


## Lighting Contactors

- Bulletin 100L Lighting Contactors ..... **Page 6-3**
- Bulletin 500LC AC Mechanically Held Lighting Contactors..... **Page 6-6**
- Bulletin 500LG AC Electrically Held Lighting Contactors..... **Page 6-11**
- Bulletin 500L Top Wiring Contactors For Non-Motor and Lighting Loads ..... **Page 6-17**
- Bulletin 500FL Feed-Through Wiring Contactors For Non-Motor and Lighting Loads ..... **Page 6-19**
- Bulletin 500LP Top Wiring Permanent Magnet Latching Contactors For Non-Motor and Lighting Loads..... **Page 6-20**

## Combination Lighting Contactors



- Bulletin 502L Combination Lighting Contactors ..... **Page 6-21**
- Bulletin 503L Combination Lighting Contactors ..... **Page 6-23**

Lighting Contactors

						
<b>Bulletin</b>	100L	500LC	500LG	500FL	500L	500LP
<b>Contactor Type</b>	IEC	NEMA	NEMA	NEMA	NEMA	NEMA
<b>Features</b>	<ul style="list-style-type: none"> <li>Multi-pole</li> <li>Electrically held</li> </ul>	<ul style="list-style-type: none"> <li>Multi-pole</li> <li>Mechanically held</li> </ul>	<ul style="list-style-type: none"> <li>Multi-pole</li> <li>Electrically or mechanically held</li> <li>RoHS Compliant</li> <li>IP1X/IP2X</li> </ul>	<ul style="list-style-type: none"> <li>Feed-through wiring</li> <li>Electrically held</li> </ul>	<ul style="list-style-type: none"> <li>Top wiring</li> <li>Electrically held</li> </ul>	<ul style="list-style-type: none"> <li>Top wiring</li> <li>Permanent magnetic latch</li> </ul>
<b>Continuous Ampere Rating [A]</b>	20	20 (Ballast, Tungsten) 30 (General)	30 (Ballast, General)	20...300	5...2250	15...300
<b>1<math>\phi</math>, 1 or 2 Power Poles</b>	20 A 277V Max 15 A 347V Max	347V Max. (Ballast) 250V Max. (Tungsten)	347V Max. (Ballast) 277V Max. (Tungsten)	600V Max.	600V Max.	600V Max.
<b>3<math>\phi</math>, 3 or 4 Power Poles</b>	20 A 480Y/277V Max 15 A 600Y/347V Max	600V Max. (Ballast) 250V Max. (Tungsten)	600V Max. (Ballast) 480V Max. (Tungsten)	600V Max.	600V Max.	600V Max.
<b>Enclosures (NEMA Type)</b>	IP42 (Type 1) IP66 (Type 3/4/12)	1, 3R, 4/4X, 12	Open, Type 1, 12	Open type	1, 3R/4/12, 4/4X, 7 & 9	1
<b>Standards</b>	<ul style="list-style-type: none"> <li>UL 508</li> <li>CSA C22.2, No. 14</li> </ul>	<ul style="list-style-type: none"> <li>UL 508</li> <li>CSA C22.2, No. 14</li> <li>Suited for UL 67 Listed Panelboards</li> </ul>	<ul style="list-style-type: none"> <li>UL 508</li> <li>CSA C22.2, No. 14</li> <li>CE Marked</li> <li>Suited for UL 67 listed panel boards</li> </ul>	<ul style="list-style-type: none"> <li>NEMA/EEMAC ICS2 (Industrial Controls and Systems)</li> <li>UL 508</li> <li>CSA C22.2, No. 14</li> <li>ABS 4/5.115</li> <li>USCG 46 CFR 111.70</li> <li>IEEE 45</li> </ul>	<ul style="list-style-type: none"> <li>NEMA/EEMAC ICS2 (Industrial Controls and Systems)</li> <li>UL 508</li> <li>CSA C22.2, No. 14</li> <li>ABS 4/5.115</li> <li>USCG 46 CFR 111.70</li> <li>IEEE 45</li> </ul>	<ul style="list-style-type: none"> <li>NEMA/EEMAC ICS2 (Industrial Controls and Systems)</li> <li>UL 508</li> <li>CSA C22.2, No. 14</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>cULus Listed (File No. E14843, Guide No. NRNT, NRNT7)</li> <li>CE Marked</li> </ul>	<ul style="list-style-type: none"> <li>UL Listed (File No. E14843, Guide No. NRNT)</li> <li>CSA Certified (File LR1234)</li> </ul>	<ul style="list-style-type: none"> <li>cULus Listed (File No. E14843, Guide No. NRNT, NRNT7)</li> <li>CE Marked</li> </ul>	<ul style="list-style-type: none"> <li>UL Listed (File No. E14843; Guide No. NRNT File No. E10314)</li> <li>CSA Certified (LR1234)</li> <li>CE Marked (Per EN 60947-4-1)</li> <li>American Bureau of Shipping (ABS)</li> </ul>	<ul style="list-style-type: none"> <li>UL Listed (File No. E14843; Guide No. NRNT File No. E91593, Guide No. WTEV)</li> <li>CSA Certified (LR1234)</li> <li>CE Marked (Per EN 60947-4-1)</li> <li>American Bureau of Shipping (ABS)</li> </ul>	<ul style="list-style-type: none"> <li>UL Listed (File No. E14843; Guide No. NRNT)</li> <li>CSA Certified (LR1234)</li> <li>American Bureau of Shipping (ABS)</li> </ul>
<b>Product Selection</b>	Page 6-3	Page 6-6	Page 6-11	Page 6-19	Page 6-17	Page 6-20

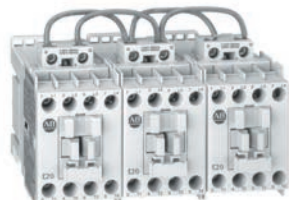
6

Combination Lighting Contactors

		
<b>Bulletin</b>	502L	503L
<b>Contactor Type</b>	NEMA	NEMA
<b>Features</b>	Combination lighting contactor	Combination lighting contactor
<b>Disconnecting Means</b>	Disconnect switch	Thermal magnetic circuit breaker
<b>Continuous Ampere Rating [A]</b>	15...300	15...300
<b>Enclosures (NEMA Type)</b>	1, 3R/4/12, 4/4X	1, 3R/4/12, 4/4X
<b>Standards</b>	<ul style="list-style-type: none"> <li>UL 508</li> <li>CSA C22.2, No. 14</li> </ul>	<ul style="list-style-type: none"> <li>UL 508</li> <li>CSA C22.2, No. 14</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>cULus Listed</li> </ul>	<ul style="list-style-type: none"> <li>cULus Listed</li> </ul>
<b>Product Selection</b>	Page 6-21	Page 6-23

# IEC AC Electrically Held Lighting Contactors

Product Overview/Product Selection



## Bulletin 100L Electrically Held Lighting Contactors

- Electrically held
- 20 A rating
- 4-, 8-, and 12-pole configurations
- Open or enclosed
- CSA Certified, cULus Listed

Bulletin 100L lighting contactors have been designed to control a variety of lighting loads. The product offering includes 4-, 8-, and 12-pole contactors with or without enclosures. The Bulletin 100L line of lighting contactors has been designed with a 20 A rating for all popular lighting loads and other non-motor applications including tungsten filament lighting loads, electric discharge (fluorescent) loads, electric furnaces, and electric water heaters. In addition these contactors have been designed to meet the requirements of both CSA and UL.

Your order must include: cat. no. of the contactor specified with coil voltage code and, if required, cat. no. of any accessories

## Table of Contents

Product Selection..... this page  
 Specifications..... this page  
 Wiring Diagram..... this page  
 Approximate Dimensions..... 6-5

## Standards Compliance

CSA C22.2, No. 14  
 UL 508  
 Meets the material restrictions for European Directive 2002/95/IEC-EU-RoHS

## Certifications

CE Marked  
 cULus Listed (File No. E14843; Guide NRNT, NRNT7)

## Product Selection

Enclosure Type Rating	No. of Poles*	Cat. No.
Open	4	<b>100L-C20NØ4</b>
	8	<b>100L-C20NØ8</b>
	12	<b>100L-C20NØ12</b>
IP42 (Type 1) (with lift-off cover)	4	<b>100L-C20AØ4</b>
	8	<b>100L-C20AØ8</b>
	12	<b>100L-C20AØ12</b>
IP66 (Type 3/4/12) (with hinged cover)	4	<b>100L-C20FØ4</b>
	8	<b>100L-C20FØ8</b>
	12	<b>100L-C20FØ12</b>

\* These contactors do not include an auxiliary hold-in contact. If a hold-in contact is required it can be ordered by adding a suffix **-90** to the cat. no. Example: **Cat. No. 100L-C20NJ4-90**.

## ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. To complete the cat. no., select a coil voltage code from the chart below and insert into the cat. no. Example: **Cat. No. 100L-C20NØ4** becomes **Cat. No. 100L-C20NJ4**. For other voltages, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

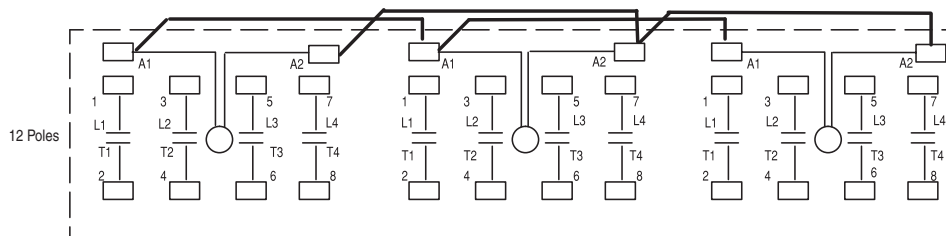
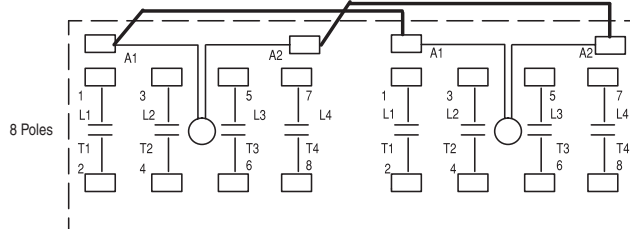
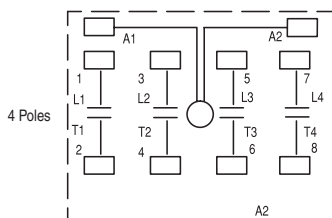
[V]	24	48	110	120	208	220	240	277	347	380... 400	415	440	480	500	600
AC, 50Hz	K	Y	D	P	—	A	T	—	—	N	G	B	—	M	—
AC, 60Hz	J	X	—	D	H	L	A	T	I	—	—	N	B	—	C

## Specifications Ratings

Type of Load	Max. Current [A]	Max. AC Volts, Poles to Load*	
		1 for 1Ø	3 for 3Ø
Tungsten	20	277	480Y/277V
	15	347	600Y/347V
Ballast	20	277	480Y/277V
	15	347	600Y/347V
General Use Resistance Heating	30	600	600

\* 20 A, 250V DC max. with 3 poles in series.

## Wiring Diagrams



# IEC AC Electrically Held Lighting Contactors

## Modifications

### Full Voltage Non-Reversing Starters and Lighting Contactors (Bulletins 100L)

Listed on this and the following pages are factory-installed modifications and special features which are available for the low voltage (600V maximum) starters listed in this catalog. To order, add a dash followed by the suffix number listed in these tables to the end of the product Cat. No. and add the price addition to the base price. Example: **Cat. No. 100L-C09ADA1E-1**

Description of Modification	Suffix Code	Enclosure Design	C09	C12	C16	100L-C20	C23	C30	C37	C43	C60	C72	C85
START-STOP Push Button	1	Plastic Lift-off	A	A	A	NA	A	NA	NA	NA	NA	NA	NA
		Metal Lift-off	A	A	A	NA	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	NA	A	A	A	A	A	A	A
ON-OFF Push Button	1E	Plastic Lift-off	A	A	A	NA	A	NA	NA	NA	NA	NA	NA
		Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
HAND-OFF-AUTO Selector Switch	3	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
OFF-ON Selector Switch	3E	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
Red Pilot Light*	4R	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
Red LED Pilot Light (120V)	4R1	Plastic Lift-off	A	A	A	NA	A	NA	NA	NA	NA	NA	NA
Red LED Pilot Light (240V)	4R2	Plastic Lift-off	A	A	A	NA	A	NA	NA	NA	NA	NA	NA
Control Circuit Transformer 2 Primary and 1 Secondary Fuse Provided (Standard Capacity)	6P*	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
External Reset	7	Plastic Lift-off	A	A	A	NA	A	NA	NA	NA	NA	NA	NA
		Metal Lift-off	A	A	A	NA	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	NA	A	A	A	A	A	A	A
Control Circuit Fuse Block 2 Fuses Provided	22	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
Additional 1 N.O. – 1 N.C. (Side Mount) Auxiliary Contact on Contactor (100L only)	90	Metal Lift-off	NA	NA	NA	A	NA	NA	NA	NA	NA	NA	NA
		Metal Hinged	NA	NA	NA	A	NA	NA	NA	NA	NA	NA	NA
Additional 1 N.O. – 1 N.C. (Side Mount) Auxiliary Contact on Contactor	901	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A
Additional 1 N.O. – 1 N.C. (Front Mount) Auxiliary Contact on Contactor	901T	Metal Lift-off	A	A	A	A	A	A	A	A	A	A	A
		Metal Hinged	A	A	A	A	A	A	A	A	A	A	A

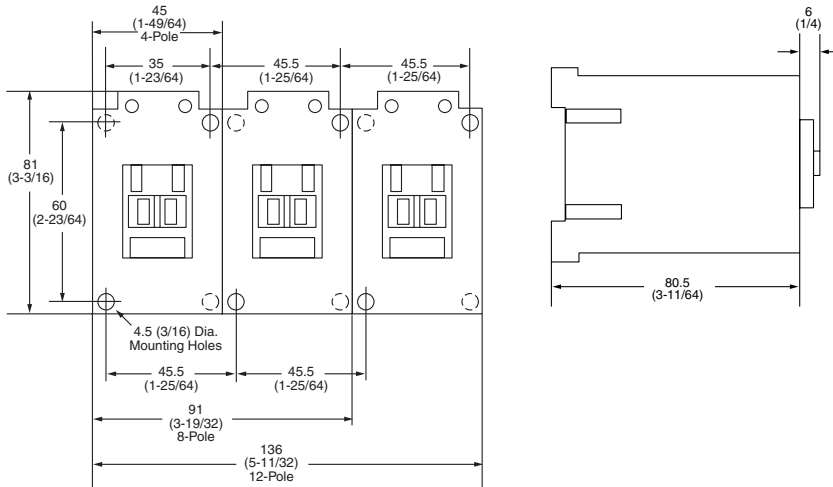


# IEC AC Electrically Held Lighting Contactors

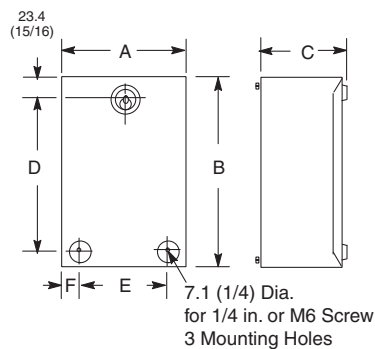
Approximate Dimensions

Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.

