
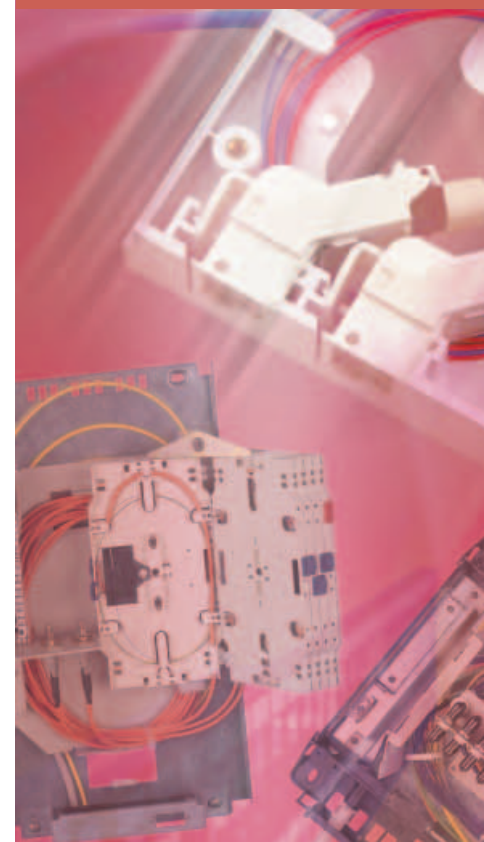


# FTTx – Customer Premise

For residential cabling, 3M Telecommunications offers a portfolio, that incorporates a passive fibre optic interconnect system based on international cabling standards: traditional interconnect products like FC, SC, ST and LC connectors; mechanical optical splices; wall mount indoor/outdoor distribution boxes.

|   |  |           |
|---|--|-----------|
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# 7



# 7.1 3M™ Cross network interface boxes

## 3M™ Optical fibre interface device

### Description

#### 3M Optical Fibre Interface Device

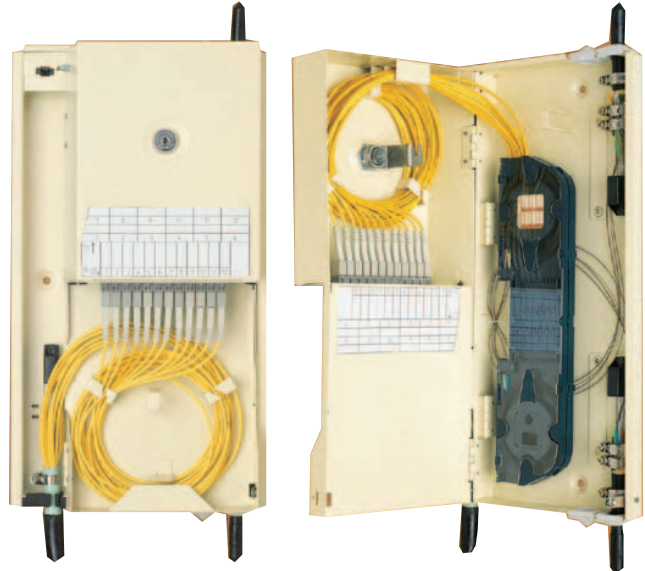
The CROS Optical fibre interface device consists of 2 separate compartments as detailed below:

##### Network compartment:

Cable entries (2 in top and 2 in bottom)  
 Cable anchoring  
 Splice trays  
 Pigtails  
 Couplings on front plate

##### Customer compartment:

Patchcord anchoring  
 Extra-length storage  
 Connection on front plate with the network compartment.



#### Technical characteristics:

##### Materials

- Cover and base: Epoxy painted steel
- Splice trays: Thermoplastic
- Front plate: Aluminium

##### Cable entries

##### Network compartment:

- 2 entries on top side max diameter: 18 mm
- 2 entries on bottom side max diameter: 18 mm

##### Customer compartment:

- 1 entry on bottom side max diameter: 18 mm

##### Locking

The two compartments are locked by two different keys

##### Mounting

Wall mounting with 3 screws.

|                    | CROS model 12      | CROS model 24      |
|--------------------|--------------------|--------------------|
| <b>Capacities</b>  |                    |                    |
| <b>Splices</b>     | 24                 | 48                 |
| <b>Connections</b> | 12 SC / E2000 / EC | 24 SC / E2000 / EC |
| <b>Dimensions</b>  |                    |                    |
| <b>Height</b>      | 435 mm             | 435 mm             |
| <b>Width</b>       | 240 mm             | 270 mm             |
| <b>Depth</b>       | 105 mm             | 125 mm             |
| <b>Weight</b>      | 5 kg*              | 6,2 kg*            |

\*(empty without pigtails and couplings)

# 7.1 3M™ Cross network interface boxes 3M™ Optical fibre interface device

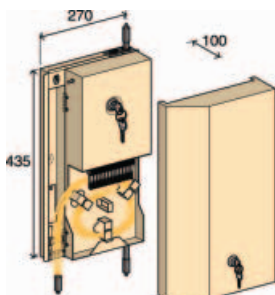


FTTx – Customer Premise

7

Type/Order text

Ref.-No.

