) with indicator on top

NH-fuse thermo plastic base

690V max. / DIN Rail fixing / screw connectors for cables



Nb of pole	Cat. number Size 000/00	Ref. number Size 000/00	Cat. number Size0	Ref. number Size 0	Cat. number Size 1	Ref. number Size 1	Pckg
Fuse holders for NH fuses w/o striker							
1 -pole	BB001EPR	R216192C	BB01EPR	S216193C	BB11PPR	A223008C	(C=3, A=1)
2 -pole	BB002EPR	F218758B	BB02EPR	P216696B	BB12PPR	G200796B	2
3 -pole	BB003EPR	V229121A	BB03EPR	C217214A	BB13PPR	Y201340A	1
4 -pole	BB004EPR	Z223007A	BB04EPR	J217726A	BB14PPR	H201855A	1
Partition	BB00CL	W212654B	BB0CL	Z213669B	BB12PPCL	J214690B	2
Fuse holders for fuses w/o striker - Included cover IP2x (finger safe)							
1 -pole	BB001RFS	S218240C	BB01EPRFS	G226717C	BB11PPRFS	P226724C	3
3 -pole	BB003RFSBLOC	S229119A	BB03EPRFS	J226719A	BB13PPRFS	Q226725A	1

Nb of pole	Cat. number Size 2	Ref. number Size 2	Cat. number Size 3	Ref. number Size 3	Cat. number Size 4	Ref. number Size 4	Pckg
Fuse holders for NH fuses w/o striker							
1 -pole	BB21PPR	E211075C	BB31PPR	X213644C			(C=3, A=1)
2 -pole	BB22PPR	V211595B	BB32PPR	B214154B			2
3 -pole	BB23PPR	D212109A	BB33PPR	F214664A			1
4 -pole	BB24PPR	R212627A	BB34PPR	K215174A			1
Partition	BB12PPCL	J214690B	BB3PPCL	Q215708B			2
Fuse holders for fuses w/o striker - Included cover IP2x (finger safe)							
1 -pole	BB21PPRFS	R226726C	BB31PPRFS	T226728C			1
3 -pole	BB13PPRES	S226727A	BB33PPRES	V226729A			1

NH-fuse ceramic base - size 4

690V max. / fixing onto plates



Nb of Pole	Cat. Number	Cat. Number Size 4	Reference Number	Pack.
1	BB41P	NHBCESC1PT0	W223004A	1

Fuse Monitoring for Din rail mounting



- Small and compact
- No need for external supply voltage
- Fixing onto DIN Rail

Voltage rating (V)	Cat. Number	Reference	Pack.
100 to 260	FM100/260RD	S236824A	1
380 to 690	FM380/690RD	T236825A	1

FUSE MONITORING: LOCATING A FAULT MADE EASY!



Simplicity itself!

- Green LED on: Power on and fuses operational
- No LED on: Power off
- Red LED on: One or more blown fuses

Ask us for our literature on Fuse Monitoring (ref. GP011)

Size 0 to 3 - 690V - gG



H216690



R223000



X214656



N219271

NH 690V gG with Striker

Size	Voltage Rating (V)	Current Rating I_N (A)	Cat. number	Reference Number	Breaking Capacity	Pack
0	690V	32	NH0GG69V32P-2	P213637C	80kA - 690V	3
0	690V	35	NH0GG69V35P-2	S214146C	80kA - 690V	3
0	690V	40	NH0GG69V40P-2	W214655C	80kA - 690V	3
0	690V	50	NH0GG69V50P-2	B215166C	80kA - 690V	3
0	690V	63	NH0GG69V63P-2	D215674C	80kA - 690V	3
0	690V	80	NH0GG69V80P-2	J216185C	80kA - 690V	3
0	690V	100	NH0GG69V100P-2	H216690C	80kA - 690V	3
0	500V	125	NH0GG50V125P-2	V217207C	120kA - 500V	3
0	500V	160	NH0GG50V160-2	A217718C	120kA - 500V	3
0	500V	200	NH0GG50V200P-2	K218233C	120kA - 500V	3
1	690V	80	NH1GG69V80P-2	Y218751C	80kA - 690V	3
1	690V	100	NH1GG69V100P-2	M219270C	80kA - 690V	3
1	690V	125	NH1GG69V125P-2	P219801C	80kA - 690V	3
1	690V	160	NH1GG69V160P-2	Z222478C	80kA - 690V	3
1	690V	200	NH1GG69V200P-2	R223000C	80kA - 690V	3
1	500V	224	NH1GG50V224P-2	Y200788C	120kA - 500V	3
1	500V	250	NH1GG50V250P-2	Q201333C	120kA - 500V	3
1	500V	315	NH1GG50V315P-2	Z201847C	120kA - 500V	3
1	500V	355	NH1GG50V355P-2	W211067C	120kA - 500V	3
2	690V	125	NH2GG69V125P-2	W212102C	80kA - 690V	3
2	690V	160	NH2GG69V160P-2	L212622C	80kA - 690V	3
2	690V	200	NH2GG69V200P-2	Y213139C	80kA - 690V	3
2	690V	224	NH2GG69V224P-2	Q213638C	80kA - 690V	3
2	690V	250	NH2GG69V250P-2	T214147C	80kA - 690V	3
2	690V	315	NH2GG69V315P-2	X214656C	80kA - 690V	3
2	500V	355	NH2GG69V355P-2	E215675C	120kA - 500V	3
2	500V	400	NH2GG50V400P-2	K216186C	120kA - 500V	3
2	500V	500	NH2GG50V500P-2	W217208C	120kA - 500V	3
3	690V	315	NH3GG69V315P-2	B217719C	80kA - 690V	3
3	690V	355	NH3GG69V355P-2	L218234C	80kA - 690V	3
3	690V	400	NH3GG69V400P-2	Z218752C	80kA - 690V	3
3	690V	500	NH3GG69V500P-2	N219271C	80kA - 690V	3
3	500V	630	NH3GG50V630P-2	Q219802C	120kA - 500V	3

Size 0 to 3 - 690V - aM



L216187



P219272



Y212104



M216188

NH 690V aM with Striker

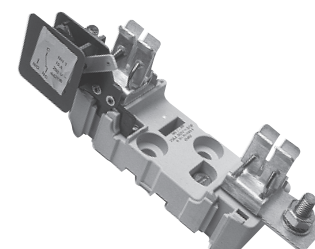
Size	Voltage Rating (V)	Current Rating I_N (A)	Cat.number	Reference Number	Breaking Capacity	Pack
0	690V	32	NH0AM69V32P-2	Z213140C	80kA - 690V	3
0	690V	40	NH0AM69V40P-2	R213639C	80kA - 690V	3
0	690V	50	NH0AM69V50P-2	V214148C	80kA - 690V	3
0	690V	63	NH0AM69V63P-2	Y214657C	80kA - 690V	3
0	690V	80	NH0AM69V80P-2	C215167C	80kA - 690V	3
0	690V	100	NH0AM69V100P-2	F215676C	80kA - 690V	3
0	690V	125	NH0AM69V125P-2	L216187C	80kA - 690V	3
0	690V	160	NH0AM69V160P-2	J216691C	80kA - 690V	3
0	500V	200	NH0AM50V200P-2	X217209C	120kA - 500V	3
1	690V	80	NH1AM69V80P-2	C217720C	80kA - 690V	3
1	690V	100	NH1AM69V100P-2	M218235C	80kA - 690V	3
1	690V	125	NH1AM69V125P-2	A218753C	80kA - 690V	3
1	690V	160	NH1AM69V160P-2	P219272C	80kA - 690V	3
1	690V	200	NH1AM69V200P-2	B222480C	80kA - 690V	3
1	690V	250	NH1AM69V250P-2	T223002C	80kA - 690V	3
1	500V	315	NH1AM50V315P-2	A200790C	120kA - 500V	3
2	690V	125	NH2AM69V125-2	S201335C	80kA - 690V	3
2	690V	160	NH2AM69V160-2	B201849C	80kA - 690V	3
2	690V	200	NH2AM69V200-2	Y211069C	80kA - 690V	3
2	690V	224	NH2AM69V224P-2	P211590C	80kA - 690V	3
2	690V	250	NH2AM69V250-2	Y212104C	80kA - 690V	3
2	690V	315	NH2AM69V315P-2	N212624C	80kA - 690V	3
2	690V	355	NH2AM69V355-2	A213141C	80kA - 690V	3
2	690V	400	NH2AM69V400-2	S213640C	80kA - 690V	3
2	500V	500	NH2AM50V500-2	W214149C	120kA - 500V	3
3	690V	315	NH3AM69V315P-2	Z214658C	80kA - 690V	3
3	690V	355	NH3AM69V355P-2	D215168C	80kA - 690V	3
3	690V	400	NH3AM69V400P-2	G215677C	80kA - 690V	3
3	690V	500	NH3AM69V500P-2	M216188C	80kA - 690V	3
3	500V	630	NH3AM50V630P-2	K216692C	120kA - 500V	3

NH-Fuse Plastic Bases (for NH with striker)

- Fixing: plates (screw) or DIN rail
- Size 0 to 3
- 690V max.



Size	In (A)	Prev. Ref.	Cat. Number	Ref. Number	Pack.
0	160	42906	BB01PPMS	T216194A	1
1	250	42908	BB11PPMS	Q216697A	1
2	400	42910	BB21PPMS	D217215A	1
3	630	42912	BB31PPMS	H218760A	1

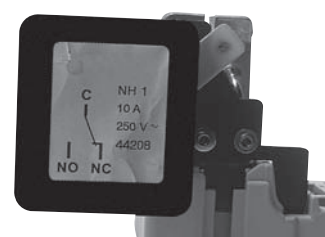


Microswitch (sold separately)

- Microswitch for NH fuse bases in polyester material (screw or rail fixing).
- Microswitch operates when:
 - fuse melts
 - no fuse-link
- Operating voltage: 250 V~
- Rated current: 10 A.
- Terminal size: 6.3 x 0.8 mm.

If you are interested in ordering microswitch and NH fuse base separately: T218241 + X219279 same size as T216194 (size 0)

Size	In (A)	Prev. Ref.	Cat. Number	Ref. Number	Pack.
0	160	44206	MSBB01	X219279A	1
1	250	44208	MSBB11	Y219809A	1
2	400	44210	MSBB21	J222487A	1
3	630	44212	MSBB31	B223009A	1



Fuse holders for plain blade fuses with striker

Master Fuse gG 690V & 500V



Master Fuse: gG fuses with very high ratings



Rating (A)	Size	Cat.Number	Ref.Number	Pack
1250	76	MF76GG69V1250	E302753	1
1600	89	MF89GG69V1600	F302754	1
2000	114	MF114GG69V2000	G302755	1
2500	127	MF127GG69V2500	H302756	1
3200	146	MF146GG50V3200	J302757A	1
4000	159	MF159GG50V4000	K302758A	1
4800	181	MF181GG50V4800	L302759A	1

Characteristics

- High ratings, from 1250 to 4800A
- gG class with rated voltage 690V & 500V
- IEC 60269-1 and 2 compliant
- Dimensions as per section V, IEC 60269-2-1
- Breaking capacity:
160 kA to 690V 50 Hz (1250 to 2500A)
160 kA to 500V 50 Hz (3200 to 4800A)

Applications

- General protection for low voltage panels
- High power protection at 690V&500V
- Backup for circuit breakers
- Blade fuses for power busbar assembly
- Disconnecter, switch or circuit breaker isolation

Fuse and Fusegear complying with the 4 standards: DIN, BS, NF, UL-CSA
Your one-stop shop for the safety of low voltage equipment

Our solutions are fully safe for use in yours!

www.ferrazshawmut.com

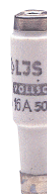
From to

Ferraz Shawmut

1, rue Jean Novel - 69626 Villeurbanne Cedex - France
Tel: 33 (0)4 72 22 66 11 - Fax 33 (0)4 72 22 67 13
324 Merrimac Street, Newburyport, MA 01950 - 1998 - USA
Phone : 978-462-6662 - Fax : 978-462-018
www.ferrazshawmut.com

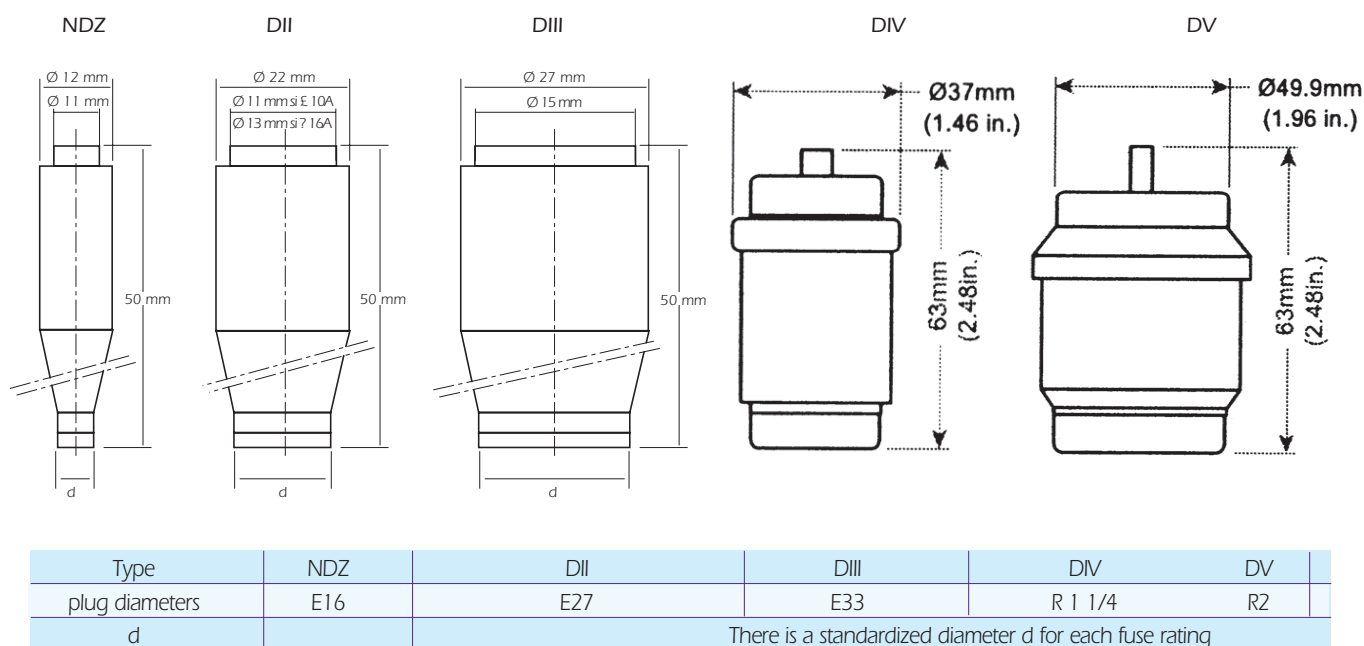
D gG fuses - NDZ, DII, DIII, DIV, DV

Size	Current (A)	Voltage (V)	Color Code	Cat. Number	Ref. number	Pckg
NDZ	2	500V	pink	NDZGG50V2	W212539M	25
NDZ	4	500V	brown	NDZGG50V4	G213055M	25
NDZ	6	500V	green	NDZGG50V6	C213557M	25
NDZ	10	500V	red	NDZGG50V10	B214062M	25
NDZ	16	500V	grey	NDZGG50V16	J214575M	25
NDZ	20	500V	blue	NDZGG50V25	O215087M	25
NDZ	25	500V	yellow	NDZGG50V25	O215593M	25
DII	2	500V	pink	DIIGG50V2	Z219718M	25
DII	4	500V	brown	DIIGG50V4	G222163M	25
DII	6	500V	green	DIIGG50V6	B222917M	25
DII	10/6*	500V	red	DIIGG50V10/6F	D213558M	25
DII	10	500V	red	DIIGG50V10	K200707M	25
DII	16	500V	grey	DIIGG50V16	K201765M	25
DII	20	500V	blue	DIIGG50V20	A211508M	25
DII	25	500V	yellow	DIIGG50V25	X212540M	25
DIII	35	500V	black	DIIGG50V35	C214063M	25
DIII	50	500V	white	DIIGG50V50	K214576M	25
DIII	63	500V	copper	DIIGG50V63	R215088M	25
DIV	80	500V	silver	DIVGG50V80	V216609J	10
DIV	100	500V	red	DIVGG50V100	M217637J	10
DV	125	500V	yellow	DVGG50V125	V218150J	10
DV	160	500V	copper	DVGG50V160	G218667J	10
DV	200	500V	blue	DVGG50V200	W219186J	10



* with base contact stud for 6A (without VDE test mark).

D-fuse systems



Functions

gG industrial fuses – German DIN standard - D EN 60269-1 and 2-1 compliant.
 Old standard (D) on dimensions to mechanically ensure non-interchangeability of ratings.
 Protection for power cables and equipment except motors.
 Selective coordination between two fuses two ratings apart (e.g. 16A and 10A).

Being replaced by NEOZED fuses.
 This single curve replaces previous curves (Träge and Flink).

Applications

Protection at all levels of power distribution.
 Mains, branch circuits, service entrance and point of use equipment.

Bases for D fuses

Snap-on mounting 500Vac/ 690Vac



Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. Number	Ref. number	Pckg
w/o protection against accidental contact						
DII	25	1*	6	00685.100000	K207055AF	15
DIII	63	4*	16	00686.400000	V215597AF	15
with protection against accidental contact						
DII	25	1	6	00685.110000	D211511J	10
DIII	63	4	16	00686.410000	C216110J	10

Screw mounting 500Vac/690Vac



Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. Number	Ref. number	Pckg
w/o protection against accidental contact						
DII	25	1*	6	00081.100000	K218670AF	15
DIII	63	4*	16	00072.400000	H212021AF	15
with protection against accidental contact						
DII	25	1*	6	00081.110000	Z219189J	10
DIII	63	4*	16	00072.410000	A212543J	10

Screw caps for D fuses

690Vac model



Size	Rated current (A)	Cat. Number	Ref. number	Pckg
D III	63	00605.000000	L218671M	25

500Vac porcelain and plastic models



Size	Rated current (A)	Vis	Cat. Number	Ref. number	Pckg
Porcelain with testing hole					
DII	25	E 27	00690.000200	E218619L	20
DIII	63	E 33	00691.000200	B213004L	20
Porcelain w/o testing hole					
NDZ	25	E 16	00589.000000	Z216613P	50
DII	25	E 27	00690.000000	Z218108L	20
DIII	63	E 33	00691.000000	F211973L	20
DIV	100	R11/4		Y216060J	10
Plastic with testing hole					
DII	25	E 27	02071.000000	L201720L	20
DII	63	E 33	02072.000000	E214019L	20

Gauge piece for D fuse

Size	Rated current (A)	Gauge piece color	Cat. Number	Ref. number	Pckg
NDZ	2	pink	01655.002000	B212544P	50
NDZ	4	brown	01655.004000	M213060P	50
NDZ	6	green	01655.006000	H213562P	50
NDZ	10	red	01655.010000	G214067P	50
NDZ	16	grey	01655.016000	P214580P	50



Screw gauge pieces for D fuses (DII/DIII)

Size	Rated current (A)	Gauge piece color	Cat. Number	Ref. number	Pckg
D II	2	pink	01657.002000	A219190M	25
D II	4	brown	01657.004000	D219722M	25
D II	6	green	01657.006000	L222167M	25
D II	10	red	01657.010000	F222921M	25
D II	16	grey	01657.016000	P200711M	25
D II	20	blue	01657.020000	D201253M	25
D II	25	yellow	01657.025000	P201769M	25
D III	35	black	01658.035000	C207071M	25
D III	50	white	01658.050000	E211512M	25
D III	63	copper	01658.063000	J212022M	25



Gauge rings for D fuses (DII/DIII) in the TRI60 system

Size	Rated current (A)	Gauge piece color	Cat. Number	Ref. number	Pckg
D II	2	pink	01652.002000	W215092P	50
D II	4	brown	01652.004000	W215598P	50
D II	6	green	01652.006000	D216111P	50
D II	10	red	01652.010000	A216614P	50
D II	16	grey	01652.016000	M217131P	50
D II	20	blue	01652.020000	S217642P	50
D II	25	yellow	01652.025000	A218155P	50
D III	2	pink	01653.002000	M218672P	50
D III	4	brown	01653.004000	E219723P	50
D III	6	green	01653.006000	M222168P	50
D III	10	red	01653.010000	G222922P	50
D III	16	grey	01653.016000	O200712P	50
D III	20	blue	01653.020000	E201254P	50
D III	25	yellow	01653.025000	Q201770P	50
D III	35	black	01653.035000	L207079P	50
D III	50	white	01653.050000	F211513P	50

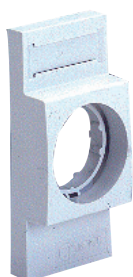


Key for D gauge pieces



Size	Cat.Number	Ref. number	Pckg
DII, DIII	01657.993000	E216112J	10

Insulating cover for D fuse bases



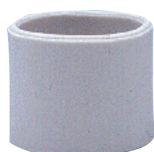
Size	Cat.Number	Ref. number	Pckg
Single-pole			
DII (40mm wide)	00685.700000	H214068Y	30
D III (50 mm wide)	00686.700000	X215093Y	30
D II (45 mm wide)	00685.709000	Q214581Y	30
D III (54 mm wide)	00686.709000	X215599Y	30
3-pole			
D II	00625.700000	N213061G	8
D II	00626.700000	J213563G	8

Touch protection ring for D fuse bases



Size	Cat.Number	Ref. number	Pckg
Plastic			
D II	00181.900000	K222120P	50
D III	00182.900000	A222870P	50
Porcelain			
D II	00081.900000	C219675Y	30

Adapter fitting for D fuse



Size	Cat.Number	Ref. number	Pckg
D II/ D III	00581.000000	C212545P	50

Locking caps



Size	Cat.Number	Ref. number	Pckg
DII Industry ²⁾	02071.810000	N217132J	10
DIII Industry ²⁾	02072.810000	B218156J	10

* PFor authorized power utility personnel only
1) red cap with black tip
2) black cap with red tip

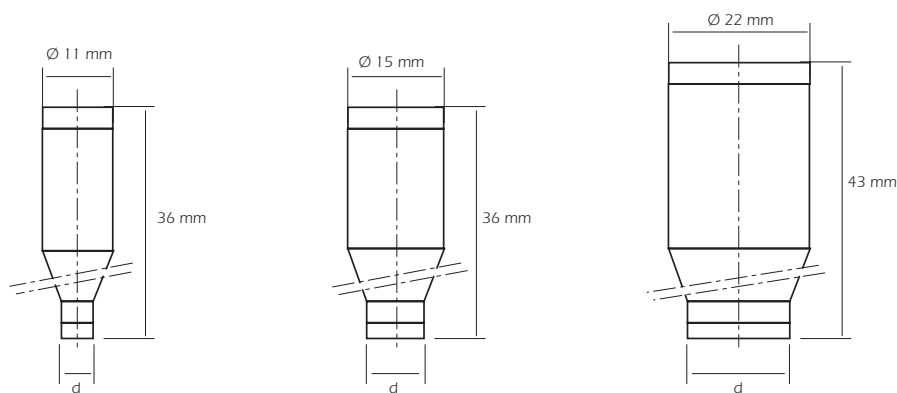
Locking keys

Size	Cat.Number	Ref. number	Pckg
supply boards	01714.820000	K213564P*	50
Industry	01717.830000	J214069P	50

* For authorized power utility personnel only

Neozed gG - D01, D02, D03 - 400Vac/250Vdc

Size	Current (A)	Color Code	Cat.Number	Ref. number	Pckg
D01	2	pink	D01GG40V2	T214676J	10
D01	4	brown	D01GG40V4	W200809J	10
D01	6	green	D01GG40V6	B215695J	10
D01	10	red	D01GG40V10	W211090J	10
D01	13	black	D01GG40V13	C201206J	10
D01	16	grey	D01GG40V16	R223023J	10
D02	20	blue	D01GG40V20	B217742J	10
D02	25	yellow	D01GG40V25	W213160J	10
D02	35	black	D01GG40V35	R219826J	10
D02	50	white	D01GG40V50	D215191J	10
D02	63	copper	D01GG40V63	C201873J	10
D03	80	silver	D01GG40V80	L216716J	10
D03	100	red	D01GG40V100	N212647J	10



Type	D01	D02	D03
plug diameters	E14	E18	M 30x2
d	There is a standardized diameter d for each fuse rating		

Neozed gG - D01, D02 - 440 Vac/250 Vdc fuses



For Marine application

Size	Rated current (A)	Gauge ring code	Cat. Number	Ref. number	Pckg
D01	2	pink	D01GG44V2	E218780P	50
D01	4	brown	D01GG44V4	V219829P	50
D01	6	green	D01GG44V6	X223028P	50
D01	10	red	D01GG44V10	S201358P	50
D02	20	blue	D02GG44V20	X212126P	50
D02	25	yellow	D02GG44V25	S213663P	50
D02	35	black	D02GG44V35	C214684P	50
D02	50	white	D02GG44V50	J215702P	50
D02	63	copper	D02GG44V63	N216718P	50



Neozed aM - D02 - 400Vac/400Vdc

Size	Current (A)	Color Code	Cat. Number	Ref. number	Pckg
D02 aM	20	blue	D02AM44V20	H211607J	10
D02 aM	25	yellow	D02AM44V25	F212640J	10
D02 aM	35	black	D02AM44V35	J213655J	10

Functions

gG industrial fuses – German DIN standard - D EN 60269-1 and 2-1 compliant.
New D0 standard on dimensions to mechanically ensure non-interchangeability of ratings by means of color coded gauge rings for different fuse diameters.
Protection of power cables and equipment except electric motors (gG) and of electric motors (aM).
Selective coordination between two fuses two ratings apart (e.g. 16A and 10A).

Applications

Protection at all levels of power distribution.
Mains, branch circuits, service entrance and point of use equipment (gG).
Protection for all low voltage electrical motors with direct-on-line start (aM).

Plastic screw caps for Neozed

400 Vac / 440 Vdc



Size	Rated current (A)	Cap thread	Cat. Number	Ref. number	Pckg
With testing hole					
D01	16	E 14	01714.000200	E212501L	20
D02	63	E 18	01715.000200	P211981L	20
For DO1 fuses with adapter spring					
D02		E 18	01715.890200	M214026L	20
With sealable hole and testing hole					
D01	16	E 14	11714.000220	R214536L	20
D02	63	E 18	11715.000220	S214537L	20
W/o testing hole					
D02	63	E 18	01715.000000	L206435L	20

Porcelain screw caps for Neozed

400 Vac / 440 Vdc



Size	Rated current (A)	Cap thread	Cat. Number	Ref. number	Pckg
With testing hole					
D01	16	E 14	01710.000200	H201211L	20
D02	63	E 18	01711.000200	T215044L	20
W/o testing hole					
D03	100	M30 x 2	01712.000200	V215045J	10

Gauge ring for Neozed

Size	Rated current (A)	Cap Thread	Cat. Number	Ref. number	Pckg
D01	2	pink	01705.002000	J216576P	50
D01	4	brown	01705.004000	J219681P	50
D01	6	green	01705.006000	P206438P	50
D01	10	red	01705.010000	M213014P	50
D02	2	pink	01706.002000	K216577P*	50
D02	4	brown	01706.004000	S222127P*	50
D02	6	green	01706.006000	R211983P*	50
D02	10	red	01706.010000	H216069P*	50
D02	16	grey	01706.016000	Q218629P*	50
D02	20	blue	01706.020000	S200668P	50
D02	25	yellow	01706.025000	R213524P	50
D02	35	black	01706.035000	J216070P	50
D02	50	white	01706.050000	R218630P	50
D03	80	silver		T200669M	25



Innozed bases for Neozed fuses

Screw mounting 400 Vac

Size	Rated current (A)	Pole	Cat. Number	Ref. number	Weight (g)	Pckg
D01	16	1	02724.000000	R228175K.	75	12
D01	16	3	02734.000000	S228176D	223	4
D02	63	1	02725.000000	W228179K	77	12
D02	63	3	02735.000000	X228180D	229	4



Snap-on mounting with no protective cover 400 Vac

Size	Rated current (A)	Pole	Cat. Number	Ref. number	Weight (g)	Pckg
D01	16	1	02724.100000	F228257K	70	12
D01	16	3	02725.100000	K228261K	210	4
D02	63	1	02734.100000	G228258D	72	12
D02	63	3	02735.100000	L228262D	217	4

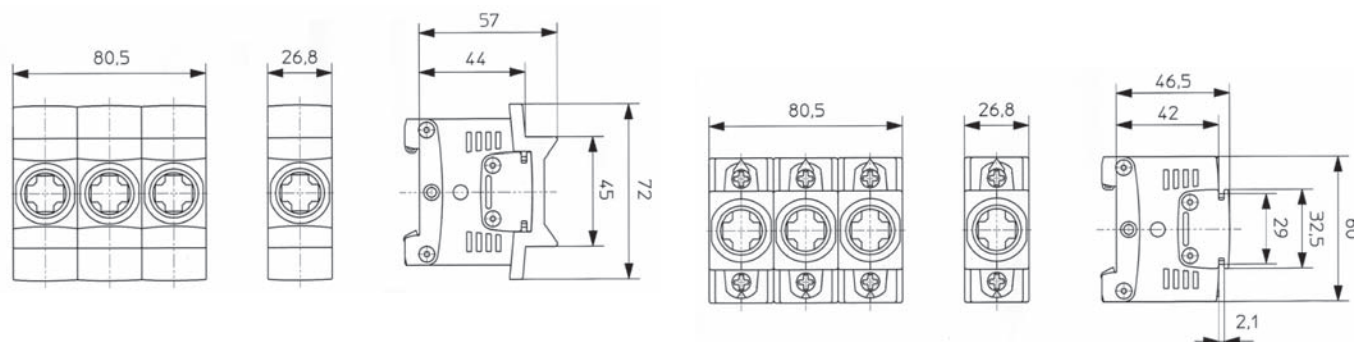


Covers for Innozed

Size	Rated current (A)	Pole	Cat. Number	Ref. number	Weight (g)	Pckg
D01/ D02		1	02718.000000	A228183AP	5	24
D01/ D02		3	02732.000000	B228184K	12	12



Dimensions of Innozed bases



Other bases for Neozed fuses

Screw mounting w/o cover for protection from accidental contact 400V AC



Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. number	Ref. Number	Pckg
D01	16	1 (1*)	4	01720.100000	Z216061L	20
D02	63	1 (2*)	25	01721.200000	M214532L	20
D02	63	1 (4*)	25	01721.400000	F213008L	20
D03	100	1 (4*)	50	01722.400000	J213011J	10
D01	16	3 (1*)	4	01730.100000	K200661E	5
D02	63	3 (2*)	25	01731.200000	F216573E	5
D02	63	3 (4*)	25	01731.400000	K206365E	5

Snap-on mounting w/o cover for protection from accidental contact 400V AC



Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. number	Ref. Number	Pckg
D01	16	1 (1*)	4	01720.150000	J200660L	20
D02	63	1 (2*)	25	01721.250000	J218623L	20
D02	63	1 (4*)	25	01721.450000	W215552L	20
D03	100	1 (4*)	50	01722.450000	Q214535J	10
D01	16	3 (1*)	4	01730.152000	B216063E	5
D02	63	3 (2*)	25	01731.252000	Y217601E	5
D02	63	3 (4*)	25	01731.452000	M211979E	5

Snap-on mounting with cover for protection from accidental contact



Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. number	Ref. Number	Pckg
D01	16	1 (1*)	4	01720.170000	B211463L	20
D01	16	1 (3*)	4	01720.370000	T215550L	20
D01	16	3 (1*)	4	01730.172000	A219144E	5
D02	63	1 (2*)	25	01721.270000	M200663L	20
D02	63	1 (4*)	25	01721.470000	K218624L	20
D02	63	3 (2*)	25	01731.272000	E222874E	5
D02	63	3 (4*)	25	01731.472000	K213518E	5
D03	100	1 (4*)	50	01722.470000	F216067J	10

Insulating covers for Neozed bases

Snap-on mounting 500Vac/690Vac

Type	Cat. Number	Ref. number	Pckg
for type DO1/DO2			
with marking on one side		M222881P	50
with marking area	01718.700000	V200670P	50
for type DO3			
w/o marking area	01728.000000	V211986AR	15
for type DO1/DO2			
cover	01721.030000	X201730L	20
for type DO1/DO2 3-pole			
with marking area	01732.700000	M216579L	20



3-pole fuse bases for Neozed

W/o protection against accidental contact 400 Vac

Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. Number	Ref. number	Pckg
Screw mounting						
D01	16	3	4	01737.100000	A212497E	5
D02	63	3	25	01738.200000	Z217602E	5
Snap-on mounting						
D01	16	3	4	01737.150000	E213007E	5
D02	63	3	25	01738.250000	B218110E	5



Single-pole fuse bases for Neozed

W/o protection against accidental contact 400 Vac

Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. Number	Ref. number	Pckg
Clamped mounting on 12 x 4...5mm, 15 x 4...5 mm busbar						
D02	63	1	25		P222124L	20
Clamped mounting on 12 x 4...10mm, 15 x 4...10 mm busbar						
D02	63	1	25		L218625L	20
Snap-on mounting on 15 x 5 mm busbar						
D02	63	1	25		G219679L	20

Clamped mounting



Snap-on mounting

Snap-on mounting w/o cover for protection from accidental contact 440 Vac

Size	Rated current (A)	Pole	Max. wire cross-section mm ²	Cat. Number	Ref. number	Pckg
D01	16	1	4	01720.150040	D201207L	20
D02	63	1	25	01721.250040	M222122L	20
D02	63	1	25	01721.450040	C216064L	20
D01	16	3	4	01730.152040	C216570E	5
D02	63	3	25	01731.252040	A218109E	5
D02	63	3	25	01731.452040	C212499E	5



Neozed holding spring



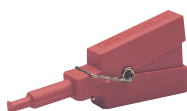
Size	Cat.Number	Ref. number	Pckg
For DO1 fuses in DO2 bases	01713.000000	Z215049P	50
For DO1 fuses in DO2 bases	01709.000000	P214028M	25
For DO1 fuses in DL bases	01733.000000	J218117Q	100

Neozed spacer



Size	Cat.Number	Ref. number	Pckg
For DO2 fuses in DO3 bases	01707.000000	T211985Y	30

Neozed Gauge ring key



Size	Cat.Number	Ref. number	Pckg
For DO1, DO2, DO3	01708.000000	J212505A	1

Neozed screw cap remover



Size	Cat.Number	Ref. number	Pckg
Plastic screw caps DO1, DO2	01716.000000	X222936A	1

Neozed locking caps



Size	Cat.Number	Ref. number	Pckg
DO1 supply boards (1)	01714.800000	D212546M*	25
DO1 Industry (2)	01714.810000	P213062M	25
DO2 supply boards (1)	01715.800000	R214582M*	25
DO2 Industry (2)	01715.810000	Y215094M	25

* For authorized power utility personnel only
1) red cap with black tip
2) black cap with red tip

Neozed locking keys

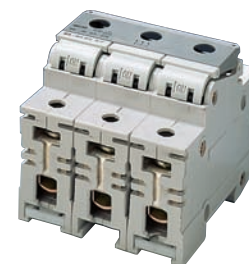
Size	Cat.Number	Ref. number	Pckg
DO2 supply boards		K213564J	10
DO2 Industry		J214069J	10

* For authorized power utility personnel only

Linocur switch disconnectors, for Neozed D02

Snap-on mounting on DIN rails as per DIN EN50022

Size	Pole	Number of modules	Max. wire cross-section (mm ²)	Cat. Number	Ref. Number	Pckg
up to 63 A*	1	1,5	35	04861.063000	P222883C	3
up to 63 A*	1+N	3	35	04861.063100	Z200674B	2
up to 63 A*	2	3	35	04862.063000	D215053B	2
up to 63 A*	3	4,5	35	04863.063000	T219690A	1
up to 63 A*	3+N	6	35	04863.063100	A214544A	1
Dummy fuse D02					F215055A	1



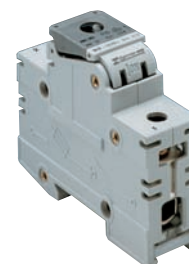
Adaptator spring D01/D02 (for D01 fuse-link) - E215049P

Made-to-order Linocur switch disconnectors for Neozed D02

440 Vac, D02

Snap-on mounting on top-hat rails as per DIN EN50022

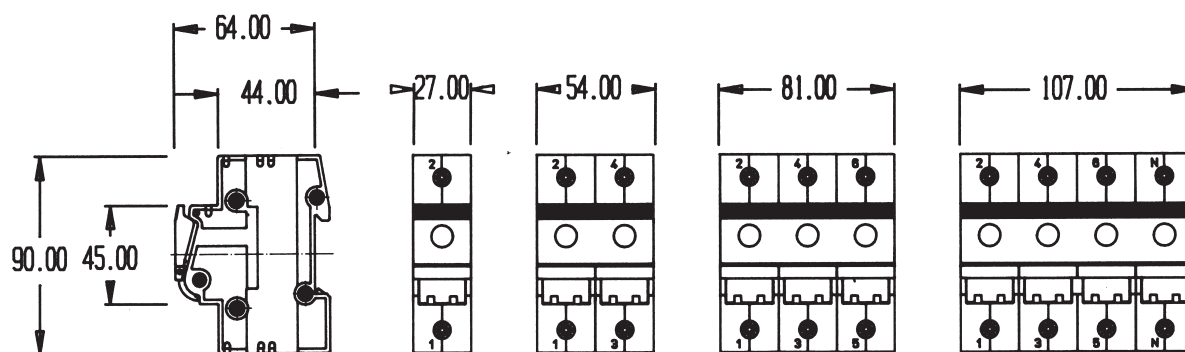
Size	Pole	Number of modules	Max. wire cross-section (mm ²)	Cat. Number	Ref. Number	Pckg
up to 63 A*	1	1,5	35	04861.063040	C215052C	3
up to 63 A*	2	3	35	04862.063040	N216074B	2
up to 63 A*	3	4,5	35	04863.063040	Z211990A	1
up to 63 A*	3+N	6	35	04863.063140	P216075A	1



* Linocur is available on request in 25, 35 and 50 A with permanently fitted and non-interchangeable adapter sleeves. In 1+N and 3+N versions, the N conductor leads when making and lags when breaking.

* Order Neozed fuses and adapter sleeves as options.

dimensions of Linocur switch disconnectors



Replacement insulating D0 LINO CUR

screw cap with testing hole



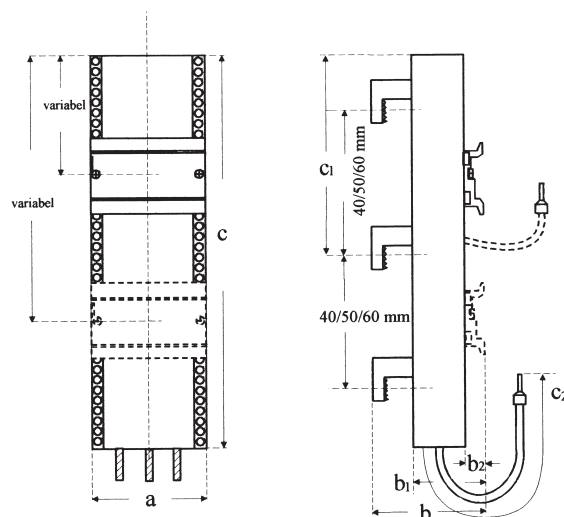
For bases	Rated current (A)	Rating / Color code	Cat. Number	Ref. number	Pckg
With testing hole					
D02	63	E18		C214546J	10
W/o testing hole					
D02	63	E18		Y213024J	10

Adapter for 40, 50 or 60 mm busbar systems



Size	Rated current (A)	Cap Thread	Cat. Number	Ref. number	Pckg
40 mm 3 x 63 A system					
Mono-A.	adjustable	1	02805.100000	E201783A	1
Mono-A.	adjustable	1	03805.400000	W219692A	1
Dual-A.	adjustable	2	03807.400000	R212512A	1
Dual-A.	adjustable	2 middle	03806.400000	C201735A	1
50 mm 3 x 63 A system					
Mono-A.	adjustable	1	03805.500000	A222134A	1
Dual-A.	adjustable	2	03807.500000	Z213025A	1
Dual-A.	adjustable	2 middle	03806.500000	V206604A	1
60 mm 3 x 63 A system					
Mono-A.	adjustable	1	03805.600000	T222887A	1
Dual-A.	adjustable	2	03807.600000	X213529A	1
Dual-A.	adjustable	2 middle	03806.600000	O211476A	1
Dual-A.	adjustable	1	03807.610000	D214547A	1
Dual-support	adjustable	0	03807.630000	G215056A	1

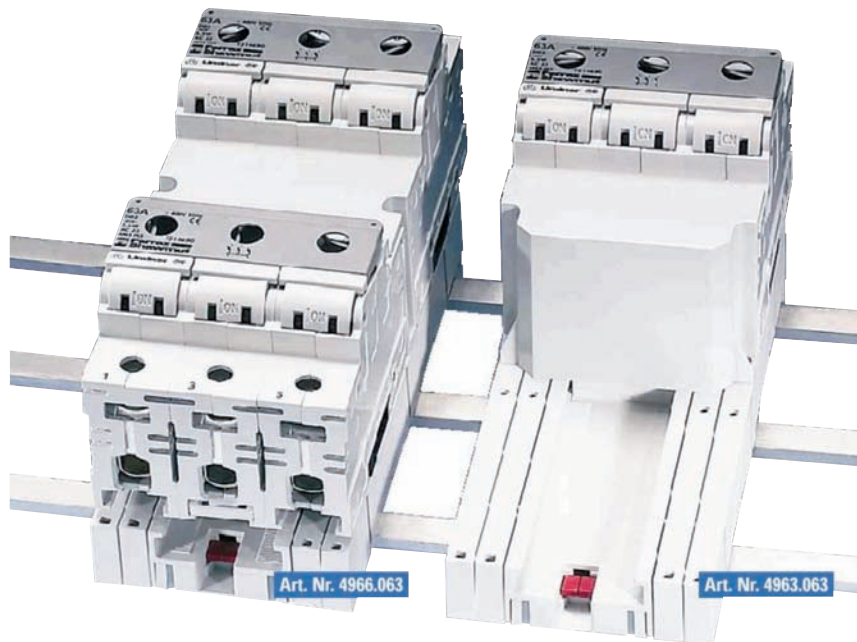
dimensions of adapters for busbar systems



D0 Linobloc for Neozed D02

- Direct fixing onto 60 mm busbarsystem

Size	Pole	Number of modules	Cat. Number	Ref. Number	Pckg
up to 63 A	1x3	4.5	04963.0630000	P302739A	1
up to 63 A	2x3	4.5	04966.063000	Q302740A	1



Offset Bolted Tag Fuses Links (A-type) - 415Vac



Rating (A)	Catalog Number	Reference Number	BS Standard Reference	IEC Standard Reference	Designation (Fuse Type)	Pack.
2	BNIT42V2	N226263J	BS88-2	IEC60269-2	2A1	10
4	BNIT42V4	P226264J	BS88-2	IEC60269-2	4A1	10
6	BNIT42V6	O226265J	BS88-2	IEC60269-2	6A1	10
10	BNIT42V10	R226266J	BS88-2	IEC60269-2	10A1	10
16	BNIT42V16	S226267J	BS88-2	IEC60269-2	16A1	10
20	BNIT42V20	T226268J	BS88-2	IEC60269-2	20A1	10
25	BNIT42V25	V226269J	BS88-1	IEC60269-1	25A1	10
32	BNIT42V32	W226270J	BS88-1	IEC60269-1	32A1	10
25	BNIT42V20M25	X226271J	BS88-2	IEC60269-2	20M25A1	10
32	BNIT42V20M32	Y226272J	BS88-2	IEC60269-2	20M32A1	10
2	BTIA42V2	Z226273J	BS88-2	IEC60269-2	2A2	10
4	BTIA42V4	A226274J	BS88-2	IEC60269-2	4A2	10
6	BTIA42V6	B226275J	BS88-2	IEC60269-2	6A2	10
10	BTIA42V10	C226276J	BS88-2	IEC60269-2	10A2	10
16	BTIA42V16	D226277J	BS88-2	IEC60269-2	16A2	10
20	BTIA42V20	V227833J	BS88-2	IEC60269-2	20A2	10
25	BTIA42V25	E226278J	BS88-2	IEC60269-2	25A2	10
32	BTIA42V32	F226279J	BS88-2	IEC60269-2	32A2	10
40	BTIA42V32M40	G226280J	BS88-2	IEC60269-2	32M40A2	10
50	BTIA42V32M50	H226281J	BS88-2	IEC60269-2	32M50A2	10
63	BTIA42V32M63	K226283J	BS88-2	IEC60269-2	32M63A2	10
40	BTIS42V40	L226284J	BS88-2	IEC60269-2	40A3	10
50	BTIS42V50	M226285J	BS88-2	IEC60269-2	50A3	10
63	BTIS42V63	N226286J	BS88-2	IEC60269-2	63A3	10
80	BTIS42V80	P226287J	BS88-1	IEC60269-1	80A3	10
100	BTIS42V100	O226288J	BS88-1	IEC60269-1	100A3	10
80	BTIS42V63M80	R226289J	BS88-2	IEC60269-2	63M80A3	10
100	BTIS42V63M100	S226290J	BS88-2	IEC60269-2	63M100A3	10
32	BTCP42V32	T226291E	BS88-2	IEC60269-2	32A4	5
40	BTCP42V40	V226292E	BS88-2	IEC60269-2	40A4	5
50	BTCP42V50	W226293E	BS88-2	IEC60269-2	50A4	5
63	BTCP42V63	X226294E	BS88-2	IEC60269-2	63A4	5
80	BTCP42V80	Y226295E	BS88-2	IEC60269-2	80A4	5
100	BTCP42V100	Z226296E	BS88-2	IEC60269-2	100A4	5
125	BTCP42V100M125	A226297E	BS88-2	IEC60269-2	100M125A4	5
160	BTCP42V100M160	B226298E	BS88-2	IEC60269-2	100M160A4	5
200	BTCP42V100M200	C226299E	BS88-2	IEC60269-2	100M200A4	5
125	BTFP42V125	D226300E	BS88-1	IEC60269-1	125A4X	5
160	BTFP42V160	E226301E	BS88-1	IEC60269-1	160A4X	5
200	BTFP42V200	F226302E	BS88-1	IEC60269-1	200A4X	5
250	BTFP42V200M250	G226303E	BS88-1	IEC60269-1	200M250A4X	5
315	BTFP42V200M315	H226304E	BS88-1	IEC60269-1	200M315A4X	5