## Open Type



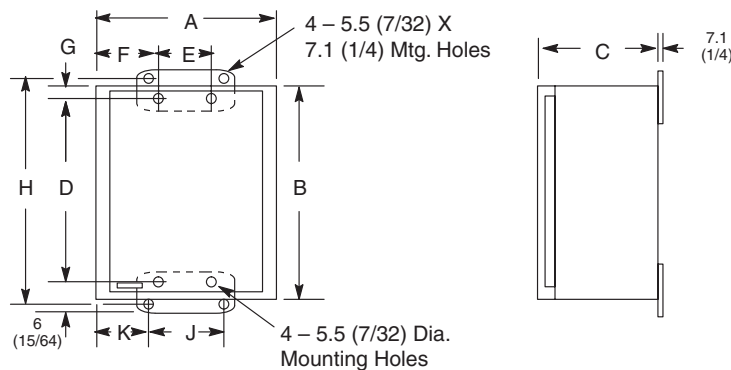
## IP42 (Type 1)



Cat. No.	A Wide	B High	C Deep	D	E	F
<b>100L-C20A@4</b>	140 (5-1/2)	220 (8-21/32)	152 (5-31/32)	175 (6-7/8)	95 (3-3/4)	22.5 (7/8)
<b>100L-C20A@8</b>	235 (9-1/4)	220 (8-21/32)	152 (5-31/32)	175 (6-7/8)	190 (7-1/2)	22.5 (7/8)
<b>100L-C20A@12</b>	270 (10-5/8)	290 (11-7/16)	152 (5-31/32)	245 (9-21/32)	225 (8-7/8)	22.5 (7/8)



## IP66 (Type 3/4/12)



Cat. No.	A Wide	B High	C Deep	D	E	F	G	H	J	K
<b>100L-C20F@4</b>	200 (7-7/8)	300 (11-13/16)	160 (6-5/16)	236 (9-9/32)	76 (3)	62 (2-7/8)	17.5 (11/16)	313 (12-5/16)	105 (4-1/8)	47.5 (1-7/8)
<b>100L-C20F@8</b>	250 (9-27/32)	250 (9-27/32)	160 (6-5/16)	186 (7-5/16)	76 (3)	87 (3-7/16)	17.5 (11/16)	263 (10-3/8)	105 (4-1/8)	72.5 (2-7/8)
<b>100L-C20F@12</b>	300 (11-13/16)	300 (11-13/16)	160 (6-5/16)	236 (9-9/32)	76 (3)	61 (2-13/32)	17.5 (11/16)	313 (12-5/16)	206 (8-1/8)	47 (1-27/32)

# AC Mechanically Held Lighting Contactors

## Product Overview/Product Selection



### Bulletin 500LC AC Mechanically Held Lighting Contactors

- Rated 20 A...600V AC (30 A general purpose)
- Fully rated for all types of lighting loads, including metal halide, mercury vapor, quartz halogen, tungsten, and fluorescent
- Interrupts 300% rated current at 0.4...0.5 power factor
- Patented single-solenoid, bi-directional operating mechanism
- Mechanically-held, electrically operated with contacts power-driven to open and closed positions
- May be applied to UL 67 Listed panelboards
- Multi-pole lighting contactor for branch circuits

The Allen-Bradley Bulletin 500LC lighting contactors are available up to 12 poles. The Bulletin 500LC line is of shallow construction to accommodate mounting in panelboards or separate mounting.

### Table of Contents

Product Selection ..... this page

Accessories — Field Installed ..... 6-7

Specifications..... 6-8

Approximate Dimensions..... 6-8

**Standards Compliance**

UL 508  
CSA C22.2, No. 14

**Certifications**

UL Listed (File No. E14843; Guide No. NRNT)  
CSA Certified (File No. LR1234)

### Product Selection

No. of Poles		Open-Type without Enclosure	Type 1 Surface Mount	Type 12 Surface Mount	Type 3R Surface Mount	Type 4/4X Stainless Steel Surface Mount
N.O.	N.C.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
2	2	500LC-220⊗	500LC-22A⊗	500LC-22F⊗	500LC-22N⊗	500LC-22C⊗
3	3	500LC-330⊗	500LC-33A⊗	500LC-33F⊗	500LC-33N⊗	500LC-33C⊗
4	4	500LC-440⊗	500LC-44A⊗	500LC-44F⊗	500LC-44N⊗	500LC-44C⊗
6	6	500LC-660⊗	500LC-66A⊗	500LC-66F⊗	500LC-66N⊗	500LC-66C⊗
2	0	500LC-200⊗	500LC-20A⊗	500LC-20F⊗	500LC-20N⊗	500LC-20C⊗
3	0	500LC-300⊗	500LC-30A⊗	500LC-30F⊗	500LC-30N⊗	500LC-30C⊗
4	0	500LC-400⊗	500LC-40A⊗	500LC-40F⊗	500LC-40N⊗	500LC-40C⊗
6	0	500LC-600⊗	500LC-60A⊗	500LC-60F⊗	500LC-60N⊗	500LC-60C⊗
8	0	500LC-800⊗	500LC-80A⊗	500LC-80F⊗	500LC-80N⊗	500LC-80C⊗
10	0	500LC-1000⊗	500LC-100A⊗	500LC-100F⊗	500LC-100N⊗	500LC-100C⊗
12	0	500LC-1200⊗	500LC-120A⊗	500LC-120F⊗	500LC-120N⊗	500LC-120C⊗

### Enclosed Panels

Description	NEMA Type	Cat. No.*
Mechanically-held, 2-wire control contactor, timing relay, 12 N.O. poles	1	500LC-120AA1-M2120-3E-4R-441
Mechanically-held, 2-wire control contactor, timing relay, 12 N.O. poles	12	500LC-120FA1-M2120-3E-4R-441
Mechanically-held, 2-wire control contactor, Pico GFX controller, 12 N.O. poles	1	500LC-120AA1-M2120-4R-436
Mechanically-held, 2-wire control contactor, Pico GFX controller, 12 N.O. poles	12	500LC-120FA1-M2120-4R-436














\* For enclosed control lighting panels not listed, please contact your local Rockwell Automation sales office or Allen-Bradley distributor.

### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no. Example: **Cat. No. 500LC-220⊗** becomes **Cat. No. 500LC-220A1**.

[V]	110...120	208...240	265...277
AC, 50/60 Hz	A1	A2	A3

**Accessories — Field Installed**

 <b>Cat. No. 500LC-141C</b>	Description	Current Rating	Cat. No.			
	One Form C (SPDT) Auxiliary contact rated 10 A at 277V AC to indicate status of main contacts.	—	<b>500LC-141C</b>			
 <b>Cat. No. 500LC-47CM120</b>	Solid-state control module for 2-wire control.	12V AC/DC	500LC-47CM12			
		24V AC/DC	500LC-47CM24			
 <b>Cat. No. 500LC-48CM120</b>	Solid-state control module for 3-wire control.	120V AC	<b>500LC-47CM120</b>			
		240/277V AC	500LC-47CM240			
 <b>Cat. No. 500LC-49SS120</b>	Solid-state control module for stop/start control (Form 3).	12V AC/DC	500LC-48CM12			
		24V AC/DC	500LC-48CM24			
 <b>Cat. No. 500LC-CCKA1</b>	Coil conversion kit	120V AC	500LC-48CM120			
		240/277V AC	500LC-48CM240			
 <b>Cat. No. 500LC-CRKA1</b>	Coil replacement kit	12V AC/DC	500LC-49SS12			
		24V AC/DC	500LC-49SS24			
 <b>Cat. No. 500LC-4PCK</b>	Pole conversion kit	120V AC	500LC-49SS120			
		240/277V AC	500LC-49SS240			
 <b>Cat. No. 500LC-E1SM</b>	Enclosure	110...120V AC	<b>500LC-CCKA1</b>			
		208...240V AC	<b>500LC-CCKA2</b>			
 <b>Cat. No. 500LC-CRKA1</b>	Coil replacement kit	265...277V AC	<b>500LC-CCKA3</b>			
		110...120V AC	<b>500LC-CRKA1</b>			
 <b>Cat. No. 500LC-CRKA1</b>	Coil replacement kit	208...240V AC	<b>500LC-CRKA2</b>			
		265...277V AC	<b>500LC-CRKA3</b>			
 <b>Cat. No. 500LC-4PCK</b>	Description	No. of Poles	Cat. No.			
		1-Pole N.O.	<b>500LC-2PCK</b>			
		4-Pole N.O.	<b>500LC-4PCK</b>			
 <b>Cat. No. 500LC-E1SM</b>	Enclosure	6-Pole N.O.	<b>500LC-6PCK</b>			
		Description	Enclosure Type	Cat. No.		
				Type 1 surface mount	500LC-E1SM	
				Type 12 surface mount	<b>500LC-E12SM</b>	
Type 4/4X stainless steel surface mount	<b>500LC-E4SM</b>					
		Type 3R surface mount	<b>500LC-E3RSM</b>			
 <b>Cat. No. 598-DF14126</b>	Description	Enclosure Type	Enclosures	Subpanel†		
			Cat. No.			
			Type 1 lift off	<b>598-BA12105</b>	—	
			Type 1 flush mount	598-QA12106	—	
			Type 1 hinged	<b>598-DA12106</b>	<b>598-PA1210</b>	
				* <b>598-DA14126</b>	<b>598-PA1412</b>	
			Type 12 hinged	* 598-DA16166	<b>598-PA1616</b>	
				598-DF12106	<b>598-PC1210</b>	
				* 598-DF14126	<b>598-PC1412</b>	
			Type 4/12 hinged	* 598-DF16146	<b>598-PC1614</b>	
				598-DJ12106	<b>598-PC1210</b>	
			Type 4/4X hinged	* 598-DJ14126	<b>598-PC1412</b>	
				* 598-DJ16146	<b>598-PC1614</b>	
				598-DC12106	<b>598-PC1210</b>	
		* 598-DC14126	<b>598-PC1412</b>			
		* 598-DC16146	<b>598-PC1614</b>			

\* Three 22.5 mm pre-punched pilot holes are available as standard enclosure. Cat. No. 800F-N2 hole plug, sold separately.  
 † Subpanel sold separately.



# AC Mechanically Held Lighting Contactors

## Specifications/Approximate Dimensions

### Specifications

**• Electrical Life**

- N.O. lighting contactors: 6000 operations (at full load)
- N.O. & N.C. lighting contactors: 6000 operations (at full load)

**• Mechanical Life**

- N.O. lighting contactors: 50 000 operations
- N.O. & N.C. lighting contactors: 6000 operations

### Inrush Current/Minimum Control Line Fuse§

Amps	Inrush Current and Fuse Size [Amps rms] at AC Control Voltage		
	120V	240V	277V
Inrush	5.0	2.5	2.2
Fuse	2.0	1.0	1.0

§ The minimum permissible control circuit fuse size is based on the operating coil's momentary inrush current.

♣ Overcurrent protective device ratings for control circuits should be selected in accordance with applicable electrical codes.

### Maximum AC Voltage and Amp. Ratings For Bulletin 500LC Main Contacts (Open or Closed)

Load Type	Amperes Continuous [A]	Poles to Load	
		1 for 1-Phase	2 for 1-Phase 3 for 3-Phase
Tungsten	20	250V AC	250V AC
Ballast	20	347V AC	600V AC
General	30	347V AC	600V AC

### Maximum DC Voltage and Amp. Ratings For Bulletin 500LC Main Contacts (Open or Closed)

Load Type	Amperes Continuous [A]	Poles to Load	
		2 in Series	3 in Series
General	20	125V DC	250V DC

### Withstand Current Rating

At AC Service Voltage	Available Symmetrical Amperes RMS	
	When Used with Molded-Case Circuit Breakers contained in UL67 listed panelboards	
	Withstand Current Rating [A]	Maximum Breaker Size [A]
250V	22 000	30
480V	14 000	30
600V	10 000	30

### Control Line Run

Wire Size [AWG]	Maximum Distance [ft] at AC Control Voltage		
	120V	240V	277V
14	700	2000	2600
12	1050	3100	4100
10	1670	5000	6600

### Ratings for Control Modules

Control Voltage Range: 80...125% of nominal

Ambient Temperature Range (Operate): -40...+60 °C (-40...+140 °F)

Ambient Temperature Range (Storage): -40...+60 °C (-40...+140 °F)

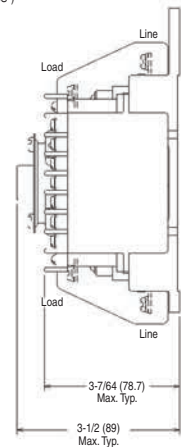
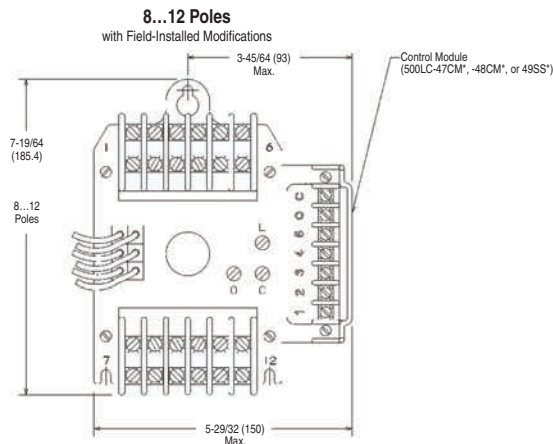
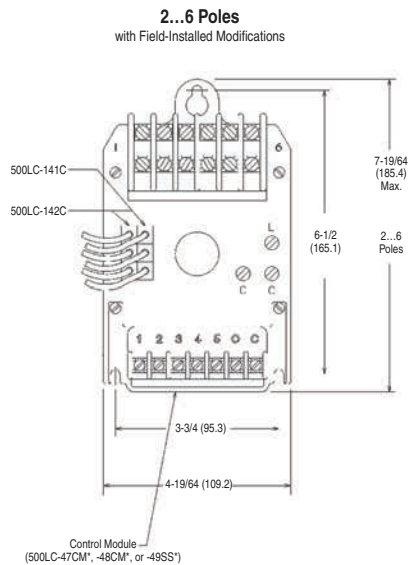
Control Module	Cat. No. 500LC-47CM*		Cat. No. 500LC-48CM*		Cat. No. 500LC-49SS*	
	AC	DC	AC	DC	AC	DC
12V AC/DC	0.60	0.32	0.34	0.36	0.68	0.70
24V AC/DC	0.85	0.36	0.34	0.38	0.70	0.72
120V AC	1.90	—	1.60	—	3.70	—
240/277V AC	4.00	—	2.50	—	6.00	—

6

### Approximate Dimensions

#### Open Type Dimensions

Dimensions are shown in inches (mm). Dimensions are not intended for manufacturing purposes.



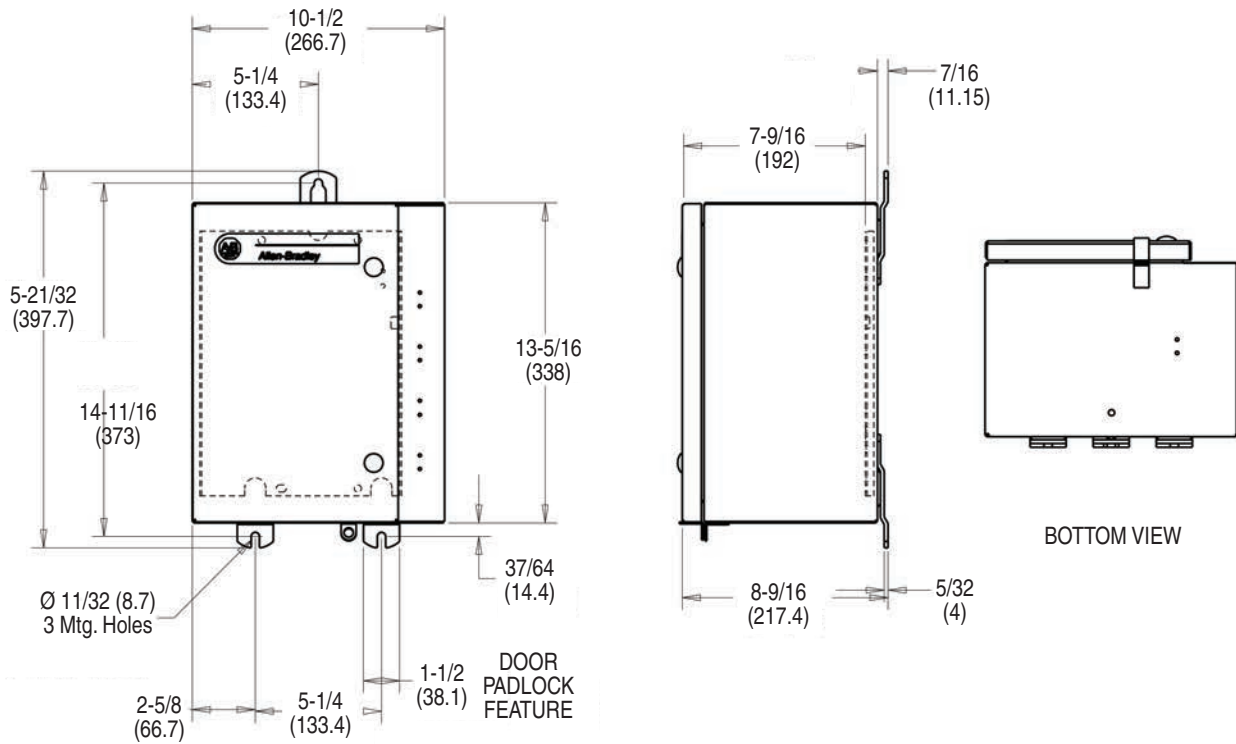


# AC Mechanically Held Lighting Contactors

Approximate Dimensions

Dimensions are shown in inches (mm). Dimensions are not intended for manufacturing purposes.

## Type 3R, Surface Mount 4/4X (Stainless Steel), and 12 Enclosure



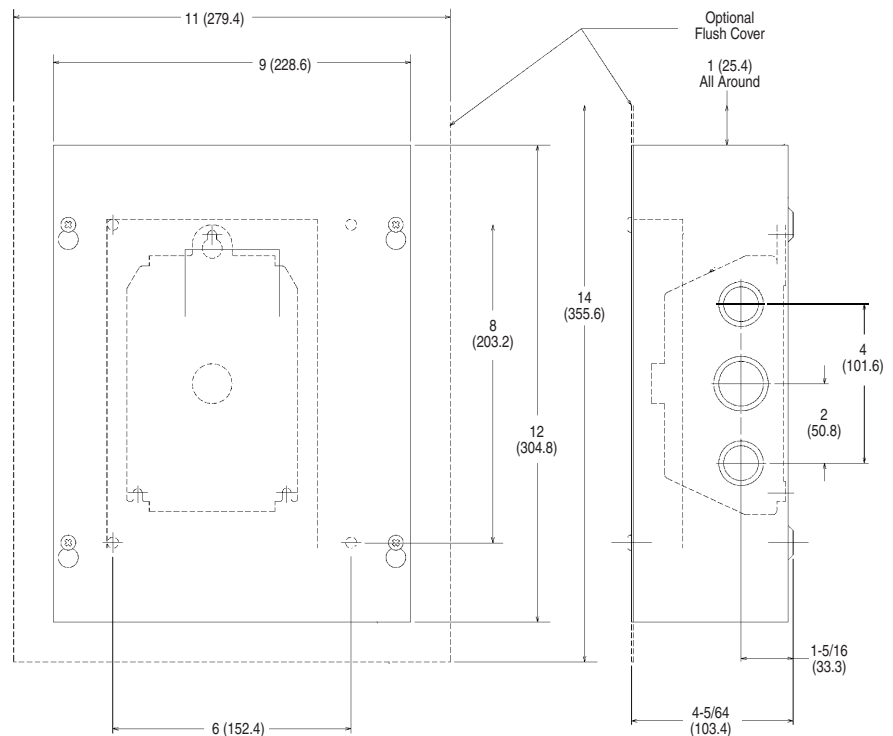
Dimensions are shown in inches (mm). Dimensions are not intended for manufacturing purposes.

## Type 1 Enclosure (Flush mount for Bulletin 500LC only)

### Approximate Shipping Weights‡

Poles	Open	Enclosed
2...6	2 lbs. (0.91 kg)	9 lbs. (4.08 kg)
8...12	2.7 lbs. (1.2 kg)	9.7 lbs. (4.4 kg)
2...6 (with Acc. 47, 48, or 49)	2.3 lbs. (1.05 kg)	9.3 lbs. (4.22 kg)
8...12 (with Acc. 47, 48, or 49)	3.0 lbs. (1.36 kg)	10.0 lbs (4.54 kg)

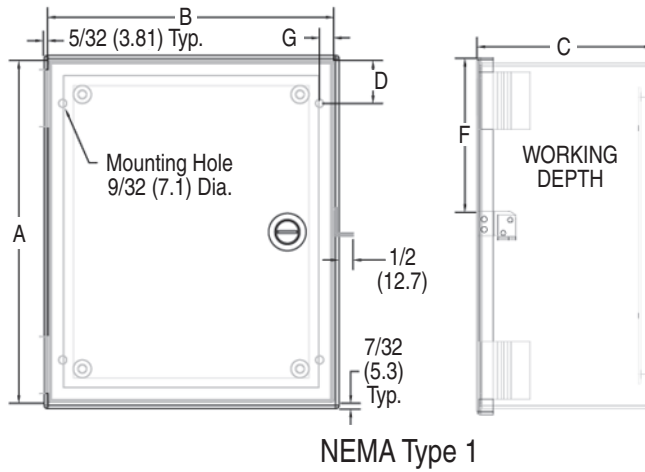
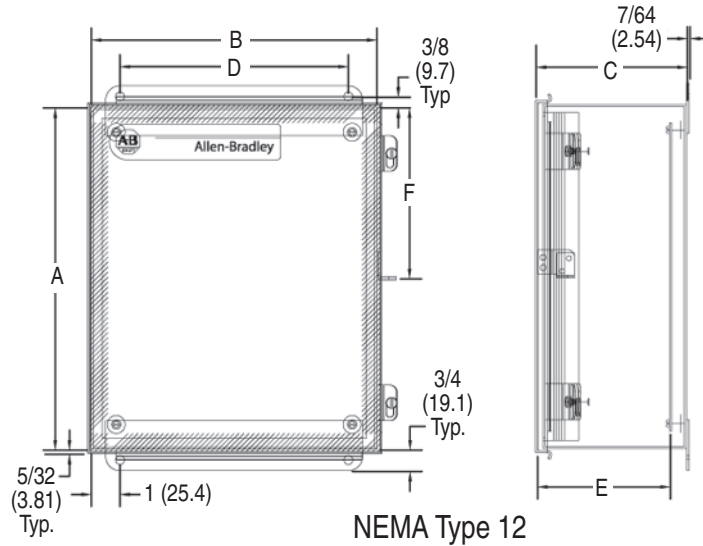
‡ Not including shipping carton.



# AC Mechanically Held Lighting Contactors

## Approximate Dimensions

Dimensions are shown in inches (mm). Dimensions are not intended for manufacturing purposes.



6

NEMA Type	Cat. No.	Approximate Dimensions in Inches (mm)						
		A (Height)	B (Width)	C (Depth)	D	E (Working Depth)	F (Hasp)	G
12	<b>598-DF14126</b>	14 (355.6)	12 (304.8)	6.27 (159.3)	10 (254.0)	5.53 (140.5)	7.06 (179.3)	—
1	<b>598-DA14126</b>	14 (355.6)	12 (304.8)	6.08 (154.4)	1.50 (38.1)	5.5 (139.7)	6.24 (158.5)	0.50 (12.7)

# AC Electrically/Mechanically Held Lighting Contactors

Product Overview/Product Selection



### Bulletin 500LG Electrically and Mechanically Held Lighting Contactors

- Multi-pole lighting contactor for branch circuits
- 30 A, 600V AC rating
- Contacts switch ballast (fluorescent or HID), tungsten, and general use loads
- Available with up to 12 poles (maximum of 8 N.C.)
- Auxiliary contacts, rated A600, suitable for use on low level circuits down to 12V, 5 mA
- Compact modular design with common footprint across all forms
- Finger and back-of-hand safe power terminals
- Contact poles are field convertible from N.O. to N.C./N.C. to N.O.
- May be applied to UL 67 Listed panelboards

### Table of Contents

Product Selection ..... 6-12  
 Accessories — Field  
 Installed ..... 6-13  
 Specifications..... 6-14  
 Approximate  
 Dimensions..... 6-15

### Standards Compliance

UL 508  
 CSA C22.2 No. 14  
 RoHS Compliant  
 IP1X, IP2Xt  
 CE Marked

### Certifications

cULus Listed (File No. E14843;  
 Guide No. NRNT, NRNT7)

### Catalog Number Explanation

Example Cat. No.

**500LG - 0 - 2 - 0 - A1 - E**

*a                    b                    c                    d                    e*

*a*

Number of N.O. Poles*	
Code	Description
0	0 N.O. poles
1	1 N.O. pole
2	2 N.O. poles
3	3 N.O. poles
4	4 N.O. poles
5	5 N.O. poles
6	6 N.O. poles
7	7 N.O. poles
8	8 N.O. poles
9	9 N.O. poles
10	10 N.O. poles
11	11 N.O. poles
12	12 N.O. poles

*b*

Number of N.C. Poles*	
Code	Description
0	0 N.C. poles
1	1 N.C. pole
2	2 N.C. poles
3	3 N.C. poles
4	4 N.C. poles
5	5 N.C. poles
6	6 N.C. poles
7	7 N.C. poles
8	8 N.C. poles

*c*

Enclosure Type	
Code	Type
O	Open style

*d*

Coil	
Code	Voltage
A1	115...120V (60 Hz) 110V (50 Hz)
A2	230...240V (60 Hz) 220V (50 Hz)
A3	277V (60 Hz) 240V (50 Hz)
A4	347V (60 Hz)
A5	460...480V (60 Hz) 440V (50 Hz)
A6	575...600V (60 Hz) 550V (50 Hz)

*e*

Control Type	
Code	Type
E	Electrically held
M212	Mechanically held, 2-wire, 12...24V DC
M224	Mechanically held, 2-wire, 24V AC
M2120	Mechanically held, 2-wire, 120V AC
M2277	Mechanically held, 2-wire, 277V AC
M312	Mechanically held, 3-wire, 12...24V DC
M324	Mechanically held, 3-wire, 24V AC
M3120	Mechanically held, 3-wire, 120V AC
M3277	Mechanically held, 3-wire, 277V AC



\*Total number of N.O. and N.C. poles cannot exceed 12.