Central Bolted Tag Fuse Links (B & C-Type) - 415Vac

Rating (A)	Catalog Number	Reference Number	BS Standard Reference	IEC Standard Reference	Designation (Fuse Type)	Pack.
32	BTBC42V32	J226305J	BS88-2	IEC60269-2	32B1X	10
40	BTBC42V40	K226306J	BS88-2	IEC60269-2	40B1X	10
50	BTBC42V50	L226307J	BS88-2	IEC60269-2	50B1X	10
63	BTBC42V63	M226308J	BS88-2	IEC60269-2	63B1X	10
80	BTC42V80	N226309E	BS88-2	IEC60269-2	80B1	5
100	BTC42V100	P226310E	BS88-2	IEC60269-2	100B1	5
125	BTC42V100M125	Q226311E	BS88-2	IEC60269-2	100M125B1	5
160	BTC42V100M160	R226312E	BS88-2	IEC60269-2	100M160B1	5
200	BTC42V100M200	S226313E	BS88-2	IEC60269-2	100M200B1	5
125	BTF42V125	T226314E	BS88-2	IEC60269-2	125B2	5
160	BTF42V160	V226315E	BS88-2	IEC60269-2	160B2	5
200	BTF42V200	W226316E	BS88-2	IEC60269-2	200B2	5
250	BTF42V200M250	X226317A	BS88-2	IEC60269-2	200M250B2	1
315	BTF42V200M315	Y226318A	BS88-2	IEC60269-2	200M315B2	1
250	BTKF42V250	Z226319A	BS88-2	IEC60269-2	250B3	1
315	BTKF42V315	A226320A	BS88-2	IEC60269-2	315B3	1
400	BTKF42V315M400	B226321A	BS88-1	IEC60269-1	315M400B3	1
250	BTKM42V250	C226322A	BS88-1	IEC60269-1	250B3X	1
315	BTKM42V315	D226323A	BS88-1	IEC60269-1	315B3X	1
355	BTMF42V355	E226324A	BS88-2	IEC60269-2	355B4	1
400	BTMF42V400	F226325A	BS88-2	IEC60269-2	400B4	1
355	BTM42V355	G226326A	BS88-2	IEC60269-2	355C1	1
400	BTM42V400	H226327A	BS88-2	IEC60269-2	400C1	1
450	BTTM42V450	J226328A	BS88-2	IEC60269-2	450C2	1
500	BTTM42V500	K226329A	BS88-2	IEC60269-2	500C2	1
560	BTTM42V560	L226330A	BS88-2	IEC60269-2	560C2	1
630	BTTM42V630	M226331A	BS88-2	IEC60269-2	630C2	1
670	BTLM42V670	N226332A	BS88-2	IEC60269-2	670C3	1
710	BTLM42V710	P226333A	BS88-2	IEC60269-2	710C3	1
750	BTLM42V750	Q226334A	BS88-2	IEC60269-2	750C3	1
800	BTLM42V800	R226335A	BS88-2	IEC60269-2	800C3	1



BS 88 Low Voltage

Offset Blade Tag Fuse Links (F-Type) - 415Vac



Rating (A)	Catalog Number	Reference Number	BS Standard Reference	IEC Standard Reference	Designation (Fuse Type)	Pack.
2	BNS42V2	S226336J	BS88-6	IEC60269-2	2F1	10
4	BNS42V4	T226337J	BS88-6	IEC60269-2	4F1	10
6	BNS42V6	V226338J	BS88-6	IEC60269-2	6F1	10
10	BNS42V10	W226339J	BS88-6	IEC60269-2	10F1	10
16	BNS42V16	X226340J	BS88-6	IEC60269-2	16F1	10
20	BNS42V20	Y226341J	BS88-6	IEC60269-2	20F1	10
25	BNS42V25	Z226342J	BS88-6	IEC60269-2	25F1	10
32	BNS42V32	A226343J	BS88-6	IEC60269-2	32F1	10
25	BNS42V20M25	B226344J	BS88-6	IEC60269-2	20M25F1	10
32	BNS42V20M32	C226345J	BS88-6	IEC60269-2	20M32F1	10
10	BES42V10	D226346J	BS88-6	IEC60269-2	10F2	10
16	BES42V16	E226347J	BS88-6	IEC60269-2	16F2	10
20	BES42V20	F226348J	BS88-6	IEC60269-2	20F2	10
25	BES42V25	G226349J	BS88-6	IEC60269-2	25F2	10
32	BES42V32	H226350J	BS88-6	IEC60269-2	32F2	10
40	BES42V40	J226351J	BS88-6	IEC60269-2	40F2	10
50	BES42V50	K226352J	BS88-6	IEC60269-2	50F2	10
63	BES42V63	L226353J	BS88-6	IEC60269-2	63F2	10

Fuse holders for F1 F2



Fuse range	Nominal Current (Amp)	Color	Connection	Catalog Number	Reference Number	Packaging
F1	32	Black	front-front	BFF32F1	A230138F	6
F1	32	Black	back-back	BBB32F1	N239120F	6
F1	32	Black	front-back	BFB32F1	B230139F	6
F1	32	White	front-front	BFF32F1W	P239121F	6
F1	32	White	back-back	BBB32F1W	Q239122F	6
F1	32	-	-	BNEUTRALF1	D239134J	10
F2	63	Black	front-front	BFF63F2	S239124F	6
F2	63	Black	back-back	BBB63F2	T239125F	6
F2	63	Black	front-back	BFB63F2	V239126F	6
F2	63	White	front-front	BFF63F2W	W239127F	6
F2	63	White	back-back	BBB63F2W	X239128F	6
F2	63	White	front-back	BFB63F2W	Y239129F	6
F2	63	Green	front-front	BFF63F2G	Z239130F	6
F2	63	Green	back-back	BBB63F2G	A239131F	6
F2	63	Green	front-back	BFB63F2G	B239132F	6
-	63	-	-	BNEUTRALF2	E239135J	10

Comparison chart for BS88 LV Fuse links

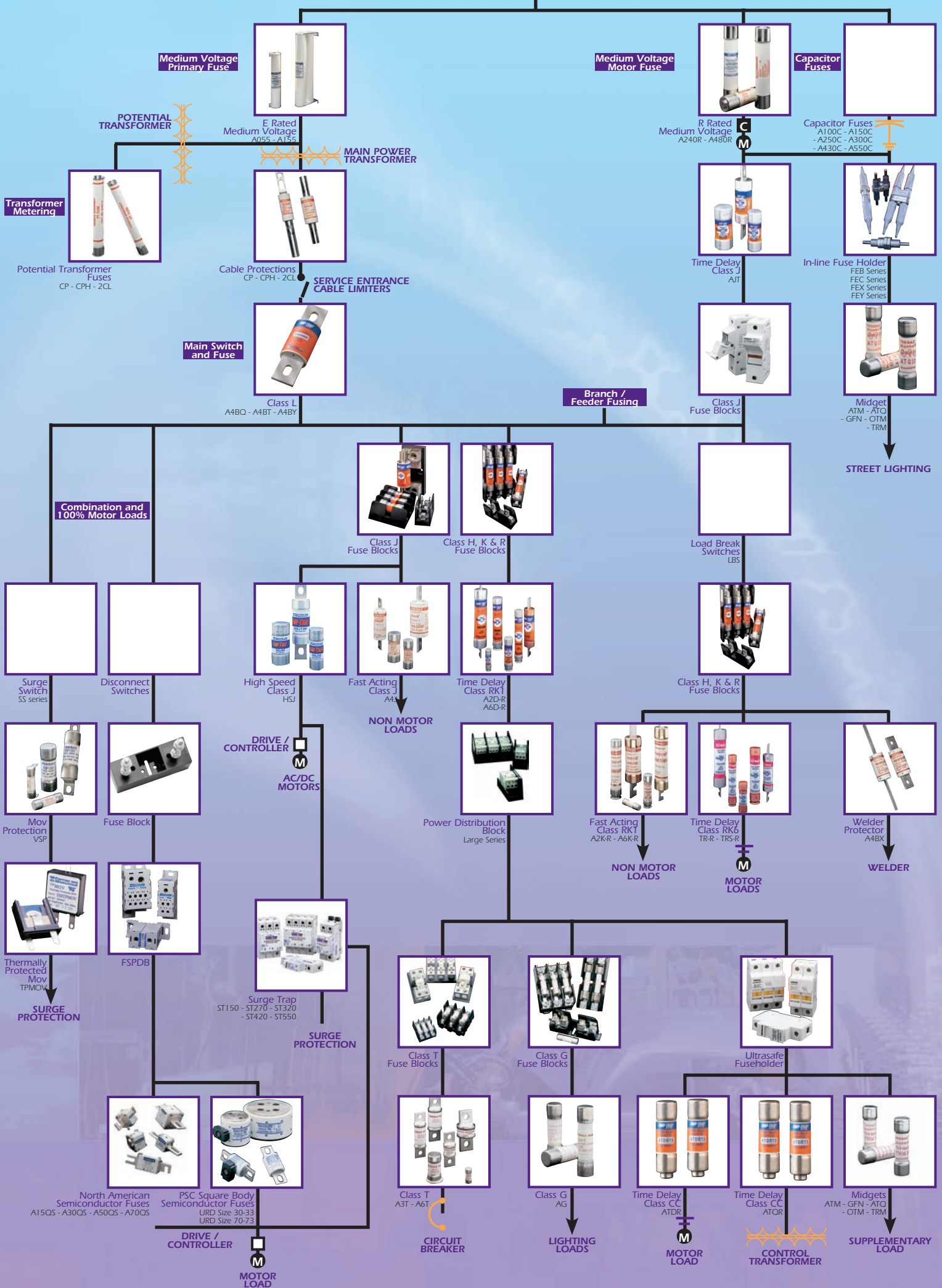
Competitors		FERRAZ SHAWMUT
NIT	NITD	BNIT42Vx
TIA	AAO	BTIA42Vx
TIS	BAO	BTIS42Vxx
TCP	CEO	BTCP42Vxx
TFP	DEO	BTFP42Vxxx
TBC	BD	BTBC42Vxx
TC	CD	BTC42Vxx
TF	DD	BTF42Vxxx
TKF	ED	BTKF42Vxxx
TKM	EFS	BTKM42Vxxx
TMF	ED	BTMF42Vxxx
TM	EF	BTM42Vxxx
TTM	FF	BTTM42Vxxx
TLM	GF	BTLM42Vxxx
NS	NSD	BNS42Vx
MES	ESD	BES42Vxx

UL-CSA General Purpose Fuses

▪ Product Selector	52
▪ Fuses links	53 - 66
▪ Class CC (UL listed)	53 - 54
▪ Fuse holders for Class CC	54 - 55
▪ Midget fuses	55 - 57
▪ Fuse holders for Midget Fuses	57 - 58
▪ Class J	59 - 61
▪ Fuse holders for Class J	61
▪ Class RK1	62
▪ Fuse holders for Class RK1	62
▪ Class RK5	63 - 64
▪ Fuse holders for Class RK5	64
▪ Class L	65
▪ Class T	66
▪ Modulostar® Fuse holders	67 - 72
▪ UL listed for Class CC	67 - 68
▪ UL recognized for Midget	68 - 69
▪ UL recognized for Other sizes Ferrule	70 - 72
▪ FSPDB connections	73



Product Selector



ATDR (Class CC TD) - 600Vac/300Vdc

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/4	ATDR1/4	W200855J	10	4	ATDR4	V217276J	10
1/2	ATDR1/2	Q223068J	10	4-1/2	ATDR4-1/2	Z217786J	10
8/10	ATDR8/10	K201397J	10	5	ATDR5	K218302J	10
1	ATDR1	T217275J	10	6/10	ATDR5-6/10	Z218821J	10
1-1/8	ATDR1-1/8	Y218820J	10	6	ATDR6	L219338J	10
1-1/4	ATDR1-1/4	J218301J	10	6-1/4	ATDR6-1/4	L219867J	10
1-4/10	ATDR1-4/10	K219337J	10	7	ATDR7	A222548J	10
1-1/2	ATDR1-1/2	Y217785J	10	7-1/2	ATDR7-1/2	R223069J	10
1-6/10	ATDR1-6/10	K219866J	10	8	ATDR8	X200856J	10
1-8/10	ATDR1-8/10	Z222547J	10	9	ATDR9	Y201915J	10
2	ATDR2	S212168J	10	10	ATDR10	J201396J	10
2-1/4	ATDR2-1/4	T213204J	10	12	ATDR12	X201914J	10
2-1/2	ATDR2-1/2	J212689J	10	15	ATDR15	V211135J	10
2-8/10	ATDR2-8/10	L213703J	10	7-1/2	ATDR17-1/2	L211656J	10
3	ATDR3	Y215232J	10	20	ATDR20	R214214J	10
3-2/10	ATDR3-2/10	J216254J	10	25	ATDR25	V214723J	10
3-1/2	ATDR3-1/2	C215742J	10	30	ATDR30	G216758J	10



AMP-TRAP 2000

Applications

- Small Motors
- Contactors
- Lighting, Heating and General Loads
- Branch Circuit Protector

Approvals

- UL Listed to Standard 248-4
- CSA Certified to Standard C22.2 No. 248.4
- DC Listed to UL Standard 198L

Ratings

AC: 1/4 to 30A 600VAC, 200kA I.R.
DC: 1/4 to 30A 300VDC, 100kA I.R.

Highlights

- Time Delay
- Best Choice for Small Motor Protection
- Highly Current-Limiting
- AC & DC Rated

ATOR (Class CC TD) - 600Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/10	ATOR1/10	E201921J	10	2-8/10	ATOR2-8/10	O216260J	10
1/8	ATOR1/8	A212175J	10	3	ATOR3	T218310J	10
15/100	ATOR15/100	S223507J	10	3-2/10	ATOR3-2/10	V219346J	10
3/16	ATOR3/16	J222556J	10	3-1/2	ATOR3-1/2	G218828J	10
2/10	ATOR2/10	Q216766J	10	4	ATOR4	S201404J	10
1/4	ATOR1/4	V211664J	10	4-1/2	ATOR4-1/2	F201922J	10
3/10	ATOR3/10	V219875J	10	5	ATOR5	W211665J	10
4/10	ATOR4/10	D211143J	10	5-6/10	ATOR5-6/10	B212176J	10
1/2	ATOR1/2	C211142J	10	6	ATOR6	T212698J	10
6/10	ATOR6/10	V213711J	10	6-1/4	ATOR6-1/4	D213213J	10
3/4	ATOR3/4	A223077J	10	7	ATOR7	B214223J	10
8/10	ATOR8/10	L215750J	10	7-1/2	ATOR7-1/2	E214732J	10
1	ATOR1	F218827J	10	8	ATOR8	H215241J	10
1-1/8	ATOR1-1/8	H222555J	10	9	ATOR9	R216261J	10
1-1/4	ATOR1-1/4	T219874J	10	10	ATOR10	S212697J	10
1-4/10	ATOR1-4/10	Z223076J	10	12	ATOR12	C213212J	10
1-1/2	ATOR1-1/2	T219345J	10	15	ATOR15	T213710J	10
1-6/10	ATOR1-6/10	E200863J	10	17-1/2	ATOR17-1/2	A214222J	10
1-8/10	ATOR1-8/10	R201403J	10	20	ATOR20	D217284J	10
2	ATOR2	D214731J	10	25	ATOR25	H217794J	10
2-1/4	ATOR2-1/4	K215749J	10	30	ATOR30	F200864J	10
2-1/2	ATOR2-1/2	G215240J	10				



AMP-TRAP 2000

Applications

- Control Transformers
- Solenoids
- Inductive Loads
- Lighting, Heating and General-purpose Loads

Approvals

- UL Listed to Standard 248-4
- CSA Certified to Standard C22.2 No. 248.4

Ratings

AC: 1/10 to 30A 600VAC, 200kA I.R.

Highlights

- Time Delay
- Best Choice for Small Transformer Protection
- Most Current-Limiting

ATMR (Class CC) - 600Vac/600Vdc



AMP-TRAP

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/10	ATMR1/10	C217789J	10	3-1/2	ATMR3-1/2	Y213208J	10
1/8	ATMR1/8	P219341J	10	4	ATMR4	G215746J	10
2/10	ATMR2/10	B201918J	10	5	ATMR5	M216257J	10
1/4	ATMR1/4	C218824J	10	6	ATMR6	L216762J	10
3/10	ATMR3/10	W214218J	10	7	ATMR7	Z217280J	10
1/2	ATMR1/2	N218305J	10	8	ATMR8	D217790J	10
3/4	ATMR3/4	Z214727J	10	9	ATMR9	P218306J	10
1	ATMR1	L216256J	10	10	ATMR10	P219870J	10
1-1/4	ATMR1-1/4	Y217279J	10	12	ATMR12	D222551J	10
1-1/2	ATMR1-1/2	K216761J	10	15	ATMR15	V223072J	10
2	ATMR2	A200859J	10	20	ATMR20	Z211139J	10
2-1/2	ATMR2-1/2	N201400J	10	25	ATMR25	Q211660J	10
3	ATMR3	N212693J	10	30	ATMR30	C215236J	10

Ratings

AC: 1/10 to 30A, 600VAC, 200kA I.R.
DC: 1/10 to 30A, 600VDC, 100kA I.R.

Highlights

- Fast Acting
- Very Current-Limiting

Applications

- Control Circuits
- Lighting
- General Loads
- Branch Circuit Protection

Approvals

- UL Listed to Standard 248-4
- CSA Certified to Standard C22.2No. 248.4
- DC Listed to UL Standard 248

Recommended Fuse Holders with Box Connectors

MODULOSTAR™ Fuse holder



Nb of pole	Cat Number w/o indicator	Ref. Number w/o indicator	Cat Number with indicator	Ref. Number with indicator	Nb of Mod. 17.5 mm	Pck.
1			USBCC1-DC24	P303015F ⁽¹⁾	1	12
1	USBCC1	H305033K	USBCC1I	P305039K	1	12
2	USBCC2	K305035F	USBCC2I	R305041F	2	6
3	USBCC3	L305036D	USBCC3I	S305042D	3	4
4	USBCC4	N305038C	USBCC4I	V305044C	4	3
1+N	USBCC1N	J305034F	USBCC1NI	Q305040F	2	6
3+N	USBCC3N	M305037C	USBCC3NI	T305043C	4	3

(1): 24Vdc LED

Accessories

Description	Cat. Number	ref. Number	Nb. of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725K				12
Lock	LOCK	M223525A				1
Tag and lockout	TAGLOCKCMS810	A235773A				1
jumping bars 1 phase size 8/10*	CMS810BB1F13	T210306J	13	63	1	10
jumping bars 2 phases size 8/10*	CMS810BB2F6	V210307J	6	63	2	10
jumping bars 3 phases size 8/10*	CMS810BB3F4	W210308J	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309J	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316P		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318P		90		50
1 phase axial incoming power supply	TBB1A	D210315P		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317P		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.

ULTRASAFE™ USFM Fuse holder and Fuse disconnecter

Nb of pole	Cat Number	Ref.Number	Fonction		Pack
			Fuse Holder	Fuse Discon.	
3 poles	USFMCC	P302762A	w/o Indicator		1
system /	USFMCCM	B302796A		w/o Indicator	1
45 mm	USFMCCI	Q302763A	with Indicator		1
width	USFMCCMI	R302764A		with Indicator	1

Fuse holder is without Prebreaking Microswitch (see accessories)
Fuse disconnecter is with mounted Prebreaking Microswitch



Accessories

Description	Cat. Number	ref. Number	Nb.of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Lock	LOCK	M223525A				1
Microswitch	USFMAC11	C302797A	1		3	1
jumping bars 3 phases			2		3	
Lateral incoming power supply	TBB23C	G210318P		90		50
Axial incoming power supply	TBB23A	F210317P		90		50

ATQ (Midget) - 500Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/10	ATQ1/10	S211662J	10	2-1/2	ATQ2-1/2	N216764J	10
1/8	ATQ1/8	A213210J	10	2-8/10	ATQ2-8/10	R218308J	10
15/100	ATQ15/100	J215748J	10	3	ATQ3	G222554J	10
3/16	ATQ3/16	D201920J	10	3-2/10	ATQ3-2/10	D200862J	10
2/10	ATQ2/10	E218826J	10	3-1/2	ATQ3-1/2	Y223075J	10
1/4	ATQ1/4	Q212695J	10	4	ATQ4	T211663J	10
3/10	ATQ3/10	O201402J	10	4-1/2	ATQ4-1/2	Z212174J	10
4/10	ATQ4/10	R212696J	10	5	ATQ5	B213211J	10
1/2	ATQ1/2	Y212173J	10	5-6/10	ATQ5-6/10	S213709J	10
6/10	ATQ6/10	F215239J	10	6	ATQ6	Z214221J	10
8/10	ATQ8/10	G217793J	10	6-1/4	ATQ6-1/4	C214730J	10
1	ATQ1	E217791J	10	7	ATQ7	P216765J	10
1-1/8	ATQ1-1/8	R219872J	10	8	ATQ8	C217283J	10
1-1/4	ATQ1-1/4	R219343J	10	9	ATQ9	S218309J	10
1-4/10	ATQ1-4/10	F222553J	10	10	ATQ10	R213708J	10
1-1/2	ATQ1-1/2	Q218307J	10	12	ATQ12	Y214220J	10
1-6/10	ATQ1-6/10	X223074J	10	14	ATQ14	B214729J	10
1-8/10	ATQ1-8/10	C200861J	10	15	ATQ15	E215238J	10
2	ATQ2	P216259J	10	20	ATQ20	S219344J	10
2-1/8	ATQ2-1/8	F217792J	10	25	ATQ25	S219873J	10
2-1/4	ATQ2-1/4	B217282J	10	30	ATQ30	B211141J	10



AMP-TRAP

Ratings

AC: 1/10 to 30A, 500VAC, 10kA I.R.

Highlights

- Time Delay

Applications

- Supplemental protection of lighting, solenoid, motor, and transformer circuits

Approvals

- UL Listed to Standard 248-14
- CSA Certified to Standard C22.2 No. 248.14

ATM (Midget) - 600Vac/600Vdc



AMP-TRAP

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/10	ATM1/10	L218303J	10	5	ATM5	K216255J	10
1/8	ATM1/8	M219868J	10	6	ATM6	J216760J	10
2/10	ATM2/10	X211137J	10	7	ATM7	X217278J	10
1/4	ATM1/4	M219339J	10	8	ATM8	B217788J	10
1/2	ATM1/2	A218822J	10	10	ATM10	B222549J	10
3/4	ATM3/4	W213206J	10	12	ATM12	Y200857J	10
1	ATM1	W217277J	10	15	ATM15	L201398J	10
1-1/2	ATM1-1/2	A217787J	10	20	ATM20	N211658J	10
2	ATM2	Z201916J	10	25	ATM25	V212170J	10
3	ATM3	L212691J	10	30	ATM30	N213705J	10
4	ATM4	E215744J	10				

Ratings

AC: 1/10 to 30A, 600VAC, 100kA I.R.; 35 to 50A, 600VAC, 10kA I.R.
DC: 1/10 to 30A, 600VDC, 100kA I.R.

Highlights

- Fast Acting
- Special Ratings(above 30A)

Applications

- Supplemental protection of a wide variety of circuits up to 600VAC and 600VDC with 100kA I.R.

Approvals

- UL Listed to Standard 248-14 (1/10 to 30A)
- DC listed to UL Standard 248-14 (1/10 to 30A)
- CSA Certified to Standard C22.2 No. 248.14 (1/10 to 30A)

TRM (Midget) - 600Vac/600Vdc



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/10	TRM1/10	R217273J	10	3	TRM3	H213700J	10
15/100	TRM15/100	M223065J	10	3-2/10	TRM3-2/10	R214720J	10
2/10	TRM2/10	P212165J	10	3-1/2	TRM3-1/2	N214211J	10
1/4	TRM1/4	F218298J	10	4	TRM4	F216251J	10
3/10	TRM3/10	V215229J	10	4-1/2	TRM4-1/2	D216755J	10
4/10	TRM4/10	W217783J	10	5	TRM5	G218299J	10
1/2	TRM1/2	V217782J	10	5-6/10	TRM5-6/10	W218818J	10
6/10	TRM6/10	X222545J	10	6	TRM6	H219335J	10
8/10	TRM8/10	G201394J	10	6-1/4	TRM6-1/4	H219864J	10
1	TRM1	M214210J	10	7	TRM7	N223066J	10
1-1/8	TRM1-1/8	T215228J	10	8	TRM8	T200853J	10
1-1/4	TRM1-1/4	Q214719J	10	9	TRM9	V201912J	10
1-4/10	TRM1-4/10	Y215738J	10	10	TRM10	V218817J	10
1-6/10	TRM1-6/10	E216250J	10	12	TRM12	G219334J	10
1-8/10	TRM1-8/10	C216754J	10	15	TRM15	W222544J	10
2	TRM2	S200852J	10	20	TRM20	F212686J	10
2-1/4	TRM2-1/4	R211132J	10	25	TRM25	Q213201J	10
2-1/2	TRM2-1/2	T201911J	10	30	TRM30	Z215739J	10
2-8/10	TRM2-8/10	H211653J	10				

Ratings

AC: 1/10 to 30A, 600VAC, 100kA I.R.; 35 to 50A, 600VAC, 10kA I.R.
DC: 1/10 to 30A, 600VDC, 100kA I.R.

Highlights

- Fast Acting
- Special Ratings(above 30A)

Applications

- Supplemental protection of a wide variety of circuits up to 600VAC and 600VDC with 100kA I.R.

Approvals

- UL Listed to Standard 248-14 (1/10 to 30A)
- DC listed to UL Standard 248-14 (1/10 to 30A)
- CSA Certified to Standard C22.2 No. 248.14 (1/10 to 30A)

6JX (Midget) - 600Vac/600Vdc

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
0,500	6JX0,5	R083068J	10	6	6JX6	B082686J	10
0,750	6JX0,75	Q079686J	10	7	6JX7	W079783J	10
1	6JX1	S083069J	10	8	6JX8	B080294J	10
1,5	6JX1,5	S080838J	10	9	6JX9	R079848J	10
2	6JX2	K082326J	10	10	6JX10	E082689J	10
2,5	6JX2,5	A080293J	10	12	6JX12	W089397J	10
3	6JX3	F082690J	10	15	6JX15	F082805J	10
3,5	6JX3,5	E079745J	10	20	6JX20	S079849J	10
4	6JX4	E083471J	10	25	6JX25	K079865J	10
5	6JX5	X089398J	10	30	6JX30	S079895J	10



Highlights

Ferraz Shawmut 6JX Midget Fuses are recommended for applications requiring very precise operating characteristics and where high available fault currents demand high interrupting capacities. Typical applications include control circuit, lighting circuit, small motor and control transformer protection.

Test specifications

$I_{NF} = 110\% I_N t \geq 4$ Hours
 $I_F = 135\% I_N t \leq 1$ Hour
 $I_F = 200\% I_N t \leq 120$ Sec.

Recommended Fuse Blocks with Box Connectors

MODULOSTAR® Fuse holders

Nb of pole	Cat Number w/o indicator	Ref. Number w/o indicator	Cat Number with indicator	Ref. Number with indicator	Nb of Mod. 17.5 mm	Pck.
N	US10N	H305056			1	12
1	US101	B305050	US101I	J305057	1	12
1+N	US101N	C305051	US101NI	K305058	2	6
2	US102	D305052	US102I	L305059	2	6
3	US103	E305053	US103I	M305060	3	4
3+N	US103N	F305054	US103NI	N305061	4	3
4	US104	G305055	US104I	P305062	4	3
1			US101I-AC120	R303017K	1	12
1			US101I-DC24(1)	S303018K	1	12
1			US101I-DC24P(2)	Q303016K	1	12

(1) 2 LED 24Vdc for both polarity

(2) 1 LED 24Vdc for 1 polarity



Accessories

Description	Catalog Number	references Number	Nb of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725				12
Lock	LOCK	M223525				1
Tag and lockout	TAGLOCKCMS810	A235773				1
jumping bars 1 phase size 8/10 *	CMS810BB1F13	T210306	13	63	1	10
jumping bars 2 phases size 8/10 *	CMS810BB2F6	V210307	6	63	2	10
jumping bars 3 phases size 8/10 *	CMS810BB3F4	W210308	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318		90		50
1 phase axial incoming power supply	TBB1A	D210315		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.



ULTRASAFE™ USFMM Fuse holder and Fuse disconnecter

Nb of pole	Cat Number	Ref. Number	Fonction	
			Fuse Holder	Fuse Discon.
3 poles	USFMM	D302775	w/o Indicator	
system /	USFMMM	E302776		w/o Indicator
45 mm	USFMMI	G302778	with Indicator	
width	USFMMMI	F302777		with Indicator

Pack: 1 piece
 Fuse holder is without Prebreaking Microswitch (see accessories)
 Fuse disconnecter is with mounted Prebreaking Microswitch

Accessories

Description	Catalog Number	references Number	Number of systems interconnected	Maxi. RMS current (A)	Number of poles	Pckg
Lock	LOCK	M223525A				1
Microswitch	USFMAC11	C302797A	1		3	1
Additional Neutral jumping bars 3 phases			1			
			2		3	
Lateral incoming power supply	TBB23C	G210318P		90		50
Axial incoming power supply	TBB23A	F210317P	1	90		50

Ferraz Shawmut

Fuse and Fusegear complying with the 4 standards: DIN, BS, NF, UL-CSA

Your one-stop shop for the safety of low voltage equipment

Our solutions are fully safe for use in yours!

www.ferrazshawmut.com

from to

CL
CARBONE LORRAINE

FERRAZ SHAWMUT SAS
1, rue Jean Novel
69626 Villeurbanne Cedex
France
Tel + 33 (0)4 72 22 66 11
Fax + 33 (0)4 72 22 67 13
www.ferrazshawmut.com

FERRAZ SHAWMUT Inc
374, Merrimac Street,
Newburyport, MA 01950 - 1998
USA
Phone : 978-462-6662
Fax : 978-462-0181
www.ferrazshawmut.com

A4J (Class J Fast Acting) - 600Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	A4J1	V217299J	10	90	A4J90	R214237J	5
3	A4J3	J219888J	10	100	A4J100	N223089J	5
6	A4J6	T211157J	10	110	A4J110	V200877A	1
10	A4J10	Z217809J	10	125	A4J125	V201935A	1
15	A4J15	K218325J	10	150	A4J150	R211155A	1
20	A4J20	X218842J	10	175	A4J175	Q212189A	1
25	A4J25	L219361J	10	200	A4J200	G212710A	1
30	A4J30	A222571J	10	225	A4J225	X215254A	1
35	A4J35	Q223091J	10	250	A4J250	T217298A	1
40	A4J40	X200879J	10	300	A4J300	K219360A	1
45	A4J45	J201419J	10	350	A4J350	H219887A	1
50	A4J50	X201937J	10	400	A4J400	Z222570A	1
60	A4J60	M211680J	10	450	A4J450	W200878A	1
70	A4J70	H212711J	5	500	A4J500	W201936A	1
80	A4J80	J213724J	5	600	A4J600	S211156A	1



AMP-TRAP

Ratings

AC: 1 to 600A
600VAC, 200kA I.R.
DC: 1 to 600A
300VDC, 20kA I.R.

Highlights

- Fast Acting
- Very Current-Limiting
- DC Ratings

Applications

- Capacitors
- Loadcenters
- Panelboards
- Switchboards
- Bus Duct
- Feeder Circuits
- Circuit Breakers
- Lighting, Heating, and General Loads

Approvals

- UL Listed to Standard 248-8.
- CSA Certified to Standard C22.2 No. 248.8
- DC Tested to UL198L limits
- EC 269-2-1

AJT (Class J TD) - 600Vac/500Vdc



AMP-TRAP 2000



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	AJT1	X214748J	10	20	AJT20	Z201939J	10
1-1/4	AJT1-1/4	C215765J	10	25	AJT25	X211160J	10
1-1/2	AJT1-1/2	B215258J	10	30	AJT30	W213229J	10
1-6/10	AJT1-6/10	G216275J	10	35	AJT35	M213727J	10
1-8/10	AJT1-8/10	H216782J	10	40	AJT40	C215259J	10
2	AJT2	P219364J	10	45	AJT45	D215766J	10
2-1/4	AJT2-1/4	A200882J	10	50	AJT50	Z217303J	10
2-1/2	AJT2-1/2	T223094J	10	60	AJT60	B218846J	10
2-8/10	AJT2-8/10	M201422J	10	70	AJT70*	L201421E*	5
3	AJT3	Q211683J	10	80	AJT80*	W211159E*	5
3-2/10	AJT3-2/10	L212714J	10	90	AJT90*	V212193E*	5
3-1/2	AJT3-1/2	W212194J	10	100	AJT100*	B215764E*	5
4	AJT4	W214241J	10	110	AJT110*	F216780A*	1
4-1/2	AJT4-1/2	Y214749J	10	125	AJT125*	A217810A*	1
5	AJT5	H216276J	10	150	AJT150*	Y218843A*	1
5-6/10	AJT5-6/10	J216783J	10	175	AJT175*	K219889A*	1
6	AJT6	D217813J	10	200	AJT200*	Y200880A*	1
6-1/4	AJT6-1/4	P218329J	10	225	AJT225*	V211158A*	1
7	AJT7	Q219365J	10	250	AJT250*	K212713A*	1
8	AJT8	M219891J	10	300	AJT300*	L213726A*	1
9	AJT9	D222574J	10	350	AJT350*	W214747A*	1
10	AJT10	Y217302J	10	400	AJT400*	G216781A*	1
12	AJT12	C217812J	10	450	AJT450*	M218327A*	1
15	AJT15	N218328J	10	500	AJT500*	N219363A*	1
17-1/2	AJT17-1/2	A218845J	10	600	AJT600*	C222573A*	1

*For optional indicator/switch mount add EI. For Example: AJT100EI .See table below
Note: Indicator not available for rating 1A to 7A.

Ratings

AC: 1 to 600A, 600VAC, 200kA I.R. (self certified for 600VAC, 300kA I.R., UL witnessed)

DC: 1 to 600A, 500VDC, 100kA I.R.

Highlights

- Smart Spot Indicator
- Time Delay
- Highly Current Limiting
- DC Ratings
- Optional Mechanical Indicator (70 to 600A fuses)

Applications

- Motor Circuits
- Mains
- Feeders
- Branch Circuits
- Lighting, Heating & General Loads

- Transformers
- Control Panels
- Circuit Breaker Back-up
- Bus Duct
- Load Centers

Approvals

- AJT (1-600):
- UL Listed to Standard 248-8
 - DC Listed to UL Standard 248
 - CSA Certified to Standard C22.2 No. 248.8
 - IEC 269-2-1

AJT (70-600) EI:

- UL Component Recognized
- DC Tested to UL Standard 248

HSJ (High Speed Class J) - 600Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
15	HSJ15	D235868J	10	110	HSJ110	T235882A	1
20	HSJ20	F235870J	10	125	HSJ125	V235883A	1
25	HSJ25	G235871J	10	150	HSJ150	X235885A	1
30	HSJ30	H235872J	10	175	HSJ175	Y235886A	1
35	HSJ35	J235873J	10	200	HSJ200	Z235887A	1
40	HSJ40	K235874J	10	225	HSJ225	A235888A	1
45	HSJ45	L235875J	10	250	HSJ250	B235889A	1
50	HSJ50	M235876J	10	300	HSJ300	C235890A	1
60	HSJ60	N235877J	10	350	HSJ350	D235891A	1
70	HSJ70	P235878E	5	400	HSJ400	E235892A	1
80	HSJ80	Q235879E	5	500	HSJ500	F235893A	1
90	HSJ90	R235880E	5	600	HSJ600	G235894A	1
100	HSJ100	S235881E	5				



Ratings

AC: 15-600A, 600VAC, 200kA I.R., 300kA I.R. Self Certified
DC: 15-600A, 500VDC, 100kA I.R., L/R 10mS

Highlights

- Current-Limiting
- AC & DC Ratings
- Low I²t
- Compact Size

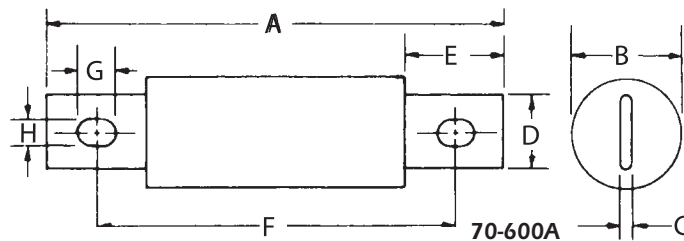
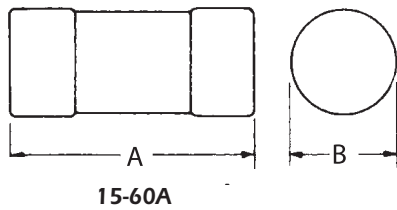
Applications

- Branch Circuits

- Control Panels
- Electronic Motor
- Controllers
- Phase Controllers
- Drives
- Soft-Starters
- Solid State Relays

Approvals

- UL Listed to Standard 248-8
- DC Listed to UL248-8
- CSA Certified to Standard C22.2 No. 248.8



Ampere Rating	A		B		C		D		E		F		G		H	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
15-30	2-1/4	57	13/16	21	-	-	-	-	-	-	-	-	-	-	-	-
31-60	2-3/8	60	1-1/16	27	-	-	-	-	-	-	-	-	-	-	-	-
61-100	4-4/8	117	1-1/8	29	1/8	3.2	3/4	19	1	25	3-5/8	92	3/8	10	9/32	7
101-200	5-3/4	146	1-5/8	41	3/16	4.8	1-1/8	29	1-3/8	35	4-3/8	111	3/8	10	9/32	7
201-400	7-1/8	181	2-1/8	54	1/4	6.3	1-5/8	41	1-7/8	48	5-1/4	133	17/32	13	13/32	10
401-600	8	203	2-1/2	64	3/8	9.5	2	51	2-1/8	54	6	152	11/16	18	17/32	13

DPM (Drive Protection Module) see page 144

Recommended Fuse Blocks with Box Connectors for Class J

Ampere Rating	Catalog Number 1 pole	Ref Number 1 pole	Pack	Catalog Number 3 pole	Ref Number 3 pole	Pack
0-30	US3J1I	M212922F	6	US3J3I	K214967B	2
31-60	US6J1I	F222047F	6	US6J3I	M211381B	2
61-100	61036J	Z201640C	3	61038J	G212917A	1
101-200	62001J	D214455A	1	62003J	E214962A	1
201-400	64031J	X218543A	1	64033J	S219068A	1
401-600	6631J	P201125A	1	6633J	A201641A	1



A2D 250V and A6D 600V (Class RK1 TD)



Smart Spot Indicator finding an open fuse is faster than ever!

Fuse Links Class RK1

Ampere Rating	Catalog Number		Reference Number		Pack	Ampere Rating	Catalog Number		Reference Number		Pack
	250V	600V	250V	600V			250V	600V			
1/10	A2D1/10R	A6D1/10R	Q215248J	R201932J	10	10	A2D10R	A6D10R	Z216268J	G211675J	10
15/100	A2D15/100R	A6D15/100R	M217292J	D212707J	10	12	A2D12R	A6D12R	Z216774J	M212186J	10
2/10	A2D2/10R	A6D2/10R	J223085J	C216271J	10	15	A2D15R	A6D15R	R217802J	N213222J	10
3/10	A2D3/10R	A6D3/10R	K212184J	G219357J	10	17-1/2	A2D17-1/2R	A6D17-1/2R	C218318J	E213720J	10
4/10	A2D4/10R	A6D4/10R	N214740J	E201415J	10	20	A2D20R	A6D20R	P200872J	C216777J	10
1/2	A2D1/2R	A6D1/2R	T215757J	P211153J	10	25	A2D25R	A6D25R	B201412J	O217295J	10
6/10	A2D6/10R	A6D6/10R	R218837J	N214234J	10	30	A2D30R	A6D30R	B212705J	E219884J	10
8/10	A2D8/10R	A6D8/10R	Q200873J	D216778J	10	35	A2D35R	A6D35R	L213220J	W222567J	10
1	A2D1R	A6D1R	Q218836J	M214233J	10	40	A2D40R	A6D40R	R215249J	S201933J	10
1-1/8	A2D1-1/8R	A6D1-1/8R	K213219J	V222566J	10	45	A2D45R	A6D45R	V215758J	Q211154J	10
1-1/4	A2D1-1/4R	A6D1-1/4R	A212704J	D219883J	10	50	A2D50R	A6D50R	N217293J	E212708J	10
1-4/10	A2D1-4/10R	A6D1-4/10R	B213717J	L223087J	10	60	A2D60R	A6D60R	E219355J	R214743J	10
1-6/10	A2D1-6/10R	A6D1-6/10R	J214230J	R200874J	10	70	A2D70R	A6D70R	N201929E	E218320E	5
1-8/10	A2D1-8/10R	A6D1-8/10R	M214739J	D201414J	10	75	A2D75R	-	L211150E	-	5
2	A2D2R	A6D2R	P201930J	V217805J	10	80	A2D80R	A6D80R	D211672E	S218838E	5
2-1/4	A2D2-1/4R	A6D2-1/4R	C219882J	T215251J	10	90	A2D90R	A6D90R	J212183E	F219356E	5
2-1/2	A2D2-1/2R	A6D2-1/2R	D219354J	Q214742J	10	100	A2D100R	A6D100R	P215247E	N211152E	5
2-8/10	A2D2-8/10R	A6D2-8/10R	S222564J	X215760J	10	110	A2D110R	A6D110R	S215756A	F211674A	1
3	A2D3R	A6D3R	C213718J	M223088J	10	125	A2D125R	A6D125R	Y216267A	L212185A	1
3-2/10	A2D3-2/10R	A6D3-2/10R	E211673J	T218839J	10	150	A2D150R	A6D150R	Y216773A	C212706A	1
3-1/2	A2D3-1/2R	A6D3-1/2R	M211151J	F218321J	10	175	A2D175R	A6D175R	L217291A	M213221A	1
4	A2D4R	A6D4R	A216269J	H211676J	10	200	A2D200R	A6D200R	Q217801A	D213719A	1
4-1/2	A2D4-1/2R	A6D4-1/2R	K214231J	S200875J	10	225	A2D225R	A6D225R	B218317A	L214232A	1
5	A2D5R	A6D5R	S217803J	P213223J	10	250	A2D250R	A6D250R	P218835A	P214741A	1
5-6/10	A2D5-6/10R	A6D5-6/10R	A216775J	N212187J	10	300	A2D300R	A6D300R	C219353A	S215250A	1
6	A2D6R	A6D6R	T222565J	V215252J	10	350	A2D350R	A6D350R	B219881A	W215759A	1
6-1/4	A2D6-1/4R	A6D6-1/4R	D218319J	F213721J	10	400	A2D400R	A6D400R	R222563A	B216270A	1
7	A2D7R	A6D7R	K223086J	Y215761J	10	450	A2D450R	A6D450R	H223084A	B216776A	1
8	A2D8R	A6D8R	C201413J	R217296J	10	500	A2D500R	A6D500R	N200871A	P217294A	1
9	A2D9R	A6D9R	Q201931J	W217806J	10	600	A2D600R	A6D600R	A201411A	T217804A	1

Ratings

A2D AC: 1/10 to 600A 250VAC, 200kA I.R. (self certified for 250VAC, 300kA I.R., UL witnessed)
 A6D AC: 1/10 to 600A 600VAC, 200kA I.R. (self certified for 600VAC, 300kA I.R.)

Highlights

- SmartSpot Indicator
- Time Delay
- Current Limiting
- Plated Terminals

- Branch Circuit Protection
- Disconnects
- Control Panels
- All General-purpose Circuits

Applications

- Motors
- Safety Switches
- Transformers

Approvals

- UL Listed to Standard 248-12
- CSA Certified to Standard C22.2 No. 248.12

Recommended Fuse Blocks with Box Connectors for Class RK1



Ampere Rating	Catalog Number 1 pole	Ref Number 1 pole	Pack	Catalog Number 3 pole	Ref Number 3 pole	Pack
0-30	20306R	T213411		20308R	K215956	
31-60	20606R	B212383		20608R	E214939	
61-100	21036R	D201621		21038R	M212899	
101-200	22001R	R213915		22003R	G214941	
201-400	24001R	J219566		24003R	D222022	
401-600	2631R	H214942		2633R	P215960	

Ampere Rating	Catalog Number 1 pole	Ref Number 1 pole	Pack	Catalog Number 3 pole	Ref Number 3 pole	Pack
0-30	60306R	60308R		H212389	K214438	
31-60	60606R	60608R		K212391	M214440	
61-100	61036R	61038R		W204788	Z211875	
101-200	62001R	62003R		V212906	B213924	
201-400	64001R	64003R		D219055	M222030	
401-600	6631R	6633R		J216990	E218021	

TR 250V and TRS 600V (Class RK5 TD)

Ampere Rating	Catalog Number		Reference Number		Pack	Ampere Rating	Catalog Number		Reference Number		Pack
	250V	600V	250V	600V			250V	600V	250V	600V	
1/10	TR1/10R	TRS1/10R	F222530J	W216748J	10	12	TR12R	TRS12R	S201381J	B219858J	10
2/10	TR2/10R	TRS2/10R	Z214198J	X216749J	10	15	TR15R	TRS15R	D211120J	B201389J	10
3/10	TR3/10R	TRS3/10R	C217260J	J212160J	10	17-1/2	TR17-1/2R	TRS17-1/2R	S211639J	K211126J	10
4/10	TR4/10R	TRS4/10R	Z223053J	Y216750J	10	20	TR20R	TRS20R	D214708J	P217777J	10
1/2	TR1/2R	TRS1/2R	Y223052J	N217776J	10	25	TR25R	TRS25R	G215217J	B219329J	10
6/10	TR6/10R	TRS6/10R	T216238J	L213197J	10	30	TR30R	TRS30R	F217769J	K213196J	10
8/10	TR8/10R	TRS8/10R	T219322J	R217779J	10	35	TR35R	TRS35R	F218804J	J214207J	10
1	TR1R	TRS1R	Z212151J	H212159J	10	40	TR40R	TRS40R	E200840J	Q217778J	10
1-1/8	TR1-1/8R	TRS1-1/8R	Q218284J	G212158J	10	45	TR45R	TRS45R	F201899J	Q218813J	10
1-1/4	TR1-1/4R	TRS1-1/4R	E217768J	J211125J	10	50	TR50R	TRS50R	B213188J	D201391J	10
1-4/10	TR1-4/10R	TRS1-4/10R	E218803J	H213194J	10	60	TR60R	TRS60R	P216742J	M214716J	10
1-6/10	TR1-6/10R	TRS1-6/10R	R219320J	G214205J	10	70	TR70R	TRS70R	Q219848E	Y213691E	5
1-8/10	TR1-8/10R	TRS1-8/10R	S219850J	R215732J	10	75	TR75R	TRS75R	E222529E	P215730E	5
2	TR2R	TRS2R	J215725J	Q222539J	10	80	TR80R	TRS80R	W223050E	W216242E	5
2-1/4	TR2-1/2R		Q212672J		10	90	TR90R	TRS90R	B200837E	L217774E	5
2-1/2	TR2-8/10R	TRS2-1/2R	S213686J	J213195J	10	100	TR100R	TRS100R	K216738E	D214202E	5
2-8/10	TR3R	TRS2-8/10R	T219851J	S215733J	10	110	TR110R	TRS110R	B218800A	K215220A	1
3	TR3-2/10R	TRS3R	N216741J	P215224J	10	125	TR125R	TRS125R	N219317A	N215729A	1
3-2/10	TR3-1/2R	TRS3-2/10R	Q216237J	N201906J	10	150	TR150R	TRS150R	P219847A	S216745A	1
3-1/2	TR4R	TRS3-1/2R	A212152J	M200847J	10	175	TR175R	TRS175R	D222528A	K217773A	1
4	TR4-1/2R	TRS4R	G222531J	D219860J	10	200	TR200R	TRS200R	V223049A	K218808A	1
4-1/2	TR5R	TRS4-1/2R	E214709J	A216246J	10	225	TR225R	TRS225R	A200836A	Y219855A	1
5	TR5-6/10R	TRS5R	R212673J	M211128J	10	250	TR250R	TRS250R	P201378A	L222535A	1
5-6/10	TR6R	TRS5-6/10R	S218286J	H223061J	10	300	TR300R	TRS300R	B201895A	J200844A	1
6	TR6R	TRS6R	S218286J	V215735J	10	350	TR350R	TRS350R	A211117A	J201902A	1
6-1/4		TRS6-1/4R		K212161J	10	400	TR400R	TRS400R	P211636A	G211123A	1
7	TR7R	TRS7R	G218805J	Z216751J	10	450	TR450R		N218282A		1
8	TR8R	TRS8R	V219852J	R218814J	10	500	TR500R		C218801A		1
9	TR9R	TRS9R	H222532J	S222541J	10	600	TR600R		P219318A		1
10	TR10R	TRS10R	D200839J	N218811J	10						



Fuse Links Class RK5

Ratings

TR
AC: 1/10 to 600A 250VAC, 200kA I.R.
DC: 1/10 to 2 8/10A and 35 to 400A, 250VDC, 20 kA I.R.
3 to 30A & 450 to 600A, 160VDC, 20kA I.R.

TRS
AC: 1/10 to 600A, 600VAC, 200kA I.R.
DC: 1/10 to 12A, 600VDC, 20kA I.R.
70 to 600A, 600VDC, 100kA I.R.
15 to 60A, 300VDC, 20kA I.R.

Highlights

- Time Delay
- Current Limiting
- AC & DC Rated

Applications

- Motor Circuits
- Mains
- Feeders
- Branch Circuits

- Transformers
- Service Entrance Equipment
- General-purpose Protection

Approvals

- UL Listed to Standard 248-12
- CSA Certified to Standard C22.2 No. 248.12
- DC Listed to UL Standard 198L

TRS - RDC (Class RK5) 1 to 30A: 300Vdc - 35 to 400A: 600Vdc



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	TRS1RDC	Z212680A	1	50	TRS50RDC	P201907J	10
2	TRS2RDC	G223060A	1	60	TRS60RDC	Q215225J	10
3	TRS3RDC	T215734A	1	70	TRS70RDC	E214203E	5
5	TRS5RDC	D211649A	1	80	TRS80RDC	H217265E	5
6	TRS6RDC	B216247A	1	90	TRS90RDC	X218290E	5
8	TRS8RDC	E219861A	1	100	TRS100RDC	G214711E	5
10	TRS10RDC	A219328A	1	125	TRS125RDC	V216241A	1
12	TRS12RDC	P222538A	1	150	TRS150RDC	G217264A	1
15	TRS15RDC	M201905J	10	175	TRS175RDC	W218289A	1
20	TRS20RDC	P218812J	10	200	TRS200RDC	X219325A	1
30	TRS30RDC	C213695J	10	250	TRS250RDC	D223057A	1
35	TRS35RDC	L214715J	10	300	TRS300RDC	Y201386A	1
40	TRS40RDC	B218294J	10	400	TRS400RDC	Y211644A	1
45	TRS45RDC	C219330J	10				

Ratings

DC: 1 to 30A 300VDC, 20kA I.R.
(Consult Factory for Availability)
DC: 35 to 400A 600VDC, 20kA I.R.

Highlights

- Time Delay
- DC Rated

Applications

- Mine Circuits
- Trailing Cables
- Pump Motors
- Rail Heaters

Approvals

- MSHA Approval No. 28-26-0

Recommended Fuse Blocks with Box Connectors for Class RK5



Ampere Rating	Catalog Number 1 pole	Ref Number 1 pole	Pack	Catalog Number 3 pole	Ref Number 3 pole	Pack
0-30	20306R	T213411J	10	20308R	K215956E	5
31-60	20606R	B212383J	10	20608R	E214939E	5
61-100	21036R	D201621C	3	21038R	M212899A	1
101-200	22001R	R213915A	1	22003R	G214941A	1
201-400	24001R	J219566A	1	24003R	D222022A	1
401-600	2631R	H214942A	1	2633R	P215960B	2

Ampere Rating	Catalog Number 1 pole	Ref Number 1 pole	Pack	Catalog Number 3 pole	Ref Number 3 pole	Pack
0-30	60306R	H212389J	10	60308R	K214438E	5
31-60	60606R	K212391J	10	60608R	M214440E	5
61-100	61036R	W204788C	3	61038R	Z211875A	1
101-200	62001R	V212906A	1	62003R	B213924A	1
201-400	64001R	D219055A	1	64003R	M222030A	1
401-600	6631R	J216990A	1	6633R	E218021A	1

A4BQ (Class L TD) - 500Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
100	A4BQ100	J215771A	1	900	A4BQ900	W219899A	1
150	A4BQ150	X218336A	1	1000	A4BQ1000	P216282A	1
200	A4BQ200	L222581A	1	1200	A4BQ1200	R216790A	1
250	A4BQ250	H200889A	1	1350	A4BQ1350	G217310A	1
300	A4BQ300	F201945A	1	1400	A4BQ1400	L217820A	1
350	A4BQ350	Y211690A	1	1500	A4BQ1500	J218853A	1
400	A4BQ400	E213237A	1	1600	A4BQ1600	Y219372A	1
450	A4BQ450	D214248A	1	1800	A4BQ1800	V219898A	1
500	A4BQ500	F214756A	1	2000	A4BQ2000	B223101A	1
600	A4BQ600	K215772A	1	2500	A4BQ2500	V201429A	1
601	A4BQ601	H217311A	1	3000	A4BQ3000	F211168A	1
650	A4BQ650	M217821A	1	3500	A4BQ3500	E212202A	1
700	A4BQ700	Y218337A	1	4000	A4BQ4000	W213735A	1
750	A4BQ750	K218854A	1	5000	A4BQ5000	K215266A	1
800	A4BQ800	Z219373A	1	6000	A4BQ6000	O216283A	1



Ratings

AC: 100 to 6000A 600VAC, 200k A I.R. (self certified for 600VAC, 300k A I.R., UL witnessed) 4-second delay at 500% rating

Note: 100-600A ratings are non-listed

DC: 601 to 3000A 600VDC, 100kA I.R.

Highlights

- Time Delay
- Industry's Most Current-Limiting Class L Fuse
- Pure Silver Elements
- AC & DC Rated

Applications

- Mains, Feeders
- Large Motors
- Lighting, Heating and General Loads
- Circuit Breaker Back-up
- DC Rated: UPS DC Links, Battery Disconnects, Other DC Applications

Approvals

- UL Listed to Standard 248-10 (601-6000A)
- DC Listed to UL Standard 198L (601-3000A)
- CSA Certified to Standard C22.2 No. 248.10 (601-6000A)

A3T 300V and A6T 600V(Class T Fast Acting)

Ampere Rating	Catalog Number		Reference Number		Pack	Ampere Rating	Catalog Number		Reference Number		Pack
	300V	600V	300V	600V			300V	600V	300V	600V	
1	A3T1	A6T1	Q212212J	L219384J	10	110	A3T110	A6T110	G218345A	K219383A	1
3	A3T3	A6T3	R214766J	H201441J	10	125	A3T125	A6T125	H219381A	F219908A	1
6	A3T6	A6T6	Y217831J	S213249J	10	150	A3T150	A6T150	D219906A	Y222592A	1
10	A3T10	A6T10	E212731J	G219909J	10	175	A3T175	A6T175	W222590A	N223112A	1
15	A3T15	A6T15	Q213247J	Z222593J	10	200	A3T200	A6T200	L223110A	V200900A	1
20	A3T20	A6T20	G213745J	P223113J	10	225	A3T225	A6T225	S200898A	G201440A	1
25	A3T25	A6T25	P214258J	W200901J		250	A3T250	A6T250	E201438A	Q201954A	1
30	A3T30	A6T30	V215275J	R201955J	10	300	A3T300	A6T300	N201952A	S211179A	1
35	A3T35	A6T35	W215782J	T211180J	10	350	A3T350	A6T350	Q211177A	K211701A	1
40	A3T40	A6T40	B216293J	L211702J	10	400	A3T400	A6T400	H211699A	R212213A	1
45	A3T45	A6T45	C216800J	S212214J	10	450	A3T450	A6T450	P212211A	F212732A	1
50	A3T50	A6T50	T217321J	G212733J	10	500	A3T500	A6T500	D212730A	R213248A	1
60	A3T60	A6T60	J218347J	J213747J	10	600	A3T600	A6T600	P213246A	H213746A	1
70	A3T70	A6T70	F213744E	Q214259E	5	700	A3T700	A6T700	N214257A	S214767A	1
80	A3T80	A6T80	Q214765E	W215276E	5	800	A3T800	A6T800	T215274A	D216801A	1
90	A3T90	A6T90	V215781E	V217322E	5	1000	A3T1000	-	W217829A	-	1
100	A3T100	A6T100	R217319E	W218864E	5	1200	A3T1200	-	T218862A	-	1



Ratings

A3T
AC: 1 to 1200A 300VAC,
200kA I.R.
DC: 1 to 1200A 160VDC,
50kA I.R.

A6T
AC: 1 to 800A 600VAC,
200kA I.R.
DC: 1 to 800A 300VDC,
100kA I.R.

Highlights

- Fast Acting
- Extremely Current Limiting
- Small Physical Size
- DC Ratings

Applications

- Loadcenters
- Panelboards
- Switchboards
- Circuit Breakers
- Metering Centers

Approvals

- UL Listed to Standard 248-15
- CSA Certified to Standard C22.2 No. 248.15
- DC Tested to UL Standard 198L

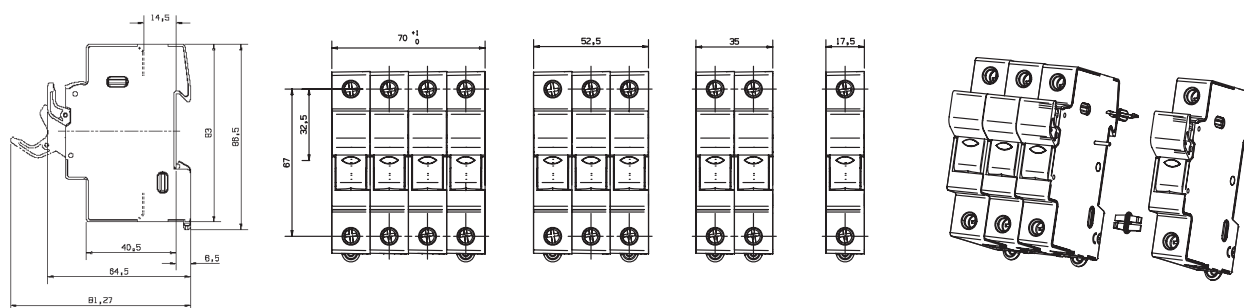
Class CC Fuse holders - 600Vac

MODULOSTAR® Fuse holders

Nb of pole	Cat Number w/o indicator	Ref. Number w/o indicator	Cat Number with indicator	Ref. Number with indicator	Nb of Mod. 17.5 mm	Pck.
1	USBCC1	H305033K	USBCC1I	P305039K	1	12
1			USBCC1I-DC24 (1)	P303015K	1	12
2	USBCC2	K305035F	USBCC2I	R305041F	2	6
3	USBCC3	L305036D	USBCC3I	S305042D	3	4
4	USBCC4	N305038C	USBCC4I	V305044C	4	3
2	USBCC1N	J305034F	USBCC1NI	Q305040F	2	6
4	USBCC3N	M305037C	USBCC3NI	T305043C	4	3



(1) 2 LEDS 24V



Accessories

Description	Catalog Number	references Number	Nb of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725K				12
Lock	LOCK	M223525A				1
Tag and lockout	TAGLOCKCMS810	A235773A				1
jumping bars 1 phase size 8/10 *	CMS810BB1F13	T210306J	13	63	1	10
jumping bars 2 phases size 8/10 *	CMS810BB2F6	V210307J	6	63	2	10
jumping bars 3 phases size 8/10 *	CMS810BB3F4	W210308J	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309J	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316P		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318P		90		50
1 phase axial incoming power supply	TBB1A	D210315P		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317P		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.

ULTRASAFE™ USFM Class CC - 600Vac

ULTRASAFE™ Fuseholder and Fuse Disconnecter



Nb of pole	Cat Number	Ref. Number	Fonction		Pack
			Fuse Holder	Fuse Discon.	
3 poles	USFMCC	P302762A	w/o Indicator		1
system /	USFMCCM	B302796A		w/o Indicator	1
45 mm	USFMCCI	Q302763A	with Indicator		1
width	USFMCCMI	R302764A		with Indicator	1

Pack: 1 piece
 Fuse holder is without Prebreaking Microswitch (see accessories)
 Fuse disconnecter is with mounted Prebreaking Microswitch

Accessories

Description	Catalog Number	references Number	Number of systems interconnected	Maxi. RMS current (A)	Number of poles	Pckg
Lock	LOCK	M223525A				1
Microswitch	USFMAC11	C302797A	1		3	1
Additional Neutral			1			
jumping bars 3 phases			2		3	
Lateral incoming power supply	TBB23C	G210318P		90		50
Axial incoming power supply	TBB23A	F210317P		90		50

Midget and 10x38 Fuse holders - 690V

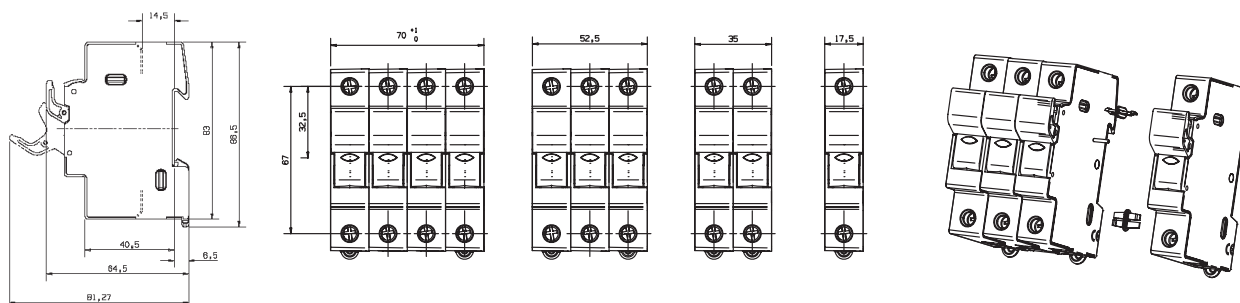
MODULOSTAR® Fuse holders



Nb of pole	Cat Number w/o indicator	Ref. Number w/o indicator	Cat Number with indicator	Ref. Number with indicator	Nb of Mod. 17.5 mm	Pck.
N	US10N	H305056			1	12
1	US101	B305050	US101I	J305057	1	12
1+N	US101N	C305051	US101NI	K305058	2	6
2	US102	D305052	US102I	L305059	2	6
3	US103	E305053	US103I	M305060	3	4
3+N	US103N	F305054	US103NI	N305061	4	3
4	US104	G305055	US104I	P305062	4	3
1			US101I-AC120	R303017K	1	12
1			US101I-DC24(1)	S303018K	1	12
1			US101I-DC24P(2)	Q303016K	1	12

(1) 2 LED 24Vdc for both polarity
 (2) 1 LED 24Vdc for 1 polarity

UL Recognized at 800Vac and 1000Vdc



Accessories

Description	Catalog Number	references Number	Nb of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725K				12
Lock	LOCK	M223525A				1
Tag and lockout	TAGLOCKCMS810	A235773A				1
jumping bars 1 phase size 8/10 *	CMS810BB1F13	T210306J	13	63	1	10
jumping bars 2 phases size 8/10 *	CMS810BB2F6	V210307J	6	63	2	10
jumping bars 3 phases size 8/10 *	CMS810BB3F4	W210308J	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309J	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316P		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318P		90		50
1 phase axial incoming power supply	TBB1A	D210315P		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317P		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.

Midget Fuse holders - 690Vac

ULTRSAFE™ Fuseholder and Fuse Disconnecter

Nb of pole	Cat Number	Ref.Number	Fonction		Pack
			Fuse Holder	Fuse Discon.	
3 poles	USFMM	D302775A	w/o Indicator		1
system /	USFMMM	E302776A		w/o Indicator	1
45 mm	USFMMI	G302778A	with Indicator		1
width	USFMMMI	F302777A		with Indicator	1

Pack: 1 piece

Fuse holder is without Prebreaking Microswitch (see accessories)

Fuse disconnecter is with mounted Prebreaking Microswitch



Accessories

Description	Catalog Number	references Number	Number of systems interconnected	Maxi. RMS current (A)	Number of poles	Pckg
Lock	LOCK	M223525A				1
Microswitch	USFMAC11	C302797A	1		3	1
Additional Neutral			1			
jumping bars 3 phases			2		3	
Lateral incoming power supply	TBB23C	G210318P		90		50
Axial incoming power supply	TBB23A	F210317P		90		50

US14 fuse holder & fuse disconnectors

14x51 used fuses with no striker, or with indicator light or with striker
Recognized compliant with UL 512 and CSA 22-2 , IEC 60947-1 & 3 , and IEC 60269-1 & 2

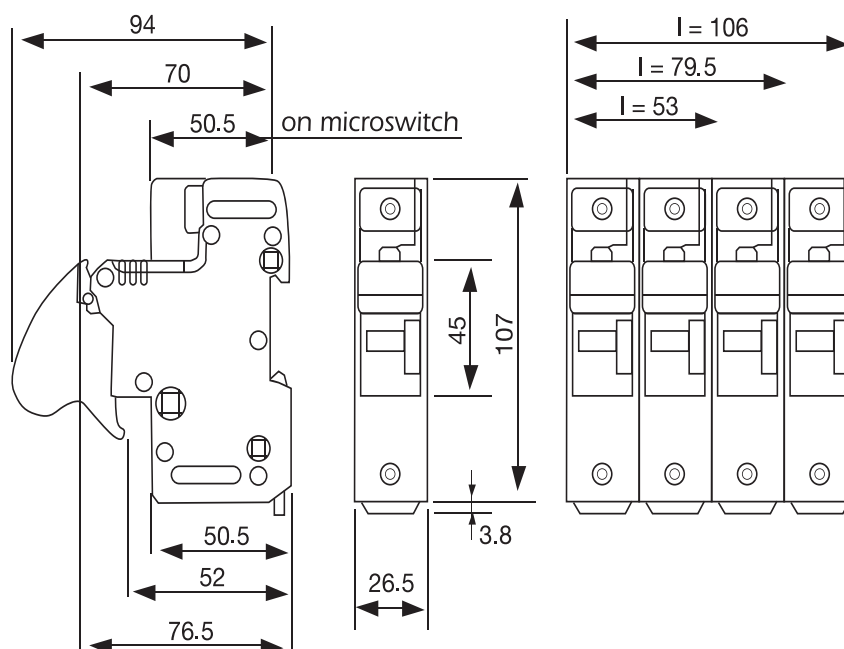


Nb of Pole	Model without indicator light ready for accessories		Model with indicator light ready for auxiliary contact		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US14N	S227900F			1.5	6
1	US141	Z331153F	US141I	A331154F	1.5	6
1 + N	US141N	D331157C	US141NI	Z227906C	3	3
2	US142	G331137C	US142I	H331138C	3	3
3	US143	N331143B	US143I	P331144B	4.5	2
3 + N	US143N	X331151A	US143NI	R227922A	6	1

Nb of Pole	Model fitted with auxiliary contact		Model fitted with auxiliary contact & indicator light		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US141M	B331155F			1.5	6
1	US141NM	W227903F	US141MI	C331156F	1.5	6
1 + N	US142M	J331139C	US142MI	B227908C	3	3
2	US142M2	L331141C	US142MI	K331140C	3	3
2*	US143M	O331145B	US142M2I	M331142C	3	3
3	US143M2	T331148B	US143MI	S331147B	4.5	2
3*	US143NM	Y331152A	US143M2I	W331150B	4.5	2
3 + N	US143NM2	S227923A	US143NMI	T227924A	6	1
3 + N*		V227925A	US143NM2I	W227926A	6	1

* Two auxiliary microswitches (see instructions for mounting) – The auxiliary microswitch function requires use of fuses with strikers

UL Recognized at 800Vac-1000Vdc
IEC 750Vac



US22 fuse holder & fuse disconnectors

22x58 fuses with no striker, or with indicator light or with striker

Recognized compliant with UL 512 and CSA 22-2 , IEC 60947-1 & 3 , and IEC 60269-1 & 2

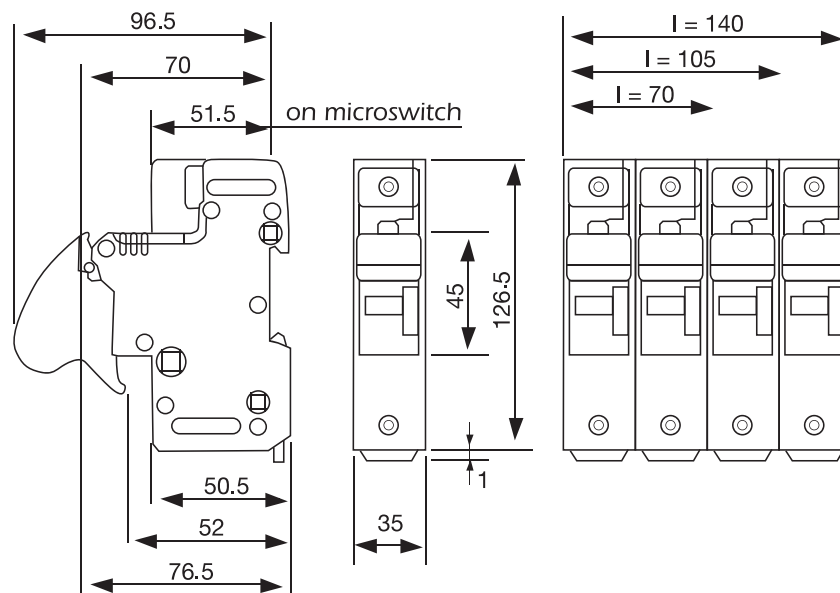
Nb of Pole	Model without indicator light ready for accessories		Model with indicator light ready for auxiliary contact		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US22N	B227931F			1.5	6
1	US221	E331158F	US221I	F331159F	1.5	6
1 + N	US221N	H331161C	US221NI	H227937C	3	3
2	US222	K331163C	US222I	L331164C	3	3
3	US223	R331169B	US223I	S331170B	4.5	2
3 + N	US223N	X331174A	US223NI	A227953A	6	1



Nb of Pole	Model fitted with auxiliary contact		Model fitted with auxiliary contact & indicator light		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N					1.5	6
1	US221M	G331160F	US221MI	F227935F	1.5	6
1 + N	US221NM	J331162C	US221NMI	K227939C	3	3
2	US222M	M331165C	US222MI	N331166C	3	3
2*	US222M2	P331167C	US222M2I	Q331168C	3	3
3	US223M	T331171B	US223MI	V331172B	4.5	2
3*	US223M2	W331173B	US223M2I	Y227951B	4.5	2
3 + N	US223NM	B227954A	US223NMI	C227955A	6	1
3 + N*	US223NM2	D227956A	US223NM2I	E227957A	6	1

* Two auxiliary microswitches (see instructions for mounting) – The auxiliary microswitch function requires use of fuses with strikers

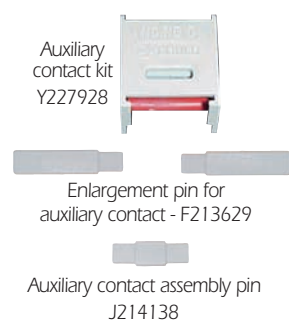
UL Recognized at 800Vac-1000Vdc
IEC 750Vac



Accessories for US14, US22 series

Description	Cat.Num	References	Nb of Mod. (17.5 mm)	Pckg
Auxiliary contact kit 1 pole US 14	USMSW/1	Y227928A	1.5	1
Auxiliary contact kit 3 poles US 14	USMSW/2	Z227929A	4.5	1
2 auxiliary contact kit 3 poles US 14	USMSW/3	A227930A	4.5	1
Auxiliary contact assembly pin (between 2 kits)	US1422PTH	J214138J		10*
Enlargement pin for auxiliary contact	US1422BP	F213629J		10*
Multi-pole assembly kit	US14PAK	X227927J		10*
Indicator light kit	CMS1422LHI	A225653A		1
Lock	LOCK	M223525A		1

* 10 per bag



US27 fuse holder (without microswitch)

800Vac & dc

Number of poles	Connections	Cat. Number	Ref. Number	Weight (g)	Pack
1	By screw, U bolt or connector	US271I	J226420C	285	3
1 + N	By screw, U bolt or connector	US271NI	K226421A	580	1
1 + N	Ring lug connection	US271NIRING	E223518A	690	1
N	Ring lug connection	US27NIRING	F223519C	340	3
2	Ring lug connection	US272IRING	C223516A	690	1
3	By screw, U bolt or connector	US273I	M226423A	855	1
3	Ring lug connection	US273IRING	D223517A	1030	1
3 + N	By screw, U bolt or connector	US273NI	N226424A	1200	1
Assembly kit		US27PAK	H227615J		10
Microswitch*		US27W1	E227612A		1

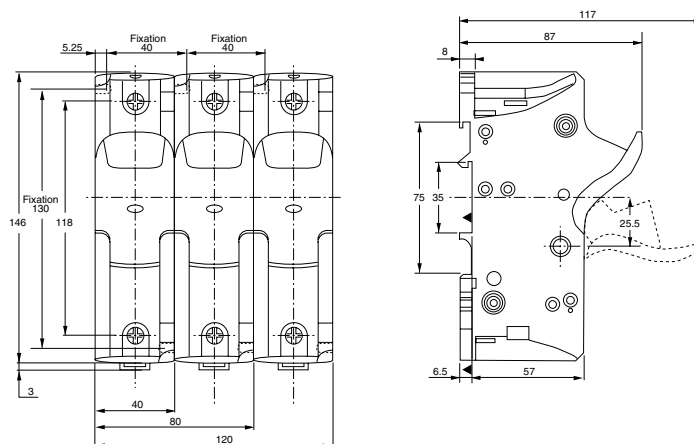
* for the US27 version only



US27 fuse disconnecter (with microswitch)

800Vac & dc

Number of poles	Connections	Cat. Number	Nb of microswitches	Ref. Number	Weight (g)	Pack
1	By screw, U bolt or connector	US271MI	1	R227600C	320	3
1	Ring lug connection	US271MIRING	1	Z227607A	355	1
2	By screw, U bolt or connector	US272MI	1	S227601A	680	1
2	By screw, U bolt or connector	US272M2I	2	T227602A	600	1
2	Ring lug connection	US272M2IRING	2	B227609A	710	1



FSPDB IP20 modular power distribution blocks

Ampere Rating	Cat. Number Aluminium	Ref. Number Aluminium	Line			Load			Pack
			wire range AWG/KCMIL	mm ²	openings per pole	wire range AWG/KCMIL	mm ²	openings per pole	
175	FSPDB1A	D233545C	2/0-#14	70-2.5	1	2/0-#14	70-2.5	1	3
175	FSPDB2A	V232801C	2/0-#14	70-2.5	1	#2-#14	35-2.5	4	3
310	FSPDB3A	W232802C	350-#6	185-16	1	#2-#14	35-2.5	8	3
310	FSPDB3A	W232802C	2/0-#14	70-2.5	1	#2-#14	35-2.5	8	3
335	FSPDB4A	X232803C	400-#6	185-16	1	400-#6	185-16	1	3
840	FSPDB5A	Y232804C	600-#4	300-25	2	600-#4	300-25	2	3

Ampere Rating	Cat. Number Copper	Ref. Number Copper	Line			Load			Pack
			wire range AWG/KCMIL	mm ²	openings per pole	wire range AWG/KCMIL	mm ²	openings per pole	
175	FSPDB1C	N232795C	2/0-#14	70-2.5	1	2/0-#14	70-2.5	1	3
175	FSPDB2C	P232796C	2/0-#14	70-2.5	1	#2-#14	35-2.5	4	3
310	FSPDB3C	Q232797C	350-#6	185-16	1	#2-#14	35-2.5	8	3
310	FSPDB3C	Q232797C	2/0-#14	70-2.5	1	#2-#14	35-2.5	8	3
335	FSPDB4C	R232798C	400-#6	185-16	1	400-#6	185-16	1	3
840	FSPDB5C	S232799C	600-#4	300-25	2	600-#4	300-25	2	3



Accessories

Description	Cat. Number	Ref. Number	Pack
Accessory pin to form multiple pole block	FSPIN1	Z232805J	10
Circuit identification marker for 2/0 & #2 max. conductors	FSCIM1	K233551E	5
Circuit identification marker for 350, 400 & 600 kcmil max. conductors	FSCIM2	L233552E	5
Cap plug for spare 2/0 openings	FSCAP1	A232806J	10
Cap plug for spare 350 kcmil openings	FSCAP2	M233553J	10
Pair of end anchors	FSEA	N233554A	1

Ratings

- Ampere ratings from 175 to 840A
- 600V rated

Highlights

- Finger-Safe: Fully insulated block ensures that no one can touch live parts. Recessed termination screws and wire openings provide IP20 grade protection and qualify as "finger-safe" per IEC 529.
- Compact Modularity: Single or multiple pole configurations in the most compact footprint. Allows users to build smaller or higher density panels.
- Snap on DIN Rail Mounting: Sizes 1 to 4 feature integral DIN rail adaptors allowing for quick and easy installations on 35mm DIN rail yielding lower installed costs.

- Captive Termination Screws: Unique channel design ensures captive metric wire termination screws. Screws can never be lost.
- Available Accessories: For multi-pole panel mounting, simply snap in pins for rigid fit. Cap plugs provide the ability to maintain touch safety on unused openings. Circuit identification markers simply snap into blocks to ID circuits. End anchors provide rigid end stops.
- Multiple Wire Ratings: Provide users more versatility by offering capability of using multiple conductors in #2 and 2/0 openings.

Approvals

- UL Recognized Component - Guide XCFR2, File E73571
- CSA Certified: Class 6228, File 69363

Miniature Fuses

▪ Miniature Fuses	75 - 79
▪ IEC - Glass body	75
▪ IEC - Ceramic body	76
▪ 6x32 Fast acting - Glass body	77
▪ 6x32 Time lag - Glass body	78
▪ Other Miniature fuses	79
▪ Convenience Fuses	80 - 84
▪ IEC fuses 5x20 Fast acting	80
▪ DIN fuses 5x20 Medium time lag	81
▪ IEC fuses 5x20 Time lag	82
▪ IEC fuses 6x32 Fast acting	83
▪ IEC fuses 6x32 Time lag	84
▪ Very HRC Fuses	85 - 89
▪ 5x20 FA/FB Very Fast acting	85
▪ 5x20 SA/SB Medium time Lag	86
▪ 5x20 FA Very Fast acting	86
▪ 5x20 SA Medium time Lag	87
▪ 6x32 FA Very Fast acting	88
▪ 6x32 SA Medium time Lag	89
▪ 6x32 FA/FB Very Fast acting	89

5 x 20 - 250 V – Glass body

Size	Current (A)	Voltage (V)	FAST ACTING Cat.number (5SF)	FAST ACTING Ref. number (5SF)	TIME LAG Cat.number (5ST)	TIME LAG Ref. number (5ST)	Pckg
5 x 20	0,063	250		-	MI5ST25V0,063	D090531P	50
5 x 20	0,08	250	MI5SF25V0,08	Z090504P	MI5ST25V0,08	E090532P	50
5 x 20	0,1	250	MI5SF25V0,1	A090505P	MI5ST25V0,1	F090533P	50
5 x 20	0,125	250	MI5SF25V0,125	B090506P	MI5ST25V0,125	G090534P	50
5 x 20	0,16	250	MI5SF25V0,16	C090507P	MI5ST25V0,16	H090535P	50
5 x 20	0,2	250	MI5SF25V0,2	D090508P	MI5ST25V0,2	J090536P	50
5 x 20	0,25	250	MI5SF25V0,25	E090509P	MI5ST25V0,25	K090537P	50
5 x 20	0,315	250	MI5SF25V0,315	F090510P	MI5ST25V0,315	L090538P	50
5 x 20	0,4	250	MI5SF25V0,4	G090511P	MI5ST25V0,4	M090539P	50
5 x 20	0,5	250	MI5SF25V0,5	H090512P	MI5ST25V0,5	N090540P	50
5 x 20	0,63	250	MI5SF25V0,63	J090513P	MI5ST25V0,63	P090541P	50
5 x 20	0,8	250	MI5SF25V0,8	K090514P	MI5ST25V0,8	Q090542P	50
5 x 20	1	250	MI5SF25V1	L090515P	MI5ST25V1	R090543P	50
5 x 20	1,25	250	MI5SF25V1,25	M090516P	MI5ST25V1,25	S090544P	50
5 x 20	1,6	250	MI5SF25V1,6	N090517P	MI5ST25V1,6	T090545P	50
5 x 20	2	250	MI5SF25V2	P090518P	MI5ST25V2	V090546P	50
5 x 20	2,5	250	MI5SF25V2,5	Q090519P	MI5ST25V2,5	W090547P	50
5 x 20	3,15	250	MI5SF25V3,15	R090520P	MI5ST25V3,15	X090548P	50
5 x 20	4	250	MI5SF25V4	S090521P	MI5ST25V4	Y090549P	50
5 x 20	5	250	MI5SF25V5	T090522P	MI5ST25V5	Z090550P	50
5 x 20	6,3	250	MI5SF25V6,3	V090523P	MI5ST25V6,3	A090551P	50
5 x 20	8 ⁽¹⁾	250	MI5SF25V8	W090524P	MI5ST25V8	P206070P	50
5 x 20	10 ⁽¹⁾	250	MI5SF25V10	X090525P	MI5ST25V10	Q206071P	50
5 x 20	12,5 ⁽¹⁾	250	MI5SF25V12,5	W233446P	MI5ST25V12,5	Z233449P	50
5 x 20	16 ⁽¹⁾	250	MI5SF25V16	X233447P	MI5ST25V16	A233450P	50
5 x 20	20 ⁽¹⁾	250	MI5SF25V20	Y233448P	MI5ST25V20	B233451P	50
Box of assorted fuses			MIBOX5SF	G203763A	MIBOX5ST	H203764A	1

IEC 127-2 sheet 2 and 3 compliant.

(1) Non standard ratings. Ceramic bodies for the 12.5, 16 and 20A fuse ratings.



Ref. J090513P (Fast acting)



Ref. M090539P (Time lag)



Ref. G203763A

Functions

Glass body dimensions 5 x 20 mm.
Low breaking capacity (35A or 10In).
Designated as per standard F: Fast acting, T: Time lag.

Applications

Protection of consumer electrical circuits and equipment, protection of intermediate PC boards in LV industrial equipment.

Box of assorted 5 x 20 fuses

Fuses	Fuse body	Operating type	Range	Breaking capacity	Cat.Number	Ref.Number
5x20 - 250V	Glass	Time lag	5ST	Low	MIBOX5ST	H203764A
5x20 - 250V	Glass	Fast acting	5SF	Low	MIBOX5SF	G203763A
5x20 - 250V	Glass	Medium time lag	5SM	Low	MIBOX5SM	P233440A
5x20 - 250V	Ceramic	Fast acting	5HF	High	MIBOX5HF	B229863A



5 x 20 - 250 V – Ceramic body

Size	Current (A)	Voltage (V)	FAST ACTING Cat.number (5HF)	FAST ACTING Ref. number (5HF)	TIME LAG Cat.number (5HT)	TIME LAG Ref. number (5HT)	Pckg
5 x 20	0,1(1)	250	M15HF25V0,1	G095548P	-	-	50
5 x 20	0,125(1)	250	M15HF25V0,125	H095549P	-	-	50
5 x 20	0,16(1)	250	M15HF25V0,16	J095550P	-	-	50
5 x 20	0,2(1)	250	M15HF25V0,2	Q095556P	-	-	50
5 x 20	0,25(1)	250	M15HF25V0,25	R095557P	M15HT25V0,25	P085366P	50
5 x 20	0,315(1)	250	M15HF25V0,315	S095558P	M15HT25V0,315	R094821P	50
5 x 20	0,4(1)	250	M15HF25V0,4	T095559P	M15HT25V0,4	W094825P	50
5 x 20	0,5(1)	250	M15HF25V0,5	V095560P	M15HT25V0,5	S085369P	50
5 x 20	0,63(1)	250	M15HF25V0,63	W095561P	M15HT25V0,63	X094826P	50
5 x 20	0,8(1)	250	M15HF25V0,8	X095562P	M15HT25V0,8	V085371P	50
5 x 20	1	250	M15HF25V1	Y095563P	M15HT25V1	W085372P	50
5 x 20	1,25	250	M15HF25V1,25	C095567P	M15HT25V1,25	X085373P	50
5 x 20	1,6	250	M15HF25V1,6	D095568P	M15HT25V1,6	Y085374P	50
5 x 20	2	250	M15HF25V2	E095569P	M15HT25V2	Z085375P	50
5 x 20	2,5	250	M15HF25V2,5	F095570P	M15HT25V2,5	A085376P	50
5 x 20	3,15	250	M15HF25V3,15	G095571P	M15HT25V3,1	B085377P	50
5 x 20	4	250	M15HF25V4	H095572P	M15HT25V4	C085378P	50
5 x 20	5	250	M15HF25V5	J095573P	M15HT25V5	D085379P	50
5 x 20	6,3	250	M15HF25V6,3	K095574P	M15HT25V6,3	E085380P	50
5 x 20	8(2)	250	M15HF25V8	J085407P	M15HT25V8	A208357P	50
5 x 20	10(2)	250	M15HF25V10	K085408P	M15HT25V10	B208358P	50

IEC 127-2 sheet 1 and 5 compliant.
 (1) Unlisted product
 (2) Non standard ratings



Ref. S095558P (Fast Acting)

Functions

5 x 20 mm ceramic body, no sand filling, high breaking capacity (1500A).
 Designated as per standard F: Fast acting, T: Time lag.

Applications

Protection of industrial electrical circuits and equipment.
 Protection of PC boards wired directly to the network (e.g. general power supply).

5 x 20 fuse holders and supports

Type of support	Fuse holder Cat.Number	Fuse holder Ref.Number	Fuse cover Cat.Number	Fuse cover Ref.Number	Characteristics	Pckg
Solder-mount fuse holder	MISIPTF78	K208228J	MICPTBSPTF76-78	L208229J	Pin spacing 22,6 mm	10
Solder-mount fuse holder	MISIPTF76	J208227J	MICPTBSPTF76-78	L208229J	Pin spacing 15 mm	10
Solder-mount fuse holder	MISIPTF15	P204943J	MICPT140PTF15	S204946J	Straight pins (center-to-center spacing 22 mm)	10
Solder-mount fuse holder	MISIPTF15B	M209012J	MICPT140APTF15	N085595J	Curved pins (center-to-center spacing 22 mm)	10
Screw-mount fuse holder	MISIPTF10	N204942J			W/o anti-rotation pin (center-to-center spacing 22 mm)	10
Screw-mount fuse holder	MISIPTF20	Q204944J			With anti-rotation pin (center-to-center spacing 22 mm)	10
Bayonet mount fuse holder for panels	MIPUPTF30	T204947J			Solder or use 2.8 x 0.5 mm lug	10
Bayonet mount fuse holder for PCB	MIPUPTF45	X204950J			Vertical (center-to-center spacing 10 mm)	10
Bayonet mount fuse holder for PCB	MIPUPTF50	Y204951J			Horizontal (center-to-center spacing 10 mm)	10
Solder-on fuse clips	MIMR5CISP	W202074P			PCB mount – 5 x 20 fuses	50
Solder-on fuse clips	MIMR5-6	Y098967P			PCB mount - 5 x 20 / 6 x 32 fuses	50
Solder-on fuse clips	MIMR5CI-S	J210550P			PCB mount – 5 x 20 fuses	50
Solder-on fuse clips	MIMR5CI-C	K210551P			PCB mount – 5 x 20 fuses	50
Modular fuse holder (Ph+N)	MIMSM250V16IP+N	K225708K			DIN rail mount – Ph+N 1 module	12



Ref. Y204951J



Ref. P204943J
(Straight pins)



Ref. Y098967P
(PCB mount)

6 x 32 - 250 V – Glass body – Fast acting

Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
6 x 32	0,1	UL 250	MI6AG25V0,1	D085701P	50
6 x 32	0,125	UL 250	MI6AG25V0,125	E085702P	50
6 x 32	0,15	UL 250	MI6AG25V0,15	F085703P	50
6 x 32	0,2	UL 250	MI6AG25V0,2	H085705P	50
6 x 32	0,25	UL 250	MI6AG25V0,25	J085706P	50
6 x 32	0,315	RU 250	MI6SF25V0,315	P090564P	50
6 x 32	0,4	RU 250	MI6SF25V0,4	Q090565P	50
6 x 32	0,5	RU 250	MI6SF25V0,5	R090566P	50
6 x 32	0,63	RU 250	MI6SF25V0,63	S090567P	50
6 x 32	0,8	RU 250	MI6SF25V0,8	T090568P	50
6 x 32	1	RU 250	MI6SF25V1	V090569P	50
6 x 32	1,25	RU 250	MI6SF25V1,25	W090570P	50
6 x 32	1,6	RU 250	MI6SF25V1,6	X090571P	50
6 x 32	2	RU 250	MI6SF25V2	Y090572P	50
6 x 32	2,5	RU 250	MI6SF25V2,5	Z090573P(1)	50
6 x 32	3,15	RU 250	MI6SF25V3,15	A090574P(1)	50
6 x 32	4	RU 250	MI6SF25V4	B090575P(1)	50
6 x 32	5	RU 250	MI6SF25V5	C090576P(1)	50
6 x 32	6,3	RU 250	MI6SF25V6,3	D090577P(2)	50
6 x 32	8	RU 250	MI6SF25V8	E090578P(2)	50
6 x 32	10	RU 250	MI6SF25V10	F090579P(2)	50
6 x 32	12,5	250	MI6SF25V12,5	C233452P(3)	50
6 x 32	16	250	MI6SF25V16	D233453P(3)	50
6 x 32	20	250	MI6SF25V20	E233454P(3)	50



Ref. R090566P (rapide)



0,100 to 0,25 A, UL/CSA 248-14 compliant IEC 127-2 sheet 4 compliant (low breaking capacity - 35A or 10In)
 (1) Recognized to 150 V
 (2) Recognized to 60 V
 (3) Ceramic bodies for the 12.5, 16 and 20 A fuse ratings.

Functions

Glass body dimensions 6 x 32 mm.
 Designated as per standard:
 3AG, 3SF: Fast acting,
 3SB, 3ST: Time lag.

Applications

Protection of consumer electrical circuits and equipment.
 Protection of intermediate PC boards in LV industrial equipment.