# AC Electrically/Mechanically Held Lighting Contactors

## Product Selection

### Product Selection

No. of Poles			Open-Type without Enclosure			No. of Poles			Open-Type without Enclosure			No. of Poles			Open-Type without Enclosure		
N.O.	N.C.	Cat. No.	N.O.	N.C.	Cat. No.	N.O.	N.C.	Cat. No.	N.O.	N.C.	Cat. No.	N.O.	N.C.	Cat. No.	N.O.	N.C.	Cat. No.
0	2	500LG-020Ⓢ-Ⓢ	3	0	500LG-300Ⓢ-Ⓢ	6	0	500LG-600Ⓢ-Ⓢ	7	0	500LG-700Ⓢ-Ⓢ	8	0	500LG-800Ⓢ-Ⓢ	9	0	500LG-900Ⓢ-Ⓢ
	3	500LG-030Ⓢ-Ⓢ		1	500LG-310Ⓢ-Ⓢ		1	500LG-610Ⓢ-Ⓢ		1	500LG-710Ⓢ-Ⓢ		1	500LG-810Ⓢ-Ⓢ		1	500LG-910Ⓢ-Ⓢ
	4	500LG-040Ⓢ-Ⓢ		2	500LG-320Ⓢ-Ⓢ		2	500LG-620Ⓢ-Ⓢ		2	500LG-720Ⓢ-Ⓢ		2	500LG-820Ⓢ-Ⓢ		2	500LG-920Ⓢ-Ⓢ
	5	500LG-050Ⓢ-Ⓢ		3	500LG-330Ⓢ-Ⓢ		3	500LG-630Ⓢ-Ⓢ		3	500LG-730Ⓢ-Ⓢ		3	500LG-830Ⓢ-Ⓢ		3	500LG-930Ⓢ-Ⓢ
	6	500LG-060Ⓢ-Ⓢ		4	500LG-340Ⓢ-Ⓢ		4	500LG-640Ⓢ-Ⓢ		4	500LG-740Ⓢ-Ⓢ		4	500LG-840Ⓢ-Ⓢ		4	500LG-940Ⓢ-Ⓢ
	7	500LG-070Ⓢ-Ⓢ		5	500LG-350Ⓢ-Ⓢ		5	500LG-650Ⓢ-Ⓢ		5	500LG-750Ⓢ-Ⓢ		5	500LG-850Ⓢ-Ⓢ		5	500LG-950Ⓢ-Ⓢ
	8	500LG-080Ⓢ-Ⓢ		6	500LG-360Ⓢ-Ⓢ		6	500LG-660Ⓢ-Ⓢ		6	500LG-760Ⓢ-Ⓢ		6	500LG-860Ⓢ-Ⓢ		6	500LG-960Ⓢ-Ⓢ
	1	500LG-110Ⓢ-Ⓢ		7	500LG-370Ⓢ-Ⓢ		7	500LG-670Ⓢ-Ⓢ		7	500LG-770Ⓢ-Ⓢ		7	500LG-870Ⓢ-Ⓢ		7	500LG-970Ⓢ-Ⓢ
1	2	500LG-120Ⓢ-Ⓢ	4	0	500LG-400Ⓢ-Ⓢ	8	0	500LG-400Ⓢ-Ⓢ	10	0	500LG-500Ⓢ-Ⓢ	11	0	500LG-500Ⓢ-Ⓢ	12	0	500LG-1200Ⓢ-Ⓢ
	3	500LG-130Ⓢ-Ⓢ		1	500LG-410Ⓢ-Ⓢ		1	500LG-510Ⓢ-Ⓢ		1	500LG-1010Ⓢ-Ⓢ						
	4	500LG-140Ⓢ-Ⓢ		2	500LG-420Ⓢ-Ⓢ		2	500LG-520Ⓢ-Ⓢ		2	500LG-1020Ⓢ-Ⓢ						
	5	500LG-150Ⓢ-Ⓢ		3	500LG-430Ⓢ-Ⓢ		3	500LG-530Ⓢ-Ⓢ		3	500LG-1100Ⓢ-Ⓢ						
	6	500LG-160Ⓢ-Ⓢ		4	500LG-440Ⓢ-Ⓢ		4	500LG-540Ⓢ-Ⓢ		4	500LG-1100Ⓢ-Ⓢ						
	7	500LG-170Ⓢ-Ⓢ		5	500LG-450Ⓢ-Ⓢ		5	500LG-550Ⓢ-Ⓢ		5	500LG-1100Ⓢ-Ⓢ						
	8	500LG-180Ⓢ-Ⓢ		6	500LG-460Ⓢ-Ⓢ		6	500LG-560Ⓢ-Ⓢ		6	500LG-1100Ⓢ-Ⓢ						
	2	500LG-200Ⓢ-Ⓢ		7	500LG-470Ⓢ-Ⓢ		7	500LG-470Ⓢ-Ⓢ		7	500LG-1100Ⓢ-Ⓢ						
2	1	500LG-210Ⓢ-Ⓢ	5	8	500LG-480Ⓢ-Ⓢ	10	8	500LG-480Ⓢ-Ⓢ	11	0	500LG-1100Ⓢ-Ⓢ	12	0	500LG-1200Ⓢ-Ⓢ			
	2	500LG-220Ⓢ-Ⓢ		0	500LG-500Ⓢ-Ⓢ		0	500LG-1000Ⓢ-Ⓢ									
	3	500LG-230Ⓢ-Ⓢ		1	500LG-510Ⓢ-Ⓢ		1	500LG-1010Ⓢ-Ⓢ									
	4	500LG-240Ⓢ-Ⓢ		2	500LG-520Ⓢ-Ⓢ		2	500LG-1020Ⓢ-Ⓢ									
	5	500LG-250Ⓢ-Ⓢ		3	500LG-530Ⓢ-Ⓢ		3	500LG-1100Ⓢ-Ⓢ									
	6	500LG-260Ⓢ-Ⓢ		4	500LG-540Ⓢ-Ⓢ		4	500LG-1100Ⓢ-Ⓢ									
	7	500LG-270Ⓢ-Ⓢ		5	500LG-550Ⓢ-Ⓢ		5	500LG-1100Ⓢ-Ⓢ									
	8	500LG-280Ⓢ-Ⓢ		6	500LG-560Ⓢ-Ⓢ		6	500LG-1200Ⓢ-Ⓢ									

6

### Enclosed Panels†

Description	NEMA Type	Cat. No.*
Electrically-held panel, timing relay, 12 poles	1	500LG-120AA1-E-3E-4R-441
Electrically-held panel, timing relay, 12 poles	12	500LG-120FA1-E-3E-4R-441
Electrically-held panel, Pico GFX controller, 12 poles	1	500LG-120AA1-E-4R-436
Electrically-held panel, Pico GFX controller, 12 poles	12	500LG-120FA1-E-4R-436

\* For enclosed control lighting panels not listed, please contact your local Rockwell Automation sales office or Allen-Bradley distributor.

† A 500LG lighting control panel configured with electrically-held contactors can be field converted with mechanically-held contactors by installing a control module conversion kit.








### Ⓢ Ⓢ Coil Voltage and Control Type Suffix Codes

The cat. no. as listed, is incomplete. Select a Coil Voltage suffix code and a Control Type suffix code from the tables below to complete the cat. no. Example: For a 120V (60 Hz) coil, mechanically held contactor with a 3-wire, 24V DC control module, **Cat. No. 500LG-220Ⓢ-Ⓢ** becomes **Cat. No. 500LG-220A1-M312**.

Ⓢ Voltage [V AC]	115...120 (60 Hz) 110 (50 Hz)	230...240 (60 Hz) 220 (50 Hz)	277 (60 Hz) 240 (50 Hz)	347 (60 Hz)	460...480 (60 Hz) 440 (50 Hz)	575...600 (60 Hz) 550 (50 Hz)			
Coil Code	A1	A2	A3	A4	A5	A6			
Ⓢ Type	Electrically held	Mechanically held 2-wire 12...24V DC	Mechanically held 2-wire 24V AC	Mechanically held 2-wire 120V AC	Mechanically held 2-wire 277V AC	Mechanically held 3-wire 12...24V DC	Mechanically held 3-wire 24V AC	Mechanically held 3-wire 120V AC	Mechanically held 3-wire 277V AC
Control Code	E	M212	M224	M2120	M2277	M312	M324	M3120	M3277



Accessories — Field Installed

Image	Description		Cat. No.			
 Cat. No. 500LG-1PCK	Pole conversion kit	1-Pole N.O.	<b>500LG-1PCK</b>			
		2-Pole N.O.	<b>500LG-2PCK</b>			
 Cat. No. 500LG-141C	One Form C (SPST) Auxiliary contact rated 10 A at 277V AC to indicate status of main contacts.		<b>500LG-141C</b>			
 Cat. No. 500LG-142C	Two Form C (SPDT) Auxiliary contact rated 10 A at 277V AC to indicate status of main contacts.		<b>500LG-142C</b>			
 Cat. No. 500LC-CCKA1	Coil replacement kit	115...120V AC (60 Hz) 110V AC (50 Hz)	<b>500LG-CCKA1</b>			
		230...240V AC (60 Hz) 220V AC (50 Hz)	500LG-CCKA2			
		277V AC (60 Hz) 240V AC (50 Hz)	<b>500LG-CCKA3</b>			
		347V AC (60 Hz)	500LG-CCKA4			
		460...480V AC (60 Hz) 440V AC (50 Hz)	500LG-CCKA5			
		575...600V AC (60 Hz)	500LG-CCKA6			
 Cat. No. 500LC-E4SM	Enclosure	Type 12 surface mount	<b>500LC-E12SM</b>			
		Type 4/4X stainless steel surface mount	<b>500LC-E4SM</b>			
		Type 3R surface mount	<b>500LC-E3RSM</b>			
 Cat. No. 500LG-47CM120	Control module, 2-wire	12...24V DC	500LG-47CM12			
		24V AC	500LG-47CM24			
		120V AC	<b>500LG-47CM120</b>			
		277V AC	500LG-47CM277			
	Control module, 3-wire	12...24V DC	<b>500LG-48CM12</b>			
		24V AC	500LG-48CM24			
		120V AC	500LG-48CM120			
		277V AC	500LG-48CM277			
 Cat. No. 598-DF14126	Description	Enclosure Type	<b>Enclosures</b> <b>Subpanel†</b>			
			Cat. No.			
	Enclosure	Type 1 flush cover	<b>598-QA1210F</b>	—		
		Type 1 lift off	<b>598-BA12105</b>	—		
		Type 1 flush mount	598-QA12106	—		
		Type 1 hinged	<b>598-DA12106</b>	<b>598-PA1210</b>		
			* 598-DA14126	<b>598-PA1412</b>		
			* 598-DA16166	<b>598-PA1616</b>		
		Type 12 hinged	598-DF12106	<b>598-PC1210</b>		
			* 598-DF14126	<b>598-PC1412</b>		
			* 598-DF16146	<b>598-PC1614</b>		
		Type 4/12 hinged	598-DJ12106	<b>598-PC1210</b>		
			* 598-DJ14126	<b>598-PC1412</b>		
			* 598-DJ16146	<b>598-PC1614</b>		
		Type 4/4X hinged	598-DC12106	<b>598-PC1210</b>		
* 598-DC14126	<b>598-PC1412</b>					
* 598-DC16146	<b>598-PC1614</b>					

\* Three 22.5 mm pre-punched pilot holes are available as standard enclosure. Cat. No. 800F-N2 hole plug, sold separately.  
 † Subpanel sold separately.



# AC Electrically/Mechanically Held Lighting Contactors

## Specifications/Wiring Diagrams

### Specifications

#### Main Power Poles — Max. AC Voltage and Amp Rating

Load Type	Continuous Ampere Rating [A]	Poles	
		1-Phase	3-Phase
Ballast	30	347V AC	600V AC
General Use	30	600V AC	600V AC
Tungsten	20	277V AC	480V AC
AC Resistive	30	600V AC	600V AC

### Control Circuit Characteristics

Coil	
Description	Ratings [VA]
Inrush	248
Sealed	28

### Control Module Characteristics

Control Module		
Description	Ratings	
Min. pulse duration (3-wire control module)	250 ms	
Max. allowable leakage current	1.8 mA	
EMI	35 V/m	
Surge transient peak	6 kV	
Frequency range	40...70 Hz	
Input Voltage	Steady State Current @ Rated Voltage (mA)	Max. VA
12...24V DC	42	2
24V AC	80	5
115...120V AC	83	12
200...277V AC	91	30

### Wire Size

Component	No. of Cables	Wire Range AWG (Solid or Stranded)	Wire Temp.
Power Poles	1	#14...8	75°C Cu
	2	#14...8*	75°C Cu
Coil	1 or 2	#18...14	60°/75°C Cu
Control Module	1 or 2	#22...12	60°/75°C Cu
Auxiliary Switch	1 or 2	#22...12	60°/75°C Cu

\* #8 AWG stranded only.