MSM 5 fuse holder – no accessories

I_{th} max. 25A - Un 400V for 5x20 miniature fuses

Nb of pole	Cat.Number	Model w/o blown fuse indicator light Ref. number	Mod. number	Pckg
1	MSM51	J225707K	1	12
1+N	MSM51N	K225708K	1	12



SI 6 fuse holder – no accessories

I_{th} max. 25A - Un 400V for 6x32 miniature fuses

Nb of pole	Cat.Number	Model w/o blown fuse indicator light Ref. number	Mod. number	Pckg
1	SI61	M091482J	1	10
1	SI61PRE	N091483J	1	10
1	SI61PREBSM	G082990J	1	10



M091482

N091483

6 x 32 - 250 V – Glass body – Time lag



Ref. H085728P (temporisé)



Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
6 x 32	0,062	250	MI6SB25V0,062	B207507P	50
6 x 32	0,08	250	MI6SB25V0,08	C207508P	50
6 x 32	0,1	250	MI6SB25V0,1	D085724P	50
6 x 32	0,125	250	MI6SB25V0,125	E085725P	50
6 x 32	0,15	250	MI6SB25V0,15	F085726P	50
6 x 32	0,175	250	MI6SB25V0,175	G085727P	50
6 x 32	0,2	250	MI6SB25V0,2	H085728P	50
6 x 32	0,25	250	MI6SB25V0,25	J085729P	50
6 x 32	0,3	250	MI6SB25V0,3	K085730P	50
6 x 32	0,375	250	MI6SB25V0,375	V087510P	50
6 x 32	0,4	250	MI6SB25V0,4	X087512P	50
6 x 32	0,5	250	MI6SB25V0,5	Y087513P	50
6 x 32	0,63	250	MI6SB25V0,6	Z087514P	50
6 x 32	0,75	250	MI6SB25V0,75	A087515P	50
6 x 32	1	250	MI6SB25V1	B087516P	50
6 x 32	1,25	250	MI6SB25V1,25	C087517P	50
6 x 32	1,5	250	MI6SB25V1,5	D087518P	50
6 x 32	1,8	250	MI6SB25V1,8	E087519P	50
6 x 32	2	250	MI6SB25V2	F087520P	50
6 x 32	2,5	250	MI6SB25V2,5	G087521P	50
6 x 32	3	250	MI6SB25V3	H087522P	50
6 x 32	4	250	MI6SB25V4	J087523P	50
6 x 32	5	250	MI6SB25V5	K087524P	50
6 x 32	6	250	MI6SB25V6	L087525P	50
6 x 32	7	250	MI6SB25V7	M087526P	50
6 x 32	8	250	MI6SB25V8	Q087529P	50
6 x 32	10	250	MI6ST25V10	F233455P (1)	50
6 x 32	12,5	250	MI6ST25V12,5	G233456P (1)	50
6 x 32	16	250	MI6ST25V16	H233457P (1)	50
6 x 32	20	250	MI6ST25V20	J233458P (1)	50

UL and CSA 248-14 compliant

(1) IEC 127-2 sheet 4 compliant (low breaking capacity - 35A or 10In) Recognized to 125 V

Breaking capacity
 0.063 to 1 A 35 A/250 V - 10 000 A/125 V
 1.25 to 3 A 100 A/250 V - 10 000 A/125 V
 4 to 8 A 200 A/250 V 10,000 A/125 V

6 x 32 fuse holders and supports

Type of support	Fuse holder Cat.Number	Fuse holder Ref.Number	Caps Cat.Number	Caps Ref.Number	Characteristics	Pckg
Bayonet mount fuse holder for panels	MIPUP5-6L	T210536J	MIBH6PU5-6	Y210540J	Panel mounting hole (ø 13, length 45mm)	10
Shock-safe fuse holder for panels	MIPU5-6IP67L	A210542J	MIBH6PU5-63P67	E210546J	Panel mounting hole: 250V/16A IP67	10
Solder-on fuse clips	MIMR6CIS	H210549P			PCB mount – 6 x 32 fuses	50
Screw-on clips	MIMR6VI	K091480P			PCB mount – 6 x 32 fuses	50
Solder-on fuse clips	MIMR5-6	Y098967P			PCB mount - 5 x 20 / 6 x 32 fuses	50



Ref. Y098967P (PCB mount)



T210536J

Miniature fuses with very high breaking capacity (HRC)

To see our line of Very High Breaking Capacity miniature fuses, consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

under the heading **Miniature fuses**
> **Very HRC fuses.**



Miniature fuses with axial leads



For further information on our miniature fuse lines, consult our complete technical catalog The Advisor on CD-ROM or on our Web site at

<http://www.ferrazshawmut.com/fr/products/index.htm>

under the heading **Miniature fuses.**

MODULOSTAR, OUR STAR MODULAR PRODUCT!

A global range

There are Modulostar models for all ferrule-style class gG and aM fuses built to IEC standards, all midget and CC fuses built to UL standards, and gR and aR fuses from 8mm to 27mm in diameter.

A modular range

Modulostar is a star in the modular world! All kinds of multi-pole combinations are possible: from 1 to 4 poles, and including 1-pole + neutral, 2-pole, 3-pole and 3-pole + neutral.

A range that stands out from the pack

Modulostar proves its worth in 11 different ways. Compatible, compact, easy-to-connect, easy-to-use, ergonomic, safe and flexible are just some of its qualities.

Modulostar in The Advisor at: <http://www.ferrazshawmut.fr/fr/products/index.html>



A NEW RANGE OF 10X38 690V aM & gG FUSES



NEW!

gG

General protection for panels, cables, transformers

aM

Protection for motor starters

IEC Fuses - MI5F25V - Fast acting

250 VAC - F: fast acting - from 0.032 to 20 A - size: 5 x 20



I_N Rating (A)	Breaking Capacity	Catalog Number	Reference	Pack.
0,032	35A 250V	MI5F25V0,032	D222942Q	100
0,04		MI5F25V0,04	M200732Q	100
0,05		MI5F25V0,05	B201274Q	100
0,063		MI5F25V0,063	L201789Q	100
0,08		MI5F25V0,08	K211011Q	100
0,1		MI5F25V0,1	L200731Q	100
0,125		MI5F25V0,125	A201273Q	100
0,16		MI5F25V0,16	K201788Q	100
0,2		MI5F25V0,2	J211010Q	100
0,25		MI5F25V0,25	A211531Q	100
0,315		MI5F25V0,315	F212042Q	100
0,4		MI5F25V0,4	B211532Q	100
0,5		MI5F25V0,5	Y212564Q	100
0,63		MI5F25V0,63	J213080Q	100
0,8		MI5F25V0,8	G212043Q	100
1		MI5F25V1	D213581Q	100
1,25		MI5F25V1,25	D214087Q	100
1,6		MI5F25V1,6	Z212565Q	100
2		MI5F25V2	J214598Q	100
2,5		MI5F25V2,5	Q215110Q	100
3,15	MI5F25V3,15	R215617Q	100	
4	10xIn 250V	MI5F25V4	Z216130Q	100
5		MI5F25V5	W216633Q	100
6,3		MI5F25V6,3	H217150Q	100
8		MI5F25V8	M217660Q	100
10		MI5F25V10	X218175Q	100
12,5		MI5F25V12,5	K218693Q	100
16		MI5F25V16	Y219211Q	100
20		MI5F25V20	A219742Q	100

Fuses without approval.

DIN Fuses - MI5SM25V - Medium time lag

250 VAC - M: medium time - from 0.032 to 20 A - size: 5 x 20

I_N Rating (A)	Breaking Capacity	Catalog Number	Reference	Pack.
0,032	80A 250V	MI5SM25V0,032	D218158Q	100
0,04		MI5SM25V0,04	Q218675Q	100
0,05		MI5SM25V0,05	D219193Q	100
0,063		MI5SM25V0,063	H219726Q	100
0,08		MI5SM25V0,08	Q222171Q	100
0,1		MI5SM25V0,1	Q222925Q	100
0,125		MI5SM25V0,125	T200715Q	100
0,16		MI5SM25V0,16	H201257Q	100
0,2		MI5SM25V0,2	T201773Q	100
0,25		MI5SM25V0,25	K207147Q	100
0,315		MI5SM25V0,315	J211516Q	100
0,4		MI5SM25V0,4	N212026Q	100
0,5		MI5SM25V0,5	F212548Q	100
0,63		MI5SM25V0,63	R213064Q	100
0,8		MI5SM25V0,8	M213566Q	100
1		MI5SM25V1	L214071Q	100
1,25		MI5SM25V1,25	T214584Q	100
1,6		MI5SM25V1,6	A215096Q	100
2		MI5SM25V2	A215602Q	100
2,5		MI5SM25V2,5	H216115Q	100
3,15	MI5SM25V3,15	E216618Q	100	
4	300A 250V	MI5SM25V4	R217135Q	100
5		MI5SM25V5	E218159Q	100
6,3		MI5SM25V6,3	R218676Q	100
8		MI5SM25V8	E219194Q	100
10		MI5SM25V10	J219727Q	100
16		MI5SM25V16	R222172Q	100



Fuses without approval.

IEC Fuses - MI5T25V - Time lag

250 VAC - T: time lag - from 0.032 to 20 A - size: 5 x 20



I_N Rating (A)	Breaking Capacity	Catalog Number	Reference	Pack.
0,032	35A 250V	MI5T25V0,032	C216639Q	100
0,04		MI5T25V0,04	P217156Q	100
0,05		MI5T25V0,05	T217666Q	100
0,063		MI5T25V0,063	D218181Q	100
0,08		MI5T25V0,08	R218699Q	100
0,1		MI5T25V0,1	B216638Q	100
0,125		MI5T25V0,125	N217155Q	100
0,16		MI5T25V0,16	S217665Q	100
0,2		MI5T25V0,2	C218180Q	100
0,25		MI5T25V0,25	O218698Q	100
0,315		MI5T25V0,315	D219216Q	100
0,4		MI5T25V0,4	E219217Q	100
0,5		MI5T25V0,5	F219747Q	100
0,63		MI5T25V0,63	N222192Q	100
0,8		MI5T25V0,8	G219748Q	100
1		MI5T25V1	J222947Q	100
1,25		MI5T25V1,25	S200737Q	100
1,6		MI5T25V1,6	P222193Q	100
2		MI5T25V2	G201279Q	100
2,5		MI5T25V2,5	R201794Q	100
3,15	MI5T25V3,15	O211016Q	100	
4	10xIn 250V	MI5T25V4	G211537Q	100
5		MI5T25V5	M212048Q	100
6,3		MI5T25V6,3	E212570Q	100
8		MI5T25V8	O213086Q	100
10		MI5T25V10	J213586Q	100
12,5		MI5T25V12,5	P214603Q	100
16		MI5T25V16	X215116Q	100
20		MI5T25V20	Y215623Q	100

Fuses without approval.

IEC Fuses - MI6F25V - Fast acting

250 VAC - F: fast acting - from 0.032 to 25 A - size: 6 x 32

I_N Rating (A)	Breaking Capacity	Catalog Number	Reference	Pack.
0,032	35A 250V	MI6F25V0,032	B219214Q	100
0,04		MI6F25V0,04	D219745Q	100
0,05		MI6F25V0,05	L222190Q	100
0,063		MI6F25V0,063	G222945Q	100
0,08		MI6F25V0,08	Q200735Q	100
0,1		MI6F25V0,1	K217152Q	100
0,125		MI6F25V0,125	P217662Q	100
0,16		MI6F25V0,16	Z218177Q	100
0,2		MI6F25V0,2	M218695Q	100
0,25		MI6F25V0,25	A219213Q	100
0,315		MI6F25V0,315	C219744Q	100
0,4		MI6F25V0,4	E201277Q	100
0,5		MI6F25V0,5	K222189Q	100
0,63		MI6F25V0,63	F222944Q	100
0,8		MI6F25V0,8	P201792Q	100
1		MI6F25V1	P200734Q	100
1,25		MI6F25V1,25	D201276Q	100
1,6		MI6F25V1,6	N211014Q	100
2		MI6F25V2	N201791Q	100
2,5		MI6F25V2,5	M211013Q	100
3,15	MI6F25V3,15	J212045Q	100	
4	10xIn 250V	MI6F25V4	B212567Q	100
5		MI6F25V5	M213083Q	100
6,3		MI6F25V6,3	G214090Q	100
8		MI6F25V8	L214600Q	100
10		MI6F25V10	T215113Q	100
12,5		MI6F25V12,5	V215620Q	100
16		MI6F25V16	Z216636Q	100
20		MI6F25V20	Q217663Q	100
25		MI6F25V25	A218178Q	100



Convenience fuses

Fuses without approval.

IEC Fuses - MI6T25V - Time lag

250 VAC - T: time lag - from 0.032 to 25 A - size: 6 x 32



I_N Rating (A)	Breaking Capacity	Catalog Number	Reference	Pack.
0,032	35A 250V	MI6T25V0,032	H216138Q	100
0,04		MI6T25V0,04	F216642Q	100
0,05		MI6T25V0,05	S217159Q	100
0,063		MI6T25V0,063	X217669Q	100
0,08		MI6T25V0,08	G218184Q	100
0,1		MI6T25V0,1	M214095Q	100
0,125		MI6T25V0,125	Q214604Q	100
0,16		MI6T25V0,16	A215625Q	100
0,2		MI6T25V0,2	G216137Q	100
0,25		MI6T25V0,25	E216641Q	100
0,315		MI6T25V0,315	R217158Q	100
0,4		MI6T25V0,4	V218702Q	100
0,5		MI6T25V0,5	W217668Q	100
0,63		MI6T25V0,63	F218183Q	100
0,8		MI6T25V0,8	H219220Q	100
1		MI6T25V1	T218701Q	100
1,25		MI6T25V1,25	G219219Q	100
1,6		MI6T25V1,6	K219751Q	100
2		MI6T25V2	J219750Q	100
2,5		MI6T25V2,5	R222195Q	100
3,15	MI6T25V3,15	M222950Q	100	
4	10xIn 250V	MI6T25V4	W200740Q	100
5		MI6T25V5	K201282Q	100
6,3		MI6T25V6,3	Q212051Q	100
8		MI6T25V8	H212573Q	100
10		MI6T25V10	S213088Q	100
12,5		MI6T25V12,5	L213588Q	100
16		MI6T25V16	N214096Q	100
20		MI6T25V20	R214605Q	100

Fuses without approval.

5 x 20 - 125V to 250V - FA/FB Very Fast Acting

Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
5 x 20	0,040*	250	MI5FB25V1,26	K084051	
5 x 20	0,050*	251	MI5FB25V0,05	Q080468	
5 x 20	0,063*	252	MI5FB25V0,063	N084054	
5 x 20	0,080*	253	MI5FB25V0,08	P080467	
5 x 20	0,100*	254	MI5FB25V0,1	L084052	
5 x 20	0,125	255	MI5FA25V0,125	L084029	
5 x 20	0,16	256	MI5FA25V0,16	F084001	
5 x 20	0,2	257	MI5FA25V0,2	Y084017	
5 x 20	0,25	258	MI5FA25V0,25	G084002	
5 x 20	0,315	259	MI5FA25V0,315	Z084018	
5 x 20	0,4	260	MI5FA25V0,4	A084019	
5 x 20	0,5	261	MI5FA25V0,5	H084003	
5 x 20	0,63	262	MI5FA25V0,63	X084016	
5 x 20	0,8	263	MI5FA25V0,8	C084021	
5 x 20	1	264	MI5FA25V1	J084004	
5 x 20	1,25	265	MI5FA25V1,25	K084005	
5 x 20	1,6	266	MI5FA25V1,6	L084006	
5 x 20	2	267	MI5FA25V2	M084007	
5 x 20	2,5	268	MI5FA25V2,5	N084008	
5 x 20	3,15	269	MI5FA25V3,15	P084009	
5 x 20	4	270	MI5FA25V4	Q084010	
5 x 20	5	271	MI5FA25V5	R084011	
5 x 20	6,3	272	MI5FA25V6,3	S084012	
5 x 20	8	273	MI5FA25V8	T084013	
5 x 20	10	274	MI5FA25V10	V084014	
5 x 20	# 12,5	275	MI5FA25V12,5	W084015	
5 x 20	# 16*	276	MI5FA12,5V16	R084034	
5 x 20	# 20*	277	MI5FA12,5V20	D084022	



* Non-certified rating.

For these ratings, heating within fuse holders must be checked.

5 x 20 - 125V to 250V - SA/SB Medium Time Lag



Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
5 x 20	0,04	250	MI5SB25V0,04	C080479	
5 x 20	0,05	251	MI5SB25V0,05	R080469	
5 x 20	0,063	252	MI5SB25V0,063	F080482	
5 x 20	0,08	253	MI5SB25V0,08	B080478	
5 x 20	0,1	254	MI5SA25V0,1	M084122	
5 x 20	0,125	255	MI5SA25V0,125	L084121	
5 x 20	0,16	256	MI5SA25V0,16	P084101	
5 x 20	0,2	257	MI5SA25V0,2	G084117	
5 x 20	0,25	258	MI5SA25V0,25	Q084102	
5 x 20	0,315	259	MI5SA25V0,315	H084118	
5 x 20	0,4	260	MI5SA25V0,4	J084119	
5 x 20	0,5	261	MI5SA25V0,5	R084103	
5 x 20	0,63	262	MI5SA25V0,63	F084116	
5 x 20	0,8	263	MI5SA25V0,8	K084120	
5 x 20	1	264	MI5SA25V1	S084104	
5 x 20	1,25	265	MI5SA25V1,25	T087164	
5 x 20	1,6	266	MI5SA25V1,6	D087173	
5 x 20	2	267	MI5SA25V2	M087020	
5 x 20	2,5	268	MI5SA25V2,5	N087021	
5 x 20	3,15	269	MI5SA25V3,15	P087022	
5 x 20	4	270	MI5SA25V4	Q087023	
5 x 20	5	271	MI5SA25V5	R087024	
5 x 20	6,3	272	MI5SA25V6,3	S087025	
5 x 20	8	273	MI5SA25V8	T087026	
5 x 20	10	274	MI5SA25V10	V087027	
5 x 20	12,5*	275	MI5SA25V12,5	W087028	
5 x 20	16*	276	MI5SA12,5V16	W086338	

* For these ratings, heating within fuse holder must be checked.

5 x 20 - 400V - FA Very Fast Acting



Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
5 x 20	0,1	400	MI5FA40V0,1	T093305	
5 x 20	0,125	401	MI5FA40V0,125	W093307	
5 x 20	0,16	402	MI5FA40V0,16	Y093309	
5 x 20	0,2	403	MI5FA40V0,2	P095992	
5 x 20	0,25	404	MI5FA40V0,25	E093315	
5 x 20	0,315	405	MI5FA40V0,315	Q093348	
5 x 20	0,4	406	MI5FA40V0,4	G093317	
5 x 20	0,5	407	MI5FA40V0,5	H093318	
5 x 20	0,63	408	MI5FA40V0,63	J093319	
5 x 20	0,8	409	MI5FA40V0,8	L093321	
5 x 20	1	410	MI5FA40V1	F093270	
5 x 20	1,25	411	MI5FA40V1,25	M093322	
5 x 20	1,6	412	MI5FA40V1,6	N093323	
5 x 20	2	413	MI5FA40V2	P093324	
5 x 20	2,5	414	MI5FA40V2,5	M093345	
5 x 20	3,15	415	MI5FA40V3,15	N093346	
5 x 20	4	416	MI5FA40V4	P093347	

Ratings lower than 0,1A : please enquire.

5 x 20 - 400V - SA Medium Time Lag

Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
5 x 20	0,1	400	MI5SA40V0,1	C095429	
5 x 20	0,125	401	MI5SA40V0,125	T078930	
5 x 20	0,16	402	MI5SA40V0,16	Q095993	
5 x 20	0,2	403	MI5SA40V0,2	R095994	
5 x 20	0,25	404	MI5SA40V0,25	E095431	
5 x 20	0,315	405	MI5SA40V0,315	A095450	
5 x 20	0,4	406	MI5SA40V0,4	S095995	
5 x 20	0,5	407	MI5SA40V0,5	E095477	
5 x 20	0,63	408	MI5SA40V0,63	T095996	
5 x 20	0,8	409	MI5SA40V0,8	G095479	
5 x 20	1	410	MI5SA40V1	J095481	
5 x 20	1,25	411	MI5SA40V1,25	Y095494	
5 x 20	1,6	412	MI5SA40V1,6	Z095495	
5 x 20	2	413	MI5SA40V2	A095496	
5 x 20	2,5	414	MI5SA40V2,5	B095497	
5 x 20	3,15	415	MI5SA40V3,15	C095498	

Ratings lower than 0,1A : please enquire.



6 x 32 - 125V to 250V - FA Very Fast Acting



Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
6,3 x 32	0,1	250	MI6FA25V0,1	R094315	
6,3 x 32	0,125	251	MI6FA25V0,125	F084323	
6,3 x 32	0,16	252	MI6FA25V0,16	G084301	
6,3 x 32	0,2	253	MI6FA25V0,2	C084320	
6,3 x 32	0,25	254	MI6FA25V0,25	H084302	
6,3 x 32	0,315	255	MI6FA25V0,315	D084321	
6,3 x 32	0,4	256	MI6FA25V0,4	E084322	
6,3 x 32	0,5	257	MI6FA25V0,5	J084303	
6,3 x 32	0,63	258	MI6FA25V0,63	B084319	
6,3 x 32	0,8	259	MI6FA25V0,8	G084324	
6,3 x 32	1	260	MI6FA25V1	K084304	
6,3 x 32	1,25	261	MI6FA25V1,25	L084305	
6,3 x 32	1,6	262	MI6FA25V1,6	M084306	
6,3 x 32	2	263	MI6FA25V2	N084307	
6,3 x 32	2,5	264	MI6FA25V2,5	P084308	
6,3 x 32	3,15	265	MI6FA25V3,15	Q084309	
6,3 x 32	4	266	MI6FA25V4	R084310	
6,3 x 32	5	267	MI6FA25V5	S084311	
6,3 x 32	6,3	268	MI6FA25V6,3	T084312	
6,3 x 32	8	269	MI6FA25V8	V084313	
6,3 x 32	10	270	MI6FA25V10	W084314	
6,3 x 32	12,5	271	MI6FA25V12,5	X084315	
6,3 x 32	16	272	MI6FA25V16	Z084317	
6,3 x 32	20	273	MI6FA25V20	A084318	
6,3 x 32	25	274	MI6FA12,5V25	H084325	
6,3 x 32	30	275	MI6FA12,5V30	J084326	

6 x 32 - 125V to 250V - SA Medium Time Lag

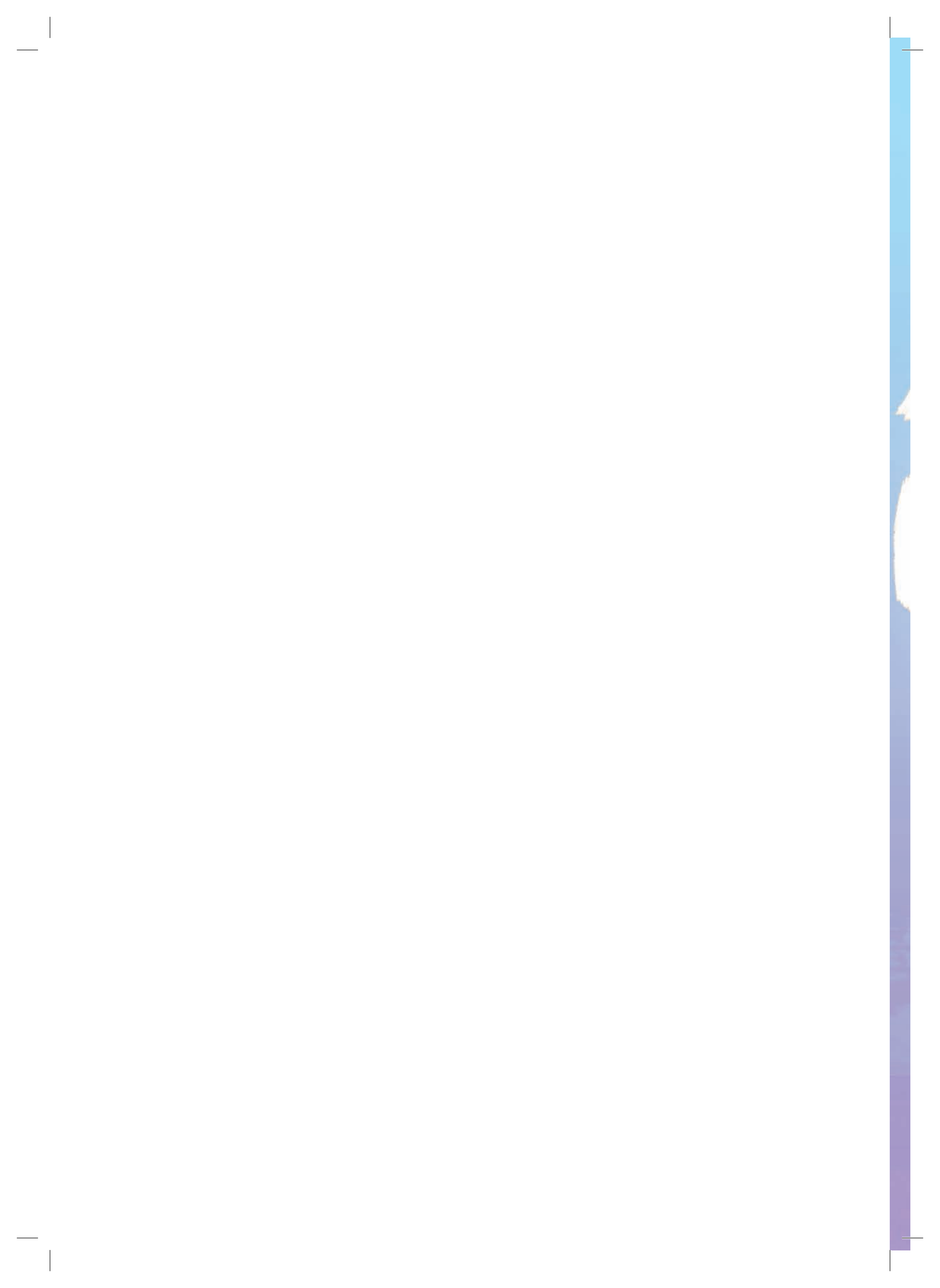
Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
6,3 x 32	0,1	250	MI6SA25V0,1	Q084424	
6,3 x 32	0,125	251	MI6SA25V0,125	C086367	
6,3 x 32	0,16	252	MI6SA25V0,16	Q084401	
6,3 x 32	0,2	253	MI6SA25V0,2	L084420	
6,3 x 32	0,25	254	MI6SA25V0,25	R084402	
6,3 x 32	0,315	255	MI6SA25V0,315	M084421	
6,3 x 32	0,4	256	MI6SA25V0,4	N084422	
6,3 x 32	0,5	257	MI6SA25V0,5	S084403	
6,3 x 32	0,63	258	MI6SA25V0,63	K084419	
6,3 x 32	0,8	259	MI6SA25V0,8	P084423	
6,3 x 32	1	260	MI6SA25V1	T084404	
6,3 x 32	1,25	261	MI6SA25V1,25	V084405	
6,3 x 32	1,6	262	MI6SA25V1,6	W084406	
6,3 x 32	2	263	MI6SA25V2	X084407	
6,3 x 32	2,5	264	MI6SA25V2,5	Y084408	
6,3 x 32	3,15	265	MI6SA25V3,15	Z084409	
6,3 x 32	4	266	MI6SA25V4	A084410	
6,3 x 32	5	267	MI6SA25V5	B084411	
6,3 x 32	6,3	268	MI6SA25V6,3	C084412	
6,3 x 32	8	269	MI6SA25V8	H093364	
6,3 x 32	10	270	MI6SA25V10	E084414	
6,3 x 32	12,5	271	MI6SA25V12,5	F084415	
6,3 x 32	16	272	MI6SA25V16	H084417	
6,3 x 32	20	273	MI6SA25V20	J084418	
6,3 x 32	25	274	MI6SA12,5V25	T084427	
6,3 x 32	30	275	MI6SA12,5V30	V084428	



6 x 32 - 400V - FA/FB Very Fast Acting

Size	Current (A)	Voltage (V)	Cat.number	Ref. number	Pckg
6,3 x 32	0,1	400	MI6FA40V0,1	H078920	
6,3 x 32	0,125	401	MI6FA40V0,125	F084369	
6,3 x 32	0,16	402	MI6FA40V0,16	M084352	
6,3 x 32	0,2	403	MI6FA40V0,2	G084370	
6,3 x 32	0,25	404	MI6FA40V0,25	N084353	
6,3 x 32	0,315	405	MI6FA40V0,315	D084367	
6,3 x 32	0,4	406	MI6FA40V0,4	H084371	
6,3 x 32	0,5	407	MI6FA40V0,5	P084354	
6,3 x 32	0,63	408	MI6FA40V0,63	E084368	
6,3 x 32	0,8	409	MI6FA40V0,8	L084351	
6,3 x 32	1	410	MI6FA40V0,1	Q084355	
6,3 x 32	1,25	411	MI6FA40V1,25	R084356	
6,3 x 32	1,6	412	MI6FA40V1,6	S084357	
6,3 x 32	2	413	MI6FA40V2	T084358	
6,3 x 32	2,5	414	MI6FA40V2,5	V084359	
6,3 x 32	3,15	415	MI6FA40V3,15	W084360	
6,3 x 32	4	416	MI6FA40V4	X084361	
6,3 x 32	5	417	MI6FA40V5	Y084362	
6,3 x 32	6,3	418	MI6FA40V6,3	Z084363	
6,3 x 32	8	419	MI6FA40V8	A084364	
6,3 x 32	10	420	MI6FA40V10	B084365	
6,3 x 32	12,5	421	MI6FA40V12,5	C084366	
6,3 x 32	16*	422	MI6FB40V16	K084373	
6,3 x 32	20*	423	MI6FA40V20	H203350	





Semiconductor Protection Fuses

- Protistor® Mapping 92 - 93
- European Ferrule-style Protistor® fuses 94 - 96
- Modulostar® for Semiconductor ferrule fuses 97 - 100
- DIN D & DO gR fuses 101
- Protistor® DIN 80 mm standard fuse sizes 000-00 102 -103
- Protistor® DIN blade-style fuses 104 - 108
 - NH gS 104
 - NH URD 105 - 107
 - Accessories 108
- Protistor® BS 88-4 fuses 109 - 112
- Square body Protistor® fuses 113 - 126
 - Size 3x 107 - 110
 - Size 7x 111 - 115
 - SI bases - IP20 finger safe fuse holder 122
 - ITCP for semiconductor fuses 123 - 125
 - Fuse Monitoring 126
- American Round Fuses Protistor® 127 - 136
 - A15QS 127
 - A30QS 128
 - A50QS 129
 - A60Q 130 - 131
 - A60X 132
 - A70QS 133
 - A70Q 134
 - A1000P 135
 - A120X 136
 - A150X 136

Applications	Applications Power	Technology	Standard	150V	200V	250V	300V	400V	440V	450V	500V	550V	600V	650V	660V	690V 700V	750V	800V	850V	900V	950V	1000V	1050V 1100V	
UPS * Motor Control * Switching Mode Power Supply	Up to 1kW Using mainly TRIAC IGBT DIODES	CP	US	1A to 60A			1A to 60A				1A to 60A	.1A to 40A				1A to 100A						5A to 60A		
		CP	FR								1A to 30A	.1A to 250A		1A to 200A	1A to 100A		8A to 110A						32A to 170A	
		CP	DIN														12A to 100A							
		CP	BS				5A to 1050A									5A to 800A	12A to 100A							
		PSC low inductance	BS								250A to 315A	200A to 400A		16A to 160A		20A to 500A								
		C1	US		50A to 6000A			70A to 4500A				35A to 1600A	70A to 300A				35A to 2000A							35A to 2000A
UPS * Motor Control * Drives * Rectifier	Between 1kW to 100kW using mainly THYRISTORS IGBT DIODES	PSC regular	DIN								350A to 400A	450A to 1600A		20A to 1400A	16A to 1000A						1000A to 1100A	630A to 900A	350A to 800A	
		PSC regular	FR					4500A to 4000A		1800A to 2500A	1400A to 4000A	1250A to 3200A	1100A to 2800A		63A to 1800A	50A to 1000A					1000A to 2500A	630A to 2000A	350A to 1800A	
		PSC regular	US								1800A to 2500A	1400A to 2250A	1250A to 2000A	1100A to 2800A		63A to 2000A					1400A	1000A to 1250A	800A to 1000A	
UPS * Drives * Rectifiers * Traction * High Voltage Distribution * Cycloconverter	Up to 10 MW using mainly Diodes GTO THYRISTORS	PSC LR	FR	2500A to 3750A	1600A to 2200A		2000A to 3200A	550A to 5000A			2500A to 1000A	2000A to 8500A	3600A to 8400A	4800A	3200A to 6400A	2500A to 8400A	1200A to 4500A	3400A to 7400A	1750A to 6400A	1800A to 3350A	1500A to 7200A	1400A to 5500A	1250A to 6400A	
		PSC HV	SP																					
Inverter - UPS with laminated BusBar	Up to 10 MW using mainly IGBT and IGCT	Flat Pack	SP																		450A to 500A	200A to 400A		
Traction - Auxiliary	DC application	C1															5A to 1000A						15A to 1000A	
		CP (end Cap)							2A to 160A							.8A to 110A								1A to 100A
		PSC (Square)													800A to 1600A		50A to 1500A							
		PSC & Flat Pack																						

Technology

Defined by the fuse size, shape and type of termination.
 CP: Cylindrical fuses with a cap crimped to the body. The body can be ceramic or GMG (Glass Melamine Glass). The electrical contacts can be bladed or non bladed style.
 C1: Cylindrical fuses made with a GMG body. The electrical contact, bladed or non bladed, is a pinned terminal assembly.
 PSC: Square ceramic fuses. The terminals are screwed to the body. Various types exist within the PSC technology: regular, low

inductance, LR (Large Rectifier) and HV (High Voltage).
 Flat pack: Rectangular ceramic fuses presenting a very low inductance and excellent high frequency performance.

Standards:

Semiconductor fuses are not governed by standards at this time however soon IEC 269-4 will be implemented. Manufacturers have developed semiconductor fuse types in response to regional practices and market needs. The mechanical connections represented by

th
Tr
US

FR
Di
BS

	1050V 1100V	1150V 1200V	1250V	1300V	1350V	1450V	1500V	1550V	1600V	1700V	1750V	1800V	1900V	2000V	2100V	2200V	2300V	2400V	2500V	3000V	3200V	3400V	3500V	3600V	3800V	4000V	4200V	6000V	7200V	
10A to 30A		.5A to 30A					15A to 30A																							
40A to 80A																														
100A to 200A																														
300A to 600A																														
1000A to 2000A																														
3000A to 6000A																														
10000A to 20000A																														
10A to 30A		45A to 800A					35A to 800A																							
100A to 200A	350A to 800A	280A to 700A	63A to 630A											100A to 1250A							20A to 1400A									
300A to 600A	350A to 1800A	280A to 900A	63A to 1250A											100A to 1250A							20A to 1400A									
1000A to 2000A	800A to 1000A	350A to 800A	63A to 900A																											
10000A to 20000A	1250A to 4000A	1000A to 4600A	800A to 4200A	900A to 2500A	1250A to 3800A	900A to 2100A	630A to 1300A	2800A to 3100A	1100A to 4100A	900A to 1900A		525A to 1700A	1400A to 1600A	800A to 1500A	750A to 1600A	1100A to 850A	630A to 900A	1000A to 2000A	900A to 1500A	800A to 1500A	500A to 1500A	1250A to 1000A	400A to 1000A							
100A to 200A							100A to 1500A							100A to 1250A							80A to 700A							10A to 700A		
300A to 600A		80A to 160A												160A to 250A	80A to 125A														225A to 950A	
1000A to 2000A																														
3000A to 6000A							.8A to 100A							.8A to 40A													.8A to 20A			
10000A to 20000A																														
30000A to 60000A		20A to 420A											6A to 16A																	
100000A to 200000A														20A to 400A																
300000A to 600000A																														
1000000A to 2000000A																														
3000000A to 6000000A																														
10000000A to 20000000A																														
30000000A to 60000000A																														
100000000A to 200000000A																														
300000000A to 600000000A																														
1000000000A to 2000000000A																														
3000000000A to 6000000000A																														
10000000000A to 20000000000A																														

the standards shown in this leaflet follow these regional practices.

The following are general descriptions of these standard practices.

US: North American Standards. Ferrule, round or square fuses with closed slot blades or end contacts with UNC threaded holes.

FR: French Standards. Ferrule and square fuses with opened slot blades or end contacts with metric threaded holes.

Din: German Standards. Round and square fuses with brackets according to DIN43620 and DIN 43653.

BS: British Standards: Round and square fuses with brackets according to BS 88-4 standard.

SP: Special Purpose fuses such as DC fuses. Mounting arrangements are determined by applications requirements.

Third party approval/conformity:
All fuses are tested to comply with IEC or UL standards.

10.3 x 38 URD and gRB w/o striker



Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
100mA	600 V URD	A060UD0.100T13	H077632J	10
125mA	600 V URD	A060UD0.125T13	J077633J	10
160mA	600 V URD	A060UD0.160T13	K077634J	10
200mA	600 V URD	A060UD0.200T13	L077635J	10
250mA	600 V URD	A060UD0.250T13	M077636J	10
315mA	600 V URD	A060UD0.315T13	N077637J	10
400mA	600 V URD	A060UD0.400T13	P077638J	10
500mA RU	600 V URD	A060UD0.500T13	Q077639J	10
630mA RU	600 V URD	A060UD0.630T13	R077640J	10
800mA RU	600 V URD	A060UD0.800T13	S077641J	10
1 RU	690 V gRC	FR10GB69V1	Z330279J	10
1,25 RU	690 V gRB	FR10GB69V1.25	X330001J	10
1,5 RU	690 V gRB	FR10GB69V1.5	Y330002J	10
2 RU	690 V gRB	FR10GB69V2	Z330003J	10
2,5 RU	690 V gRB	FR10GB69V2.5	A330004J	10
3 RU	690 V gRB	FR10GB69V3	B330005J	10
4 RU	690 V gRB	FR10GB69V4	C330006J	10
5 RU	690 V gRB	FR10GB69V5	D330007J	10
6 RU	690 V gRB	FR10GB69V6	E330008J	10
8 RU	690 V gRB	FR10GB69V8	F330009J	10
10 RU	690 V gRB	FR10GB69V10	G330010J	10
12,5 RU	690 V gRB	FR10GB69V12.5	H330011J	10
16 RU	690 V gRB	FR10GB69V16	J330012J	10
20 RU	690 V gRB	FR10GB69V20	K330013J	10
25 RU	690 V gRB	FR10GB69V25	L330014J	10
30 RU	690 V gRB	FR10GB69V30	M330015J	10
32 RU	690 V gRB	FR10GB69V32	Y330278J	10
Neutral		FRN1038	R211569J	10

10.3 x 38 URD/URB/URL with striker












Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
1	500 V URD	A050URD1T13I	P076925	10
2	500 V URD	A050URD2T13I	Q076926	10
4	500 V URD	A050URD4T13I	S076928	10
5	500 V URD	A050URD5T13I	T076929	10
6	500 V URD	A050URB6T13I	V076930	10
8	500 V URD	A050URB8T13I	W076931	10
10	500 V URD	A050URB10T13I	X076932	10
12	500 V URD	A050URB12T13I	Y076933	10
16	500 V URD	A050URB16T13I	Z076934	10
20	500 V URD	A050URB20T13I	A076935	10
25	500 V URL	A050URL25T13I	B076936	10
30	500 V URD	A050URL30T13I	C076937	10

14 x 51 gRC w/o striker

Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
1	690 V gRC	FR14GC69V1	E221080J	10
2	690 V gRC	FR14GC69V2	H081473J	10
4	690 V gRC	FR14GC69V4	J081474J	10
6	690 V gRC	FR14GC69V6	T220909J	10
8	690 V gRC	FR14GC69V8	S220908J	10
10	690 V gRC	FR14GC69V10	R220907J	10
12	690 V gRC	FR14GC69V12	Q220906J	10
16	690 V gRC	FR14GC69V16	P220905J	10
20	690 V gRC	FR14GC69V20	E220735J	10
25	690 V gRC	FR14GC69V25	N220904J	10
32	690 V gRC	FR14GC69V32	W220819J	10
40	690 V gRC	FR14GC69V40	M220903J	10
50	690 V gRC	FR14GC69V50	L220902J	10



14 x 51 gRC/URC with striker

Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
1	690 V gRC	FR14GC69V1T	F221081J	10
2	690 V gRC	FR14GC69V2T	L081476J	10
4	690 V gRC	FR14GC69V4T	F081517J	10
6	690 V gRC	FR14GC69V6T	B220939J	10
8 	690 V gRC	FR14GC69V8T	A220938J	10
10 	690 V gRC	FR14GC69V10T	Z220937J	10
12 	690 V gRC	FR14GC69V12T	Y220936J	10
16 	690 V gRC	FR14GC69V16T	X220935J	10
20 	690 V gRC	FR14GC69V20T	W220934J	10
25 	690 V gRC	FR14GC69V25T	V220933J	10
32 	690 V gRC	FR14GC69V32T	V220818J	10
40 	690 V gRC	FR14GC69V40T	M220949J	10
50 	690 V gRC	FR14GC69V50T	N220950J	10
63	600 V URC	FR14UC60V63T	V220910J	10



14 x 51 URC w/o striker

Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
6	690 V URC	FR14UC69V6	K081475J	10
8	690 V URC	FR14UC69V8	S093902J	10
10	690 V URC	FR14UC69V10	T093903J	10
12	690 V URC	FR14UC69V12	V093904J	10
16	690 V URC	FR14UC69V16	W093905J	10
20	690 V URC	FR14UC69V20	X093906J	10
25	690 V URC	FR14UC69V25	Y093907J	10
32	690 V URC	FR14UC69V32	Z093908J	10
40	690 V URC	FR14UC69V40	A093909J	10
50	690 V URC	FR14UC69V50	B093910J	10



14 x 51 URC/URD with striker



Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
6	690 V URC	FR14UC69V6T	G081518J	10
8	690 V URC	FR14UC69V8T	C093911J	10
10	690 V URC	FR14UC69V10T	D093912J	10
12	690 V URC	FR14UC69V12T	E093913J	10
16	690 V URC	FR14UC69V16T	F093914J	10
20	690 V URC	FR14UC69V20T	G093915J	10
25	690 V URC	FR14UC69V25T	H093916J	10
32	690 V URC	FR14UC69V32T	J093917J	10
40	690 V URD	FR14UD69V40T	T100136J	10
50	690 V URD	FR14UD69V50T	V100137J	10

22 x 58 gRC w/o striker



Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
20	690 V gRC	FR22GC69V20	C220940J	10
25	690 V gRC	FR22GC69V25	B220916J	10
32	690 V gRC	FR22GC69V32	A220915J	10
40	690 V gRC	FR22GC69V40	Z220914J	10
50	690 V gRC	FR22GC69V50	Y220913J	10
63	690 V gRC	FR22GC69V63	X220912J	10
80	690 V gRC	FR22GC69V80	Y220821J	10
100	690 V gRC	FR22GC69V100	W220911J	10
125	600 V gRC	FR22UD60V125T	A220708J	10
135	600 V gRC	FR22UD60V135T	B220709J	10

22 x 58 gRC with striker



Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
20	690 V gRC	FR22GC69V20T	D220734J	10
25	690 V gRC	FR22GC69V25T	G220921J	10
32	690 V gRC	FR22GC69V32T	F220920J	10
40	690 V gRC	FR22GC69V40T	E220919J	10
50	690 V gRC	FR22GC69V50T	D220918J	10
63	690 V gRC	FR22GC69V63T	C220733J	10
80	690 V gRC	FR22GC69V80T	X220820J	10
100	690 V gRC	FR22GC69V100T	C220917J	10

22 x 58 URD w/o striker



Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
25	690 V URD	FR22UD69V25	B093956J	10
32	690 V URD	FR22UD69V32	Z094828J	10
40	690 V URD	FR22UD69V40	S094822J	10
50	690 V URD	FR22UD69V50	W094779J	10
63	690 V URD	FR22UD69V63	T094823J	10
80	690 V URD	FR22UD69V80	A094829J	10
100	690 V URD	FR22UD69V100	Y094827J	10

22 x 58 URD with striker

Current (A)	Rating - Curve	Cat.Number	Ref. number	Pack
25	690 V URD	FR22UD69V25T	H093801J	10
32	690 V URD	FR22UD69V32T	C093957J	10
40	690 V URD	FR22UD69V40T	J093802J	10
50	690 V URD	FR22UD69V50T	D093958J	10
63	690 V URD	FR22UD69V63T	K093803J	10
80	690 V URD	FR22UD69V80T	E093959J	10
100	690 V URD	FR22UD69V100T	F093960J	10

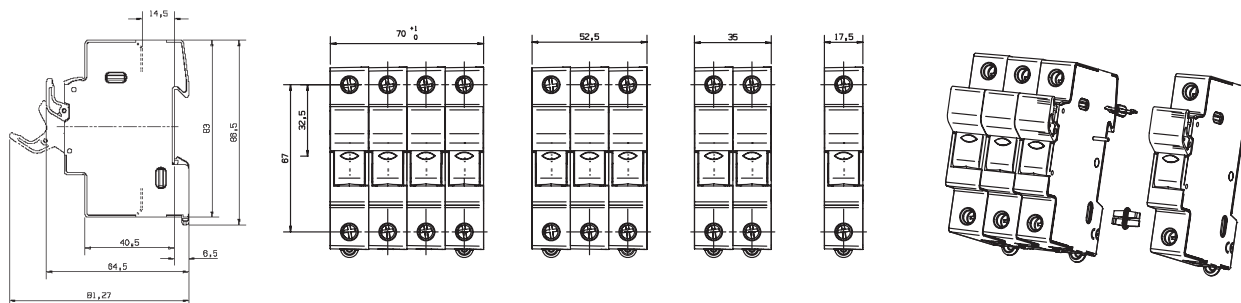


Fuse holders - 600Vac

MODULOSTAR® Fuse holders

Nb of pole	Cat Number w/o indicator	Ref.Number w/o indicator	Cat Number with indicator	Ref.Number with indicator	Nb of Mod. 17.5 mm	Pck.
N	US10N	H305056			1	12
1	US101	B305050	US101I	J305057	1	12
1+N	US101N	C305051	US101NI	K305058	2	6
2	US102	D305052	US102I	L305059	2	6
3	US103	E305053	US103I	M305060	3	4
3+N	US103N	F305054	US103NI	N305061	4	3
4	US104	G305055	US104I	P305062	4	3
1			US101I-AC120	R303017K	1	12
1			US101I-DC24(1)	S303018K	1	12
1			US101I-DC24P(2)	Q303016K	1	12

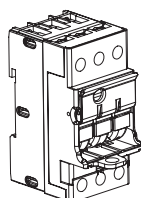
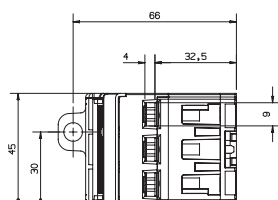
(1) 2 LED 24Vdc for both polarity
(2) 1 LED 24Vdc for 1 polarity



MODULOSTAR® Fuse holders

Nb of pole	Cat Number	Ref.Number	Fonction Fuse Holder	Fuse Discon.	Pack
3 poles	CMSFM10	S302765A	w/o Indicator		1
system /	CMSFM10M	T302766A		w/o Indicator	1
45 mm	CMSFM10I	W302768A	with Indicator		1
width	CMSFM10MI	V302767A		with Indicator	1

Fuse holder is without Prebreaking Microswitch (see accessories)
Fuse disconnector is with mounted Prebreaking Microswitch



Compact Fusegear for Motor starter 3pole/45mm

Accessories

Description	Catalog Number	references Number	Nb of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725K				12
Lock	LOCK	M223525A				1
Tag and lockout	TAGLOCKCMS810	A235773A				1
jumping bars 1 phase size 8/10 *	CMS810BB1F13	T210306J	13	63	1	10
jumping bars 2 phases size 8/10 *	CMS810BB2F6	V210307J	6	63	2	10
jumping bars 3 phases size 8/10 *	CMS810BB3F4	W210308J	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309J	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316P		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318P		90		50
1 phase axial incoming power supply	TBB1A	D210315P		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317P		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.

US14 fuse holder & fuse disconnectors 

14x51 used fuses with no striker, or with indicator light or with striker
Recognized compliant with UL 512 and CSA 22-2 , IEC 60947-1 & 3 , and IEC 60269-1 & 2

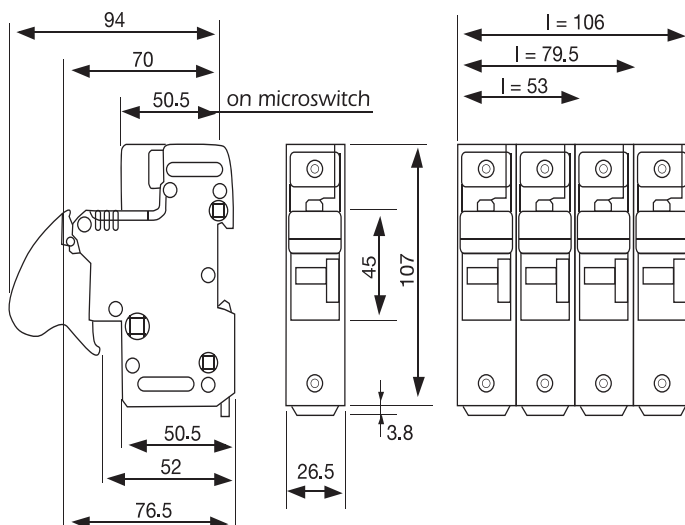


Nb of Pole	Model without indicator light ready for accessories		Model with indicator light ready for auxiliary contact		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US14N	S227900F			1.5	6
1	US141	Z331153F	US141I	A331154F	1.5	6
1 + N	US141N	D331157C	US141NI	Z227906C	3	3
2	US142	G331137C	US142I	H331138C	3	3
3	US143	N331143B	US143I	P331144B	4.5	2
3 + N	US143N	X331151A	US143NI	R227922A	6	1

Nb of Pole	Model fitted with auxiliary contact		Model fitted with auxiliary contact & indicator light		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US141M	B331155F			1.5	6
1	US141NM	W227903F	US141MI	C331156F	1.5	6
1 + N	US142M	J331139C	US141NMI	B227908C	3	3
2	US142M2	L331141C	US142MI	K331140C	3	3
2*	US143M	O331145B	US142M2I	M331142C	3	3
3	US143M2	T331148B	US143MI	S331147B	4.5	2
3*	US143NM	Y331152A	US143M2I	W331150B	4.5	2
3 + N	US143NM2	S227923A	US143NMI	T227924A	6	1
3 + N*		V227925A	US143NM2I	W227926A	6	1

* Two auxiliary microswitches (see instructions for mounting) – The auxiliary microswitch function requires use of fuses with strikers

UL Recognized at 800Vac-1000Vdc
IEC 750Vac



US22 fuse holder & fuse disconnectors

22x58 fuses with no striker, or with indicator light or with striker
Recognized compliant with UL 512 and CSA 22-2 , IEC 60947-1 & 3 , and IEC 60269-1 & 2

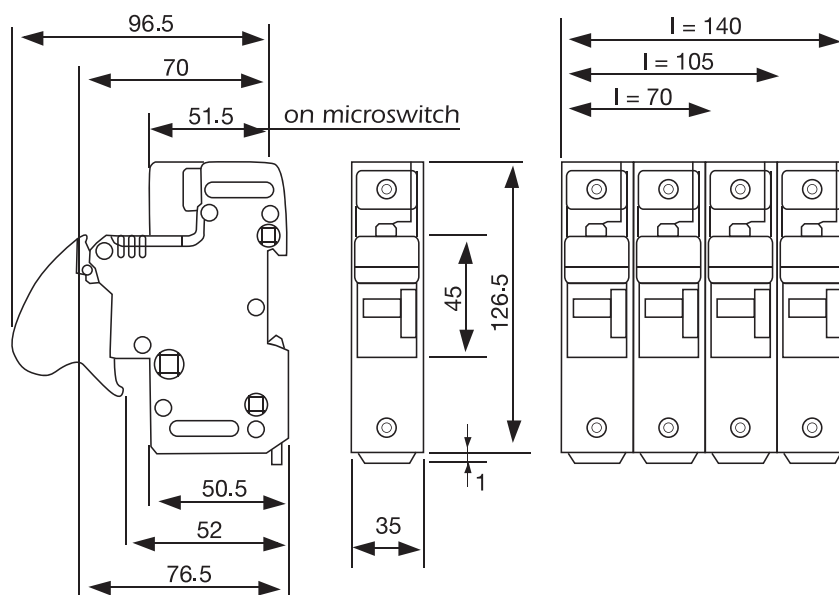
Nb of Pole	Model without indicator light ready for accessories		Model with indicator light ready for auxiliary contact		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N	US22N	B227931F			1.5	6
1	US221	E331158F	US2211	F331159F	1.5	6
1 + N	US221N	H331161C	US221NI	H227937C	3	3
2	US222	K331163C	US2221	L331164C	3	3
3	US223	R331169B	US2231	S331170B	4.5	2
3 + N	US223N	X331174A	US223NI	A227953A	6	1

Nb of Pole	Model fitted with auxiliary contact		Model fitted with auxiliary contact & indicator light		Nb of Mod. (17.5 mm)	Pckg box of
	Cat.Num	Ref.Num	Cat.Num	Ref.Num		
N					1.5	6
1	US221M	G331160F	US221MI	F227935F	1.5	6
1 + N	US221NM	J331162C	US221NMI	K227939C	3	3
2	US222M	M331165C	US222MI	N331166C	3	3
2*	US222M2	P331167C	US222M2I	Q331168C	3	3
3	US223M	T331171B	US223MI	V331172B	4.5	2
3*	US223M2	W331173B	US223M2I	Y227951B	4.5	2
3 + N	US223NM	B227954A	US223NMI	C227955A	6	1
3 + N*	US223NM2	D227956A	US223NM2I	E227957A	6	1



* Two auxiliary microswitches (see instructions for mounting) – The auxiliary microswitch function requires use of fuses with strikers

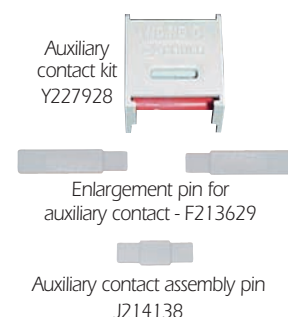
UL Recognized at 800Vac-1000Vdc
IEC 750Vac



Accessories for US14, US22 series

Description	Cat.Num	References	Nb of Mod. (17.5 mm)	Pckg
Auxiliary contact kit 1 pole US 14	USMSW1	Y227928A	1.5	1
Auxiliary contact kit 3 poles US 14	USMSW2	Z227929A	4.5	1
2 auxiliary contact kit 3 poles US 14	USMSW3	A227930A	4.5	1
Auxiliary contact assembly pin (between 2 kits)	US1422PTH	J214138J		10*
Enlargement pin for auxiliary contact	US1422BP	F213629J		10*
Multi-pole assembly kit	US14PAK	X227927J		10*
Indicator light kit	CMS1422LHI	A225653A		1
Lock	LOCK	M223525A		1

* 10 per bag



US27 fuse holder (without microswitch)

800Vac & dc



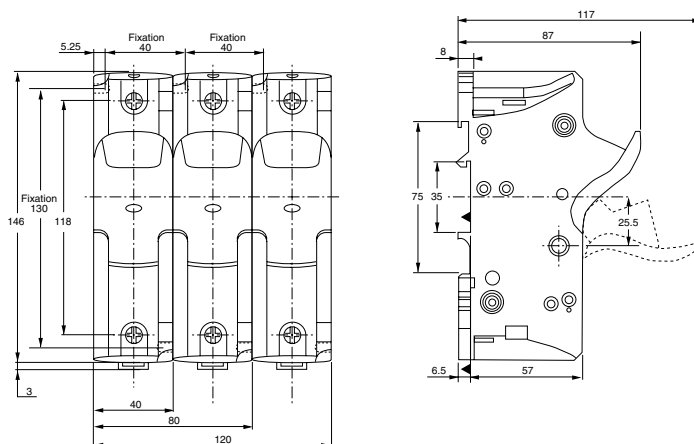
Number of poles	Connections	Cat. Number	Ref. Number	Weight (g)	Pack
1	By screw, U bolt or connector	US271I	J226420C	285	3
1 + N	By screw, U bolt or connector	US271NI	K226421A	580	1
1 + N	Ring lug connection	US271NIRING	E223518A	690	1
N	Ring lug connection	US27NIRING	F223519C	340	3
2	Ring lug connection	US272IRING	C223516A	690	1
3	By screw, U bolt or connector	US273I	M226423A	855	1
3	Ring lug connection	US273IRING	D223517A	1030	1
3 + N	By screw, U bolt or connector	US273NI	N226424A	1200	1
Assembly kit		US27PAK	H227615J		10
Microswitch*		US27W1	E227612A		1

* for the US27 version only

US27 fuse disconnecter (with microswitch)

800Vac & dc

Number of poles	Connections	Cat. Number	Nb of microswitches	Ref. Number	Weight (g)	Pack
1	By screw, U bolt or connector	US271MI	1	R227600C	320	3
1	Ring lug connection	US271MIRING	1	Z227607A	355	1
2	By screw, U bolt or connector	US272MI	1	S227601A	680	1
2	By screw, U bolt or connector	US272M2I	2	T227602A	600	1
2	Ring lug connection	US272M2IRING	2	B227609A	710	1



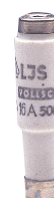
D - gR

Size	Current (A)	Voltage	Cat.Number	Ref. number	Pckg
DII	2	500VAC/400VDC	DIIGR50V2	Z212542E	5
DII	4	500VAC/400VDC	DIIGR50V4	K213058E	5
DII	6	500VAC/400VDC	DIIGR50V6	E214065E	5
DII	10	500VAC/400VDC	DIIGR50V10	M214578E	5
DII	16	500VAC/400VDC	DIIGR50V16	T215090E	5
DII	20	500VAC/400VDC	DIIGR50V20	T215596E	5
DII	25	500VAC/400VDC	DIIGR50V25	B216109E	5
DII	30	500VAC/400VDC	DIIGR50V30	Y216612E	5
DIII	35	500VAC/400VDC	DIIGR50V35	K217129E	5
DIII	50	500VAC/400VDC	DIIGR50V50	Q217640E	5
DIII	63	500VAC/400VDC	DIIGR50V63	Y218153E	5
DIV	80	500VAC/400VDC	DIVGR50V80	B201251E	5
DIV	100	500VAC/400VDC	DIVGR50V100	M201767E	5
DIV	125	500VAC/400VDC	DIVGR50V125	J207054E	5
DIV	160	500VAC/400VDC	DIVGR50V160	C211510E	5
DIV	200	500VAC/400VDC	DIVGR50V200	G212020E	5



NEOZED - gR

Size	Current (A)	Voltage	Cat.Number	Ref. number	Pckg
D01	2	440 V	D01GR44V2	M215038P	50
D01	4	440 V	D01GR44V4	N218673P	50
D01	6	440 V	D01GR44V6	B219191P	50
D01	10	440 V	D01GR44V10	F219724P	50
D01	16	440 V	D01GR44V16	N222169P	50
D02	20	440 V	D02GR44V20	H222923M	25
D02	25	440 V	D02GR44V25	R200713M	25
D02	35	440 V	D02GR44V35	F201255M	25
D02	50	440 V	D02GR44V50	R201771M	25
D02	63	440 V	D02GR44V63	Y207113M	25
D03	80	440 V	D03GR44V80	G211514J	10
D03	100	440 V	D03GR44V100	L212024J	10



Functions











Semi-conductor protection fuses for industry, dimensions D and D0. German standard DIN compliant. NF EN 60269 and -14 compliant.

Applications

Protection for small semi-conductor equipment (current regulator, static relay, etc.)

Size 000 DIN - 690V gRB - URB



Current (A)	Curves	Cat.Number for bracket-style with striker	Ref. number for bracket-style with striker	Pckg
16	gRB	DN000GB69V16L	X330277C 	3
20	gRB	DN000GB69V20L	J330173C 	3
25	gRB	DN000GB69V25L	K330174C 	3
32	gRB	DN000GB69V32L	L330175C 	3
40	gRB	DN000GB69V40L	M330176C 	3
50	gRB	DN000GB69V50L	N330177C 	3
63	gRB	DN000GB69V63L	P330178C 	3
80	gRB	DN000GB69V80L	Q330179C 	3
100	gRB	DN000GB69V100L	R330180C 	3
125	gRB	DN000GB69V125L	S330181C 	3
80	URB	DN000UB69V80L	T330182C	3
100	URB	DN000UB69V100L	V330183C	3
125	URB	DN000UB69V125L	W330184C	3
160	URB	DN000UB69V160L	X330185C	3
200	URB	DN000UB69V200L	Y330186C	3
250	URB	DN000UB69V250L	Z330187C	3
315	URB	DN000UB69V315L	A330188C	3
350	URB	DN000UB69V350L	B330189C	3
400	URB	DN000UB69V400L	F330193C	3
Micro (1)		MS4L2-5B6PRES	F210156C	3

For Blade style - see gS page 98

(1) : Microswitch automatically resettable, indicates fuse presence (PRES) and proper mounting. In case of improper mounting or fuse melting this is indicated (terminal 1-4 closed)
Clips 6.3 mm

Porte-fusible Size 000 DIN



Type	Cat.Number Size 000	Ref. number Size 000	Pckg
Bracket fuse holder	SI000DN80	C220710C	3

Size 00 DIN - gRB - URB

Current (A)	Curves	Cat.Number for bracket-style with striker	Ref. number for bracket-style with striker	Pckg
16	gRB	DN00GB69V16L	S330273C	3
20	gRB	DN00GB69V20L	S330227C	3
25	gRB	DN00GB69V25L	T330228C	3
32	gRB	DN00GB69V32L	V330229C	3
40	gRB	DN00GB69V40L	W330230C	3
50	gRB	DN00GB69V50L	X330231C	3
63	gRB	DN00GB69V63L	Y330232C	3
80	gRB	DN00GB69V80L	Z330233C	3
100	gRB	DN00GB69V100L	A330234C	3
125	gRB	DN00GB69V125L	B330235C	3
160	gRB	DN00GB69V160L	C330236C	3
16	URB	DN00UB69V16L	V330275C	3
20	URB	DN00UB69V20L	T330274C	3
25	URB	DN00UB69V25L	M330268C	3
32	URB	DN00UB69V32L	N330269C	3
40	URB	DN00UB69V40L	P330270C	3
50	URB	DN00UB69V50L	Q330271C	3
63	URB	DN00UB69V63L	R330272C	3
80	URB	DN00UB69V80L	D330237C	3
100	URB	DN00UB69V100L	E330238C	3
125	URB	DN00UB69V125L	F330239C	3
160	URB	DN00UB69V160L	G330240C	3
200	URB	DN00UB69V200L	H330241C	3
250	URB	DN00UB69V250L	J330242C	3
315	URB	DN00UB69V315L	K330243C	3
350	URB	DN00UB69V350L	L330244C	3
400	URB	DN00UB69V400L	M330245C	3
Micro (1)		MS4L2-5B6PRES	F210156C	3

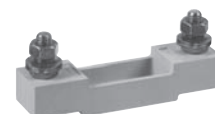
For Blade style - see gS page 98

(1) : Microswitch automatically resattable, indicates fuse presence (PRES) and proper mounting. In case of improper mounting or fuse melting this is indicated (terminal 1-4 closed)
Clips 6.3 mm



Fuse holder Size 00 DIN

Type	Ref. number Size 000	Cat.Number Size 000	Pckg
Bracket fuse holder	Q098040C	S100DN80	3



Functions

German DIN standard 43653 (bracket-style 00C and 00, center to center 80mm).
German DIN standard 43653 (blade-style 00C and 00)
Ultrafast semi-conductor protection fuses for industry, very current limiting under short circuit conditions, very low I²t.
Intermediate speed between ferrule-style fuse and T30.
Bolted directly on a busbar or on a fuse holder.
Blade mounting in a fuse holder.
gRB curve fuses (class gR) clear all overloads, while URB curve fuses (class aR) require an outside device to clear small overloads (3 I_n or less).

Applications

Power semi-conductor protection for soft starter, static relay, uninterrupted power supply UPS, speed regulator, rectifier, inverter, etc.



Size 000 - gS - 690V gS SP



Current (A)	Rating - Curve	Cat. Number with striker	Ref. number with striker	Pckg
25	690 V gS	NH000GS69V25PV	S322039C	3
32	690 V gS	NH000GS69V32PV	X322043C	3
40	690 V gS	NH000GS69V40PV	B322047C	3
50	690 V gS	NH000GS69V50PV	F322051C	3
63	690 V gS	NH000GS69V63PV	K322055C	3
80	690 V gS	NH000GS69V80PV	P322059C	3
100	690 V gS	NH000GS69V100PV	T322063C	3
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			

No derating in fuse holders & switch disconnectors

Size 00 - gS - 690V gS SP



Current (A)	Rating - Curve	Cat. Number with striker	Ref. number with striker	Pckg
125	690 V gS	NH00GS69V125PV	E322165C	3
160	690 V gS	NH00GS69V160PV	J322169C	3
Neutral		NH00NEUTRAL	Z218269J	10
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			

I_{RMS} maxi respectively 110 & 140 A in fuse holders & switch disconnectors

Size 1 - gS - 690V gS SP



Current (A)	Rating - Curve	Cat. Number with striker	Ref. number with striker	Pckg
125	690 V gS	NH1GS69V125PV	X322365C	3
160	690 V gS	NH1GS69V160PV	B322369C	3
200	690 V gS	NH1GS69V200PV	D322371C	3
250	690 V gS	NH1GS69V250PV	H322375C	3
280	690 V gS	NH1GS69V280PV	L302897C	3
Neutral		NH1NEUTRAL	A219834E	5
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			

No derating in fuse holders & switch disconnectors

Size 2 - gS - 690V gS SP



Current (A)	Rating - Curve	Cat. Number with striker	Ref. number with striker	Pckg
250	690 V gS	NH2GS69V250PV	R322475C	3
315	690 V gS	NH2GS69V315PV	W322479C	3
350	690 V gS	NH2GS69V350PV	X322480C	3
400	690 V gS	NH2GS69V400PV	A322483C	3
450	690 V gS	NH2GS69V450PV	C322485C	3
Neutral		NH2NEUTRAL	N222514E	5
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			

No derating in fuse holders & switch disconnectors

Size 3 - gS - 690V gS SP



Current (A)	Rating - Curve	Cat. Number with striker	Ref. number with striker	Pckg
315	690 V gS	NH3GS69V315PV	E322579A	1
350	690 V gS	NH3GS69V350PV	F322580A	1
400	690 V gS	NH3GS69V400PV	J322583A	1
450	690 V gS	NH3GS69V450PV	L322585A	1
500	690 V gS	NH3GS69V500PV	N322587A	1
550	690 V gS	NH3GS69V550PV	P322588A	1
630	690 V gS	NH3GS69V630PV	Q322589A	1
Neutral		NH3NEUTRAL	E223035E	5
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			

No derating in fuse holders & switch disconnectors

Size 000 - URD - 690V & 500V

Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
16	690 V	NH000UD69V16PV	P320035C	3
20	690 V	NH000UD69V20PV	R320037C	3
25	690 V	NH000UD69V25PV	T320039C	3
32	690 V	NH000UD69V32PV	Y320043C	3
40	690 V	NH000UD69V40PV	C320047C	3
50	690 V	NH000UD69V50PV	G320051C	3
63	690 V	NH000UD69V63PV	L320055C	3
80	690 V	NH000UD69V80PV	O320059C	3
100	690 V	NH000UD69V100PV	V320063C	3
125	690 V	NH000UD69V125PV	X320065C	3
160	690 V	NH000UD69V160PV	B320069C	3
200	690 V	NH000UD69V200PV	D320071C	3
250	690 V	NH000UD69V250PV	H320075C	3
315	500 V	NH000UD50V315PV	M320079C	3
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			



Size 00 - URD - 690V

Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
20	690 V	NH00UD69V20PV	A320137C	3
25	690 V	NH00UD69V25PV	C320139C	3
32	690 V	NH00UD69V32PV	G320143C	3
40	690 V	NH00UD69V40PV	L320147C	3
50	690 V	NH00UD69V50PV	O320151C	3
63	690 V	NH00UD69V63PV	V320155C	3
80	690 V	NH00UD69V80PV	Z320159C	3
100	690 V	NH00UD69V100PV	D320163C	3
125	690 V	NH00UD69V125PV	F320165C	3
160	690 V	NH00UD69V160PV	K320169C	3
200	690 V	NH00UD69V200PV	M320171C	3
250	690 V	NH00UD69V250PV	R320175C	3
315	690 V	NH00UD69V315PV	W320179C	3
Neutral		NH00NEUTRAL	Z218269J	10
Extractor handle		NHHADEL	P215592E	5
Microswitch	consult us			



Size 0 - URD - 690V

Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
32	690 V	NH0UD 69V 32PV	O320243C	3
40	690 V	NH0UD 69V 40PV	V320247C	3
50	690 V	NH0UD 69V 50PV	Z320251C	3
63	690 V	NH0UD 69V 63PV	D320255C	3
80	690 V	NH0UD 69V 80PV	H320259C	3
100	690 V	NH0UD 69V 100PV	M320263C	3
125	690 V	NH0UD 69V 125PV	P320265C	3
160	690 V	NH0UD 69V 160PV	T320269C	3
200	690 V	NH0UD 69V 200PV	W320271C	3
250	690 V	NH0UD 69V 250PV	A320275C	3
315	690 V	NH0UD 69V 315PV	E320279C	3
Neutral		NH0NEUTRAL	Z219304J	10
Extractor handle		NH HANDLE	P215592E	5
Microswitch	consult us			



Protistor® DIN blade-style fuses

Size 1 - URD - 690V RN



Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
63	690 V	NH1UD 69V 63PV	M320355C	3
80	690 V	NH1UD 69V 80PV	K320399C	3
100	690 V	NH1UD 69V 100PV	W320363C	3
125	690 V	NH1UD 69V 125PV	Y320365C	3
160	690 V	NH1UD 69V 160PV	C320369C	3
200	690 V	NH1UD 69V 200PV	E320371C	3
250	690 V	NH1UD 69V 250PV	J320375C	3
315	690 V	NH1UD 69V 315PV	N320379C	3
350	690 V	NH1UD 69V 350PV	P320380C	3
400	690 V	NH1UD 69V 400PV	S320383C	3
Neutral		NH1NEUTRAL	A219834E	5
Extractor handle		NHHANDLE	P215592A	1
Microswitch	consult us			

Size 2 - URD - 690V RN



Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
160	690 V	NH2UD 69V 160PV	L320469C	3
200	690 V	NH2UD 69V 200PV	N320471C	3
250	690 V	NH2UD 69V 250PV	S320475C	3
315	690 V	NH2UD 69V 315PV	X320479C	3
350	690 V	NH2UD 69V 350PV	Y320480C	3
400	690 V	NH2UD 69V 400PV	B320483C	3
450	690 V	NH2UD 69V 450PV	D320485C	3
500	690 V	NH2UD 69V 500PV	F320487C	3
550	690 V	NH2UD 69V 550PV	G320488C	3
630	690 V	NH2UD 69V 630PV	H320489C	3
700	690 V	NH2UD 69V 700PV	J320490C	3
Neutral		NH2NEUTRAL	N222514E	5
Extractor handle		NHHANDLE	P215592A	1
Microswitch	consult us			

Size 3 - URD - 690V RN



Extractor handle

Current (A)	Rating	Cat.Number with striker	Ref. number with striker	Pckg
315	690 V	NH3UD 69V 315PV	F320579A	1
350	690 V	NH3UD 69V 350PV	G320580A	1
400	690 V	NH3UD 69V 400PV	K320583A	1
500	690 V	NH3UD 69V 500PV	P320587A	1
550	690 V	NH3UD 69V 550PV	Q320588A	1
630	690 V	NH3UD 69V 630PV	R320589A	1
700	690 V	NH3UD 69V 700PV	S320590A	1
800	690 V	NH3UD 69V 800PV	T320591A	1
900	690 V	NH3UD 69V 900PV	V320592A	1
1000	690 V	NH3UD 69V 1000PV	W320593A	1
Neutral		NH3NEUTRAL	E223035E	5
Extractor handle		NHHANDLE	P215592A	1
Microswitch	consult us			

Functions

German standard 43620 on dimensions.
Ultrafast semi-conductor protection fuses for industry, very current limiting under short circuit conditions. Very low I_{2t}.
Class aR fuses with a minimum interrupting rating, i.e. requiring an outside device to clear small overloads (4 I_n or less).
NF EN 60269-1 and -4 compliant.

Can be installed in Ferraz Shawmut's ITCP-type fuse switches (see catalog The Advisor).

Applications

Power semi-conductor protection for soft starter, static relay, uninterrupted power supply UPS, speed regulator, rectifier, inverter, etc.

690V URD derating in fuse holders

- 1- Derating for plastic bases (see page 102, picture A)
- 2- Derating for fingersafe fuse holder & fuset switch-disconnectors (see page 102, picture B-D-C)
- 3- Derating for fused switch-disconnectors ITC (see page 102, picture E)
- 4- Derating for fused switch-disconnectors ITC with finger safe protection (see page 102, picture E)

Size	In	1	2	3	4	Size	In	1	2	3	4
000	16	1,00	1,00	1,00	1,00	1	63	1,00	0,95	1,00	1,00
000	20	1,00	1,00	1,00	1,00	1	80	0,95	0,85	0,95	0,90
000	25	1,00	1,00	1,00	1,00	1	100	0,85	0,75	0,85	0,80
000	32	1,00	1,00	1,00	1,00	1	125	0,85	0,75	0,85	0,80
000	40	1,00	1,00	1,00	1,00	1	160	0,80	0,70	0,80	0,75
000	50	1,00	1,00	0,90	0,90	1	200	0,80	0,70	0,80	0,70
000	63	1,00	1,00	0,90	0,90	1	250	0,75	0,70	0,75	0,70
000	80	1,00	0,90	0,75	0,75	1	315	0,75	0,65	0,75	0,70
000	100	1,00	0,90	0,75	0,75	1	350	0,70	0,65	0,70	0,65
000	125	1,00	0,85	0,70	0,70	1	400	0,65	0,60	0,65	0,60
000	160	0,90	0,75	0,60	0,60	2	160	0,90	0,80	0,90	0,85
000	200	0,85	0,70	0,55	0,55	2	200	0,85	0,75	0,85	0,80
000	250	0,75	0,60	0,50	0,50	2	250	0,85	0,70	0,80	0,75
000	315	0,70	0,55	0,45	0,45	2	315	0,75	0,65	0,70	0,65
00	20	1,00	1,00	1,00	1,00	2	350	0,70	0,65	0,70	0,65
00	25	1,00	1,00	1,00	1,00	2	400	0,70	0,60	0,70	0,60
00	32	1,00	1,00	1,00	1,00	2	450	0,70	0,60	0,65	0,60
00	40	1,00	1,00	1,00	1,00	2	500	0,70	0,60	0,65	0,60
00	50	1,00	1,00	1,00	1,00	2	550	0,65	0,60	0,65	0,60
00	63	1,00	1,00	1,00	1,00	2	630	0,65	0,55	0,65	0,60
00	80	1,00	0,95	0,95	0,95	2	700	0,60	0,55	0,60	0,55
00	100	1,00	0,90	0,90	0,90	3	315	0,85	0,75	0,80	0,75
00	125	1,00	0,85	0,85	0,85	3	350	0,85	0,75	0,80	0,75
00	160	0,90	0,75	0,75	0,75	3	400	0,80	0,70	0,75	0,70
00	200	0,85	0,70	0,70	0,70	3	450	0,80	0,70	0,75	0,70
00	250	0,80	0,65	0,65	0,65	3	500	0,75	0,65	0,75	0,70
00	315	0,70	0,55	0,55	0,55	3	550	0,75	0,65	0,75	0,70
0	32	1,00				3	630	0,70	0,60	0,70	0,65
0	40	1,00				3	700	0,70	0,60	0,65	0,60
0	50	1,00				3	800	0,65	0,55	0,60	0,55
0	63	1,00				3	900	0,60	0,50	0,60	0,55
0	80	0,95				3	1000	0,60	0,50	0,55	0,50
0	100	0,95									
0	125	0,85									
0	160	0,85									
0	200	0,80									
0	250	0,75									
0	315	0,65									

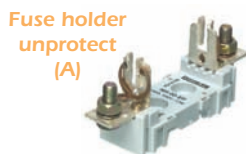
Fuse holders and switch disconnectors for NH Protistor

Since there's no need to derate our range of Protistor® NH gS class fuses, all the fusegear built to NH standard can be used.

Type	Poles	Size 000/00		Size 1		Size 2		Size 3	
		Cat.Number	Ref	Cat.Number	Ref	Cat.Number	Ref	Cat.Number	Ref
Fuse holder Unprotected (4) screw connection for hole and bar terminals for 35mm Din rail	1	BB001EPR	R216192	BB11PPR	A223008	BB21PPR	E211075	BB31PPR	X213644
	2	BB002EPR	F218758	BB12PPR	G200796	BB22PPR	V211595	BB32PPR	B214154
	3	BB003EPR	V229121	BB13PPR	Y201340	BB23ABG	D212109	BB33PPR	F214664
	4	BB004EPR	Z223007	BB14PPR	H201855	BB24PPR	R212627	BB34PPR	K215174
Fuse holder Unprotected (4) screw connection for holes or bar terminals for panels	1	BB001EP	F215170	BB11PP	E218757	BB21PP	F201853	BB31PP	W213643
	2	BB002EP	A217212	BB12PP	F222484	BB22PP	S211593	BB32PP	D214662
	3	BB003EPVBLOC	W229122	BB13PP	Y223006	BB23PP	B212107	BB33PP	H215172
	4	BB004EP	S219275	BB14PP	X201339	BB24PP	C213143	BB34PP	L215681
Fuse holder Finger Safe Protected screw connection for hole and bar terminals for DIN rail	1	BB001RFS	S218240	BB11PPRFS	P226724	BB21PPRFS	R226726	BB31PPRFS	T226728
	3	BB003RFSBLOC	S229119	BB13PPRFS	Q226725	BB23PPRFS	S226727	BB33PPRFS	V226729
	3	BB003SFSBLOC	T229120						
Switch Linocur horizontal	2xM8	NHLINC1PT0	N216626						
	S/BL	NHLINC1PT7	N222882						
	2xM8	NHLINC2PT0	B218685						
	S/BL	NHLINC2PT7	C201781						
	2xM8	NHLINC3PT0	Y212035						
	S/BL	NHLINC3PT7	W213574						
Multibloc clamp connection	3	NH00MBSC3PT2	J229295						
Multibloc Screw connection	3	NH00MBSC3PT0	H229294	NH1MBS-	S229878				
Fused switch* ITC 63 III complete(5)	3	ITC63C3CFNSF	M235347	C3PT0					
Fused switch* ITC 160 III complete(5)	3	ITC160C3CFNSF	T235353						
Fused switch* ITC 250 III complete(5)	3			A235359 + Y210770(3)	ITC250C3CFNSF + RCPTITCP250/800				
Fused switch* ITC 400 III complete(5)	3					N235371 + Y210770(3)	ITC#00C3CFNSF + RCPTITCP250/800		
Fused switch* ITC 630 III complete(5)	3							B235383 + Y210770(3)	ITC630C3CFNSF + RCPTITCP250/800
Fused switch* ITC 800 III complete(5)	3							W229674 + Y210770(3)	ITC800S3CEF + RCPTITCP250/800

* Fused switch/disconnector front handle
For side handle switch replace CF with CL in Catalog Number
(3) Necessary heighten for the use of microswitch (F210156C or G210157C)

(4) Unprotected against accidental contact-not finger safe
(5) Finger safe



Fuse holder
unprotect
(A)



Fuse holder
finger safe
(B)



Switch
Disconnector
Linocur
(C)



Multibloc
(D)



Fuse switch
Disconnector
fast handle
(E)

Fuse Monitoring for Din rail mounting



- Small and compact
- No need for external supply voltage
- Fixing onto DIN Rail

Voltage rating (V)	Cat. Number	Reference	Pack.
100 to 260	FM100/260RD	S236824A	1
380 to 690	FM380/690RD	T236825A	1

Size 10 x 28 250 V w/o striker

Current (A)	Cat. Number	Ref. number	Pckg
5	BS10UE25V5	M082489J	10
6	BS10UE25V6	E097478J	10
10	BS10UE25V10	L082488J	10
12	BS10UE25V12	P097487J	10
15	BS10UE25V15	K082487J	10
20	BS10UE25V20	J082486J	10
25	BS10UE25V25	X097494J	10
32	BS10UE25V32	N081984J	10

for DC Voltage application, consult us



Size 17 x 27 250 V w/o striker

Current (A)	Cat. Number	Ref. number	Pckg
7	BS17US25V7	M076647J	10
10	BS17US25V10	N076648J	10
12	BS17US25V12	P076649J	10
16	BS17US25V16	Q076650J	10
20	BS17US25V20	L097507J	10
25	BS17US25V25	R076651J	10
30	BS17US25V30	S076652J	10
35	BS17US25V35	T076653J	10
50	BS17US25V50	V076654J	10
60	BS17US25V60	W076655J	10
75	BS17US25V75	X076656J	10
80	BS17US25V80	Z085559	10
100	BS17UZ25V100	Y085558J	10
125	BS17UZ25V125	G097526J	10
150	BS17UZ25V150	W085556J	10
160	BS17UZ25V160	H097527J	10
180	BS17UZ25V180	N097532J	10

for DC Voltage application, consult us



Size 17 x 27 250 V with striker

Current (A)	Cat. Number	Ref. number	Pckg
7	BS17US25V7P	P097533J	10
10	BS17US25V10P	Q097534J	10
12	BS17US25V12P	S097536J	10
16	BS17US25V16P	X097540J	10
20	BS17US25V20P	B097544J	10
25	BS17US25V25P	D097546J	10
30	BS17US25V30P	E097547J	10
35	BS17US25V35P	F097548J	10
50	BS17US25V50P	J097551J	10
60	BS17US25V60P	H081082J	10
75	BS17US25V75P	K097552J	10
80	BS17US25V80P	L097553J	10
125	BS17UZ25V125P	Q097557J	10
150	BS17UZ25V150P	R097558J	10
160	BS17UZ25V160P	S097559J	10



Size 36 x 27 250 V w/o striker



Current (A)	Cat.Number	Ref. number	Pckg
125	BS36UG25V125	R082470C	3
150	BS36UG25V150	Q082469C	3
200	BS36UG25V200	P082468C	3
250	BS36UG25V250	N082467C	3
300	BS36UG25V300	M082466C	3
350	BS36UG25V350	L082465C	3
400	BS36UG25V400	G075538C	3
450	BS36UG25V450	H075539C	3
500	BS36UG25V500	J075540C	3
525	BS36UG25V525	K075541C	3

Size 36 x 27 250 V with striker



Current (A)	Cat.Number	Ref. number	Pckg
50	BS36UG25V50T	F080942C	3
75	BS36UG25V75T	G080943C	3
100	BS36UG25V100T	H080944C	3
125	BS36UG25V125T	W082382C	3
150	BS36UG25V150T	V082381C	3
200	BS36UG25V200T	T082380C	3
250	BS36UG25V250T	S082379C	3
300	BS36UG25V300T	R082378C	3
350	BS36UG25V350T	Q082377C	3
400	BS36UG25V400T	L075542C	3
450	BS36UG25V450T	M075543C	3
500	BS36UG25V500T	N075544C	3
525	BS36UG25V525T	P075545C	3

Size 2 x 36 x 27 250 V w/o striker



Current (A)	Cat.Number	Ref. number	Pckg
300	BS236UH25V300	K082464C	3
350	BS236UH25V350	J082463C	3
400	BS236UH25V400	H082462C	3
500	BS236UH25V500	G082461C	3
600	BS236UH25V600	F082460C	3
700	BS236UH25V700	E082459C	3
800	BS236UH25V800	Q075546C	3
900	BS236UH25V900	R075547C	3
1000	BS236UH25V1000	S075548C	3
1050	BS236UH25V1050	T075549C	3

Size 2 x 36 x 27 250 V w/o striker



Current (A)	Cat.Number	Ref. number	Pckg
300	BS236UH25V300T	P082376C	3
350	BS236UH25V350T	N082375C	3
400	BS236UH25V400T	M082374C	3
500	BS236UH25V500T	L082373C	3
600	BS236UH25V600T	K082372C	3
700	BS236UH25V700T	J082371C	3
800	BS236UH25V800T	V075550C	3
900	BS236UH25V900T	R075501C	3
1000	BS236UH25V1000T	S075502C	3
1050	BS236UH25V1050T	T075503C	3

Size 17 x 49 690 V w/o striker

Current (A)	Curve	Cat.Number	Ref. number	Pckg
16	URS	BS17US69V16	G075883C	3
20	URS	BS17US69V20	H075884C	3
25	URS	BS17US69V25	J075885C	3
32	URS	BS17US69V32	K075886C	3
35	URS	BS17US69V35	L075887C	3
40	URS	BS17US69V40	M075888C	3
45	URS	BS17US69V45	N075889C	3
50	URS	BS17US69V50	P075890C	3
55	URS	BS17US69V55	Q075891C	3
63	URS	BS17US69V63	R075892C	3
75	URS	BS17US69V75	S075893C	3
80	URS	BS17US69V80	T075894C	3
12	GRB	BS17GB69V12	W220957C	3
16	GRB	BS17GB69V16	X220958C	3
20	GRB	BS17GB69V20	Y220959C	3
25	GRB	BS17GB69V25	Z220960C	3
32	GRB	BS17GB69V32	A220961C	3
35	GRB	BS17GB69V35	B220962C	3
40	GRB	BS17GB69V40	C220963C	3
45	GRB	BS17GB69V45	D220964C	3
50	GRB	BS17GB69V50	E220965C	3
55	GRB	BS17GB69V55	F220966C	3
63	GRB	BS17GB69V63	G220967C	3
75	GRB	BS17GB69V75	H220968C	3
80	GRB	BS17GB69V80	J220969C	3
90	GRB	BS17GB69V90	K220970C	3

for DC Voltage application, consult us



Protistor® BS 88-4 fuses

Size 2 x 17 x 49 690 V w/o striker

Current (A)	Cat.Number	Ref. number	Pckg
65	BS217UT69V65	G075906E	5
75	BS217UT69V75	F099572E	5
85	BS217UT69V85	H075907E	5
90	BS217UT69V90	A099958E	5
110	BS217UT69V110	B099959E	5
140	BS217UT69V140	J075908E	5
150	BS217UT69V150	C099960E	5
160	BS217UT69V160	K075909E	5

for DC Voltage application, consult us



Size 000 690 V w/o striker



Current (A)	Curve	Cat.Number	Ref. number	Pckg
20	gRB	BS000GB69V20	T330044C	3
25	gRB	BS000GB69V25	V330045C	3
32	gRB	BS000GB69V32	W330046C	3
40	gRB	BS000GB69V40	X330047C	3
50	gRB	BS000GB69V50	Z330049C	3
63	gRB	BS000GB69V63	A330050C	3
80	gRB	BS000GB69V80	N330108C	3
100	gRB	BS000GB69V100	H330103C	3
125	gRB	BS000GB69V125	P330109C	3
63	URB	BS000UB69V63	A330050C	3
75	URB	BS000UB69V75	B330051C	3
80	URB	BS000UB69V80	C330052C	3
100	URB	BS000UB69V100	D330053C	3
110	URB	BS000UB69V110	E330100C	3
125	URB	BS000UB69V125	E330054C	3
150	URB	BS000UB69V150	F330101C	3
160	URB	BS000UB69V160	F330055C	3
200	URB	BS000UB69V200	G330056C	3
250	URB	BS000UB69V250	H330057C	3
315	URB	BS000UB69V315	J330058C	3
350	URB	BS000UB50V350	X330116C	3
400	URB	BS000UB50V400	G330194C	3

for DC Voltage application, consult us

Size 000 BS88Z 690 V with striker



Current (A)	Curve	Cat.Number	Ref. number	Pckg
50	gRB	BZ000GB69V50	V330137C	3
65	gRB	BZ000GB69V65	W330138C	3
75	URC	BZ000UC69V75	X330139C	3
85	URC	BZ000UC69V85	Y330140C	3
90	URC	BZ000UC69V90	Z330141C	3
110	URC	BZ000UC69V110	A330142C	3
150	URC	BZ000UC69V150	B330143C	3
180	URC	BZ000UC69V180	C330144C	3
200	URC	BZ000UD69V200	D330145C	3
250	URC	BZ000UD69V250	E330146C	3
280	URC	BZ000UC69V280	F330147C	3
175	URC	BZ2000UC69V175	P330155C	3
200	URC	BZ2000UC69V200	Q330156C	3
235	URC	BZ2000UC69V235	R330157C	3
300	URC	BZ2000UC69V300	S330158C	3
325	URC	BZ2000UC69V325	T330159C	3
355	URC	BZ2000UC69V355	V330160C	3
400	URC	BZ2000UD69V400	W330161C	3
450	URC	BZ2000UC69V450	X330162C	3
500	URD	BZ2000UD69V500	Y330163C	3

for DC Voltage application, consult us

Functions

British Standard BS. Ultrafast semi-conductor protection fuses for industry, very current limiting under short circuit conditions, very low I_{2t}.

gRB fuse capable of clearing all overloads (gR). Class URB fuse with a minimum interrupting rating, i.e. requiring an outside device to clear small overloads (3 I_n or less). Bolted directly on a busbar or insulator.

Breaking capacity: 660 V - 200 kA

250 V - 100 kA and 160 kA

NF EN 20691 and BS EN 60269-4 compliant

Applications

Power semi-conductor protection for soft starter, static relay, uninterrupted power supply UPS, speed regulator, rectifier, inverter, etc.

For other products see web site:

http://www.ferraz-shawmut.com/advisor/pdf/BZ000_69V.pdf

French standard size 30 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	Total I ² t at 660V	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
690	700	50	610	PC30UD69V50TF	S300373C	3
690	700	63	1 100	PC30UD69V63TF	M300000C	3
690	700	80	1 750	PC30UD69V80TF	S300051C	3
690	700	100	2 500	PC30UD69V100TF	T300052C	3
690	700	125	4 500	PC30UD69V125TF	V300053C	3
690	700	160	8 500	PC30UD69V160TF	W300054C	3
690	700	200	15 500	PC30UD69V200TF	X300055C	3
690	700	250	30 000	PC30UD69V250TF	Y300056C	3
690	700	315	62 000	PC30UD69V315TF	Z300057C	3
690	700	350	80 000	PC30UD69V350TF	A300058C	3
690	700	400	120 000	PC30UD69V400TF	B300059C	3
690	700	450	150 000	PC30UD69V450TF	V300398C	3
690	700	500	240 000	PC30UD69V500TF	W300399C	3
690	700	550	300 000	PC30UD69V550TF	X300400C	3
Microswitch				MS3 V1-5	X310014A	1
Studs HC M8 x 30 & M8 x 35				STUM8x30M8x35	S098801F	6

French standard size 31 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	Total I ² t at 660V	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
690	700	160	6 900	PC31UD69V160TF	M300299C	3
690	700	200	13 500	PC31UD69V200TF	N300001C	3
690	700	250	25 000	PC31UD69V250TF	P300002C	3
690	700	315	40 000	PC31UD69V315TF	O300003C	3
690	700	350	55 000	PC31UD69V350TF	M300046C	3
690	700	400	100 000	PC31UD69V400TF	R300004C	3
690	700	450	140 000	PC31UD69V450TF	S300005C	3
690	700	500	195 000	PC31UD69V500TF	T300006C	3
690	700	550	280 000	PC31UD69V550TF	V300007C	3
690	700	630	390 000	PC31UD69V630TF	W300008C	3
690	700	700	490 000	PC31UD69V700TF	X300009C	3
690	700	800	800 000	PC31UD69V800TF	Y300401C	3
Microswitch				MS3 V1-5	X310014A	1
Studs HC M8 x 30 & M8 x 35				STUM8x30M8x35	S098801F	6

Functions

Ultrafast semi-conductor protection fuses for industry, very current limiting under short circuit conditions, very low I²t. A faster range than ferrule-style fuses and one with higher ratings.