### Short Circuit Current Rating

Available Symmetrical Amperes RMS				
At AC Service Voltage	Short Circuit Current Rating [A]	Max. Breaker Size [A]	Fuse (30 A)	
			SCCR J Fuse	SCGR RK1 Fuse
240V	14 000	30	100 kA	50 kA
277V	10 000	30		
480V	5000	40		
600V	5000	40		

### Ambient Temperature

-25...+40 °C (-13...+104 °F) — Operating

-30...+65 °C (-22...+149 °F) — Storage

### Auxiliary Contact Rating

A600, 24V DC, 24VA

## Bulletin 500LG Electrically Held Lighting Contactor

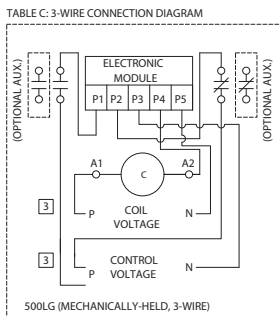
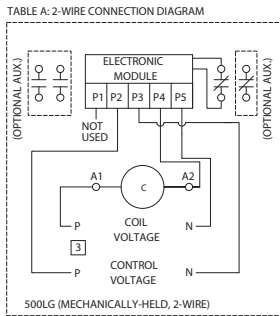


TABLE D: OPTIONAL WIRING AND PILOT DEVICES FOR MECHANICALLY-HELD CONTACTOR, 3-WIRE CONTROL

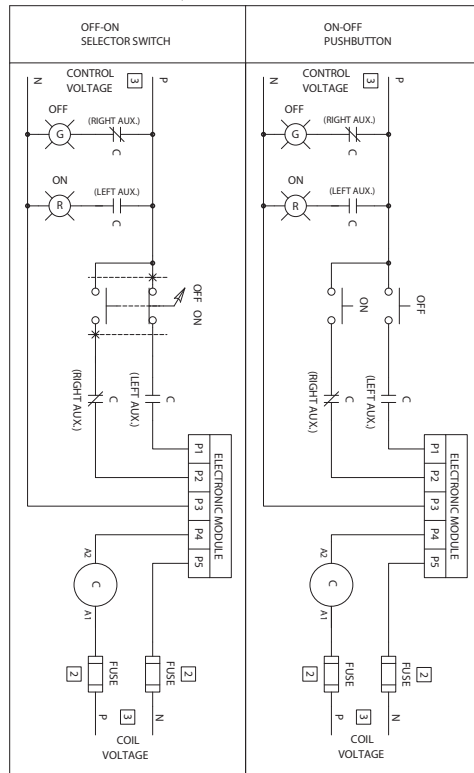
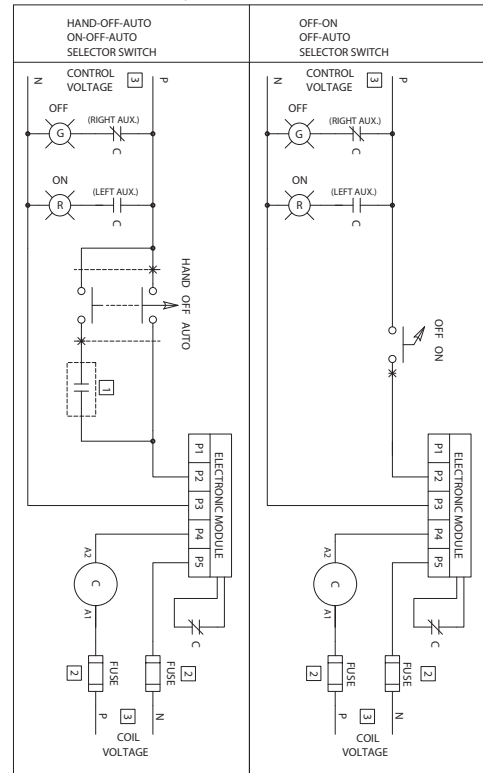


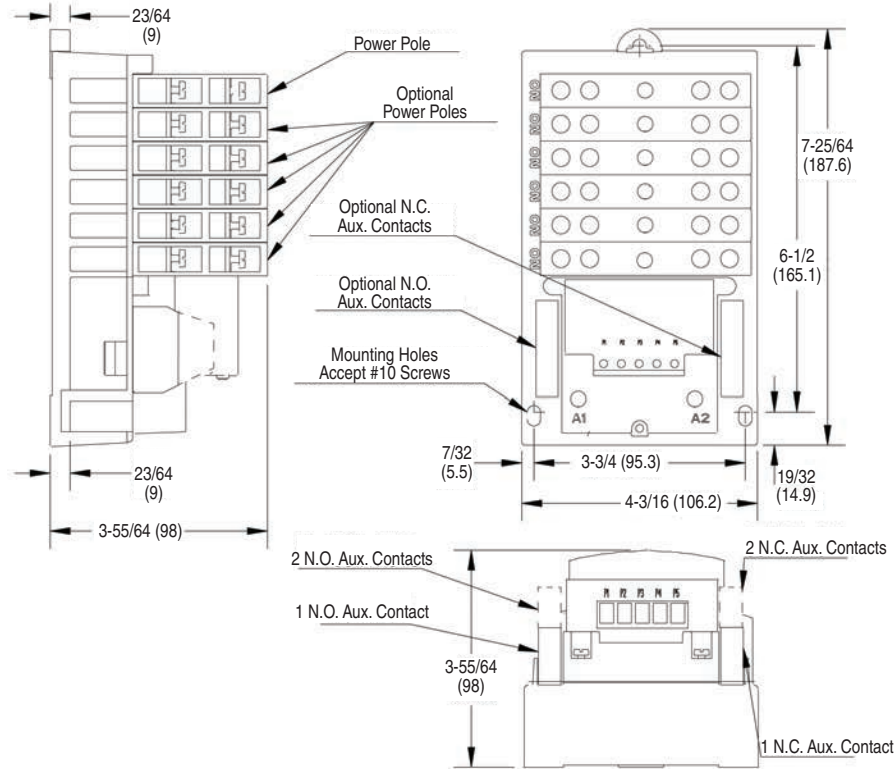
TABLE B: OPTIONAL WIRING AND PILOT DEVICES FOR MECHANICALLY-HELD CONTACTOR, 2-WIRE CONTROL



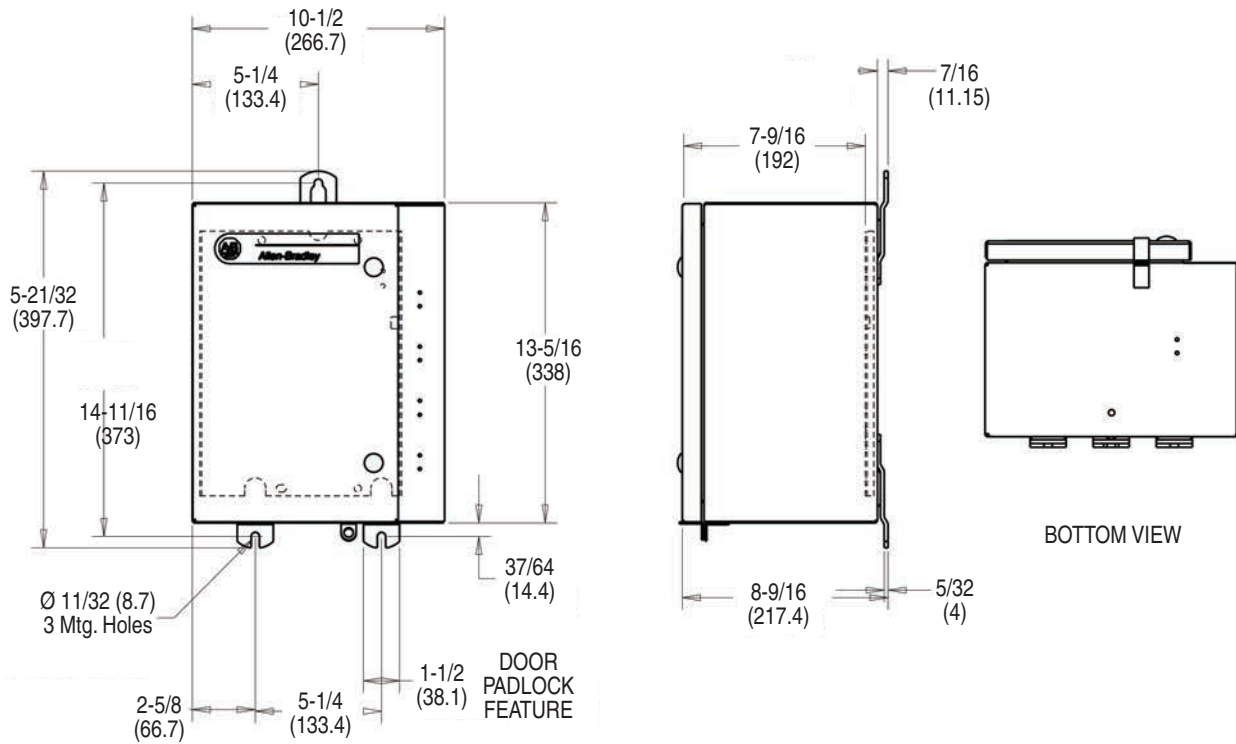
# AC Electrically/Mechanically Held Lighting Contactors

Approximate Dimensions

## Approximate Dimensions



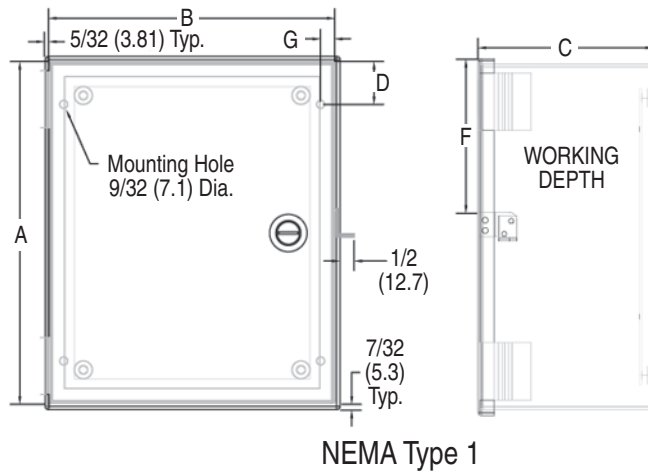
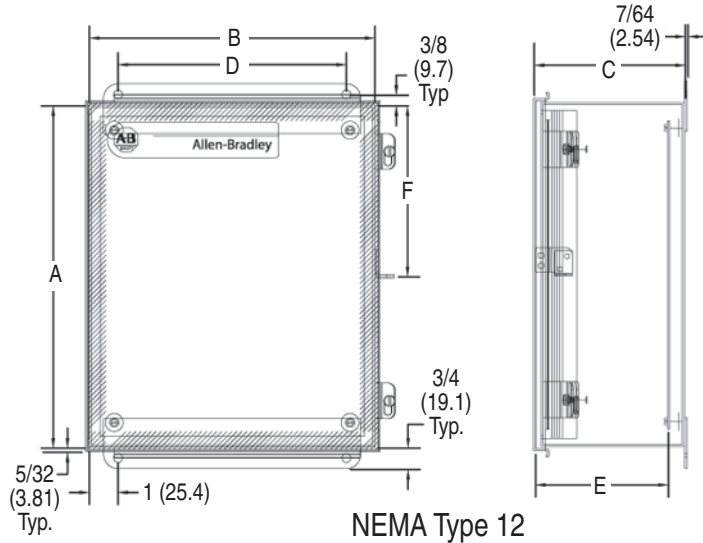
## Type 3R, Surface Mount 4/4X (Stainless Steel), and 12 Enclosure





# AC Electrically/Mechanically Held Lighting Contactors

Approximate Dimensions



6

NEMA Type	Cat. No.	Approximate Dimensions in Inches (mm)						
		A (Height)	B (Width)	C (Depth)	D	E (Working Depth)	F (Hasp)	G
12	598-DF14126	14 (355.6)	12 (304.8)	6.27 (159.3)	10 (254.0)	5.53 (140.5)	7.06 (179.3)	—
1	598-DA14126	14 (355.6)	12 (304.8)	6.08 (154.4)	1.50 (38.1)	5.5 (139.7)	6.24 (158.5)	0.50 (12.7)



# NEMA AC Electrically Held Lighting Contactors

Product Overview/Product Selection



100 A, 3-Pole  
Open Type without Enclosure

### Bulletin 500L

- Top wiring electrically held
- For non-motor loads, lighting, and heating
- NEMA sizes to 2250 A
- Enclosure ratings: NEMA Type 1, 3R/12, 4/4X (stainless steel)
- Special purpose enclosures:  
Type 4X glass reinforced polyester  
Bolted — 7 & 9, and 3R, 7 & 9
- 2-, 3-, and 4-pole configurations

Bulletin 500L lighting contactors are electrically held contactors designed to switch the current to incandescent filament, fluorescent, mercury arc lamps, capacitors, and other non-motor loads. These contactors are not suitable for use on sign flashers.

**Hold-in Contact** — If a hold-in contact for 3-wire push button control is required, it must be specified on the order as a modification. A normally open auxiliary contact to be used as a hold-in contact can also be added in the field. See [S-1362200] for information.

Feeder disconnect type lighting contactors are used for turning large blocks of lights on and off.