Class aR fuse with a minimum interrupting rating, i.e. requiring an outside device to clear small overloads (4 I_n or less).

Square body offering different types of connection: threaded terminals for mounting on SITT base or bar, French blades for mounting on a clip support whether

elastic (sizes 30, 31, 32) or bolted (size 33), DIN 80 and 110 for bolted mounting on base or bar. DIN 43653 and NF EN 60269-1 and 4 compliant. Breaking capacity: 110 to 200 kA at rated voltage.

Applications

Power semi-conductor protection for soft starter, static relay, uninterrupted power supply UPS, speed regulator, rectifier, inverter, etc.

for DC Voltage application, see web site: <http://www.ferraz-shawmut.com/advisor/pdf/PC3xaR69VFrFlatEnd.pdf>

French standard size 32 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	Total I ² t at 660V	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
690	700 RU	400	80 000	PC32UD69V400TF	H300065C	3
690	700 RU	450	115 000	PC32UD69V450TF	J300066C	3
690	700 RU	500	145 000	PC32UD69V500TF	K300067C	3
690	700 RU	550	195 000	PC32UD69V550TF	L300068C	3
690	700 RU	630	280 000	PC32UD69V630TF	M300069C	3
690	700 RU	700	400 000	PC32UD69V700TF	N300070C	3
690	700 RU	800	600 000	PC32UD69V800TF	P300071C	3
690	700 RU	900	900 000	PC32UD69V900TF	Q300072C	3
690	700 RU	1000	1 250 000	PC32UD69V1000TF	S300074C	3
600	650 RU	1100	1 670 000	PC32UD60V1100TF	M300759C	3
550	600	1250	2 400 000	PC32UD55V1250TF	P301060C	3
500	550	1400	3 400 000	PC32UD50V1400TF	Q301061C	3
500	550	1600	5 300 000	PC32UD50V1600TF	H300893C	3
450	500	1800		PC32UD45V1800TF	R301062C	3
Microswitch				MS3 V1-5	X310014A	1
Studs HC M10 x 30 & M10 x 50				STUM10x30M10x50	T098802F	6

French standard size 33 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	Total I ² t at 660V	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
690	700 RU	500	100 000	PC33UD69V500TF	V300076C	3
690	700 RU	550	140 000	PC33UD69V550TF	W300077C	3
690	700 RU	630	210 000	PC33UD69V630TF	X300078C	3
690	700 RU	700	300 000	PC33UD69V700TF	Y300079C	3
690	700 RU	800	490 000	PC33UD69V800TF	Z300080C	3
690	700 RU	900	700 000	PC33UD69V900TF	A300081C	3
690	700 RU	1000	900 000	PC33UD69V1000TF	B300082C	3
690	700 RU	1100	1 260 000	PC33UD69V1100TF	C300083C	3
690	700 RU	1250	1 850 000	PC33UD69V1250TF	D300084C	3
690	700 RU	1400	2 500 000	PC33UD69V1400TF	E300085C	3
600	650 RU	1500	3 000 000	PC33UD60V1500TF	Y300585C	3
600	650 RU	1600	3 300 000	PC33UD60V1600TF	Z300586C	3
600	650	1800	4 450 000	PC33UD60V1800TF	A300587C	3
550	600	2000	5 600 000	PC33UD55V2000TF	B300588C	3
500	550	2250	7 600 000	PC33UD50V2250TF	K300757C	3
450	500	2500		PC33UD45V2500TF	L300758C	3
Microswitch				MS3 V1-5	X310014A	3
Studs HC M12 x 85 & M12 x 50				STUM10x30M10x50	V098803F	6

Square body fuse holder



Fuse holder	Cat.Number 500 to 600 V DIN80	Ref. number 500 to 600V DIN80	Cat.Number 500 to 600V DIN110	Ref. number 500 to 600V DIN110	Pckg
Size 30	SITT30/31	B301232A	SP30	T096939A	1
Size 31	SITT30/31	B301232A	SE31	J098701A	1
Size 32	SITT32/33	D301234A	SE32	K098702A	1
Size 33	SITT32/33	D301234A	SF50-33	B209186A	1

German standard size 30 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	I ² t total to 660V	Cat Number Din 80	Ref. number Din 80	Cat Number Din 110	Ref. number Din 110	Pckg
690	700	50	610	PC30UD69V50A	F301926C	PC30UD69V50D1A	G301191C	3
690	700	63	1 100	PC30UD69V63A	E300108C	PC30UD69V63D1A	Q300118C	3
690	700	80	1 750	PC30UD69V80A	F300109C	PC30UD69V80D1A	R300119C	3
690	700	100	2 500	PC30UD69V100A	G300110C	PC30UD69V100D1A	S300120C	3
690	700	125	4 500	PC30UD69V125A	H300111C	PC30UD69V125D1A	T300121C	3
690	700	160	8 500	PC30UD69V160A	J300112C	PC30UD69V160D1A	V300122C	3
690	700	200	15 500	PC30UD69V200A	K300113C	PC30UD69V200D1A	W300123C	3
690	700	250	30 000	PC30UD69V250A	L300114C	PC30UD69V250D1A	X300124C	3
690	700	315	62 000	PC30UD69V315A	M300115C	PC30UD69V315D1A	Y300125C	3
690	700	350	80 000	PC30UD69V350A	N300116C	PC30UD69V350D1A	Z300126C	3
690	700	400	120 000	PC30UD69V400A	P300117C	PC30UD69V400D1A	A300127C	3
690	700	450	150 000	PC30UD69V450A	A300403C	PC30UD69V450D1A	S300695C	3
690	700	500	240 000	PC30UD69V500A	B300404C	PC30UD69V500D1A	Y301091C	3
690	700	550	300 000	PC30UD69V550A	C300405C	PC30UD69V550D1A	Z301092C	3
Microswitch				MS3 V1-5	X310014A	MS3 V1-5	X310014A	1

German standard size 31 - URD



Voltage IEC (V)	Voltage USA (V)	Current (A)	I ² t total to 660V	Cat Number Din 80	Ref. number Din 80	Cat Number Din 110	Ref. number Din 110	Pckg
690	700	160	6 900	PC31UD69V160A	M300322C	PC31UD69V160D1A	N300323C	3
690	700	200	13 500	PC31UD69V200A	Y300010C	PC31UD69V200D1A	H300019C	3
690	700	250	25 000	PC31UD69V250A	Z300011C	PC31UD69V250D1A	J300020C	3
690	700	315	40 000	PC31UD69V315A	A300012C	PC31UD69V315D1A	K300021C	3
690	700	350	55 000	PC31UD69V350A	Q300049C	PC31UD69V350D1A	P300048C	3
690	700	400	100 000	PC31UD69V400A	B300013C	PC31UD69V400D1A	L300022C	3
690	700	450	140 000	PC31UD69V450A	C300014C	PC31UD69V450D1A	M300023C	3
690	700	500	195 000	PC31UD69V500A	D300015C	PC31UD69V500D1A	N300024C	3
690	700	550	280 000	PC31UD69V550A	E300016C	PC31UD69V550D1A	P200025C	3
690	700	630	390 000	PC31UD69V630A	F300017C	PC31UD69V630D1A	Q300026C	3
690	700	700	490 000	PC31UD69V700A	G300018C	PC31UD69V700D1A	R300027C	3
690	700	800	800 000	PC31UD69V800A	D300406C	PC31UD69V800D1A	H300709C	3
Microswitch				MS3 V1-5	X310014A	MS3 V1-5	X310014A	1

Functions

Ultrafast semi-conductor protection fuses for industry, very current limiting under short circuit conditions, very low I²t. A faster range than ferrule-style fuses and one with higher ratings.

Class aR fuse with a minimum interrupting rating, i.e. requiring an outside device to clear small overloads (4 In or less).

Square body offering different types of connection: threaded terminals for mounting on SITT base or bar, French blades for mounting on a clip support whether

elastic (sizes 30, 31, 32) or bolted (size 33), DIN 80 and 110 for bolted mounting on base or bar. DIN 43653 and NF EN 60269-1 and 4 compliant.

Breaking capacity: 110 to 200 kA at rated voltage.

Applications

Power semi-conductor protection for soft starter, static relay, uninterrupted power supply UPS, speed regulator, rectifier, inverter, etc.

for DC Voltage application, see web site: <http://www.ferraz-shawmut.com/advisor/pdf/PC3xaR69VDinBlade.pdf>

German standard size 32



Voltage IEC (V)	Voltage USA (V)	Current (A)	I ² t total to 660V	Cat Number Din 80	Ref. number Din 80	Cat Number Din 110	Ref. number Din 110	Pckg
690	700 RA	400	80 000	PC32UD69V400A	E300177C	PC32UD69V400D1A	P300186C	3
690	700 RA	450	115 000	PC32UD69V450A	F300178C	PC32UD69V450D1A	Q300187C	3
690	700 RA	500	145 000	PC32UD69V500A	G300179C	PC32UD69V500D1A	R300188C	3
690	700 RA	550	195 000	PC32UD69V550A	H300180C	PC32UD69V550D1A	S300189C	3
690	700 RA	630	280 000	PC32UD69V630A	J300181C	PC32UD69V630D1A	T300190C	3
690	700 RA	700	400 000	PC32UD69V700A	K300182C	PC32UD69V700D1A	V300191C	3
690	700 RA	800	600 000	PC32UD69V800A	L300183C	PC32UD69V800D1A	W300192C	3
690	700 RA	900	900 000	PC32UD69V900A	M300184C	PC32UD69V900D1A	X300193C	3
690	700 RA	1000	1 250 000	PC32UD69V1000A	N300185C	PC32UD69V10CD1A	Y300194C	3
600	650 RA	1100	1 670 000	PC32UD60V1100A	W302101C	PC32UD60V1100A	W302101C	3
550	600	1250	2 400 000	PC32UD50V1250A	G300409C	PC32UD50V1250A	G300409C	3
Microswitch				MS3 V1-5	X310014A	MS3 V1-5	X310014A	1

German standard size 33



Voltage IEC (V)	Voltage USA (V)	Current (A)	I ² t total to 660V	Cat Number Din 80	Ref. number Din 80	Cat Number Din 110	Ref. number Din 110	Pckg
690	700 RA	500	100 000	PC33UD69V500A	G300248C	PC33UD69V500D1A	S300258C	3
690	700 RA	550	140 000	PC33UD69V550A	H300249C	PC33UD69V550D1A	T300259C	3
690	700 RA	630	210 000	PC33UD69V630A	J300250C	PC33UD69V630D1A	V300260C	3
690	700 RA	700	300 000	PC33UD69V700A	K300251C	PC33UD69V700D1A	W300261C	3
690	700 RA	800	490 000	PC33UD69V800A	L300252C	PC33UD69V800D1A	X300262C	3
690	700 RA	900	700 000	PC33UD69V900A	M300253C	PC33UD69V900D1A	Y300263C	3
690	700 RA	1000	900 000	PC33UD69V1000A	N300254C	PC33UD69V10CD1A	Z300264C	3
690	700 RA	1100	1 260 000	PC33UD69V1100A	P300255C	PC33UD69V11CD1A	A300265C	3
690	700 RA	1250	1 850 000	PC33UD69V1250A	Q300256C	PC33UD69V12CD1A	B300266C	3
690	700 RA	1400	2 500 000	PC33UD69V1400A	R300257C	PC33UD69V14CD1A	C300267C	3
600	650 RA	1600	3 300 000	PC33UD60V1600A	X301803C	PC33UD60V16CD1A	Z301437C	3
Microswitch				MS3 V1-5	X310014A	MS3 V1-5	X310014A	3

Square body fuse holder



Fuse holder	Cat.Number 500 to 600V DIN80	Ref. number 500 to 600V DIN80	Cat.Number 500 to 600V DIN110	Ref. number 500 to 600V DIN110	Pckg
Size 30	SIDN80630A	L098772A	SIDN110630A	F098031A	1
Size 31	SIDN80630A	L098772A	SIDN110630A	F098031A	1
Size 32	SIDN80630A	L098772A ⁽¹⁾	SIDN110630A	F098031A ⁽¹⁾	1
Size 32	SIDN801250A	F098560A ⁽²⁾	SIDN1101250A	L091941A ⁽²⁾	1
Size 33	SIDN80630A	L098772A ⁽¹⁾	SIDN110630A	F098031A ⁽¹⁾	1
Size 33	SIDN801250A	F098560A ⁽²⁾	SIDN1101250A	L091941A ⁽²⁾	1

(1) for ratings < 1250A
(2) for ratings > 1250A

French standard size 70 - gRB

Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
50	690 V gRB	PC70GB69V50TF	C301279C	3
63	690 V gRB	PC70GB69V63TF	D301280C	3
80	690 V gRB	PC70GB69V80TF	E301281C	3
100	690 V gRB	PC70GB69V100TF	F301282C	3
125	690 V gRB	PC70GB69V125TF	G301283C	3
160	690 V gRB	PC70GB69V160TF	L301310C	3
200	690 V gRB	PC70GB69V200TF	M301311C	3
250	690 V gRB	PC70GB69V250TF	N301312C	3
315	690 V gRB	PC70GB69V315TF	P301313C	3



French standard size 71 - gRB

Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
125	690 V gRB	PC71GB69V125TF	Q301314C	3
160	690 V gRB	PC71GB69V160TF	R301315C	3
200	690 V gRB	PC71GB69V200TF	S301316C	3
250	690 V gRB	PC71GB69V250TF	T301317C	3
315	690 V gRB	PC71GB69V315TF	N301427C	3
350	690 V gRB	PC71GB69V350TF	V301318C	3
400	690 V gRB	PC71GB69V400TF	W301319C	3
450	690 V gRB	PC71GB69V450TF	X301320C	3
500	690 V gRB	PC71GB69V500TF	S301707C	3



French standard size 72 - gRB

Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
200	690 V gRB	PC72GB69V200TF	F301328A	1
250	690 V gRB	PC72GB69V250TF	G301329A	1
315	690 V gRB	PC72GB69V315TF	H301330A	1
350	690 V gRB	PC72GB69V350TF	W301710A	1
400	690 V gRB	PC72GB69V400TF	J301331A	1
450	690 V gRB	PC72GB69V450TF	X301711A	1
500	690 V gRB	PC72GB69V500TF	K301332A	1
550	690 V gRB	PC72GB69V550TF	L301333A	1
630	690 V gRB	PC72GB69V630TF	M301334A	1
700	690 V gRB	PC72GB69V700TF	Y301712A	1



French standard size 73 - gRB

Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
315	690 V gRB	PC73GB69V315TF	W301342A	1
350	690 V gRB	PC73GB69V350TF	B301715A	1
400	690 V gRB	PC73GB69V400TF	X301343A	1
450	690 V gRB	PC73GB69V450TF	Y301344A	1
500	690 V gRB	PC73GB69V500TF	C301716A	1
550	690 V gRB	PC73GB69V550TF	Z301345A	1
630	690 V gRB	PC73GB69V630TF	A301346A	1
700	690 V gRB	PC73GB69V700TF	B301347A	1
800	690 V gRB	PC73GB69V800TF	D301717A	1
900	690 V gRB	PC73GB69V900TF	S301638A	1
1000	690 V gRB	PC73GB69V10CTF	F301719A	1



Square body Protistor® fuses

French standard size 70 - URD



Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
50	1250 V URD	PC70UD13C50TF	C301095C	3/39
63	1250 V URD	PC70UD13C63TF	M300483C	3/39
80	1250 V URD	PC70UD13C80TF	N300484C	3/39
100	1250 V URD	PC70UD13C100TF	P300485C	3/39
125	1250 V URD	PC70UD13C125TF	Q300486C	3/39
160	1250 V URD	PC70UD13C160TF	R300487C	3/39
200	1250 V URD	PC70UD13C200TF	S300488C	3/39
250	1250 V URD	PC70UD13C250TF	T300489C	3/39
280	1200 V URD	PC70UD12C280TF	N300714C	3/39
315	1200 V URD	PC70UD12C315TF	V300490C	3/39
350	1100 V URD	PC70UD11C350TF	W300491C	3/39
400	1100 V URD	PC70UD11C400TF	E300867C	3/39

French standard size 71 - URD



Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
160	1250 V URD	PC71UD13C160TF	B300749C	3/27
200	1250 V URD	PC71UD13C200TF	Z300517C	3/27
250	1250 V URD	PC71UD13C250TF	A300518C	3/27
280	1250 V URD	PC71UD13C280TF	P300715C	3/27
315	1250 V URD	PC71UD13C315TF	B300519C	3/27
350	1250 V URD	PC71UD13C350TF	C300520C	3/27
400	1250 V URD	PC71UD13C400TF	D300521C	3/27
450	1250 V URD	PC71UD13C450TF	E300522C	3/27
500	1100 V URD	PC71UD11C500TF	F300523C	3/27
550	1100 V URD	PC71UD11C550TF	G300524C	3/27
630	1100 V URD	PC71UD11C630TF	H300525C	3/27
900	800 V URD	PC71UD80V900TF	N301289C	3/27
1000	750 V URD	PC71UD75V10CTF	R301292C	3/27

French standard size 72 - URD



Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
280	1250 V URD	PC72UD13C280TF	Y300493C	3/36
315	1250 V URD	PC72UD13C315TF	Z300494C	3/18
350	1250 V URD	PC72UD13C350TF	A300495C	3/36
400	1250 V URD	PC72UD13C400TF	B300496C	3/18
450	1250 V URD	PC72UD13C450TF	C300497C	3/15
500	1250 V URD	PC72UD13C500TF	D300498C	3/36
550	1250 V URD	PC72UD13C550TF	E300499C	3/36
630	1250 V URD	PC72UD13C630TF	F300500C	3/15
700	1100 V URD	PC72UD11C700TF	G300501C	3/18
800	1100 V URD	PC72UD11C800TF	H300502C	3/18
900	1000 V URD	PC72UD10C900TF	G300869C	3/18
1000	850 V URD	PC72UD85V1000TF	T301294C	3/18

French standard size 73 - URD

Current (A)	Voltage - Curve	Cat Number threaded terminals	Ref. number threaded terminals	Pckg
350	1250 V URD	PC73UD13C350TF	K300504A	1/9
375	1250 V URD	PC73UD13C375TF	C301992A	1/9
400	1250 V URD	PC73UD13C400TF	L300505A	1/9
450	1250 V URD	PC73UD13C450TF	M300506A	1/9
500	1250 V URD	PC73UD13C500TF	N300507A	1/9
550	1250 V URD	PC73UD13C550TF	P300508A	1/9
630	1250 V URD	PC73UD13C630TF	Q300509A	1/9
700	1250 V URD	PC73UD13C700TF	R300510A	1/9
800	1250 V URD	PC73UD13C800TF	S300511A	1/13
900	1200 V URD	PC73UD12C900TF	T300512A	1/10
1000	1000 V URD	PC73UD10C1000TF	V300513A	1/11
1100	1000 V URD	PC73UD10C11CTF	R300832A	1/11
1100	950 V URD	PC73UD95V11CTF	W300514A	1/11
1400	850 V URD	PC73UD85C14CTF	S300718A	1/11
1300	900 V URD	PC73UD90V13CTF	T300696A	1/11



German standard size 70 - gRB

Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
100	690 V gRB	PC70GB69V100D1A	Q302027C	3
125	690 V gRB	PC70GB69V125D1A	S302742C	3
160	690 V gRB	PC70GB69V160D1A	R301591C	3
200	690 V gRB	PC70GB69V200D1A	S301592C	3
250	690 V gRB	PC70GB69V250D1A	Z301943C	3
315	690 V gRB	PC70GB69V315D1A	J301584C	3
315	690 V gRB	PC70GB69V350D1A	W302124C	3



German standard size 71 - gRB

Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
125	690 V gRB	PC71GB69V125D1A	B302658C	3
160	690 V gRB	PC71GB69V160D1A	C302659C	3
200	690 V gRB	PC71GB69V200D1A	C302682C	3
250	690 V gRB	PC71GB69V250D1A	R302143C	3
450	690 V gRB	PC71GB69V450D1A	R301637C	3
500	690 V gRB	PC71GB69V500D1A	A301737C	3



German standard size 72 - gRB

Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
250	690 V gRB	PC72GB69V250D1A	T302697A	1
350	690 V gRB	PC72GB69V350D1A	E302500A	1
400	690 V gRB	PC72GB69V400D1A	V302215A	1
450	690 V gRB	PC72GB69V450D1A	Q302671A	1
550	690 V gRB	PC72GB69V550D1A	L301724A	1



Square body Protistor® fuses

German standard size 72 - gRB



Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
500	690 V gRB	PC73GB69V500D1A	W302216A	1
550	690 V gRB	PC73GB69V550D1A	R302672A	1
700	690 V gRB	PC73GB69V700D1A	F301765A	1
1000	690 V gRB	PC73GB69V10CD1A	S302673A	1

German standard size 70 - URD



Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
50	1250 V URD	PC70UD13C50D1A	D300544C	3/36
63	1250 V URD	PC70UD13C63D1A	F300868C	3/36
80	1250 V URD	PC70UD13C80D1A	J300710C	3/36
100	1250 V URD	PC70UD13C100D1A	C300543C	3/36
125	1250 V URD	PC70UD13C125D1A	X300538C	3/36
160	1250 V URD	PC70UD13C160D1A	Y300539C	3/36
200	1250 V URD	PC70UD13C200D1A	Z300540C	3/24
250	1250 V URD	PC70UD13C250D1A	A300541C	3/36
350	1100 V URD	PC70UD11C350D1A	B300542C	3/36
400	1100 V URD	PC70UD11C400D1A	J301906C	3/36
280	1200 V URD	PC70UD12C280D1A	V300536C	3/36
315	1200 V URD	PC70UD12C315D1A	W300537C	3/36

German standard size 71 - URD



Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
160	1250 V URD	PC71UD13C160D1A	N300553C	3/27
200	1250 V URD	PC71UD13C200D1A	L300551C	3/27
250	1250 V URD	PC71UD13C250D1A	M300552C	3/27
315	1250 V URD	PC71UD13C315D1A	D300751C	3/27
350	1250 V URD	PC71UD13C350D1A	E300545C	3/27
400	1250 V URD	PC71UD13C400D1A	F300546C	3/27
450	1250 V URD	PC71UD13C450D1A	G300547C	3/27
500	1100 V URD	PC71UD11C500D1A	H300548C	3/27
550	1100 V URD	PC71UD11C550D1A	J300549C	3/27
630	1000 V URD	PC71UD10C630D1A	K300550C	3/27

German standard size 72 - URD ⚡

Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
700	1000 V URD	PC72UD10C700D1A	Y300562C	3/18
800	1000 V URD	PC72UD10C800D1A	Z300563C	3/18
900	1000 V URD	PC72UD10C900D1A	H300870C	3/18
630	1100 V URD	PC72UD11C630D1A	X300561C	3/18
250	1250 V URD	PC72UD13C250D1A	W301595C	3/18
280	1250 V URD	PC72UD13C280D1A	P300554C	3/18
315	1250 V URD	PC72UD13C315D1A	Q300555C	3/18
350	1250 V URD	PC72UD13C350D1A	R300556C	3/18
400	1250 V URD	PC72UD13C400D1A	S300557C	3/18
450	1250 V URD	PC72UD13C450D1A	T300558C	3/18
500	1250 V URD	PC72UD13C500D1A	V300559C	3/18
550	1250 V URD	PC72UD13C550D1A	W300560C	3/18
550	1250 V URD	PC72UD13C550D1I	G302203C	3/18



German standard size 73 - URD ⚡

Current (A)	Voltage - Curve	Cat Number blades DIN 110	Ref. number blades DIN 110	Pckg
350	1250 V URD	PC73UD13C350D1A	X300837A	1/12
400	1250 V URD	PC73UD13C400D1A	K300573A	1/12
450	1250 V URD	PC73UD13C450D1A	J300572A	1/12
500	1250 V URD	PC73UD13C500D1A	H300571A	1/12
550	1250 V URD	PC73UD13C550D1A	B300565A	1/12
630	1250 V URD	PC73UD13C630D1A	C300566A	1/12
700	1200 V URD	PC73UD12C700D1A	D300567A	1/12
800	1100 V URD	PC73UD11C800D1A	E300568A	1/12
900	1000 V URD	PC73UD10C900D1A	F300569A	1/12
1000	900 V URD	PC73UD90V10CD1A	G300570A	1/12
1000	1000 V URD	PC73UD10C10CD1A	L300574A	1/11
1100	900 V URD	PC73UD90V11CD1A	M300575A	1/12

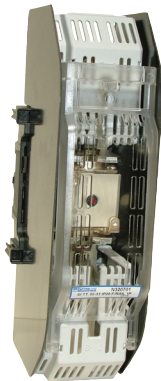


Square body Protistor® fuses

Finger safe to IP20 standard carriers for PSC 000, 00, 3x and 7x fuses

Fuse bases IP20	Rated insulation voltage U _i (AC 50/60 Hz & DC)	Current	Dielectric strength test		Flame/ smoke rating
			AC voltage 1 mn 50/60 Hz	Impulse voltage 1,2/50 µs	
SI TT 30/31	1500 V	1000 A	10 kV	12 kV	UL 94 VO II F1 (NF 16102)
SI TT 70/71	1500 V	1000 A	10 kV	12 kV	
SI TT 32/33	1500 V	2500 A	10 kV	12 kV	
SI TT 72/73	1500 V	2500 A	10 kV	12 kV	
SI 000 DIN 80	700 V	400 A	7 kV	8 kV	UL 94 VO
SI 00 DIN 80	700 V	400 A	8 kV	12 kV	UL 94 VO-3F3 (NF16102)
SI DIN 80/630 (30 TO 33)	1500 V	2500 A	10 kV	12 kV	II F1 (NF 16102)
SI DIN 110/630 (30 TO 33-70 TO 73)	1500 V	2500 A	10 kV	12 kV	UL 94 VO

Reference numbers – Catalog numbers



Size	No microswitch can be used			Microswitch can be used		
	TTF	DIN 80	DIN 110	TTF	DIN 80	DIN 110
000		B227218 SI000FS1DN80R			V227672 SI000FS1DN80RM	
00		C227219 SI00FS1DN80R			W227673 SI00FS1DN80RM	
30	N320701 SI30-31FS1TTR	L320745 SI30-32FS1DN80R	X320755 SI0-2FS1DN11R	P320725 SI30-31FS1TTRM	R320750 SI3XFS1DN80RM	C320760 SI0-2FS1DN11RM
31						
32	S320705 SI32FS1TTR			V320730 SI32-33FS1TTRM		
33	Y320710 SI33FS1TTR	R320750 SI3XFS1DN80RM	C320760 SI0-3FS1DN11RM			
70	D320715		X320755	A320735C		C320760 SI0-3FS1DN11RM
71	SI70-71FS1TTR		SI0-1-2FS1DN11R	SI70-71FS1TTRM		
72	J320720			F320740		
73	SI72-73FS1TTR		C320760 SI0-3FS1DN11RM	SI72-73FS1TTRM		

ITCP pour fusibles semi-conducteurs

Tableau de sélection : calibres thermiques ITCP / Type de fusible
Catalog number



		Pour fusibles PROTISTOR®					
ITCP Thermal rating Ambient temperatu- re outside ≤ 40°C	Max. power loss in fuse	Ferrule				00 - 000	
		10 x 38	14 x 51	22 x 58	27 x 60	Couteaux pleins 00P	Brackets 000/00D80
32 A	3,5 W @ Ith 3,5 W @ Ithe	ITCP32C3CP10 ITCP32S3CF					
50 A	7,5 W @ Ith 7,5 W @ Ithe		ITCP50C3CP14 ITC50S3CF				
125 A	12 W @ Ith 12 W @ Ithe			ITCP125C3CP22 ITC125S3CF			
160 A (135)*	12 W @ Ith 9 W @ Ithe				- ITCP160K3CP27	ITCP160C3D08 ITC160S3CF	
250 A (230)*	32 W @ Ith 23 W @ Ithe						ITCP250C3TD08 ITCP250K3TD08
400 A (360)*	45 W @ Ith 34 W @ Ithe*						ITCP400C3TD08 ITCP400K3TD08
630 A (570)*	60 W @ Ith 45 W @ Ithe*						
800 A (720)*	65 W @ Ith 55 W @ Ithe*						

Catalog number

		Pour fusibles PROTISTOR®							
ITCP Thermal rating Ambient temperatu- re outside ≤ 40°C	Max. power loss in fuse	End contacts PSC							
		30TT	31TT	32TT	33TT	70TT	71TT	72TT	73TT
32 A	3,5 W @ Ith 3,5 W @ Ithe								
50 A	7,5 W @ Ith 7,5 W @ Ithe								
125 A	12 W @ Ith 12 W @ Ithe								
160 A (135)*	12 W @ Ith 9 W @ Ithe								
250 A (230)*	32 W @ Ith 23 W @ Ithe	ITCP250C3TTF3 ITCP250K3TTF3	ITCP250C3TTF3 ITCP250K3TTF3			ITCP250C3TTF7 ITCP250K3TTF7	ITCP250C3TTF7 ITCP250K3TTF7		
400 A (360)*	45 W @ Ith 34 W @ Ithe*	ITCP400C3TTF3 ITCP400K3TTF3	ITCP400C3TTF3 ITCP400K3TTF3	ITCP400C3TTF3 ITCP400K3TTF3		ITCP400C3TTF7 ITCP400K3TTF7	ITCP400C3TTF7 ITCP400K3TTF7	ITCP400C3TTF7 ITCP400K3TTF7	
630 A (570)*	60 W @ Ith 45 W @ Ithe*	ITCP630C3TTF ITCP630K3TTF	ITCP630C3TTF ITCP630K3TTF	ITCP630C3TTF ITCP630K3TTF		ITCP630C3TTF ITCP630K3TTF	ITCP630C3TTF ITCP630K3TTF	ITCP630C3TTF ITCP630K3TTF	
800 A (720)*	65 W @ Ith 55 W @ Ithe*	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800K3TTF	ITCP800C3TTF ITCP800 K3TTF

In boldface type: Switches + accessories to be assembled (switch + connection kit + inside handle + protection against accidental contact with fuses + protection against accidental contact with terminals + pre-isolating microswitch).

In italics: Switch – Order accessories separately.

@ Ith: Value given at switch thermal rating

@ Ithe: Value given for shrouded switch (as when in cubicle)

ITCP pour fusibles semi-conducteurs

Tableau de sélection : calibres thermiques ITCP / Type de fusible

Catalog number

		Pour fusibles PROTISTOR®			
ITCP Thermal rating Ambient temperature outside ≤ 40°C	Max. power loss in fuse	German PSC range			
		30-70 DIN 110	31-71 DIN 110	32-72 DIN 110	33-73 DIN 110
32 A	3,5 W @ I _{th} 3,5 W @ I _{the}				
50 A	7,5 W @ I _{th} 7,5 W @ I _{the}				
125 A	12 W @ I _{th} 12 W @ I _{the}				
160 A (135)*	12 W @ I _{th} 9 W @ I _{the}				
250 A (230)*	32 W @ I _{th} 23 W @ I _{the}	ITCP250C3D11 ITCP250K3D11	ITCP250C3D11 ITCP250K3D11		
400 A (360)*	45 W @ I _{th} 34 W @ I _{the} *	ITCP400C3D11 ITCP400K3D11	ITCP400C3D11 ITCP400K3D11	ITCP400C3D11 ITCP400K3D11	
630 A (570)*	60 W @ I _{th} 45 W @ I _{the} *	ITCP630C3D08/14 ITCP630K3D11/14	ITCP630C3D08/14 ITCP630K3D11/14	ITCP630C3D08/14 ITCP630K3D11/14	
800 A (720)*	65 W @ I _{th} 55 W @ I _{the} *	ITCP800C3D08/14 ITCP800K3D08/14	ITCP800C3D08/14 ITCP800K3D08/14	ITCP800C3D08/14 ITCP800K3D08/14	ITCP800C3D08/14 ITCP800K3D08/14

Catalog number

		Pour fusibles PROTISTOR®							
ITCP Thermal rating Ambient temperature outside ≤ 40°C	Max. power loss in fuse	American PSC range							
		Long blades				Short blades			
		30LI	31LI	32LI	33LI	70KI	71KI	72KI	73KI
32 A	3,5 W @ I _{th} 3,5 W @ I _{the}								
50 A	7,5 W @ I _{th} 7,5 W @ I _{the}								
125 A	12 W @ I _{th} 12 W @ I _{the}								
160 A (135)*	12 W @ I _{th} 9 W @ I _{the}								
250 A (230)*	32 W @ I _{th} 23 W @ I _{the}	ITCP250C3US ITCP250K3US	ITCP250C3US ITCP250K3US			ITCP250C3US ITCP250K3US	ITCP250C3US ITCP250K3US		
400 A (360)*	45 W @ I _{th} 34 W @ I _{the} *	ITCP400C3US ITCP400K3US	ITCP400C3US ITCP400K3US	ITCP400C3US ITCP400K3US		ITCP400C3US ITCP400K3US	ITCP400C3US ITCP400K3US	ITCP400C3US ITCP400K3US	
630 A (570)*	60 W @ I _{th} 45 W @ I _{the} *	ITCP630C3US ITCP630K3US	ITCP630C3US ITCP630K3US	ITCP630C3US ITCP630K3US		ITCP630C3US ITCP630K3US	ITCP630C3US ITCP630K3US	ITCP630C3US ITCP630K3US	
800 A (720)*	65 W @ I _{th} 55 W @ I _{the} *	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US	ITCP800C3US ITCP800K3US

In boldface type: Switches + accessories to be assembled (switch + connection kit + inside handle + protection against accidental contact with fuses + protection against accidental contact with terminals + pre-isolating microswitch).

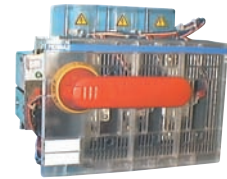
In italics: Switch – Order accessories separately.

@ I_{th}: Value given at switch thermal rating

@ I_{the}: Value given for shrouded switch (as when in cubicle)

ITCP for semi-conductor fuses

Selection chart: ITCP thermal ratings vs. fuse type Ref. number



		For PROTISTOR® fuses														
ITCP Thermal rating Ambient temperature outside ≤ 40°C	Max. power loss in fuse	Ferrule				00 - 000 Solid blades Brackets		End contacts PSC								
		10 x 38	14 x 51	22 x 58	27 x 60	00P	000/ 00D80	30TT	31TT	32TT	33TT	70TT	71TT	72TT	73TT	
32 A	3,5 W @ lth 3,5 W @ lthe	B210405 J205283														
50 A	7,5 W @ lth 7,5 W @ lthe		C210406 Y209896													
125 A	12 W @ lth 12 W @ lthe			D210407 L210782												
160 A (135)*	12 W @ lth 9 W @ lthe				E210408 B210888		F210409 S210788									
250 A (230)*	32 W @ lth 23 W @ lthe						G210410 X210125	H210411 Y210126	H210411 Y210126			J210412 Z210127	J210412 Z210127			
400 A (360)*	45 W @ lth 34 W @ lthe*						M210415 C210130	N210416 D210131	N210416 D210131	N210416 D210131		P210417 E210132	P210417 E210132	P210417 E210132		
630 A (570)*	60 W @ lth 45 W @ lthe*							S210420 H210135	S210420 H210135	S210420 H210135		S210420 H210135	S210420 H210135	S210420 H210135		
800 A (720)*	65 W @ lth 55 W @ lthe*							W210423 M210139	W210423 M210139	W210423 M210139	W210423 M210139	W210423 M210139	W210423 M210139	W210423 M210139	W210423 M210139	

Ref. number

		For PROTISTOR® fuses														
ITCP Thermal rating Ambient temperature outside ≤ 40°C	Max. power loss in fuse	German PSC range				American PSC range										
		30-70 DIN 110	31-71 DIN 110	32-72 DIN 110	33-73 DIN 110	Long blades				Short blades						
						30LI	31LI	32LI	33LI	70KI	71KI	72KI	73KI			
32 A	3,5 W @ lth 3,5 W @ lthe															
50 A	7,5 W @ lth 7,5 W @ lthe															
125 A	12 W @ lth 12 W @ lthe															
160 A (135)*	12 W @ lth 9 W @ lthe															
250 A (230)*	32 W @ lth 23 W @ lthe	K210413 A210128	K210413 A210128			L210414 B210129	L210414 B210129			L210414 B210129	L210414 B210129					
400 A (360)*	45 W @ lth 34 W @ lthe*	Q210418 F210133	Q210418 F210133	Q210418 F210133		R210419 G210134	R210419 G210134	R210419 G210134		R210419 G210134	R210419 G210134	R210419 G210134				
630 A (570)*	60 W @ lth 45 W @ lthe*	T210421 L210138	T210421 L210138	T210421 L210138		V210422 K210137	V210422 K210137	V210422 K210137		V210422 K210137	V210422 K210137	V210422 K210137				
800 A (720)*	65 W @ lth 55 W @ lthe*	X210424 Q210142	X210424 Q210142	X210424 Q210142	X210424 Q210142	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	Y210425 P210141	

In boldface type: Switches + accessories to be assembled (switch + connection kit + inside handle + protection against accidental contact with fuses + protection against accidental contact with terminals + pre-isolating microswitch).

In italics: Switch – Order accessories separately.

@ lth: Value given at switch thermal rating

@ lthe: Value given for shrouded switch (as when in cubicle)

Fuse Monitoring for 3-phase circuits

Fuse Monitoring, Suitable for 3-phase circuits (can be used for single-phase).

- includes the auxiliary contacts 1NO + 1NC.



Cat Number	Reference	Rated voltage [Vac]	Mounting on	Weight [kg]	Pack [pcs]
FM100/260	N229276A	100...260	ITC/ITCP*	0.14	1
FM380/690	P229277A	380...690	ITC/ITCP*	0.14	1
FM100/260RD	S236824A	100...260	Rail DIN**	0.19	1
FM380/690RD	T236825A	380...690	Rail DIN**	0.19	1

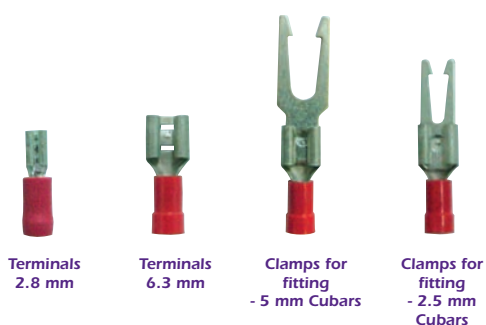
*: Snap-on switches ITC/ITCP 63/125/160 or screw mounting for all switches and fuse holders

** : Snap-on DIN rail. All switches-fuses and all fuse holders

Mounting accessories

Includes 6 pcs crimp terminals.

Cat Number	Reference	For switch size ITC/ITCP	Crimp terminal size [mm]	Pack [pc]	Description
COSSES2,8	J229272A	ITC/ITCP 32,63,125,160	2.8 - 0.8	1	6 x Terminals 2.8 mm
COSSES6,3	K229273A	6.3 - 0.8	6.3 - 0.8	16	16 x Terminals 6.3 mm
GRIFFES5	L229274A	ITC/ITCP 250,400,630,800	6.3 - 0.8	1	6 x Clamps for fitting - 2.5 or 5mm Cubars



Terminals 2.8 mm

Terminals 6.3 mm

Clamps for fitting - 5 mm Cubars

Clamps for fitting - 2.5 mm Cubars

A15QS - 150 Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	A15QS1-2	D230072J	10	130	A15QS130-4	O232291J	10
2	A15QS2-2	E230073J	10	150	A15QS150-4	T232294J	10
3	A15QS3-2	F230074J	10	200	A15QS200-4	Z232299J	10
4	A15QS4-2	G230075J	10	250	A15QS250-4	C232302J	10
5	A15QS5-2	H230076J	10	300	A15QS300-4	D232303J	10
6	A15QS6-2	J230077J	10	400	A15QS400-4	V232318J	10
7	A15QS7-2	K230078J	10	450	A15QS450-4	Y232321J	10
8	A15QS8-2	L230079J	10	500	A15QS500-4	B232324E	5
10	A15QS10-2	N230081J	10	600	A15QS600-4	H232330E	5
12	A15QS12-2	P230082J	10	700	A15QS700-4	L232333E	5
15	A15QS15-2	O230083J	10	800	A15QS800-4	R232338E	5
20	A15QS20-2	R230084J	10	900	A15QS900-4	X232343E	5
25	A15QS25-2	S230085J	10	1000	A15QS1000-4	A232346E	5
30	A15QS30-2	T230086J	10	750	A15QS750-128	P232336A	1
35	A15QS35-1	V230087J	10	800	A15QS800-128	V232341A	1
40	A15QS40-1	W230088J	10	1000	A15QS51000-128	D232349A	1
45	A15QS45-1	X230089J	10	1200	A15QS1200-128	F232351A	1
50	A15QS50-1	Y230090J	10	1500	A15QS1500-128	H232353A	1
55	A15QS55-1	Z230091J	10	2000	A15QS2000-128	P232359A	1
60	A15QS60-1	A230092J	10	2500	A15QS2500-128	R232361A	1
70	A15QS70-4	Z230076J	10	3000	A15QS3000-128	T232363C	3
80	A15QS80-4	C230079J	10	3500	A15QS3500-128	W232365A	1
90	A15QS90-4	F232282J	10	4000	A15QS4000-128	Y232367A	1
100	A15QS100-4	J232285J	10	5000	A15QS5000-128	B232370A	1
125	A15QS125-4	M232288J	10	6000	A15QS6000-128	A232369A	1



American Round Fuses - Form 101 range

Ratings

AC: 1-6000A
 150VAC, 100kA I.R.
 DC: 1-6000A
 150VDC, 100kA I.R.

Highlights

- Fast Acting
- Current Limiting
- Low I²t
- Indicator Options Available

Applications

- Protection of heavy duty devices such as electrochemical rectifiers

Approvals

- UL Recognized Component
- AC: UL Guide No. JFHR2 (1-4000A)
- DC Tested to UL Standard 198L parameters (1-4000A)

Single Pole Fuse Blocks for A15QS Fuses

Fuse Rating	Cat. Number	Ref. Number	Pack
1-30	30311	A212405J	10
31-60	60306J	J211884J	10
61-100	P243D	C219560E	5
101-200	P243D	C219560E	5
201-450	P243D	C219560E	5
500-600	P243G	H222762E	5



A30QS - 300Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	A30QS1-1	A230000J	10	225	A30QS225-4	F226923E	5
2	A30QS2-1	B230001J	10	250	A30QS250-4	H226925J	10
3	A30QS3-1	C230002J	10	275	A30QS275-4	A230276J	10
4	A30QS4-1	D230003J	10	300	A30QS300-4	W226937J	10
5	A30QS5-1	E230004J	10	350	A30QS350-4	S226934J	10
6	A30QS6-1	F230005J	10	400	A30QS400-4	Y226939J	10
7	A30QS7-1	G230006J	10	450	A30QS450-4	N226953J	10
8	A30QS8-1	H230007J	10	500	A30QS500-4	H226948J	10
10	A30QS10-1	K230009J	10	550	A30QS550-4	L226948J	10
12	A30QS12-1	L230010J	10	600	A30QS600-4	D226944J	10
15	A30QS15-1	M230011J	10	700	A30QS700-4	Z232414E	5
20	A30QS20-1	N230012J	10	800	A30QS800-4	C226966J	10
25	A30QS25-1	P230013J	10	700	A30QS700-128	T226958E	5
30	A30QS30-1	Q230014J	10	800	A30QS800-128	A226964A	1
35	A30QS35-4	R230015J	10	1000	A30QS1000-128	G226901A	1
40	A30QS40-4	S230016J	10	1200	A30QS1200-128	J226903A	1
50	A30QS50-4	T230017J	10	1500	A30QS1500-128	T226912A	1
60	A30QS60-4	V230018J	10	1600	A30QS1600-128	W226914A	1
70	A30QS70-4	R226956J	10	1800	A30QS1800-128	N230265A	1
80	A30QS80-4	Y226962J	10	2000	A30QS2000-128	D226921A	1
90	A30QS90-4	E226968J	10	2500	A30QS2500-128	L226928A	1
100	A30QS100-4	D226898J	10	3000	A30QS3000-128	Q226932A	1
125	A30QS125-4	L226905J	10	3500	A30QS3500-128	V226936A	1
130	A30QS130-4	N226907J	10	4000	A30QS4000-128	B226942A	1
150	A30QS150-4	Q226909B	2	4500	A30QS4500-128	F226946A	1
175	A30QS175-4	Y226916J	10	5000	A30QS5000-128	G226970A	1
200	A30QS200-4	A226918J	10				

Ratings

AC: 1-4500A
300VAC, 200kA I.R.
DC: 300VDC,
100kA I.R.
L/R= 10ms

Highlights

- Fast Acting
- Current Limiting
- Low I²t
- Indicator Options Available
- Superior DCCapabilities

Applications

- Protection of 300 volts (or less) heavy duty rectifiers and similar heavy duty power supplies

Approvals

- UL Recognized Component
- AC: UL Guide No. JFHR2 (35-4500A) CSA

Single Pole Fuse Blocks for A30QS Fuses



Fuse Rating	Cat. Number	Ref. Number	Pack
1-30	70316	B223308J	10
31-60	P243G	H222762E	5
61-100	P243	T218517E	5
101-200	P243	T218517E	5
201-400	P243G	H222762E	5
401-700	P243G	H222762E	5

A50QS - 500Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
35	A50QS35-4	Q214834A	1	250	A50QS250-4	W211251A	1
40	A50QS40-4	Y215853A	1	300	A50QS300-4	D212799A	1
50	A50QS50-4	W217392A	1	350	A50QS350-4	T215343A	1
60	A50QS60-4	A218937A	1	400	A50QS400-4	B216362A	1
70	A50QS70-4	B222664A	1	450	A50QS450-4	E216871A	1
80	A50QS80-4	L201513A	1	500	A50QS500-4	L218418A	1
90	A50QS90-4	X211252A	1	600	A50QS600-4	Q219457A	1
100	A50QS100-4	A216361A	1	700	A50QS700-4	N223181A	1
125	A50QS125-4	K218417A	1	800	A50QS800-4	C202287A	1
150	A50QS150-4	P219456A	1	900	A50QS900-4	R212282A	1
175	A50QS175-4	A222663A	1	1000	A50QS1000-4	V217391A	1
200	A50QS200-4	T200968A	1	1200	A50QS1200-4	C217904A	1
225	A50QS225-4	K201512A	1				



Ratings

AC: 35-60A
 500VAC, 200kA I.R.
 70-1200A
 500VAC, 200kA I.R.
 DC: 35-1200A
 500VDC, 100kA I.R.

Highlights

- 500V AC/DC Rated
- Lowest I²t
- Low Watts Loss
- Superior Cycling Ability

Applications

- Protection of 500V or less motor drives, UPS, inverters, etc.

Approvals

- UL Recognized Component
- AC: UL Guide No. JFHR2
- DC Tested to UL Standard 198L parameters (70-1200A)
- CSA Certified LR12636

Single Pole Fuse Blocks for A50QS Fuses

Fuse Rating	Cat. Number	Ref. Number	Pack
35-200	P243E	X222016E	5
225-600	P266C	K212897C	3



A60Q - 600Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
5	A60Q5-2	E217400J	10	20	A60Q20-2	B214338J	10
6	A60Q5-2	E217400J	10	25	A60Q25-2	Z214842J	10
8	A60Q8-2	T218425J	10	30	A60Q30-2	E215859J	10
10	A60Q10-2	Z212289J	10	35	A60Q35-2	J216369J	10
12	A60Q12-2	M212807J	10	40	A60Q40-2	E218879J	10
15	A60Q15-2	X213322J	10				

Ratings

AC: 5-40A 600VAC, 200kA I.R.
DC: 5-40A 600VDC, 100kA I.R. L/R = 10ms

Highlights

- 600VAC/DC Rated
- Extremely Fast Acting
- Current Limiting
- Lowest I²t
- Excellent Cycling Ability

Applications

- Protection of small inverters and drives, and equipment requiring the highest degree of protection

Approvals

- UL Recognized Component
- AC: UL Guide JFHR2 File E60314
- DC : UL File E60314

Recommended Fuse Blocks for Midget fuses

MODULOSTAR® Fuse holders



Nb of pole	Cat Number w/o indicator	Ref. Number w/o indicator	Cat Number with indicator	Ref. Number with indicator	Nb of Mod. 17.5 mm	Pck.
N	US10N	H305056			1	12
1	US101	B305050	US101I	J305057	1	12
1+N	US101N	C305051	US101NI	K305058	2	6
2	US102	D305052	US102I	L305059	2	6
3	US103	E305053	US103I	M305060	3	4
3+N	US103N	F305054	US103NI	N305061	4	3
4	US104	G305055	US104I	P305062	4	3
1			US101I-AC120	R303017K	1	12
1			US101I-DC24(1)	S303018K	1	12
1			US101I-DC24P(2)	Q303016K	1	12

(1) 2 LED 24Vdc for both polarity
(2) 1 LED 24Vdc for 1 polarity

Accessories

Description	Catalog Number	references Number	Nb of Mod. (17.5 mm)	Maxi. RMS current (A)	Number of poles	Pckg
Kit for Multi-Phase connection links	CMS810PAK	Z233725				12
Lock	LOCK	M223525				1
Tag and lockout	TAGLOCKCMS810	A235773				1
jumping bars 1 phase size 8/10 *	CMS810BB1F13	T210306	13	63	1	10
jumping bars 2 phases size 8/10 *	CMS810BB2F6	V210307	6	63	2	10
jumping bars 3 phases size 8/10 *	CMS810BB3F4	W210308	4	100	3	10
jumping bars 4 phases size 8/10 *	CMS810BB4F3	X210309	3	100	4	10
1 phase lateral incoming power supply	TBB1C	E210316		90		50
2 & 3 phases lateral incoming power supply	TBB23C	G210318		90		50
1 phase axial incoming power supply	TBB1A	D210315		90		50
2 & 3 phases axial incoming power supply	TBB23A	F210317		90		50

Note *: It is possible to use a rigid cable 16 mm² with a jumping bar 1.5 mm thick.

ULTRASAFE™ USFMM Fuse holder and Fuse disconnecter 

Nb of pole	Cat Number	Ref. Number	Fonction	
			Fuse Holder	Fuse Discon.
3 poles	USFMM	D302775	w/o Indicator	
system /	USFMMM	E302776		w/o Indicator
45 mm	USFMMI	G302778	with Indicator	
width	USFMMMI	F302777		with Indicator



Pack: 1 piece
Fuse holder is without Prebreaking Microswitch (see accessories)
Fuse disconnecter is with mounted Prebreaking Microswitch

Accessories

Description	Catalog Number	references Number	Number of systems interconnected	Maxi. RMS current (A)	Number of poles	Pckg
Lock	LOCK	M223525A				1
Microswitch	USFMAC11	C302797A	1		3	1
Additional Neutral jumping bars 3 phases			1			
			2		3	
Lateral incoming power supply	TBB23C	G210318P		90		50
Axial incoming power supply	TBB23A	F210317P	1	90		50

Fuse holders for A60Q fuses 

Number of Poles	Catalog Number			Reference Number			Pack
	Screw w/double quick connects at both ends	Pressure plate (sems) w/double quick connects at both ends	Copper box	Screw w/double quick connects at both ends	Pressure plate (sems) w/double quick connects at both ends	Copper box	
ADDER	30310			W204857A			1
1	30311			R212397A			1
2	30312			Z212910A			1
4	30314	30324	30354	J215472A	H211377A	J217519A	1



A60X - 600Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	A60X1-1	R201518J	10	175	A60X175-4	Q223183E	5
2	A60X2-1	Y212288J	10	200	A60X200-4	H211768E	5
3	A60X3-1	P213821J	10	200	A60X200-4TA	G212802A	1
4	A60X4-1	A215349J	10	225	A60X225-4	T214837E	5
5	A60X5-1	L217912J	10	250	A60X250-4	Z217395E	5
6	A60X6-1	O219986J	10	250	A60X250-4TA	D218940A	1
7	A60X7-1	C200976J	10	300	A60X300-4	N201515E	5
8	A60X8-1	S201519J	10	300	A60X300-4TA	V212285A	1
10	A60X10-1	D202633J	10	350	A60X350-4	X214334E	5
12	A60X12-1	D211258J	10	350	A60X350-4TA	X215346A	1
15	A60X15-1	M211772J	10	400	A60X400-4	B215856E	5
20	A60X20-1	L212806J	10	400	A60X400-4TA	A217396A	1
25	A60X25-1	W213321J	10	450	A60X450-4	P218421E	5
30	A60X30-1	A214337J	10	450	A60X450-4TA	V219461A	1
35	A60X35-4	Y214841J	10	500	A60X500-4	E222667E	5
40	A60X40-4	M216878J	10	500	A60X500-4TA	P201516A	1
45	A60X45-4	D217399J	10	600	A60X600-4	K211770E	5
50	A60X50-4	S218424J	10	600	A60X600-4TA	J212804A	1
55	A60X55-4	Y219464A	1	700	A60X700-4	G216367A	1
60	A60X60-4	G222669J	10	700	A60X700-128	C215857A	1
70	A60X70-4	Y214335E	5	800	A60X800-4	T223186A	1
80	A60X80-4	B217397E	5	800	A60X800-4TA	A200974A	1
80	A60X80-4TA	Q218422A	1	800	A60X800-128	F218942A	1
90	A60X90-4	Q201517E	5	1000	A60X1000-128	S212283A	1
100	A60X100-4	D202288E	5	1200	A60X1200-128	Q213316A	1
100	A60X100-4TA	G211767A	1	1500	A60X1500-128	C218939A	1
125	A60X125-4	S214836E	5	1600	A60X1600-128	L219982A	1
125	A60X125-4TA	D216364A	1	1800	A60X1800-128	Z211254A	1
150	A60X150-4	G216873E	5	2000	A60X2000-128	K213817A	1
150	A60X150-4TA	N218420A	1				

Ratings

AC: 1-2000A 600V, 100kA I.R.

Highlights

- Fast Acting
- Current Limiting
- Low I²t
- Indicator Options Available

Applications

- Protection of heavy traction and electro chemical as well as rectifiers and other heavy-duty equipment

Approvals

- UL Recognized Component
- AC: UL Guide No.JFHR2 (35-800A)

Single Pole Fuse Blocks for A60X Fuses



Fuse Rating	Cat. Number	Ref. Number	Pack
1-30	60306	V211871	
31-60	P243C	M219040E	5
61-100	P243C	M219040E	5
101-200	P243C	M219040E	5
201-400	P266A	Y212380C	3
401-600	P266A	Y212380C	3

A70QS - 700 Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
35	A70QS35-4	D202748		200	A70QS200-4	V212814	
40	A70QS40-4	Y213829		200	A70QS200-4K	E213329	
50	A70QS50-4	T217919		250	A70QS250-4	L217406	
60	A70QS60-4	H219473		300	A70QS300-4	Q218951	
70	A70QS70-4	B201527		350	A70QS350-4	M211266	
80	A70QS80-4	X212816		400	A70QS400-4	J214345	
90	A70QS90-4	K214346		450	A70QS450-4	F214848	
100	A70QS100-4	G214343		450	A70QS450-4K	H215356	
125	A70QS125-4	L215865		500	A70QS500-4	A218431	
125	A70QS125-4K	O216375		500	A70QS500-4K	R218952A	1
150	A70QS150-4	P218950		600	A70QS600-4	Y219993	
150	A70QS150-4K	F219471		600	A70QS600-4K	P222676	
175	A70QS175-4	A223192		700	A70QS700-4	E202772	
175	A70QS175-4K	J200982		800	A70QS800-4	Z213830	



Ratings

AC: 35-800A 700VAC, 200kA I.R.
 DC: 35-800A 700VDC, 100kA I.R. L/R = 10ms

Highlights

- 700V AC/DC Rated
- Very low I²t
- Low Watts Loss
- Superior Cycling Ability

Applications

- Protection of 700V less motor drives, UPS, inverters, etc.

Approvals

- UL Recognized Component AC/DC
- AC: GuideNo.JFHR2
- DC: Tested to UL Standard 198L Parameters (35-800A)
- CSA Certified File LR 12636

Single Pole Fuse Blocks for A70QS Fuses

Fuse Rating	Cat. Number	Ref. Number	Pack
35-200	P243C	M219040C	3
225-600	P266A	Y212380A	1
700-800			



A70Q - 700Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
35	A70Q35-4	D214846J	10	175	A70Q175-4	Y202697E	5
40	A70Q40-4	T216884J	10	200	A70Q200-4	T211778E	5
50	A70Q50-4	N218949J	10	250	A70Q250-4	S212812E	5
60	A70Q60-4	W219991J	10	300	A70Q300-4	V213826E	5
70	A70Q70-4	R202714J	10	350	A70Q350-4	E215353E	5
80	A70Q80-4	K211264J	10	400	A70Q400-4	K217405E	5
90	A70Q90-4	V211779J	10	450	A70Q450-4	S217918A	1
100	A70Q100-4	Y218429J	10	500	A70Q500-4	E219470A	1
125	A70Q125-4	D219469E	5	600	A70Q600-4	M222674A	1
150	A70Q150-4	H200981E	5				

Ratings

AC: 35-600A 700VAC, 100kA I.R.
DC: 35-600A 650VDC, 100kA I.R. L/R = 10ms

Highlights

- Extremely Fast Acting
- Current Limiting
- Lowest I²t

Applications

- Protection of inverters and other equipment requiring the best AC or DC protection in this voltage range

Approvals

- UL Recognized Component
- AC: GuideNo.JFHR2
- DC: Tested to UL Standard 198L Parameters (35-600A)

Single Pole Fuse Blocks for A70Q Fuses



Fuse Rating	Cat. Number	Ref. Number	Pack
35-100	P243C	M219040C	3
125-400	P266A	Y212380A	1
450-600	P266F	S213410C	1



Ferraz Shawmut

The most comprehensive line of ultrafast fuses
PROTISTOR® takes the lead!

- When it comes to the protection of power electronic equipment, one brand name stands alone: PROTISTOR®.
- Who offers optimal, ultimate protection to lengthen the lifespan of power semi-conductors?
- Who combines optimized I²t, reduced peak let-thru currents and high breaking capacities for ever safer installations?
- Who is supported by counselling from high-level engineers and the Select-A-Fuse/Power Electronics program for right-on-target design?

Only one name comes to mind: **PROTISTOR®**



FERRAZ SHAWMUT SAS
1 - rue Jean Novel
69626 Villeurbanne Cedex
France
Tél.: + 33 (0)4 72 22 66 11
Fax: + 33 (0)4 72 22 67 13
www.ferrazshawmut.com

FERRAZ SHAWMUT inc
374 Merrimac Street,
Newburyport, MA 01950 - 1998
USA
Phone : 978-462-6662
Fax : 978-462-0181
www.ferrazshawmut.com

A100P - 1000Vac

Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
15	A100P15-1	D222643L	20	200	A100P200-4	J212781E	5
20	A100P20-1	Y212265L	20	225	A100P225-4	F216343A	1
25	A100P25-1	J216852L	20	250	A100P250-4	Z217372A	1
30	A100P30-1	E218918L	20	300	A100P300-4	T219437A	1
35	A100P35-4	S223162E	5	350	A100P350-4	O201494A	1
40	A100P40-4	A211232E	5	400	A100P400-4	Z212266A	1
50	A100P50-4	Q213799E	5	500	A100P500-4	W214816A	1
60	A100P60-4	G216344E	5	600	A100P600-4	A217373A	1
65	A100P65-4	-		650	A100P650-4	F218919A	1
80	A100P80-4	R201495E		700	A100P700-4	T223163A	1
100	A100P100-4	A215832E	5	800	A100P800-4	B211233A	1
125	A100P125-4	D218917E	5	1000	A100P1000-4	Y217371A	1
150	A100P150-4	R223161E	5				



Ratings

AC: 15-30A 1000VAC, 100kA I.R.
 35-1000A 1000VAC, 100kA I.R.
 DC: 15-1000A 750VDC, 100kA I

Highlights

- Fast Acting
- Current Limiting
- Low I²t
- Optional Trigger Indicator

Applications

- Protection of UPS systems AC/DC drives, reduced voltage motor starters and other 1000V or less semiconductor devices
- Spare markets only for new installations, refer to PC range

Approvals

- UL Recognized Component
- AC: UL Guide No. JFHR2 (60-800A)
- DC: Ferraz Shawmut Certified

Single Pole Fuse Blocks for A100P Fuses

Fuse Rating	Cat. Number	Ref. Number	Pack
35-100	P266G	Z214428C	3
125-400	P266L	J215955C	3



A120X - 1200Vac



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1/2	A120X1/2-1	T218954J	10	6	A120X6-1	W216380J	10
1	A120X1-1	C218433J	10	10	A120X10-1	K219475J	10
2	A120X2-1	E223196J	10	15	A120X15-1	R222678J	10
3	A120X3-1	P211268J	10	20	A120X20-1	M200985J	10
4	A120X4-1	Z212818J	10	25	A120X25-1	E202864J	10
5	A120X5-1	J214851J	10	30	A120X30-1	Z211783J	10

Ratings

AC: 1/2-30A 1200VAC, 100kA I.R.
 DC: 1/2-30A 1000VDC, 100kA I.R. L/R = 10ms

Protection of traction drive auxiliary circuits, etc.

Highlights

- Fast Acting
- Current Limiting
- Low I²t
- Compact Size

Approvals

- Ferraz Shawmut Certified

Applications

Single Pole Fuse Blocks for A120X Fuses



Fuse Rating	Cat. Number	Ref. Number	Pack
1/2-30	P292	T216976C	3

A150X



Ampere Rating	Catalog Number	Reference Number	Pack	Ampere Rating	Catalog Number	Reference Number	Pack
1	A150X1-1	J213333A	1	90	A150X90-4	R215364A	1
15	A150X15-1	O200988A	1	100	A150X100-4	O215869A	1
15	A150X15-4	F201531A	1	125	A150X125-4	M219477A	1
20	A150X20-1	R215870A	1	150	A150X150-4	K213334A	1
20	A150X20-4	C216892A	1	175	A150X175-4	C213833A	1
25	A150X25-4	E218435A	1	200	A150X200-4	A217925A	1
30	A150X30-1	V222681A	1	250	A150X250-4	N219478A	1
30	A150X30-4	J223200A	1	300	A150X300-4	G201532A	1
35	A150X35-4	C211786A	1	400	A150X400-4	O214351A	1
40	A150X40-4	D213834A	1	450	A150X450-4	Y216382A	1
50	A150X50-4	S217412A	1	500	A150X500-4	B217926A	1
60	A150X60-4	D219998A	1	600	A150X600-4	K223201A	1
70	A150X70-4	N212302A	1	800	A150X800-4	N214855A	1
80	A150X80-4	E213835A	1				

Ratings

AC: 1A to 1000A 1500VAC, 100kA I.R.
 DC: 1A to 1000A 1000VDC, 100kA I.R. L/R = 1000ms

Applications

Protection of traction drive auxiliary circuits, etc.

Highlights

- Fast Acting
- Current Limiting
- Low I²t

Approvals

- Ferraz Shawmut Certified

Medium Voltage Fuses

- **Fuses for Street lighting - HVI distribution** 138 - 139
 - **Fuses for Power Utilities** 140 - 142
 - UTE Standard 140
 - DIN Standard 141 - 142
-

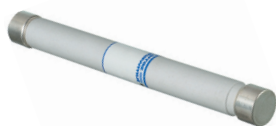


10 x 85



Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Pckg
0,125	1500	10GC15V0,125	S093327J	10
0,16	1500	10GC15V0,16	T093328J	10
0,25	1500	10GC15V0,25	V093329J	10
0,315	1500	10GC15V0,315	W093330J	10
0,4	1500	10GC15V0,4	X093331J	10
0,5	1500	10GC15V0,5	Z093333J	10
0,63	1500	10GC15V0,63	A093334J	10
0,8	1500	10GC15V0,8	B093335J	10
1	1500	10GC15V1	A093426J	10
1,6	1500	10GC15V1,6	B093427J	10
2	1500	10GC15V2	C093428J	10
3,15	1500	10GC15V3,15	D093429J	10
4	1500	10GC15V4	E093430J	10
5	1500	10GC15V5	Y093654J	10
6,3	1500	10GC15V6,3	Z093655J	10
8	1500	10GC15V8	A093656J	10
10	1500	10GC15V10	B093657J	10
12	1500	10GC15V12	C093658J	10
16	1500	10GC15V16	F093431J	10
20	1500	10GC15V20	L220028J	10

10 x 180



Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Pckg
0,16	3200	10GB32V0,16	E081838J	10
0,315	3200	10GB32V0,315	F081839J	10
0,5	3200	10GB32V0,5	G081840J	10
0,8	3200	10GB32V0,8	H081841J	10
1	3200	10GB32V1	P089621J	10
1,25	3200	10GB32V1,25	R078744J	10
1,6	3200	10GB32V1,6	N081409J	10
2	3200	10GB32V2	Q089622J	10
2,5	3200	10GB32V2,5	S078745J	10
3,15	3200	10GB32V3,15	M081845J	10
4	3200	10GB32V4	R089623J	10
5	3200	10GB32V5	M087733J	10
6	3200	10AB32V6	S089624J	10
8	3200	10AB32V8	T089625J	10
10	3200	10AB32V10	V089626J	10
12	3200	10AB32V12	W089627J	10

10 x 180



Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Pckg
0,16	5500	10GB55V0,16	A093035J	10
0,315	5500	10GB55V0,315	B093036J	10
0,5	5500	10GB55V0,5	W081140J	10
0,8	5500	10GB55V0,8	V081139J	10
1	5500	10GB55V1	T081138J	10
1,25	5500	10GB55V1,25	N093162J	10
1,6	5500	10GB55V1,6	S081137J	10
2	5500	10GB55V2	R081136J	10
2,5	5500	10GB55V2,5	P093163J	10
3,15	5500	10GB55V3,15	Q081135J	10
3,5	5500	10GB55V3,5	P081134J	10
4	5500	10GB55V4	N081133J	10

36 x 190

Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Cat.Number with striker	Ref. number with striker	Pckg
2	3200	36GD32V2	P081801A			1
3,15	3200	36GD32V3,15	Q081802A			1
4	3200	36GD32V4	R081803A			1
5	3200	36GD32V5	S081804A			1
6,3	3200	36GD32V6,3	T081805A	36GD32V6,3	K081797A	1
8	3200	36GD32V8	V081806A	36GD32V8	J081796A	1
10	3200	36GD32V10	W081807A	36GD32V10	H081795A	1
12	3200	36GD32V12	X081808A	36GD32V12	G081794A	1
16	3200	36GD32V16	Y081809A	36GD32V16	F081793A	1
20	3200	36GD32V20	Z081810A	36GD32V20	E081792A	1
25	3200	36GD32V25	A081811A	36GD32V25	D081791A	1
32	3200	36GD32V32	B081812A	36GD32V32	C081790A	1
40	3200	36GD32V40	C081813A	36GD32V40	B081789A	1
50	3200	36GD32V50	D081814A	36GD32V50	A081788A	1
63	3200	36GD32V63	L081798A	36GD32V63	Z081787A	1
80	3200	36GD32V80	M081799A	36GD32V80	Y081786A	1
100	3200	36GD32V100	N081800A	36GD32V100	X081785A	1
Microswitch(1 contact)				MC1-5NFLEX	E098674A	1



36 x 250

Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Cat.Number with striker	Ref. number with striker	Pckg
2	5500	36GB55V2	V081622A			1
3,15	5500	36GB55V20	A081397A			1
4	5500	36GB55V4	T081621A			1
5	5500	36GB55V5	S081620A			1
6	5500	36GB55V6	R081619A	36GB55V6P	G081610A	1
8	5500	36GB55V8	Q081618A	36GB55V8P	F081609A	1
10	5500	36GB55V10	P081617A	36GB55V10P	E081608A	1
12	5500	36GB55V12	N081616A	36GB55V12P	D081607A	1
16	5500	36GB55V16	M081615A	36GB55V16P	C081606A	1
20	5500	36GJB55V20	L081614A	36GJB55V20P	E078802A	1
25	5500	36GJB55V25	Q078789A	36GJB55V25P	F078803A	1
32	5500	36GJB55V32	R078790A	36GJB55V32P	G078804A	1
40	5500	36GJB55V40	S078791A	36GJB55V40P	H078805A	1
50	5500	36GJB55V50	T078792A	36GJB55V50P	J078806A	1
63	5500	36AJB55V63	V078793A	36AJB55V63P	K078807A	1
75	5500	36AJB55V75	W078794A	36AJB55V75P	L078808A	1
Microswitch (1 contact)				MC1-5NFLEX	E098674A	1
Microswitch(2 contacts)				MC1-9NFLEXQ	F098675A	1

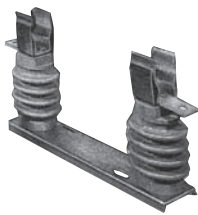


55 x 259



Current (A)	Voltage	Cat.Number w/o striker	Ref. number w/o striker	Cat.Number with striker	Ref. number with striker	Pckg	
2	5500	55GD55V2	S081505C			3	
3,15	5500	55GD55V3,15	S081390C			3	
4	5500	55GD55V4	R081504C			3	
5	5500	55GD55V5	Q081503C			3	
6	5500	55GD55V6	P081502C	55GD55V6P	A081489C	3	
8	5500	55GD55V8	N081501C	55GD55V8P	Z081488C	3	
10	5500	55GD55V10	M081500C	55GD55V10P	Y081487C	3	
12	5500	55GD55V12	L081499C	55GD55V12P	X081486C	3	
16	5500	55GD55V16	K081498C	55GD55V16P	W081485C	3	
20	5500	55GD55V20	J081497C	55GD55V20P	V081484C	3	
25	5500	55GD55V25	H081496C	55GD55V25P	T081483C	3	
32	5500	55GD55V32	G081495C	55GD55V32P	S081482C	3	
40	5500	55GD55V40	F081494C	55GD55V40P	R081481C	3	
50	5500	55GD55V50	E081493C	55GD55V50P	Q081480C	3	
63	5500	55GD55V63	D081492C	55GD55V63P	P081479C	3	
80	5500	55GD55V80	C081491C	55GD55V80P	N081478C	3	
100	5500	55GD55V100	B081490C	55GD55V100P	M081477C	3	
Microswitch (1 contact)					MC1-5NFLEX	E092694A	1
Microswitch (2 contacts)					MC1-9NFLEXQ	F092695A	1

MV fuse holders



Fuse size	Voltage (V AC)	Fuse holder Cat.Number	Fuse holder Ref. numbe
3200	10 x 180	SI50-10-180	S092706A
5500	10 x 180	SI85-36-190TRA	D092693A
3200	36 x 190	SI85-10-180	C092738A
5500	36 x 250	SI85-36-250	P092864A
5500	55 x 259	SI130-55-259	X092227A

Clips

Size	Cat.Number	Ref.Number	Pack
MR10 + ressort	MR10RESSORT	B098004L	20
MR36 + ressort	MR36R	M091275A	1
MR55 + ressort	MR55R	L078969A	1

Medium Voltage – Size 55 x 520 – UTE French utility standards compliant

Voltage (V)	Current (A)	Set of 3 fuses	EDF part number	Cat.number w/o striker	Ref. number w/o striker	Cat.number with striker	Ref. number with striker	Pckg
24	6,3	1	73.02.132	LOT-FR240V6,3	A210795A	LOT-FR240V6,3P	G227430A	1
24	16	1	73.02.133	LOT-FR240V16	B210796A	LOT-FR240V16P	H227431A	1
24	32	1	-	LOT-FR240V32	G226234A	LOT-FR240V32P	J227432A	1
24	43	1	73.02.134	LOT-FR240V43	C210797A	LOT-FR240V43P	K227433A	1
24	63	1	73.02.135	LOT-FR240V63	D210798A	LOT-FR240V63P	L227434A	1

HV Back-up Fuse-Links according to IEC 60 282-1

Current (A)	Voltage (kV)	Cat.Number	Ref. number	Pack.
2	3/7,2	45DB72V2P	N1000098A	1
4	3/7,2	45DB72V4P	P1000099A	1
6,3	3/7,2	45DB72V6,3PD	S209293A	1
10	3/7,2	45DB72V10PD	T209294A	1
16	3/7,2	45DB72V16PD	V209295A	1
20	3/7,2	45DB72V20PD	W209296A	1
25	3/7,2	45DB72V25PD	X209297A	1
31,5	3/7,2	45DB72V32PD	Y209298A	1
40	3/7,2	45DB72V40PD	Z209299A	1
50	3/7,2	45DB72V50PD	A209300A	1
63	3/7,2	45DB72V63P	B209301A	1
80	3/7,2	45DB72V80P	C209302A	1
100	3/7,2	45DB72V100P	D209303A	1
125	3/7,2	45DB72V125PD	O1000100A	1
160	3/7,2	45DB72V160P	R1000101A	1
200	3/7,2	45DB72V200P	S1000102A	1
1	6/12	45DB120V1P	T1000103A	1
2	6/12	45DB120V2P	V1000104A	1
4	6/12	45DB120V4P	W1000105A	1
6,3	6/12	45DB120V6,3P	F209305A	1
10	6/12	45DB120V10P	G209306A	1
16	6/12	45DB120V16P	H209307A	1
20	6/12	45DB120V20P	J209308A	1
25	6/12	45DB120V25P	K209309A	1
31,5	6/12	45DB120V32P	L209310A	1
40	6/12	45DB120V40P	M209311A	1
50	6/12	45DB120V50P	N209312A	1
63	6/12	45DB120V63P	P209313A	1
80	6/12	45DB120V80P	Q209314A	1
100	6/12	45DB120V100P	R209315A	1
125	6/12	45DB120V125P	X1000106A	1
160	6/12	45DB120V160P	Y1000107A	1
200	6/12	45DB120V200P	Z1000108A	1
6,3	10/17,5	45DB175V6,3P	T209317A	1
10	10/17,5	45DB175V10P	V209318A	1
16	10/17,5	45DB175V16P	W209319A	1
20	10/17,5	45DB175V20P	X209320A	1
25	10/17,5	45DB175V25P	Y209321A	1
31,5	10/17,5	45DB175V32P	Z209322A	1
40	10/17,5	45DB175V40P	A209323A	1
50	10/17,5	45DB175V50P	B209324A	1
63	10/17,5	45DB175V63P	C209325A	1
80	10/17,5	45DB175V80P	D209326A	1
100	10/17,5	45DB175V100P	E209327A	1
1	10/24	45DB240V1P	A1000109A	1
2	10/24	45DB240V2P	B1000110A	1
4	10/24	45DB240V4P	C1000111A	1
6,3	10/24	45DB240V6,3P	S209339A	1
10	10/24	45DB240V10P	T209340A	1
16	10/24	45DB240V16P	V209341A	1
20	10/24	45DB240V20P	W209342A	1
25	10/24	45DB240V25P	X209343A	1
31,5	10/24	45DB240V32P	Y209344A	1
40	10/24	45DB240V40P	Z209345A	1
50	10/24	45DB240V50P	A209346A	1
63	10/24	45DB240V63P	B209347A	1
80	10/24	45DB240V80P	C209348A	1
100	10/24	45DB240V100P	D209349A	1
125	10/24	45DB240V125P	D1000112A	1
160	10/24	45DB240V160P	E1000113A	1
200	10/24	45DB240V200P	F1000114A	1
2	20/36	45DB360V2P	G1000115A	1
4	20/36	45DB360V4P	H1000116A	1
6,3	20/36	45DB360V6,3PD	S209362A	1
10	20/36	45DB360V10PD	T209363A	1
16	20/36	45DB360V16PD	V209364A	1
20	20/36	45DB360V20PD	W209365A	1
25	20/36	45DB360V25PD	X209366A	1
31,5	20/36	45DB360V32PD	Y209367A	1
40	20/36	45DB360V40PD	Z209368A	1
50	20/36	45DB360V50PD	J1000117A	1
63	20/36	45DB360V63PD	K1000118A	1



HV back-up fuse-links acc. to IEC 60282-1 with controlled power dissipation



Current (A)	Voltage (kV)	Cat.Number	Ref. number	Pack.
1	6/12	45DB120V1PT	L1000119A	1
2	6/12	45DB120V2PT	M1000120A	1
4	6/12	45DB120V4PT	N1000121A	1
6,3	6/12	45DB120V6,3PT	P1000122A	1
10	6/12	45DB120V10PT	Q1000123A	1
16	6/12	45DB120V16PT	R1000124A	1
20	6/12	45DB120V20PT	S1000125A	1
25	6/12	45DB120V25PT	T1000126A	1
31,5	6/12	45DB120V32PT	V1000127A	1
40	6/12	45DB120V40PT	W1000128A	1
50	6/12	45DB120V50PT	X1000129A	1
63	6/12	45DB120V63PT	Y1000130A	1
80	6/12	45DB120V80PT	Z1000131A	1
100	6/12	45DB120V100PT	A1000132A	1
125	6/12	45DB120V125PT	B1000133A	1
160	6/12	45DB120V160PT	C1000134A	1
200	6/12	45DB120V200PT	D1000135A	1
1	10/24	45DB240V1PT	E1000136A	1
2	10/24	45DB240V2PT	F1000137A	1
4	10/24	45DB240V4PT	G1000138A	1
6,3	10/24	45DB240V6,3PT	H1000139A	1
10	10/24	45DB240V10PT	J1000140A	1
16	10/24	45DB240V16PT	K1000141A	1
20	10/24	45DB240V20PT	L1000142A	1
25	10/24	45DB240V25PT	M1000143A	1
31,5	10/24	45DB240V32PT	N1000144A	1
40	10/24	45DB240V40PT	P1000145A	1
50	10/24	45DB240V50PT	Q1000146A	1
63	10/24	45DB240V63PT	R1000147A	1
80	10/24	45DB240V80PT	S1000148A	1
100	10/24	45DB240V100PT	T1000149A	1
125	10/24	45DB240V125PT	V1000150A	1

HV General Purpose fuse-links acc. to IEC 60282-1



Current (A)	Voltage (kV)	Cat.Number	Ref. number	Pack.
6,3	6/12	45DG120V6,3P	W1000151A	1
10	6/12	45DG120V10P	X1000152A	1
16	6/12	45DG120V16P	Y1000153A	1
25	6/12	45DG120V25P	Z1000154A	1
40	6/12	45DG120V40P	A1000155A	1
50	6/12	45DG120V50P	B1000156A	1
4	10/24	45DG240V4P	C1000157A	1
6,3	10/24	45DG240V6,3P	D1000158A	1
10	10/24	45DG240V10P	E1000159A	1
16	10/24	45DG240V16P	F1000160A	1
25	10/24	45DG240V25P	G1000161A	1

Other Fuses

- aD Fuses 144
- CNL CNN fuses for Fork Truck protection 144 - 145
- VSP for MOV Protection 145 - 146
- Multi-meter fuse 146



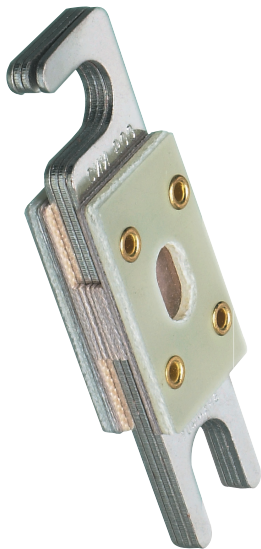
AD-type French utility standard fuses



For cylindrical blade-style fuses: Please enquire.

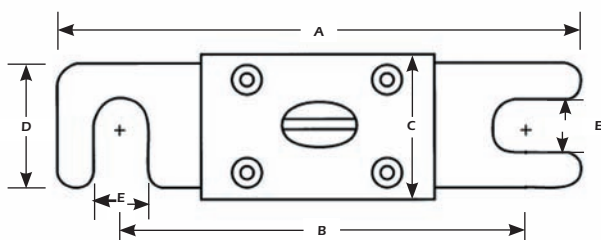
Size	Current (A)	Voltage	Cat.Number	Ref. number	Pckg
10 x 38	15	440	10AD44V15	V216149J	10
14 x 51	15	440	14AD44V15	E222966J	10
14 x 51	30	440	14AD44V30	M200755J	10
22 x 58	15	440	22AD44V15	M222973J	10
22 x 58	30	440	22AD44V30	V200762J	10
22 x 58	45	440	22AD44V45	K201305J	10
22 x 58	60	440	22AD44V60	T201819J	10
00	45	440	00AD44V45	J223430J	10
00	60	440	00AD44V60	P223435J	10
00	90	440	00AD44V90	X223442J	10
10 x 38 neutral			FRN1038	R211569J	10
14 x 51 neutral			FRN1451	L228032J	10
22 x 58 neutral			FRN2258	M228033J	10

CNL fuses for batteries



Voltage (V)	Current (A)	Fuse holder Cat.Number	Fuse holder Ref. number
	35	CNL35 DIN	T216332E
	40	CNL40 DIN	L217360E
	50	CNL50 DIN	A218385E
	60	CNL60 DIN	E219424E
	80	CNL80 DIN	Y219947E
	100	CNL100 DIN	K201995E
	125	CNL125 DIN	K211218E
	130	CNL130 DIN	A211738E
80VAC/DC	150	CNL150 DIN	J212252E
	175	CNL175 DIN	W212769E
PdC: 2500A	200	CNL200 DIN	J213287E
	225	CNL225 DIN	A213785E
	250	CNL250 DIN	J214299E
	275	CNL275 DIN	J214805E
	300	CNL300 DIN	L215313E
	325	CNL325 DIN	P215822E
	350	CNL350 DIN	X216841E
	400	CNL400 DIN	T217873E
	500	CNL500 DIN	Q218905E
Fuse base		SFBT	A092092C

Dimensions



	A mm	B mm	C mm	D mm	E mm
CNL DIN/CNN DIN	82	60	23 max	20	11

CNN fuses for batteries

Voltage (V)	Current (A)	Fuse holder Cat.Number	Fuse holder Ref. number
130VAC 75VDC PdC : 2500A	10	CNN10 DIN	E228831
	35	CNN35 DIN	F228832
	40	CNN40 DIN	G228833
	50	CNN50 DIN	H228834
	60	CNN60 DIN	J228835
	80	CNN80 DIN	K228836
	90	CNN90 DIN	L228837
	100	CNN100 DIN	M228838
	125	CNN125 DIN	N228839
	150	CNN150 DIN	P228840
	175	CNN175 DIN	Q228841
	180	CNN180 DIN	N229874
	200	CNN200 DIN	R228842
	225	CNN225 DIN	S228843
	250	CNN250 DIN	T228844
275	CNN275 DIN	V228845	
300	CNN300 DIN	W228846	
130VAC 48VDC PdC : 2500A @48VDC	325	CNN325 DIN	X228874
	350	CNN350 DIN	Y228848
	400	CNN400 DIN	Z228849
	500	CNN500 DIN	A228850
	600	CNN600 DIN	B228851
	700	CNN700 DIN	C228852
800	CNN800 DIN	D228853	
Fuse base		SFBT	A092092

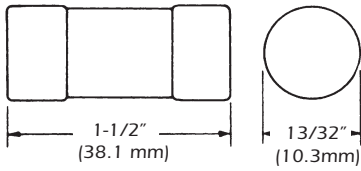


VSP for MOV Protection

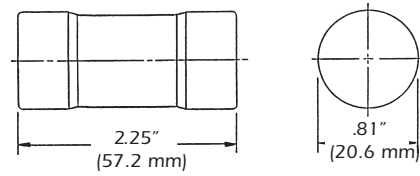
Voltage Rating (AC)	8x20μ sec. surge rating	Body Size	Ferrules		Hole Mounting		Double Hole Mounting	
			Cat.Number	Ref.Number	Cat.Number	Ref.Number	Cat.Number	Ref.Number
600V	5	10x38	VSP5-2	G219886	VSP5-R	Consult us	VSP5-H	K230469
600V	10	10x38	VSP10-2	X217807	VSP10-R	E230464	VSP10-H	D230463
600V	15	10x38	VSP15-2	V230455	VSP15-R	H230467	VSP15-H	G230466
600V	20	10x38	VSP20-2	W218841	VSP20-R	G230416	VSP20-H	Consult us
600V	30	20x57	VSP30-2	X230457				
600V	40	20x57	VSP40-2	J211677				
600V	50	20x57	VSP50-2	W232250				
600V	60	20x57	VSP60-2	F212709				
600V	70	20x57	VSP70-2	G213722				
600V	80	20x57	VSP80-2	J214744				
600V	90	20x57	VSP90-2	X232251				
480V	100	20x57	VSP100-2	F201416				



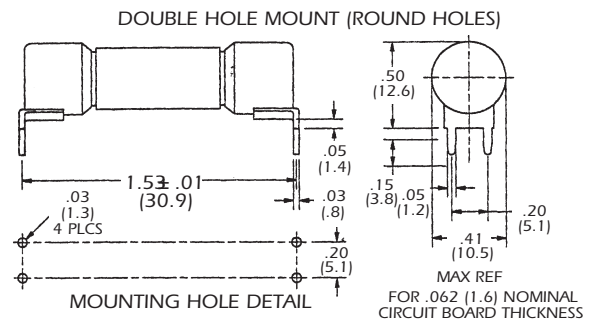
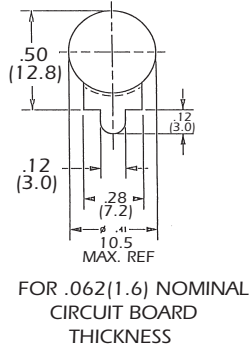
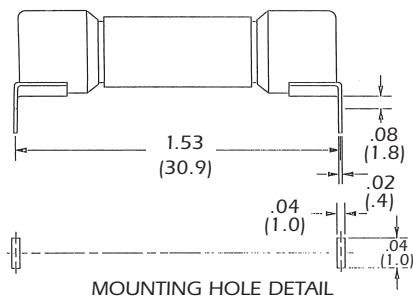
VSP (5-20)-2,R,H,S



VSP (30-100)-2



PC BOARD MOUNTING



Multi-meter Fuse



Voltage (V)	Rating (A)	Size	Cat.Number	Ref.Number	Weight (g)	Pack
1000	0.44	10x35	FSM44/100	W232480J	10	10
1000	11	10x38	FSM11	X232481J	10	10
1000	15	10x38	FSM15	Y232482J	10	10

US10 Fuse holder for VSP 5-2 to 20-2 & FSM

MODULOSTAR® Fuse holders



Nb of pole	Cat Number w/o indicator	Ref.Number w/o indicator	Cat Number with indicator	Ref.Number with indicator	Nb of Mod. 17.5 mm	Pck.
N	US10N	H305056K			1	12
1	US101	B305050K	US101I	J305057K	1	12
1+N	US101N	C305051F	US101NI	K305058F	2	6
2	US102	D305052F	US102I	L305059F	2	6
3	US103	E305053D	US103I	M305060D	3	4
3+N	US103N	F305054C	US103NI	N305061C	4	3
4	US104	G305055C	US104I	P305062C	4	3

Approvals

- UL Recognize for 1000Vdc

Other Products

- **Surge Trap DIN rail TVSS** **148**
- **Drive Protection Module** **149**



Surge Trap DIN rail TVSS



Voltage Configuration	Wires	Protection Modes	Catalog Number
120V Single Phase	2 Wire +Grnd	L-N / L-G Only	ST1201PG (M)
230V Single Phase	2 Wire +Grnd	L-N / L-G Only	ST2301PG (M)
277V Single Phase	2 Wire +Grnd	L-N / L-G Only	ST2771PG (M)
120/208V Split Phase	3 Wire +Grnd	L-L/L-N/L-G	ST208SPG (M)
120/240V Split Phase	3 Wire +Grnd	L-L/L-N/L-G	ST240SPG (M)
240/480V Split Phase	3 Wire +Grnd	L-L/L-N/L-G	ST480SPG (M)
120/208V 3-ph Wye	4 Wire +Grnd	L/L-N/L-G/N-G	ST2083PY (M)
120/208V 3-ph Wye	4 Wire +Grnd	L-L/L-N/L-G	ST2083PYG (M)
277/480V 3-ph Wye	4 Wire +Grnd	L/L-N/L-G/N-G	ST4803PY (M)
277/480V 3-ph Wye	4 Wire +Grnd	L-L/L-N/L-G	ST4803PYG (M)
347/600V 3-ph Wye	4 Wire +Grnd	L/L-N/L-G/N-G	ST6003PY (M)
347/600V 3-ph Wye	4 Wire +Grnd	L-L/L-N/L-G	ST6003PYG (M)
240V 3-ph Delta	3 Wire +Grnd	L-L Only	ST2403PD (M)
240V 3-ph Delta	3 Wire +Grnd	L-L / L-G	ST2403PDG (M)
480V 3-ph Delta	3 Wire +Grnd	L-L Only	ST4803PD (M)
480V 3-ph Delta	3 Wire +Grnd	L-L / L-G	ST4803PDG (M)

Ratings

- MCOV 150 to 550
- 50kA 8/20us Capacity per mode

Applications

- Transient Voltage Surge Suppressors
- AC/DC Distribution
- High Voltage Power Supplies

- Telecom
- Motor Control Systems
- PLC Applications
- Power Transfer Equipment

Approvals

- UL 1449 Second Edition Component Recognition

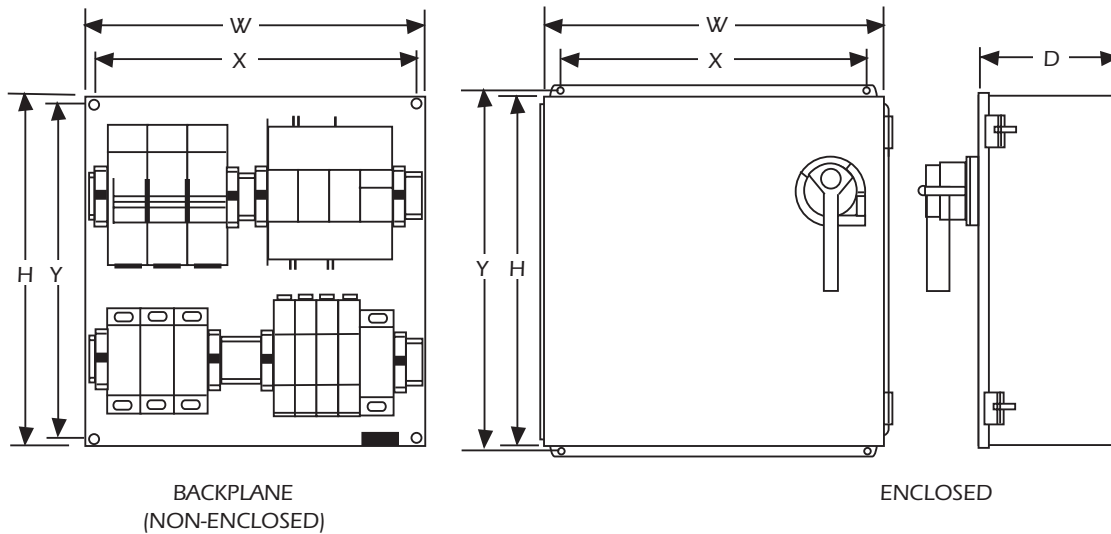
DPM (Drive Protection Module)



Voltage Rating	Configuration	Wires	Catalog Number	Ref Number	Pack
ENCLOSED DPM					
120	Single Phase	2 Wire + Grnd	DPM3J120P112		
208	3ph-Wye	4 Wire + Grnd	DPM3J208Y112		
240	3ph - Delta	3 Wire + Grnd	DPM3J240D112		
480	3ph-Wye	4 Wire + Grnd	DPM3J480Y112		
480	3ph - Delta	3 Wire + Grnd	DPM3J480D112		
208	3ph-Wye	4 Wire + Grnd	DPM6J208Y112		
240	3ph - Delta	3 Wire + Grnd	DPM6J240D112		
480	3ph-Wye	4 Wire + Grnd	DPM6J480Y112		
480	3ph - Delta	3 Wire + Grnd	DPM6J480D112		
120	Single Phase	2 Wire + Grnd	DPM3J120P4X(SS/NM)		
208	3ph-Wye	4 Wire + Grnd	DPM3J208Y4X(SS/NM)		
480	3ph-Wye	4 Wire + Grnd	DPM3J480Y4X(SS/NM)		
208	3ph-Wye	4 Wire + Grnd	DPM6J208Y4X(SS/NM)		
480	3ph-Wye	4 Wire + Grnd	DPM6J480Y4X(SS/NM)		
BACKPLANE ONLY					
120	Single Phase	2 Wire + Grnd	DPM3J120P		
208	3ph-Wye	4 Wire + Grnd	DPM3J208Y		
240	3ph - Delta	3 Wire + Grnd	DPM3J240D		
480	3ph-Wye	4 Wire + Grnd	DPM3J480Y		
480	3ph - Delta	3 Wire + Grnd	DPM3J480D		
208	3ph-Wye	4 Wire + Grnd	DPM6J208Y		
240	3ph - Delta	3 Wire + Grnd	DPM6J240D		
480	3ph-Wye	4 Wire + Grnd	DPM6J480Y		
480	3ph - Delta	3 Wire + Grnd	DPM6J480D		



Other Products



Ampere Rating	Enclosure Type	H		W		D		Y		X		Weight	
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	Lb.	kg
30A	None (Backplane)	12.75	324	10.88	276	3.26	83	12.25	311	10.38	264	8	3.4
30 A	NEMA 1, 12,	14.00	356	12.00	305	6.18	157	14.75	375	10.00	254	24	10.9
30 A	NEMA 4X Stainless Steel	14.00	356	12.00	305	6.17	157	14.75	375	10.00	254	23	10.3
30 A	NEMA 4X Non-Metallic	15.32	389	13.30	338	6.70	170	14.75	375	10.00	254	16	7.3
60 A	None (Backplane)	14.75	375	12.88	327	5.71	145	14.25	362	12.38	314	9	3.9
60 A	NEMA 1, 12	16.00	406	14.00	356	8.18	208	16.75	425	12.00	305	33	14.8
60 A	NEMA 4X Stainless Steel	16.00	406	12.00	305	9.35	237	17.24	438	9.50	241	34	15.3
60 A	NEMA 4X Non-Metallic	17.31	440	15.30	389	8.19	208	16.75	425	12.00	305	18	8.2

Other solutions

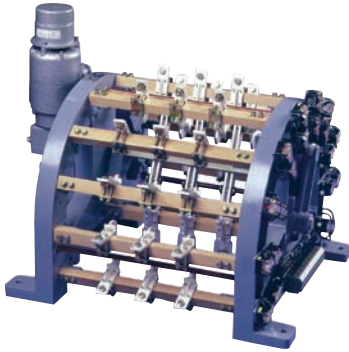
- **Power Interconnection** 151 - 156
- **Thermal Management** 157 - 160
- **Traction products** 161 - 163



High power switches application

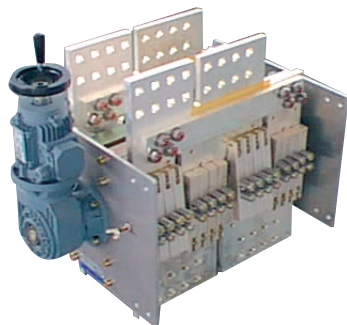
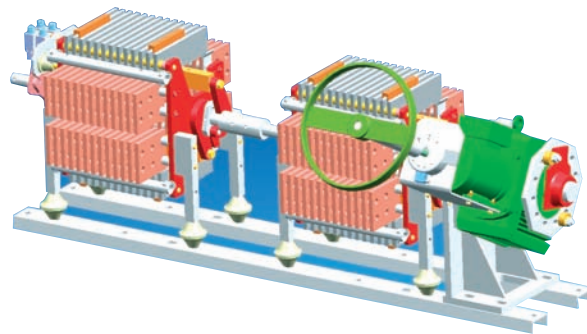
When industry-leading companies worldwide have a special challenge, they call Ferraz Shawmut.