### Table of Contents

Product Selection ..... this page

Accessories..... 1-112

Modifications..... 1-107

Specifications..... 1-127

Full Load Currents  
of AC Motors..... 1-133

Approximate  
Dimensions..... 1-136

Renewal Parts..... 1-158

Coil Data ..... 1-130

### Standards Compliance

NEMA/EEMAC ICS 2  
UL 508  
CSA C22.2, No.14  
ABS 4/5.115 — American Bureau of Shipping  
UCSG 46 CFR 111.70  
IEEE 45  
EN/IEC 60947-4-1

### Certifications

CSA Certified (LR1234, LR11924)  
UL Listed (File No. E14843, Guide No. NRNT)  
Hazardous Location: UL Listed (File No. E91593, Guide No. WTEV)  
CE Marked

### Top Wiring for Non-Motor and Lighting Loads

Maximum Continuous Ampere Ratings [A]		Open Type Without Enclosure
Tungsten Lamp Loads (Max. 480V Line, 277V Load)	General Use	
	Resistive Heating	
	Ballast Lighting (Fluorescent)	
	Discharge Lighting (Mercury Vapor High Pressure Sodium and Metal Halide)	Cat. No.
2 Power Poles • 600V AC Maximum • 60 Hz		
5	10	500L-TO <sup>92</sup>
15	20	<b>500L-AO<sup>92</sup></b>
30	30	<b>500L-BO<sup>92</sup></b>
60	60	<b>500L-CO<sup>92</sup></b>
100	100	500L-DO <sup>92</sup>
200	200	<b>500L-EO<sup>92</sup></b>
300	300	<b>500L-FO<sup>92</sup></b>
540	540	—
810*	810	500L-HO <sup>92</sup>
1215*	1215	500L-JO <sup>92</sup>
2250*	2250	500L-KO <sup>92</sup>

### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no.  
Example: **Cat. No. 500L-AO<sup>92</sup>** becomes **Cat. No. 500L-AOD<sup>92</sup>**. For other voltages, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

[V]	24*	110-115	115-120	200-208	220-230	230-240	240	277	380	380-400	415	440-460	460-480	500	550	575-600
AC, 50 Hz	K	S§	—	—	P%	—	T	—	N	KN	I	Q	—	M	R	—
AC, 60 Hz	J	—	D>	H	—	A+	—	F	—	—	U	—	B	—	—	C

\* Does not include line and load lugs, see page 1-113 for kits.  
 \* Only available on sizes 00...5. When using 24V coils on size 4 or 5, an interposing relay may be required. See coil VA values on page 1-130.  
 § This coil is optimized for 110...115V, 50 Hz applications, but can be used at 120V, 60 Hz nominal.  
 > This coil is optimized for 115...120V, 60 Hz applications, but can be used at 110V, 50 Hz nominal.  
 % This coil is optimized for 220...230V, 50 Hz applications, but can be used at 240V, 60 Hz nominal.  
 + This coil is optimized for 230...240V, 60 Hz applications, but can be used at 220V, 50 Hz nominal.



# NEMA AC Electrically Held Lighting Contactors

## Product Selection

### Top Wiring for Non-Motor and Lighting Loads

Maximum Continuous Ampere Ratings [A]		Open Type Without Enclosure	Type 1 General Purpose Enclosure	Type 4/4X Watertight, Corrosion-Resistant Enclosure Stainless Steel	Type 3R/4/12 Rainproof, Dusttight Industrial Use Enclosure
Tungsten Lamp Loads (Max. 480V Line, 277V Load)	General Use				
	Resistive Heating				
	Ballast Lighting (Fluorescent)				
	Discharge Lighting (Mercury Vapor High Pressure Sodium and Metal Halide)				
	3 Power Poles • 600V AC Maximum • 60 Hz				
		Cat. No.	Cat. No.	Cat. No.*	Cat. No.
5	10	500L-TO <sup>Ⓢ</sup> 930	500L-TA <sup>Ⓢ</sup> 930	—	—
15	20	500L-AO <sup>Ⓢ</sup> 930	500L-AA <sup>Ⓢ</sup> 930	500L-AC <sup>Ⓢ</sup> 930	500L-AJ <sup>Ⓢ</sup> 930
30	30	500L-BO <sup>Ⓢ</sup> 930	500L-BA <sup>Ⓢ</sup> 930	500L-BC <sup>Ⓢ</sup> 930	500L-BJ <sup>Ⓢ</sup> 930
60	60	500L-CO <sup>Ⓢ</sup> 930	500L-CA <sup>Ⓢ</sup> 930	500L-CC <sup>Ⓢ</sup> 930	500L-CJ <sup>Ⓢ</sup> 930
100	100	500L-DO <sup>Ⓢ</sup> 930	500L-DA <sup>Ⓢ</sup> 930	500L-DC <sup>Ⓢ</sup> 930	500L-DJ <sup>Ⓢ</sup> 930
200	200	500L-EO <sup>Ⓢ</sup> 930	500L-EA <sup>Ⓢ</sup> 930	500L-EC <sup>Ⓢ</sup> 930	500L-EJ <sup>Ⓢ</sup> 930
300	300	500L-FO <sup>Ⓢ</sup> 930	500L-FA <sup>Ⓢ</sup> 930	500L-FC <sup>Ⓢ</sup> 930	500L-FJ <sup>Ⓢ</sup> 930
540 <sup>Ⓢ</sup> ‡	540	500L-GO <sup>Ⓢ</sup> 930	500L-GA <sup>Ⓢ</sup> 930	500L-GC <sup>Ⓢ</sup> 930	500L-GJ <sup>Ⓢ</sup> 930
810 <sup>Ⓢ</sup>	810	500L-HO <sup>Ⓢ</sup> 930	500L-HA <sup>Ⓢ</sup> 930	500L-HC <sup>Ⓢ</sup> 930	500L-HJ <sup>Ⓢ</sup> 930
1215 <sup>Ⓢ</sup>	1215	500L-JO <sup>Ⓢ</sup> 930	500L-JA <sup>Ⓢ</sup> 930	—	—
2250 <sup>Ⓢ</sup>	2250	500L-KO <sup>Ⓢ</sup> 930	500L-KA <sup>Ⓢ</sup> 930	—	—
Tungsten Lamp Loads (Max. 480V Line, 277V Load)	General Use				
	Resistive Heating				
	Ballast Lighting (Fluorescent)				
	Discharge Lighting (Mercury Vapor High Pressure Sodium and Metal Halide)				
	4 Power Poles • 600V AC Maximum • 60 Hz				
		Cat. No.	Cat. No.	Cat. No.*	Cat. No.
5	10	500L-TO <sup>Ⓢ</sup> 94	500L-TA <sup>Ⓢ</sup> 940	—	—
15	20	500L-AO <sup>Ⓢ</sup> 94	500L-AA <sup>Ⓢ</sup> 940	500L-AC <sup>Ⓢ</sup> 940	500L-AJ <sup>Ⓢ</sup> 940
30	30	500L-BO <sup>Ⓢ</sup> 94	500L-BA <sup>Ⓢ</sup> 940	500L-BC <sup>Ⓢ</sup> 940	500L-BJ <sup>Ⓢ</sup> 940
60	60	500L-CO <sup>Ⓢ</sup> 94	500L-CA <sup>Ⓢ</sup> 940	500L-CC <sup>Ⓢ</sup> 940	500L-CJ <sup>Ⓢ</sup> 940
100	100	500L-DO <sup>Ⓢ</sup> 94	500L-DA <sup>Ⓢ</sup> 940	500L-DC <sup>Ⓢ</sup> 940	500L-DJ <sup>Ⓢ</sup> 940
200	200	500L-EO <sup>Ⓢ</sup> 94	500L-EA <sup>Ⓢ</sup> 940	500L-EC <sup>Ⓢ</sup> 940	500L-EJ <sup>Ⓢ</sup> 940
300	300	500L-FO <sup>Ⓢ</sup> 94	500L-FA <sup>Ⓢ</sup> 940	500L-FC <sup>Ⓢ</sup> 940	500L-FJ <sup>Ⓢ</sup> 940

6

### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no.

Example: **Cat. No. 500L-AO<sup>Ⓢ</sup>94** becomes **Cat. No. 500L-AOD94**. For other voltages, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

[V]	24 <sup>Ⓢ</sup>	110-115	115-120	200-208	220-230	230-240	240	277	380	380-400	415	440-460	460-480	500	550	575-600
AC, 50 Hz	K	S <sup>§</sup>	—	—	P <sup>Ⓢ</sup>	—	T	—	N	KN	I	Q	—	M	R	—
AC, 60 Hz	J	—	D <sup>➤</sup>	H	—	A <sup>+</sup>	—	F	—	—	U	—	B	—	—	C

\* Fiberglass-reinforced polyester hubs are included with each starter.

Ⓢ Does not include line and load lugs, see page 1-113 for kits.

‡ Feed-through wiring only.

Ⓢ Only available on sizes 00...5. When using 24V coils on size 4 or 5, an interposing relay may be required. See coil VA values on page 1-130.

§ This coil is optimized for 110...115V, 50 Hz applications, but can be used at 120V, 60 Hz nominal.

➤ This coil is optimized for 115...120V, 60 Hz applications, but can be used at 110V, 50 Hz nominal.

Ⓢ This coil is optimized for 220...230V, 50 Hz applications, but can be used at 240V, 60 Hz nominal.

+ This coil is optimized for 230...240V, 60 Hz applications, but can be used at 220V, 50 Hz nominal.



### Special Purpose Bolted Enclosures — Hazardous Location

Contactor		Type 7 & 9; Class I, Groups C & D; Class II, Groups E, F & G – Divisions 1 & 2 – Enclosure Code (E)	Type 3R, 7 & 9; Class I, Groups C & D; Class II, Groups E, F & G – Divisions 1 & 2 – Enclosure Code (H)
Size	Poles		
0	3	Available	Available
1			
2			
3			
4			
5			



# NEMA AC Electrically Held Lighting Contactors

Product Overview/Product Selection

 <p><b>30 A</b> Open Type</p>  <p><b>100 A</b> Open Type</p>	<p><b>Bulletin 500FL</b></p> <ul style="list-style-type: none"> <li>• Feed-through wiring electrically held</li> <li>• For non-motor loads, lighting, and heating</li> <li>• NEMA sizes to 300 A</li> <li>• 2- and 3-pole configurations</li> </ul> <p><b>Description</b></p> <p>Bulletin 500FL open type lighting contactors are electrically held contactors designed to switch the current to incandescent filament, fluorescent, mercury arc lamps, capacitors, and other non-motor loads. These contactors are not suitable for use on sign flashers.</p> <p><b>Hold-in Contact</b> — If a hold-in contact for 3-wire push button control is required, it must be specified on the order as a modification. A normally open auxiliary contact to be used as a hold-in contact can also be added in the field. See page 1-112 for information.</p> <p>Feeder disconnect type lighting contactors are used for turning large blocks of lights on and off.</p>	<p><b>Table of Contents</b></p> <p>Product Selection ..... this page</p> <p>Accessories..... 1-112</p> <p>Modifications ..... 1-107</p> <p>Specifications..... 1-127</p> <p>Full Load Currents of AC Motors ..... 1-133</p> <p>Approximate Dimensions..... 1-136</p> <p>Coil Data ..... 1-130</p>
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**Standards Compliance**

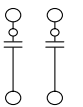
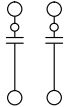
NEMA/EEMAC ICS 2  
 UL 508  
 CSA C22.2, No.14  
 ABS 4/5.115 — American Bureau of Shipping  
 UCSG 46 CFR 111.70  
 IEEE 45  
 EN/IEC 60947-4-1

**Certifications**

CSA Certified (LR1234)  
 UL Listed (File No. E14843, Guide No. NRNT)  
 CE Marked

**Product Selection**

**Feed-Through Wiring for Non-Motor and Lighting Loads**

2 Power Poles • 600V AC Maximum • 60 Hz			3 Power Poles • 600V AC Maximum • 60 Hz		
Maximum Continuous Ampere Ratings [A]		Open Type without Enclosure	Maximum Continuous Ampere Ratings [A]		Open Type without Enclosure
Tungsten Lamp Loads (Maximum 480V Line 277V Load)	Non-Motor Loads General Use		Tungsten Lamp Loads (Maximum 480V Line 277V Load)	Non-Motor Loads General Use	
	Resistive Heating			Resistive Heating	
	Ballast Lighting (Fluorescent)			Ballast Lighting (Fluorescent)	
	Discharge Lighting (Mercury Vapor High Pressure Sodium, and Metal Halide)	Cat. No.		Discharge Lighting (Mercury Vapor High Pressure Sodium, and Metal Halide)	Cat. No.
15	20	<b>500FL-AO®92</b>	15	20	<b>500FL-AO®93</b>
30	30	<b>500FL-BO®92</b>	30	30	<b>500FL-BO®93</b>
60	60	<b>500FL-CO®92</b>	60	60	500FL-CO®93
100	100	500FL-DO®92	100	100	<b>500FL-DO®93</b>
200	200	500FL-EO®92	200	200	<b>500FL-EO®93</b>
300	300	500FL-FO®92	300	300	500FL-FO®93

⊗ **Coil Voltage Code**

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no.  
 Example: **Cat. No. 500FL-AO®92** becomes **Cat. No. 500FL-AOD92**. For other voltages, consult your local Rockwell Automatio sales office or Allen-Bradley distributor.

[V]	24	110-115	115-120	200-208	220-230	230-240	240	277	380	380-400	415	440-460	460-480	500	550	575-600
AC, 50 Hz	K	S*	—	—	P‡	—	T	—	N	KN	I	Q	—	M	R	—
AC, 60 Hz	J	—	D*	H	—	A§	—	F	—	—	U	—	B	—	—	C

\* This coil is optimized for 110...115V, 50 Hz applications, but can be used at 120V, 60 Hz nominal.  
 † This coil is optimized for 115...120V, 60 Hz applications, but can be used at 110V, 50 Hz nominal.  
 ‡ This coil is optimized for 220...230V, 50 Hz applications, but can be used at 240V, 60 Hz nominal.  
 § This coil is optimized for 230...240V, 60 Hz applications, but can be used at 220V, 50 Hz nominal.

# NEMA AC Permanent Magnet-Latching Lighting Contactors

## Product Overview/Product Selection/Wiring Diagram



**30 A, 3-Pole  
Open Type without Enclosure**

### Bulletin 500LP

- Top wiring permanent magnet latching
- For non-motor loads, lighting, heating
- NEMA sizes to 300 A
- 2-, 3-, and 4-pole configurations

### Description

Bulletin 500LP open type contactors are permanent magnet latching type contactors designed to switch the current to incandescent filament, fluorescent, mercury arc lamps, capacitors, and other non-motor loads.

Feeder disconnect type lighting contactors are used for turning large blocks of lights on and off.

### Table of Contents

Product Selection..... this page  
 Accessories..... 1-112  
 Modifications..... 1-107  
 Specifications..... 1-127  
 Full Load Currents  
 of AC Motors..... 1-133  
 Approximate  
 Dimensions..... 1-136

### Standards Compliance

NEMA/EEMAC ICS 2  
 UL 508  
 CSA C22.2, No. 14

### Certifications

UL Listed (File No. E14843;  
 Guide No. NRNT)  
 CSA Certified (File No. LR1234)

### Product Selection

**Note:** For motor load application, order a Bulletin 500PM. For Bulletin 500PM information, contact your local Rockwell Automation sales office or Allen-Bradley distributor.

Maximum Continuous Ampere Ratings [A]		Open Type Without Enclosure	Type 1 General Purpose Enclosure
Tungsten Lamp Loads (Maximum 480V Line 277V Load)	General Use		
	Resistive Heating		
	Ballast Lighting (Fluorescent)		
	Discharge Lighting (Mercury Vapor High Pressure Sodium, and Metal Halide)		
		Cat. No.	Cat. No.
<b>2 Power Poles • 600V AC Maximum • 60 Hz</b>			
15	20	<b>500LP-AO@92</b>	—
30	30	<b>500LP-BO@92</b>	
60	60	<b>500LP-CO@92</b>	
100	100	<b>500LP-DO@92</b>	
200	200	<b>500LP-EO@92</b>	
300	300	<b>500LP-FO@92</b>	
<b>3 Power Poles • 600V AC Maximum • 60 Hz</b>			
15	20	<b>500LP-AO@93</b>	<b>500LP-AA@930</b>
30	30	<b>500LP-BO@93</b>	<b>500LP-BA@930</b>
60	60	<b>500LP-CO@93</b>	<b>500LP-CA@930</b>
100	100	<b>500LP-DO@93</b>	<b>500LP-DA@930</b>
200	200	<b>500LP-EO@93</b>	<b>500LP-EA@930</b>
300	300	<b>500LP-FO@93</b>	<b>500LP-FA@930</b>
<b>4 Power Poles • 600V AC Maximum • 60 Hz</b>			
15	20	<b>500LP-AO@94</b>	<b>500LP-AA@940</b>
30	30	<b>500LP-BO@94</b>	<b>500LP-BA@940</b>
60	60	<b>500LP-CO@94</b>	<b>500LP-CA@940</b>
100	100	<b>500LP-DO@94</b>	<b>500LP-DA@940</b>
200	200	<b>500LP-EO@94</b>	<b>500LP-EA@940</b>
300	300	—	—

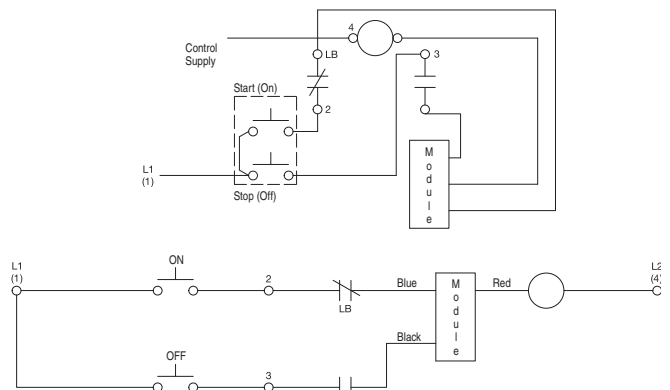
### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no. Example: **Cat. No. 500LP-AO@92** becomes **Cat. No. 500LP-AOD92**. For other voltages, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

[V]	24*	110-115	115-120	200-208	220-230	230-240	240	277
AC, 50 Hz	K	S⊗	—	—	P§	—	T	—
AC, 60 Hz	J	—	D‡	H	—	A♣	—	F
		380-400V	415V	440-460V	460-480V	500V	550V	575-600V
[V]	380V							
AC, 50 Hz	N	KN	I	Q	—	M	R	—
AC, 60 Hz	—	—	U	—	B	—	—	C

- \* When using 24V coils on sizes 4 or 5, an interposing relay may be required.
- ⊗ This coil is optimized for 110...115V, 50 Hz applications, but can be used at 120V, 60 Hz nominal.
- ‡ This coil is optimized for 115...120V, 60 Hz applications, but can be used at 110V, 50 Hz nominal.
- § This coil is optimized for 220...230V, 50 Hz applications, but can be used at 240V, 60 Hz nominal.
- ♣ This coil is optimized for 230...240V, 60 Hz applications, but can be used at 220V, 50 Hz nominal.

### Typical Wiring Diagram



# NEMA AC Electrically Held Combination Lighting Contactors

Product Overview/Cat. No. Explanation



### Bulletin 502L

- Current ratings 15...300 A
- Fusible or non-fusible disconnect switch
- Painted metal enclosures: Type 1, Type 3R/4/12
- Stainless steel enclosures: Type 4/4X
- Modifications — Factory installed
- Accessories — Field installed

A Bulletin 502L combination lighting contactor consists of a Bulletin 500L 3-pole lighting contactor and a disconnect switch (fused or non-fused) mounted in a common enclosure.

Combination lighting contactors are available for applications that require combining switching and over-current protection in the same enclosure. Combination lighting contactors may be applied for industrial, highway, and area lighting applications, or where a lighting circuit may have to be disconnected for periodic maintenance.

### Table of Contents

Configuration..... this page  
 Product Selection ..... 6-22  
 Accessories..... 1-112  
 Modifications..... 1-110  
 Specifications..... 1-129  
 Approximate  
 Dimensions..... 1-147

### Standards Compliance

UL 508A  
 CSA C22.2, No. 14

### Certifications

cULus Listed (File No. E54866;  
 Guide No. NITW, NITW7)

### Catalog Number Explanation

The information below is for reference purposes. Not all combinations will produce a valid cat. no. Refer to the tables on the following pages for product selection.

### Example Cat. No.

502L - A A CD - 24R - 90 - 1  
           a        b        c        d        e        f

**a**

Bulletin No.	
Bulletin No.	Description
502L	Combination lighting contactor with disconnect switch
503L	Combination lighting contactor with circuit breaker

**b**

Lighting Contactor Size	
Code	Max. Continuous Ampere Rating [A]
A	15...20
B	30
C	60
D	100
E	200
F	300

**c**

Enclosure Type	
Code	Description
A	Type 1: General purpose, painted metal enclosure with spring latch door fastener, external overload relay reset, and non-metallic handle
F	Type 3R/4/12: Rainproof, watertight, dusttight, painted metal enclosure with screw fasteners, and non-metallic handle
J	Type 3R/4/12: Rainproof, watertight, dusttight, painted metal enclosure with door safety hardware, and metal handle
C	Type 4/4X: Watertight corrosion-resistant stainless steel enclosure with screw fasteners, and a stainless steel handle

**d**

Coil Voltage			
Voltage Code	Description	Line Voltage [V]	Coil Voltage [V]
H	Common control (without transformer)	208	208
A		240	240
B		480	480
C		600	600
H	Transformer control*	208	120
A		240	120
B		480	120
C		600	120
AD	Separate control (without transformer)	208	120
		240	120
CD		480	120
		600	120

**e**

Fuse Clip		
Code	Rating	Type
24R	30	Class R
25R	60	Class R
26R	100	Class R
27R	200	Class R
28R	400	Class R
25J	60	Class J
26J	100	Class J
27J	200	Class J

**f**

Options	
See page 1-112	

**\* Note**

When selecting a factory-installed control circuit transformer use the Transformer Control Voltage Suffix Code to denote the transformer primary voltage. The transformer secondary voltage and starter coil will both be 120V AC by default. Example: **Cat. No. 512-BAB-6P-24R** will have a transformer with a 480V primary voltage, 120V secondary voltage, and a 120V starter coil voltage. If a starter coil voltage other than 120V is desired, a second Voltage Suffix Code must be added to denote the coil and transformer secondary voltage. Example: **Cat. No. 512-BABJ-6P-24R** will have a transformer with a 480V primary voltage, 24V secondary voltage, and a 24V starter coil voltage.





# NEMA AC Electrically Held Combination Lighting Contactors

## Product Selection

### Product Selection

Tungsten Lamp Loads [A] (Maximum 480V Line 277V Load)	Maximum Continuous Ampere Rating [A]	Line Voltage [V]	Fuse Clip Rating Fuses not included. Select per NEC.	Type 1 General Purpose	Type 3R/4/12 Rainproof, Waterproof, Dusttight	Type 3R/4/12 Rainproof, Waterproof, Dusttight (Door Safety Hardware)	Type 4/4X Watertight Corrosion-Resistant Stainless Steel
				Cat. No.*	Cat. No.*	Cat. No.*	Cat. No.*
15	20	208...240	30 Class R	<b>502L-AA-24R</b>	<b>502L-AF-24R</b>	<b>502L-AJ-24R</b>	<b>502L-AC-24R</b>
		480...600	30 Class R	<b>502L-AA-24R</b>	<b>502L-AF-24R</b>	<b>502L-AJ-24R</b>	<b>502L-AC-24R</b>
30	30	208...240	30 Class R	<b>502L-BA-24R</b>	<b>502L-BF-24R</b>	<b>502L-BJ-24R</b>	<b>502L-BC-24R</b>
		480...600	30 Class R	<b>502L-BA-24R</b>	<b>502L-BF-24R</b>	<b>502L-BJ-24R</b>	<b>502L-BC-24R</b>
		208...240	60 Class R	<b>502L-BA-25R</b>	<b>502L-BF-25R</b>	<b>502L-BJ-25R</b>	<b>502L-BC-25R</b>
		480...600	60 Class R	<b>502L-BA-25R</b>	<b>502L-BF-25R</b>	<b>502L-BJ-25R</b>	<b>502L-BC-25R</b>
60	60	480...600	30 Class R	<b>502L-CA-24R</b>	<b>502L-CF-24R</b>	<b>502L-CJ-24R</b>	<b>502L-CC-24R</b>
		208...240	60 Class R	<b>502L-CA-25R</b>	<b>502L-CF-25R</b>	<b>502L-CJ-25R</b>	<b>502L-CC-25R</b>
		480...600	60 Class R	<b>502L-CA-25R</b>	<b>502L-CF-25R</b>	<b>502L-CJ-25R</b>	<b>502L-CC-25R</b>
		208...240	100 Class J	<b>502L-CA-26J</b>	<b>502L-CF-26J</b>	<b>502L-CJ-26J</b>	<b>502L-CC-26J</b>
		480...600	100 Class J	<b>502L-CA-26J</b>	<b>502L-CF-26J</b>	<b>502L-CJ-26J</b>	<b>502L-CC-26J</b>
100	100	480...600	60 Class R	<b>502L-DA-25R</b>	<b>502L-DF-25R</b>	<b>502L-DJ-25R</b>	<b>502L-DC-25R</b>
		208...240	100 Class R	<b>502L-DA-26R</b>	<b>502L-DF-26R</b>	<b>502L-DJ-26R</b>	<b>502L-DC-26R</b>
		480...600	100 Class R	<b>502L-DA-26R</b>	<b>502L-DF-26R</b>	<b>502L-DJ-26R</b>	<b>502L-DC-26R</b>
		208...240	200 Class J	<b>502L-DA-27J</b>	<b>502L-DF-27J</b>	<b>502L-DJ-27J</b>	<b>502L-DC-27J</b>
		480...600	200 Class J	<b>502L-DA-27J</b>	<b>502L-DF-27J</b>	<b>502L-DJ-27J</b>	<b>502L-DC-27J</b>
200	200	480...600	100 Class R	<b>502L-EA-26R</b>	<b>502L-EF-26R</b>	<b>502L-EJ-26R</b>	<b>502L-EC-26R</b>
		208...240	200 Class R	<b>502L-EA-27R</b>	<b>502L-EF-27R</b>	<b>502L-EJ-27R</b>	<b>502L-EC-27R</b>
		480...600	200 Class R	<b>502L-EA-27R</b>	<b>502L-EF-27R</b>	<b>502L-EJ-27R</b>	<b>502L-EC-27R</b>
		208...240	400 Class R	<b>502L-EA-28R</b>	<b>502L-EF-28R</b>	<b>502L-EJ-28R</b>	<b>502L-EC-28R</b>
		480...600	400 Class R	<b>502L-EA-28R</b>	<b>502L-EF-28R</b>	<b>502L-EJ-28R</b>	<b>502L-EC-28R</b>
300	300	208...600	400 Class R	<b>502L-FA-28R</b>	<b>502L-FF-28R</b>	<b>502L-FJ-28R</b>	<b>502L-FC-28R</b>

## 6

### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no.

Example: **Cat. No. 502L-AA-24R** becomes **Cat. No. 502L-AAB-24R**. For other voltages, consult your local Allen-Bradley distributor.

	[V]	208	230...240	460...480	575...600
Common Control	AC, 60 Hz	<b>H</b>	<b>A</b>	<b>B</b>	<b>C</b>
Transformer Control (See page 1-79 Note)		<b>AD</b>	<b>AD</b>	<b>CD</b>	<b>CD</b>
120V Separate Control (without transformer)		<b>AD</b>	<b>AD</b>	<b>CD</b>	<b>CD</b>

### \* Non-Fusible Disconnect Type

Cat. nos. listed above include a fusible disconnect switch with Class R or J fuse clips. To order a non-fusible disconnect switch, eliminate the fuse clip code from the cat. no. Example: **Cat. No. 502L-BFB-24R** becomes **Cat. No. 502L-BFB**.

\* Class H fuse clips can be supplied. Example: **Cat. No. 502L-AA-24R** becomes **Cat. No. 502L-AA-24**. Class J fuse clips can be supplied. Example: **Cat. No. 502L-AA-24R** becomes **Cat. No. 502L-AA-24J**. Class HRC form II fuse clips can be supplied. Example: **Cat. No. 502L-AA-24R** becomes **Cat. No. 502L-AA-24E**.





# NEMA AC Electrically Held Combination Lighting Contactors

Product Overview/Cat. No. Explanation



### Bulletin 503L

- Current ratings 15...300 A
- Circuit breaker thermal magnetic (inverse time)
- Painted metal enclosures: Type 1, Type 3R/4/12
- Stainless steel enclosures: Type 4/4X
- Modifications — Factory installed
- Accessories — Field installed

A Bulletin 503L combination lighting contactor consists of a Bulletin 500L lighting contactor and a thermal magnetic circuit breaker (inverse time) mounted in a common enclosure.