Why? Because we've pioneered more technological advances in high-power switches than all of our competitors combined with three Ferraz Shawmut brands: Fouilleret, Berg, Soulé



DC and AC switch designs to handle high current/low voltage and high voltage/low current applications, include

- Rectifier output disconnect switches.
 - Change-over disconnect switches.
 - Change-over grounding disconnect switches.
 - Polarity-reversing disconnect switches.
 - Distribution panel disconnect switches.
 - Low-voltage disconnect switches.
 - Medium-voltage disconnect switches.
 - Grounding switches.
 - Mobile and stationary shorting switches.
- A deformable disconnect switch that can move on three axes to allow for bus bar expansion, eliminating the need for expensive flexible connections.
 - A proven air-cooled switch for aluminium smelting - the first of its kind.
 - The first input loadbreak disconnect switch for "choppers" - DC-to-DC converters used in chlor-alkali applications.
 - The first loadbreak switch and rotating current transfer unit for copper foil process.
 - The first dual-shell switching system for DC arc furnaces.



- Pure silver-to-silver contacts for the best connection.
- A visible disconnect that eliminates guesswork and increases safety.
- Self-cleaning contacts for minimal maintenance.
- Aluminium or copper, bolted or welded connection.
- Various methods of operation - manual, electric or pneumatic.
- Mechanical or electrical open-switch locks.
- Multiple contacts, with spring-loaded arc-quenching chambers independent from the main contacts on load break switches.
- Outdoor enclosures resistant to corrosive environments

Branded Solutions

Electrical Contactors

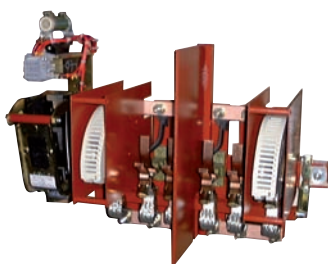
Thanks to the improvements brought by Lenoir Elec R&D, the magnetic blow out contactors assembled on insulating bars reaches extremely high technical features. Those contactors have many qualities: high electrical and mechanical endurance, perfect reliability under intensive duties, under selfic breaks in AC and DC and under heavy powers, flexibility in design and in use, extended lifetime, high numbers of auxiliary contacts, ...

Such assets enable Lenoir Elec contactors to cover a wide range of requirements that block contactors or power electronics, by design, cannot meet.

Lenoir Elec contactors division designs and produces 'standard' modular AC and DC low voltage bar contactors ranging from 80 to 8370A suitable for the most varied applications, as well as current-triggered and voltagetriggered magnetic relays, and 'customised special' contactors like excitation contactors (also called field circuit breakers), bi-stable energy accumulation contactors and with high making currents, high speed opening contactors,



Assets



Human-sized, Lenoir Elec puts at your service its flexibility and high level of competence. Its highly skilled workers fully commit themselves in giving you for any of your projects a total satisfaction.

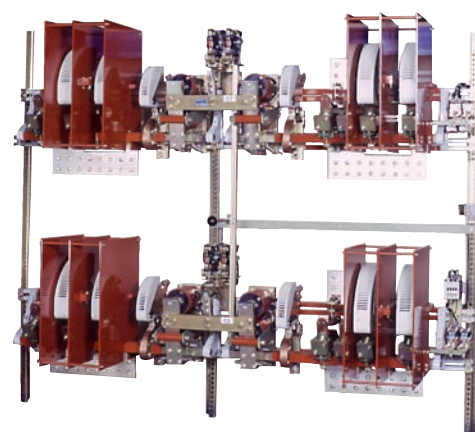
Lenoir Elec role doesn't stop at the commissioning of contactors. The company permanently holds a significant stock of spare parts that enables it to answer quickly to your after-sales requests.

Lenoir Elec also puts at your service, highly skilled and trained technicians capable to handle any servicing on site. Old equipment can also be refurbished in Lenoir Elec factory.

Modularity

Lenoir Elec bar contactors are exceptionally modular. All their constitutive parts are easily replaceable and offer thus many possibilities :

- Assembly of main poles in variable number, with similar or different ratings, with different current nature, of closing or of opening type, with or without mechanical overlapping, with or without magnetic blowout.
- Assembly of auxiliary contacts in significant quantity, instant normally open or normally closed, with or without overlapping, with blowout (for DC selfic control circuits) or without blowout, delayed on opening or on closing of contactor.
- Assembly of a mechanical latching with single or double electrical release with or without tripping coil(s) auto-protective system.
- Possible mechanical interlock with one or several contactors of the same calibre or of different calibre, in vertical position or back-to-backs.
- Possible adaptation of the centre-to-centre distance to the assembly conditions.
- Possible lock condemnation of the contactor in the open position (Ronis type, Profalux,



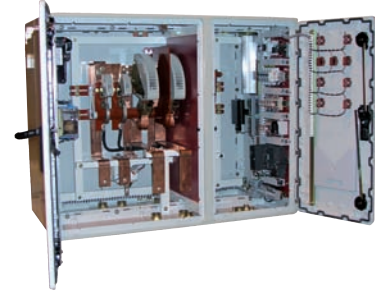
Customisation

From study to design, drafting of drawings and specifications, to assembly in cubicle, installation and commissioning, Lenoir Elec teams of specialists are present at each step to bring a customised solution for each of your projects. By an attentive listening of your needs, Lenoir Elec implements a solution always perfectly suited to your project.

Automation

Lenoir Elec Automation department plays a part in the most varied sectors of activities. Specialised in the study, design and achievement of automation systems and industrial processes, it proposes a wide range of services that complement Lenoir Elec contactor activity to propose global and innovative solutions to its customers :

- Development of prototypes or new products based on PLCs or micro controllers
- Design of digital and analogical electronic systems
- Automation of existing installations
- Industrial vision
- Technical advise and assistance
- Maintenance and repair of varied systems
- Distribution of Automation components Omron and Toshiba



Lenoir Elec Automation department has privileged relations with several universities or reputed engineering schools for the research and development of common projects. Such collaboration enables the Automation department to always be in the vanguard of technology.

Insulators

Wiser for its numerous years of experience in manufacturing and machining of thermal and electrical insulators, the Insulators division of Lenoir Elec brings you the most performing solution to each of your projects.

At the leading edge of progress and innovation, the Insulators division is amongst the first to have developed a substitute to cement-asbestos in the electro-technical field. After several years of research, a new asbestosfree material is patented: Colomix 71.

Thus, Lenoir Elec is at the origin of the development of a 'graphite' composite material used in the glass industry. This product holds a very small friction factor not to scratch the glass and stands the thermal and mechanical constraints specific to this sector.

Such revolutionary insulator is perfectly suited to many applications, notably to the replacement of blow out cages equipping the old generation contactors from us or from others, even improving their technical features.

In order to bring you the most suited solution, the Insulators division has ambitious means:

- highly skilled staff
- an ultra-modern R&D centre
- High-tech production means (machining centre, NC equipment, CAD/CAM,...)
- A metrology unit
- Compliance with ISO 9001

Lenoir Elec Insulators division is working for various fields of activity where its innovative solutions are highly appreciated: petrochemicals, glass, foundries, traction, cryogenics, electrotechnics.

Engineering

Modular, Lenoir Elec solutions offer wide possibilities and can adapt to your specific needs and the most diverse technical constraints. Contactors and cubicles are most of the times designed and made to order, from a specification issued by your technical services or by Lenoir Elec engineers. The experience and know-how in terms of engineering enables to propose reliable innovative and customised solutions adapted to your applications combining the expertise of its three divisions.

Chemical, metal process

A range of switches, from transformer to cell

High-power chemical processes, like electroplating and the electrolysis of chlorine, fluorine and magnesium, require disconnect switches that can handle 300 kA plus.

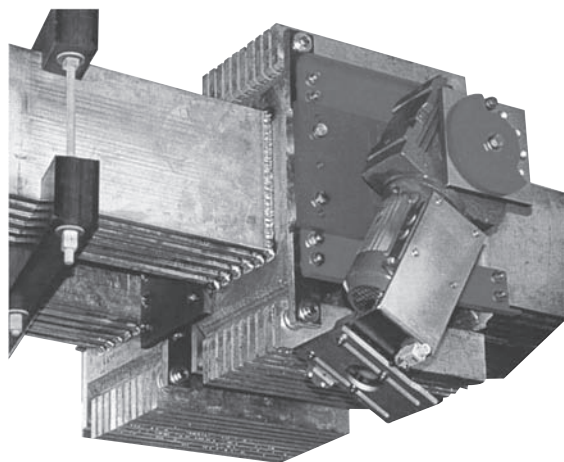
Ferraz Shawmut offers these as well as a range of other types of switches, to cover the entire line from transformer to cell. In fact, we were the first to create multiple products for specific applications.

Switches are available for flexible or fixed connections - copper or aluminium, bolted or welded.

They include:

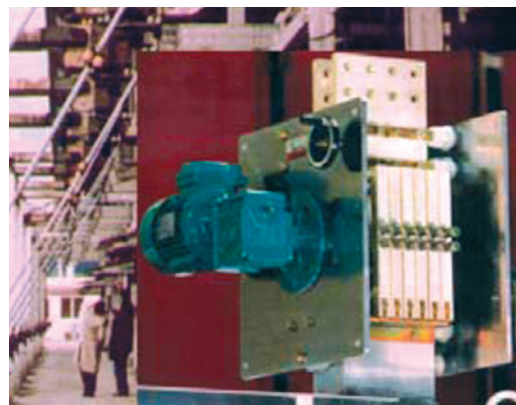
- Medium-voltage transformer disconnect switches.
- Rectifier output disconnect switches.
- Mobile and stationary shorting switches.
- Polarity-reversing disconnect switches for electroplating.

Very High Power Disconnectors
PBD (Plain Bars Disconnectors) Type
2000 V DC - 20 kA to 160 kA
Single pole / Double pole / Change-over
Aluminum Terminals

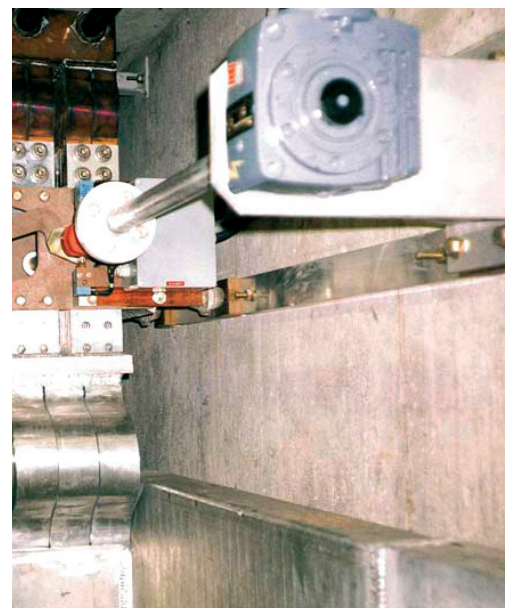


Few applications are as extreme as metals processing. Whether it involves arc furnaces or induction ovens that reach over 300 kA, rolling mills or the electrically charged drums used to create foils, metals processing poses formidable challenges to circuit protection.

High-Current Disconnectors
NORD Type
1500 V DC - 14 kA to 140 kA
Single pole / Double pole / Change-over
Aluminum or Copper Terminals



High-Current Disconnectors
MBD (Multi-Blade Disconnectors) Type
2000 V DC - 5kA to 60 kA
Single pole / Double pole / Change-over
Aluminum or Copper Terminals



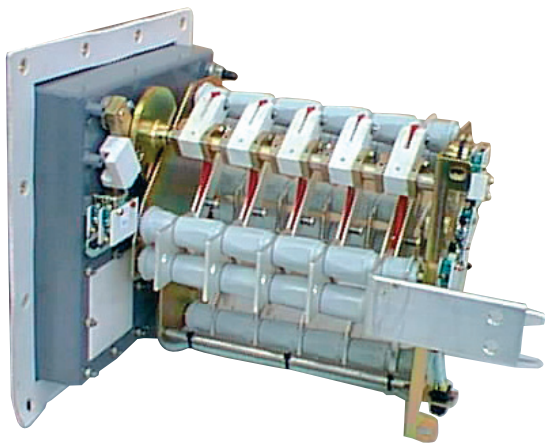
Electrical traction application

If you've traveled by train anywhere in the world, chances are Ferraz Shawmut's high-power switches were part of trip.

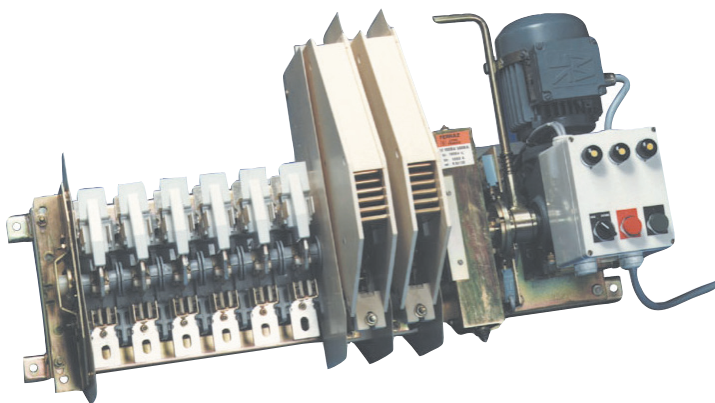
Built to take the vibration and constant punishment of traction applications, our AC and DC switches are found everywhere - from light rail and subway trains to locomotives, from substations and rolling stock to third rails.

Customers rely on us for:

Change-over disconnectors on board
FA Type

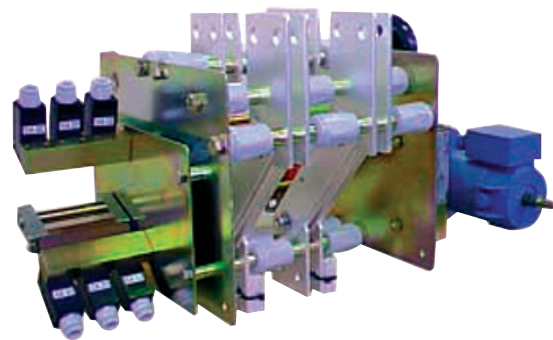


The switches can be operated manually, or they can be motorized and operated locally or remotely, increasing safety and reliability. Another safety feature is a built-in interlock that ensures the position of the switch.



High Current Disconnectors
Change-over disconnectors
FA Type

3000 V ~ / = 500-8000 A 0-175 HZ



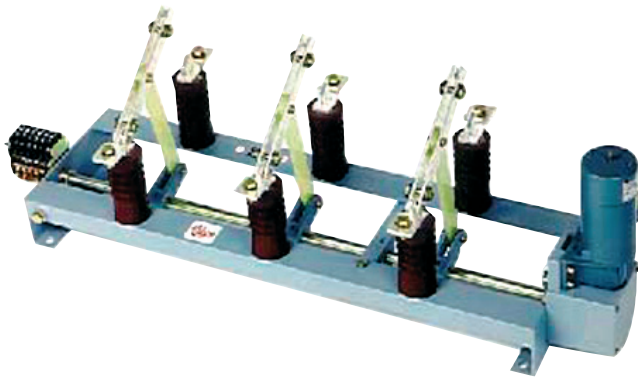
- Substation switches:
 - DC change-over switches.
 - DC grounding switches.
 - AC medium-voltage disconnect switches.
- Rolling stock switches:
 - AC and DC disconnect switches.
 - AC and DC change-over switches with several poles and several positions, to handle main, shop, auxiliary and other sources of power.
- Track and main yard switches:
 - Catenary and third-rail switches.
 - Loadbreak disconnect switches to sectionalize track.

DC Loadbreak Switches
IF Type
1000 V DC - 800 to 6300 A

Medium voltage

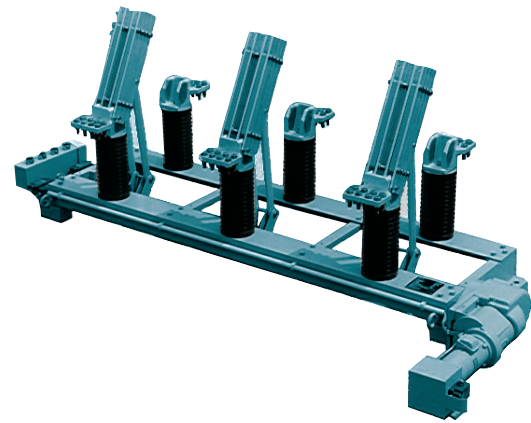
So whether your needs are simple or complex, you can rely on Ferraz Shawmut to deliver the best solution. To learn more, call us. We'll show you all the ways we're your circuit protection resource.

HAS Type
12 kV, 24 kV, 36 kV
400 A to 1 000 A - up to 175 Hz
Number of poles : 1, 2, 3, ...



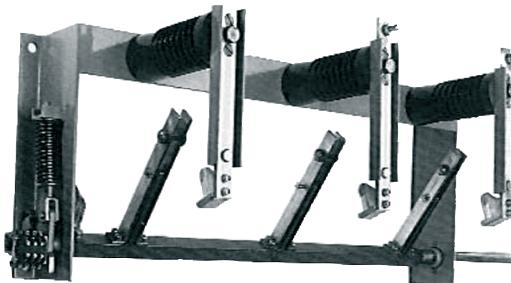
- Distribution panel disconnect switches.
- Low-voltage disconnect switches.
- Medium-voltage disconnect switches.
- Grounding switches.
- Mobile and stationary shorting switches.

HAS Type
1.6 kA to 6.3 kA - up to 175 Hz
Number of poles: 1, 2, 3, ...

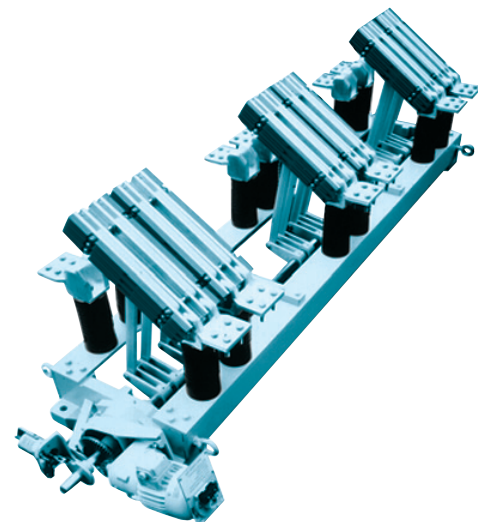


Equally important, we possess the ability to listen. An ability that enables us to truly understand your operation and your needs, so we can create a high-power switch solution that's both effective and cost-effective.

HAS Type
12 kV, 24 kV, 36 kV
400 A to 1 000 A - up to 175 Hz
Number of poles : 1, 2, 3, ...

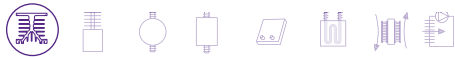


HAS Type
1.6 kA to 6.3 kA - up to 175 Hz
Number of poles: 1, 2, 3, ...



- Large isolation air and creepage path
- Self-cleaning blade contacts
- True opening and visible break
- Rugged anti-torsion construction
- Large customisation with :
 - Manual, motor, pneumatic drives
 - Auxiliary switches, solenoid interlocks
- According to IEC 62 271
- Dimensions Adaptable

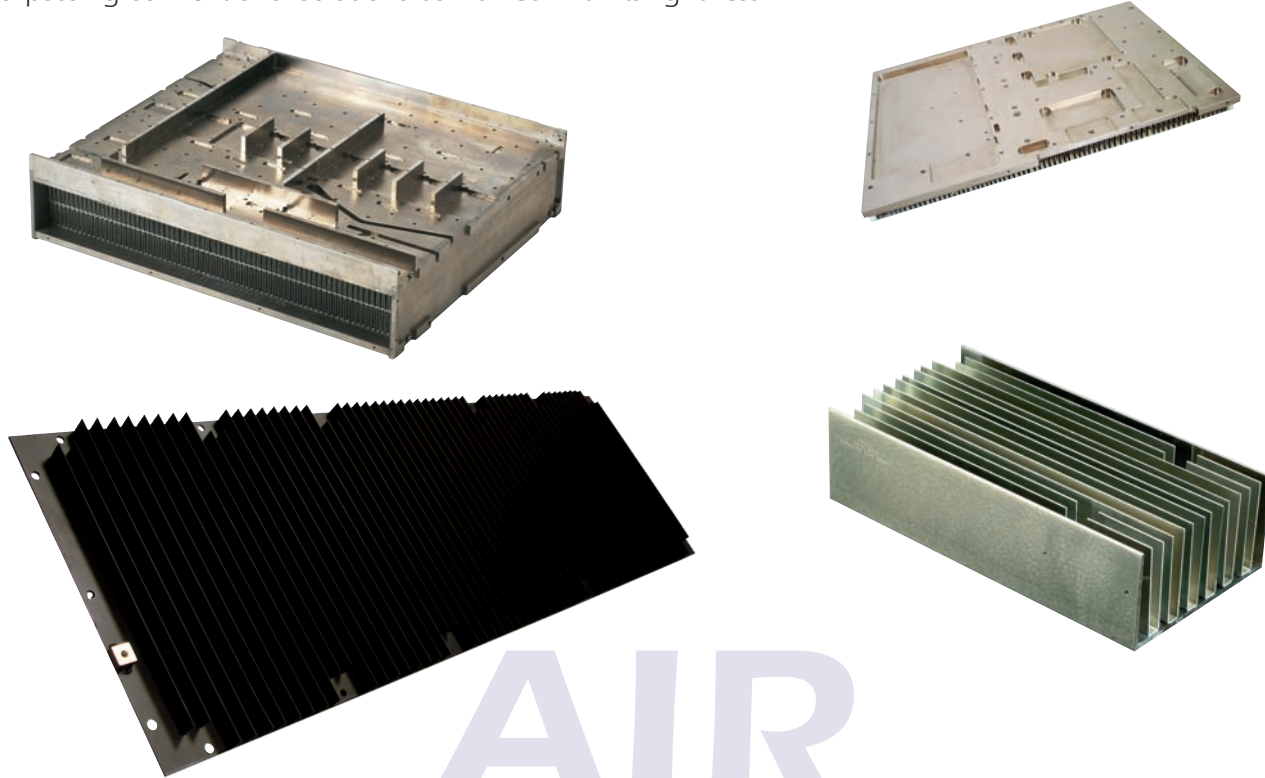
AIR-COOLED HEAT SINKS



Radiacal® Corrugated: soldered fin

Technology

- Straight or corrugated fins soldered or bonded onto a base plate.
- Surpassing conventional solutions combined with its lightness.

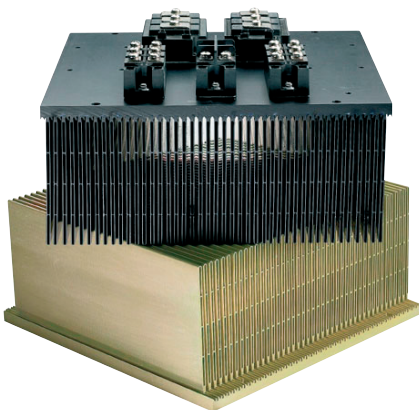


AIR

Applications

High power electronics in the aeronautics, telecommunications and traction fields.

Radiacal® FABFIN®: Swaged fin



Ferraz-Shawmut is the European distributor of Fabfin® range (R-theta).
For further information, please request the specific datasheet: "FABFIN® High Performance Air-Cooled Heat Sinks".

DIPHASIC-COOLED HEAT SINKS

The Thermal Management
Transcal®



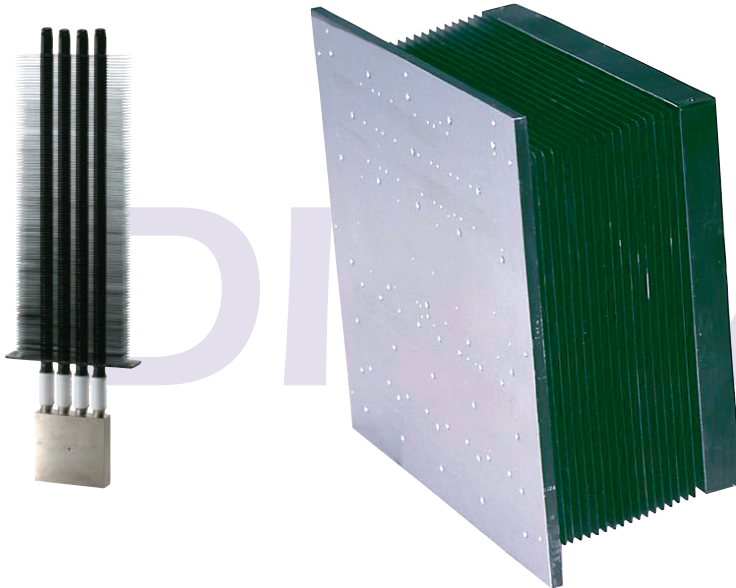
Heat pipe heat sinks

Advantages

- High thermal performance.
- Homogeneity of temperature under components.
- Instantaneous cooling action.
- Limiting temperature peaks.
- Dielectric insulation possible.
- Starting temperature -40°C .
- Easy maintenance.

Applications

- More than 20 years of experience in traction, industrial and military applications.
- For the cooling of press-pack or screwmounted modules.

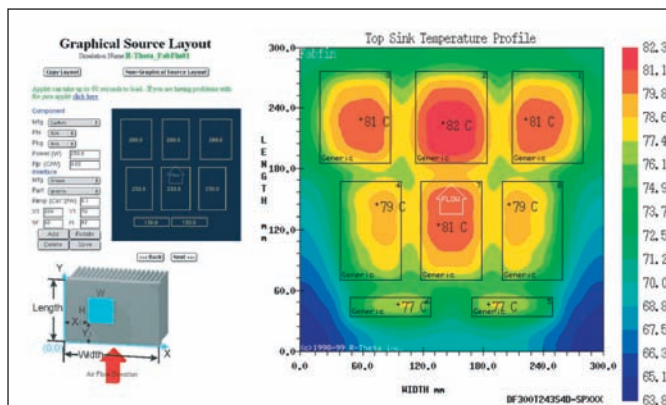


Air and Water simulation tools

Use the free on-line thermal simulation program on the website:

Easy to cool: www.fs-thermalmanagement.com

R-theta: www.r-theta.com



EASY-TO-COOL

Selecting the cooling system for dimensioning

<p>Modular: water cooling box</p> <p>Vacuum brazed aluminum or copper cold plate for power IGBT modules measuring 190x140 mm or 140x130 mm.</p> <p>Patented grid-type cooling circuit to guarantee exceptional thermal performance.</p> <p>Dimensioning template</p>	<p>Callistor series G and M: water cooling box</p> <p>Vacuum brazed aluminum or copper cold plate for clamped electronic components measuring 48 to 125 mm in diameter.</p> <p>Patented grid-type cooling circuit to guarantee exceptional thermal performance.</p> <p>Dimensioning template</p>
<p>Multical: water cold plate</p> <p>Vacuum brazed aluminum cold plate for all types of screw-mounted electronic components.</p> <p>A single cold plate can cool up to 12 screwed-on components on each surface.</p> <p>Machined groove or pin-type cooling circuit.</p> <p>Dimensioning template</p>	<p>Callistor series U: water cooling box</p> <p>Vacuum brazed aluminum cold plate for clamped electronic components measuring 48 to 125 mm in diameter.</p> <p>Machined spiral cooling circuit to guarantee absolutely uniform temperature under the component.</p> <p>Dimensioning template</p>

WATER-COOLED

Thermal Management
Moducal®



Screw-mounted component heat sinks

Technology

(patented)

Vacuum brazing of colaminated aluminium grids enclosed between two covers.

Single or double side cooling.



Advantages

- The optimized internal technology offers the highest thermal performance and a low pressure drop.
- The uniform flow distribution guarantees high reliability of your electronic device.

Thermal Management
Calistor®



Press-pack component heat sinks

Technology

(patented)

Vacuum brazing of colaminated aluminium grids enclosed between two covers.

The grids can be brazed on an aluminium profile.



Advantages

- Same as for the Moducal®.
- The profile is used for the hydraulic fittings, for a tab for electrical connection and as a mounting plate for other components.

Thermal Management
Calitube



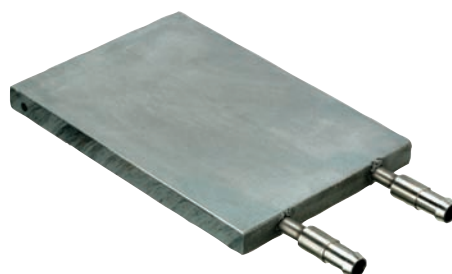
Stainless-steel cooling circuit heat sinks

Technology

Over-moulding an aluminium block around a stainless-steel tube.

The tube is bent into several turns under the components.

Soldered calitubes are also available.



Advantages

- Over-moulding ensures excellent contact between the two materials.
- Stainless-steel enables the use of all types of cooling fluid.
- Single or double side cooling.

HEAT SINKS

Thermal Management
Multical®



Customized plates

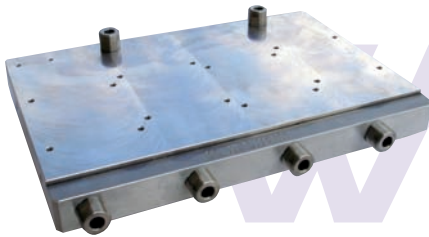
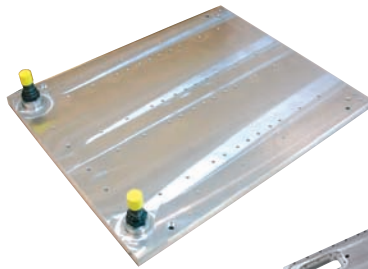
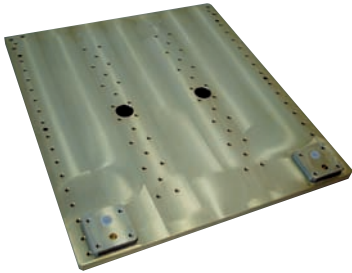
Technology

- Vacuum brazing of a cover on machine tooled cooling circuits.
- Different cooling circuit geometries available.
- Single or double side cooling.
- All dimensions available.



Advantages

- Design able to meet highest technical specification.
- Thermal homogeneity over the entire surface available.
- Hydraulic connectors customized to our customer's design.

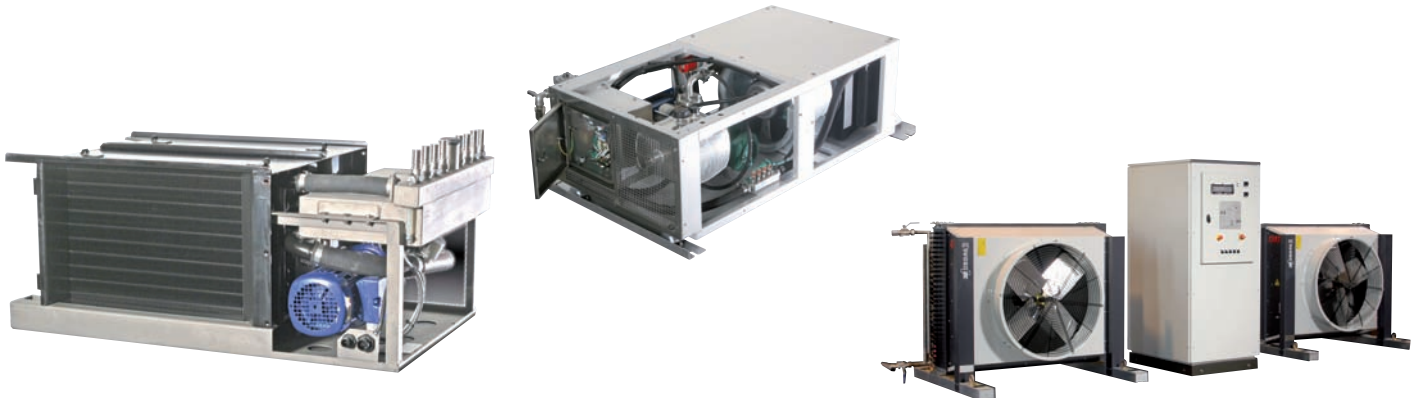


Thermal Management
Syscal®



Cooling unit groups

Expertise in dimensioning and manufacture of complete cooling loops.

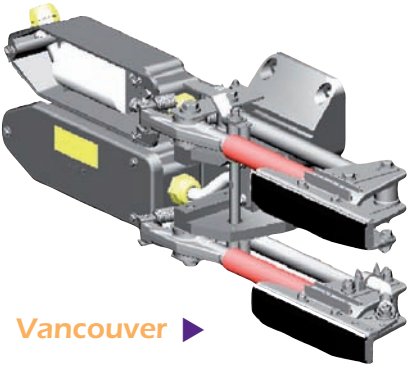
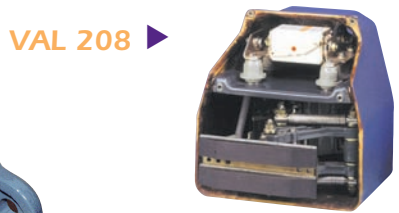
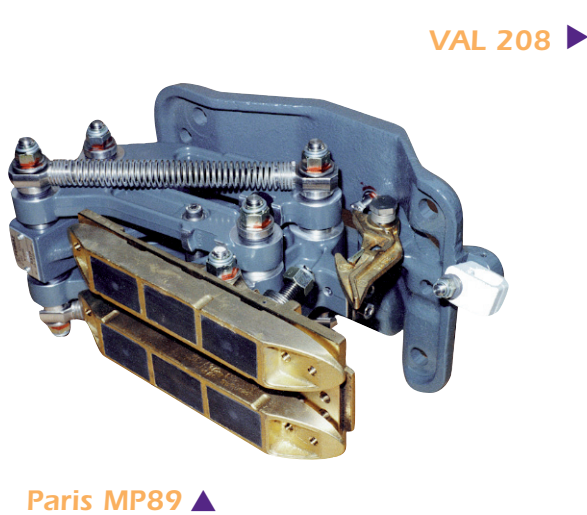


Thanks to our cooling expertise, engineering and integration knowledge, Ferraz Shawmut Thermal Management can offer global thermal systems for applications in traction and industry.

Current collector devices

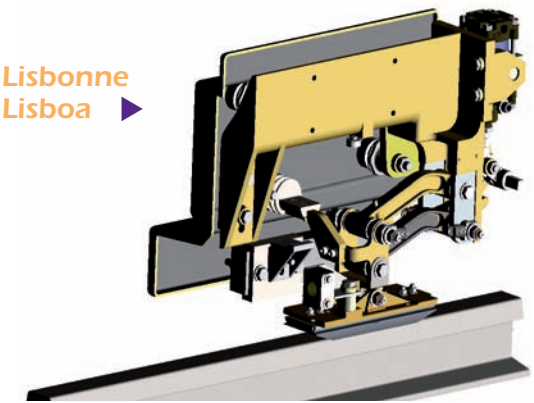
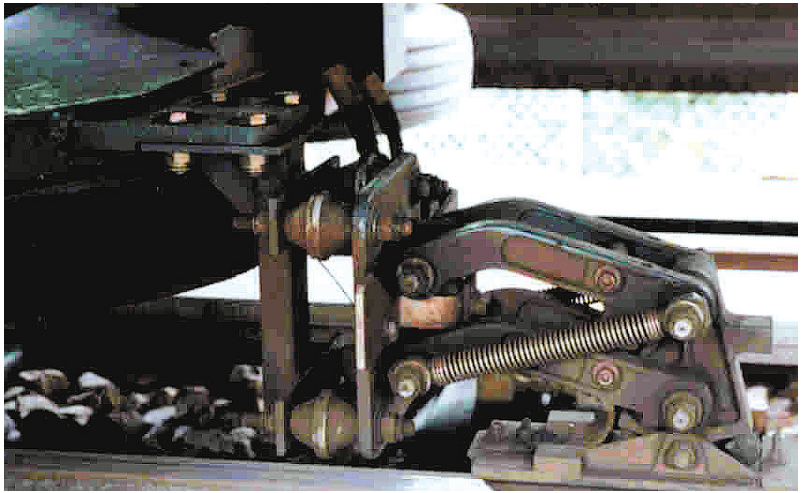
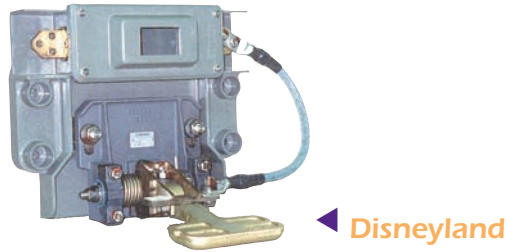
Lateral contact

Single or two-pole. The pressure system maintains contact horizontally in the rail's axis.



Top contact

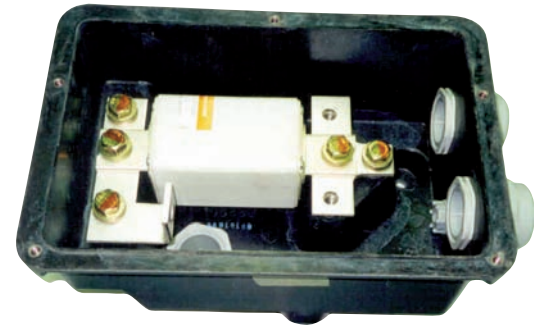
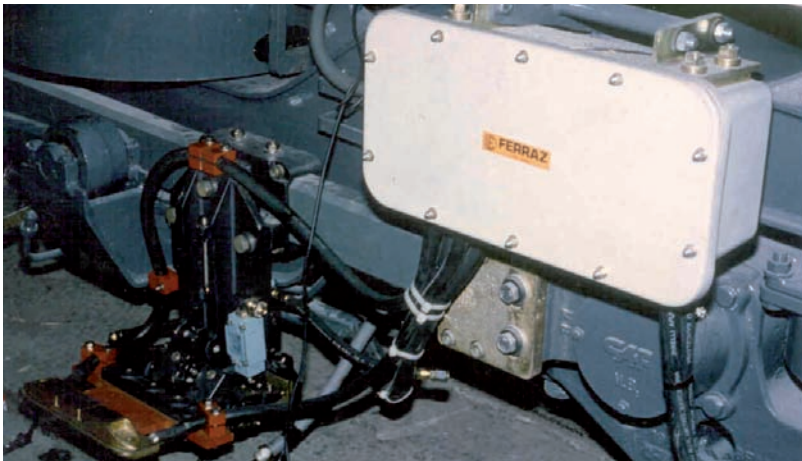
The collector is fastened on the vehicle off-center from the rail and a pressure system maintains contact vertically, from top to bottom. Manual or power retraction and locking.



Fuse-boxes

Bogie mounting

Insulating, self-extinguishing fuse-boxes withstanding shocks and vibrations in compliance with current standards. Approved by many manufacturers.



Paris - MP89 ▲

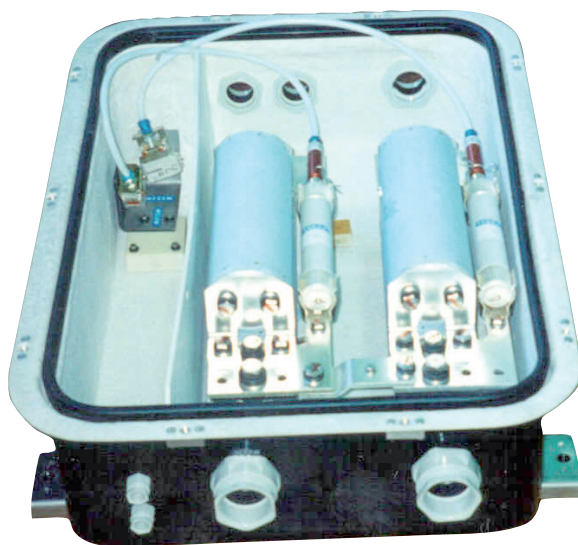
Singapore ▼



◀ Bruxelles



Top mounting

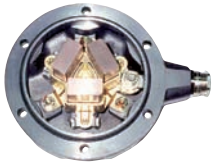


◀ Shanghai

Earth return current units

ERCUS, axial or radial, are installed on axles to provide an effective shunt around the bearings.

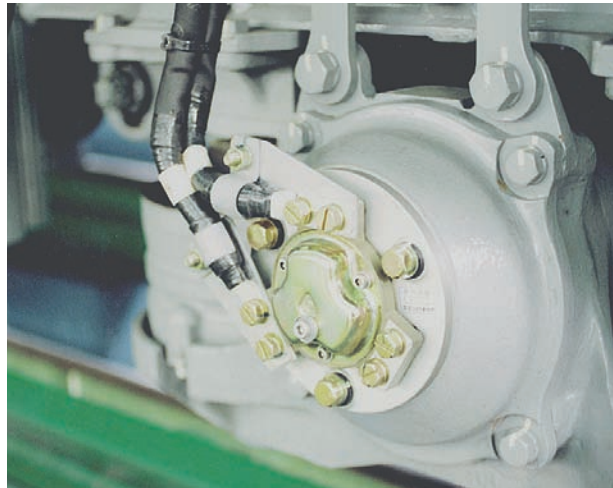
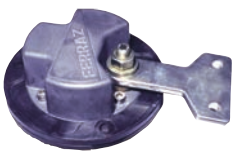
BR 185



**Standard
3 Brushes
20x40**



Compact type



**3 Brushes
20x40**



Toronto



TGV



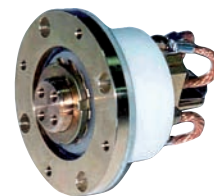
Juniper



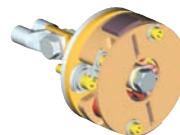
Citadis



Combino



Torino



On recent tramway rolling stock, the device is mounted insulated in the hub and returns the current to the rail via brushes in contact on a track. A watertight ball bearing is built into the unit to ensure rotation of the whole with the disc.