Combination lighting contactors are available for applications that require combining switching and over-current protection in the same enclosure. Combination lighting contactors may be applied for industrial, highway, and area lighting applications, or where a lighting circuit may have to be disconnected for periodic maintenance.

### Table of Contents

Configuration..... this page  
 Product Selection ..... 6-24  
 Accessories..... 1-112  
 Modifications..... 1-109  
 Specifications..... 1-129  
 Approximate Dimensions..... 1-147

### Standards Compliance

UL 508A  
 CSA C22.2, No. 14

### Certifications

cULus Listed (File No. E54866;  
 Guide No. NITW, NITW7)

### Catalog Number Explanation

The information below is for reference purposes. Not all combinations will produce a valid cat. no. Refer to the tables on the following pages for product selection.

### Example Cat. No.

**503L**
**- A**
**A**
**CD**
**- 30T**
**- 90**
**- 1**

*a*
*b*
*c*
*d*
*e*
*f*

*a*

Bulletin No.	
Bulletin No.	Description
502L	Combination lighting contactor with disconnect switch
503L	Combination lighting contactor with circuit breaker

*b*

Lighting Contactor Size	
Code	Max. Continuous Ampere Rating [A]
A	15...20
B	30
C	60
D	100
E	200
F	300

*c*

Enclosure Type	
Code	Description
A	Type 1: General purpose, painted metal enclosure with spring latch door fastener, and non-metallic handle
F	Type 3R/4/12: Rainproof, watertight, dusttight, painted metal enclosure with screw fasteners, and non-metallic handle
J	Type 3R/4/12: Rainproof, watertight, dusttight, painted metal enclosure with door safety hardware, and metal handle
C	Type 4/4X: Watertight corrosion-resistant stainless steel enclosure with screw fasteners, and a stainless steel handle

*d*

Coil Voltage			
Voltage Code	Description	Line Voltage [V]	Coil Voltage [V]
H		208	208
A	Common control (without transformer)	240	240
B		480	480
C		600	600
H	Transformer control*	208	120
A		240	120
B		480	120
C		600	120
HD		208	120
AD	Separate control (without transformer)	240	120
BD		480	120
CD		600	120

*e*

Max. Breaker Size	
Code	Max. Amperes [A]
30T	15
31T	20
32T	30
33T	35
34T	40
35T	50
36T	60
37T	70
38T	80
39T	90
40T	100
41T	125
42T	150
43T	175
44T	200
45T	225
46T	250
47T	275
48T	300
49T	350
50T	400

*f*

Options
See page 1-112

**\* Note**

When selecting a factory-installed control circuit transformer use the Transformer Control Voltage Suffix Code to denote the transformer primary voltage. The transformer secondary voltage and starter coil will both be 120V AC by default. Example: **Cat. No. 512-BAB-6P-24R** will have a transformer with a 480V primary voltage, 120V secondary voltage, and a 120V starter coil voltage. If a starter coil voltage other than 120V is desired, a second Voltage Suffix Code must be added to denote the coil and transformer secondary voltage. Example: **Cat. No. 512-BABJ-6P-24R** will have a transformer with a 480V primary voltage, 24V secondary voltage, and a 24V starter coil voltage.



# NEMA AC Electrically Held Combination Lighting Contactors

## Product Selection

### Product Selection

Tungsten Lamp Loads [A] (Max. 480V Line, 277V Load)	Maximum Continuous Ampere Rating [A]*	Max. Breaker Size [A]	Type 1 General Purpose Enclosure	Type 3R/412 Rainproof, Waterproof, Dusttight Enclosure	Type 3R/412 Rainproof, Waterproof, Dusttight Enclosure with Door Safety Hardware	Type 4/4X Watertight Corrosion- Resistant Enclosure Stainless Steel
			Cat. No.*	Cat. No.*	Cat. No.*	Cat. No.*
15	20	15	503L-AC-30T	503L-AF-30T	503L-AJ-30T	503L-AC-30T
		20	503L-AA-31T	503L-AF-31T	503L-AJ-31T	503L-AC-31T
30	30	15	503L-BC-30T	503L-BF-30T	503L-BJ-30T	503L-BC-30T
		20	503L-BA-31T	503L-BF-31T	503L-BJ-31T	503L-BC-31T
		30	503L-BA-32T	503L-BF-32T	503L-BJ-32T	503L-BC-32T
		35	503L-BA-33T	503L-BF-33T	503L-BJ-33T	503L-BC-33T
		40	503L-BA-34T	503L-BF-34T	503L-BJ-34T	503L-BC-34T
60	60	35	503L-CA-33T	503L-CF-33T	503L-CJ-33T	503L-CC-33T
		40	503L-CA-34T	503L-CF-34T	503L-CJ-34T	503L-CC-34T
		50	503L-CA-35T	503L-CF-35T	503L-CJ-35T	503L-CC-35T
		60	503L-CA-36T	503L-CF-36T	503L-CJ-36T	503L-CC-36T
		70	503L-CA-37T	503L-CF-37T	503L-CJ-37T	503L-CC-37T
100	100	60	503L-DA-36T	503L-DF-36T	503L-DJ-36T	503L-DC-36T
		70	503L-DA-37T	503L-DF-37T	503L-DJ-37T	503L-DC-37T
		80	503L-DA-38T	503L-DF-38T	503L-DJ-38T	503L-DC-38T
		90	503L-DA-39T	503L-DF-39T	503L-DJ-39T	503L-DC-39T
		100	503L-DA-40T	503L-DF-40T	503L-DJ-40T	503L-DC-40T
		125	503L-DA-41T	503L-DF-41T	503L-DJ-41T	503L-DC-41T
200	200	70	503L-EA-37T	503L-EF-37T	503L-EJ-37T	503L-EC-37T
		80	503L-EA-38T	503L-EF-38T	503L-EJ-38T	503L-EC-38T
		90	503L-EA-39T	503L-EF-39T	503L-EJ-39T	503L-EC-39T
		100	503L-EA-40T	503L-EF-40T	503L-EJ-40T	503L-EC-40T
		125	503L-EA-41T	503L-EF-41T	503L-EJ-41T	503L-EC-41T
		150	503L-EA-42T	503L-EF-42T	503L-EJ-42T	503L-EC-42T
		175	503L-EA-43T	503L-EF-43T	503L-EJ-43T	503L-EC-43T
		200	503L-EA-44T	503L-EF-44T	503L-EJ-44T	503L-EC-44T
		225	503L-EA-45T	503L-EF-45T	503L-EJ-45T	503L-EC-45T
300	300	250	503L-EA-46T	503L-EF-46T	503L-EJ-46T	503L-EC-46T
		225	503L-FA-45T	503L-FF-45T	503L-FJ-45T	503L-FC-45T
		250	503L-FA-46T	503L-FF-46T	503L-FJ-46T	503L-FC-46T
		275	503L-FA-47T	503L-FF-47T	503L-FJ-47T	503L-FC-47T
		300	503L-FA-48T	503L-FF-48T	503L-FJ-48T	503L-FC-48T
		350	503L-FA-49T	503L-FF-49T	503L-FJ-49T	503L-FC-49T
		400	503L-FA-50T	503L-FF-50T	503L-FJ-50T	503L-FC-50T

\* To order lighting contactors (sizes 0...3) with current limiters, change the letter **T** to **D** at the end of the listed cat. no. Example: **Cat. No. 503L-AA-35D**.

\* When controlling high efficiency motors – consult your local Allen-Bradley distributor for proper circuit breaker selection.

### ⊗ Coil Voltage Code

The cat. no. as listed is incomplete. Select a coil voltage code from the table below to complete the cat. no.

Example: **Cat. No. 503L-BA-35T** becomes **Cat. No. 503L-BAB-35T**. For other voltages, consult your local Allen-Bradley distributor.

	[V]	208	230...240	460...480	575...600
Common Control	AC, 60 Hz	<b>H</b>	<b>A</b>	<b>B</b>	<b>C</b>
Transformer Control (See page 1-79 Note)		<b>AD</b>	<b>AD</b>	<b>CD</b>	<b>CD</b>
120V Separate Control (without transformer)		<b>AD</b>	<b>AD</b>	<b>CD</b>	<b>CD</b>

# NEMA AC Electrically Held Combination Lighting Contactors

## Modifications

### Modifications for Combination Devices

For Use on Bulletins 502L and 503L

Description of Modification		Suffix No.	Enclosure Type	
<b>Pilot Devices in Cover or Flange</b>	START-STOP- Push Button	1 1	1 3R/4/12, 4/4X	
	ON-OFF Push Button	1E 1E	1 3R/4/12, 4/4X	
	START-STOP Illuminated Push Button	1L 1L	1 3R/4/12, 4/4X	
	HAND-OFF-AUTO Selector Switch	3 3	1 3R/4/12, 4/4X	
	OFF-ON Selector Switch	3E 3E	1 3R/4/12, 4/4X	
	HAND-AUTO Selector Switch	3H 3H	1 3R/4/12, 4/4X	
	PILOT LIGHT	Transformer Type — Incandescent Bulb	4*❖	1, 3R/4/12, 4/4X, 3R
		Transformer Type—LED Bulb	4L*❖	1, 3R/4/12, 4/4X, 3R
	PUSH-TO-TEST PILOT LIGHT Trans.—Incandescent Bulb		5*❖	1, 3R/4/12, 4/4X, 3R
			5L*❖	1, 3R/4/12, 4/4X, 3R
	START-STOP Push Button and HAND-OFF-AUTO Selector Switch (Unwired)	13 13	1 3R/4/12, 4/4X	
	<b>Control Circuit Transformers</b> Includes 2 Primary Fuses and 1 Secondary Fuse	With Standard Capacity 60 or 50 Hz	6P	1, 3R/4/12, 4/4X, 3R
		With Standard Capacity with Fuse Covers	6PC	1, 3R/4/12, 4/4X, 3R
		With 100 Watt Extra Capacity 60 or 50 Hz	6XP	1, 3R/4/12, 4/4X 3R
With 100 Watt Extra Capacity with Fuse Covers		6XPC	1, 3R/4/12, 4/4X 3R	
With 200 VA Capacity		6XXP	1, 3R/4/12, 4/4X 3R	
With 200 VA Capacity with Fuse Covers		6XXPC	1, 3R/4/12, 4/4X 3R	
With 200 Watt Extra Capacity 60 or 50 Hz		6YP	1, 3R/4/12, 4/4X 3R	
With 200 Watt Extra Capacity with Fuse Covers		6YPC	1, 3R/4/12, 4/4X 3R	
With 300 Watt Extra Capacity 60 or 50 Hz		6XYP	1, 3R/4/12, 4/4X 3R	
	With 300 Watt Extra Capacity with Fuse Covers	6XYPC	1, 3R/4/12, 4/4X 3R	
With 400 Watt Extra Capacity 60 or 50 Hz		6YYP	1, 3R/4/12, 4/4X 3R	
	With 400 Watt Extra Capacity with Fuse Covers	6YYPC	1, 3R/4/12, 4/4X 4X	
<b>Auxiliary Contacts</b>	Auxiliary Contact installed on contactors	N.O. N.C.	90 91	
	Auxiliary Contact — Contactor (Four Maximum) N.C. — Late Break		97	
	Auxiliary Contact installed on disconnect	N.O. N.C.	98 99	
	Auxiliary Contact installed on circuit breaker (external to breaker) to operate with handle (two maximum)	N.O.	98	
		N.C.	99	
<b>Control Circuit</b>	Control Circuit Fuse Block Less Transformer	1 Fuse —Fuse Included	21	
	FOR-REV-STOP Push Button	1 Fuse with Protective Cover — Fuse Included	21C	
		2 Fuses — Fuses Included	22	
	FOR-OFF-REV Selector Switch (Bulletin 506...507)	2 Fuse with Protective Cover — Fuse Included	22C	
	Surge Suppression for 120V or 240V AC Coil		17	
	Terminal Blocks	6-Point Block	TB6	
	Terminal Blocks	12-Point Block	TB12	

\* "OFF" pilot lights require a normally closed auxiliary contact (-91).

❖ The suffix number is incomplete. Specify the lens with the following letters: **A** = Amber; **B** = Blue; **C** = Clear; **G** = Green; **W** = White.



# NEMA AC Electrically Held Combination Lighting Contactors

## Modifications

For Use on Bulletins 502L and 503L, Continued

	Description of Modification	Suffix No.	Enclosure Type	
<b>Circuit Breakers</b>	Marine Requirements	<b>345</b>	—	
	Current Limiters	Add the letter "C" to the instantaneous circuit breaker no. code.	<b>C</b>	
	Current Limiters	Add the letter "D" to the inverse time circuit breaker no. code.	<b>D</b>	
<b>Accessories</b>	Enclosure Door Viewing Window	<b>203W</b>	1, 3R/4/12, 3R	
	Handles For Disconnect Switch or Circuit Breaker	Painted Metal	<b>412</b>	1, 3R/4/12, 3R
		Stainless Steel	<b>413</b>	4/4X
		Molded Plastic (Deduct)	<b>419</b>	1, 3R/4/12, 4/4X, 3R
	Control Relay (Plug-In)	2-Pole	<b>415</b>	1, 3R/4/12, 4/4X, 3R
		3-Pole	<b>416</b>	
	Timing Relay (Plug-In)	On-Delay	<b>417</b>	1, 3R/4/12, 4/4X, 3R
		Off-Delay	<b>418</b>	
	Electrical Interlock	Early Break (1 N.O. / 1 N.C.)	<b>420</b>	1, 3R/4/12, 4/4X, 3R
		Early Break (2 N.O. / 2 N.C.)	<b>421</b>	1, 3R/4/12, 4/4X, 3R
Elapsed Time Meter (ENM - Series T50)		<b>425</b>	3R	
Protective Covers for Contactors and Starters		<b>426</b>	1, 3R/12, 4/4X, 4	