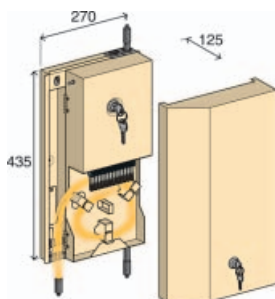


**CROS 12**

N 46 1500 A 0000

Box delivered with:

- 2 splice trays
- 2 anchoring cable kits for dia. Max 13 mm
- 1 front plate for 12 couplings SC, E2000 or EC

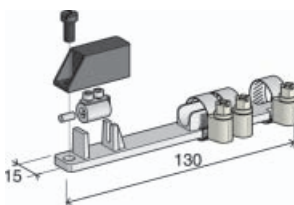


**CROS 24**

N 46 1611 A 0000

Box delivered with:

- 4 splice trays
- 2 anchoring cable kits for dia. Max 13 mm
- 1 front plate for 24 couplings SC, E2000 or EC



**Additional securing devices** (more than 2 cables)

Kit of 2 securing plates

**For 1 cable, max. dia. 13 mm**

NN 4 71 024 0000

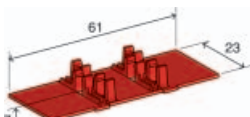
**For 1 cable, max. dia. 25 mm**

N 71 1010 A 0000

**Accessories for splice trays**

Each splice tray is delivered with 2 adaptors for fusion splice protectors.

Splice trays can be equipped with other adaptors:

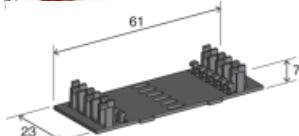


**Adaptor for 3 Mass fusion splice** (dia. 5 mm)

N 85 1125 B 0000

Capacity: 2 adaptors per splice tray

Set of 30 adaptors

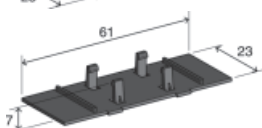


**Adaptor for 6 Fibrlok**

N 80 1016 C 0000

Capacity: 2 adaptors per splice tray

Set of 30 adaptors



**Adaptor for 1 mass Fibrlok**

N 80 1127 A 0000

Capacity: 2 adaptors per splice tray

Set of 30 adaptors

## 7.2 3M™ VKA Distribution boxes

### 3M™ VKA 2/GF-EFM

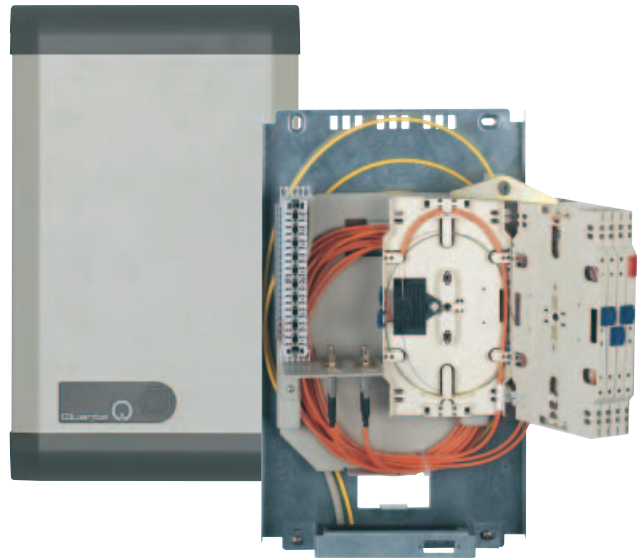
#### Description

#### 3M VKA 2/GF-EFM with single fibre management

The VKA 2/GF-EFM serves as a final distribution or splice distribution frame in optical fibre networks and is capable of accommodating up to 12 splice connections in six FO splicing cassettes.

A feature of the VKA 2/GF-EFM is that it provides the opportunity for both single and multiple fibre management. This type of fibre management enables the storage of the splice for a connection to be separate from all other fibres. Ideally, two fibres will be stored in one splicing cassette. Using this method to manage the fibres, existing fibre connections will not be affected, even during later installation or service work.

By using different connector mounting plates, the VKA 2/GF-EFM can be used as a patch distribution frame. It is possible to install a 10 pair copper connector block (SID-CT) for use with hybrid cables.

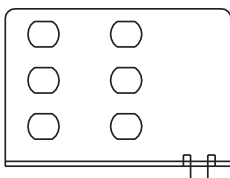


#### Highlights:

- Single-fibre management for up to 12 splicing connections (24 fibres)
- FO cassette stack, completely removable
- Separate cable guide levels for incoming and outgoing sides
- Connector holders for SC, ST or FC connections
- Copper connector block for hybrid cables
- Lockable
- Remote monitoring via lid contact
- Utilises the same design as the VKA distribution frame

#### Type/Order text

#### Ref.-No.



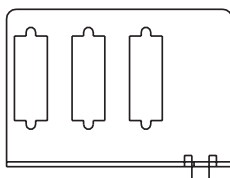
#### VKA 2/GF-EFM for 12 splice connections

Protection rating: IP 40 (DIN 40050)  
 Dimensions (H x W x D): 330 x 200 x 100 mm  
 Weight: approx. 2,1 kg; Packaging: 1 unit

#### Delivery:

- Base plate with earth terminal and attachment for copper connector block
- Cassette stack with 6 FO splicing cassettes, hinges and cassette lids included
- Unlocking tools
- Various cable straps
- Assembly instructions

52-303-00000



#### FO connector mounting plates holders 6 ST/FC

52138-009 30

#### Lock kits

#### VKA lock kit Q2

52096-523 00

#### VKA lock kit Q3

52096-521 00

#### VKA lock kit Q15

52096-526 00



#### VKA-Lid contact

Lid contact only useable in combination with lock kit

52096-519 00

# 7.2 3M™ VKA Distribution boxes

## 3M™ VKA 2/GF



FTTx – Customer Premise

### Description

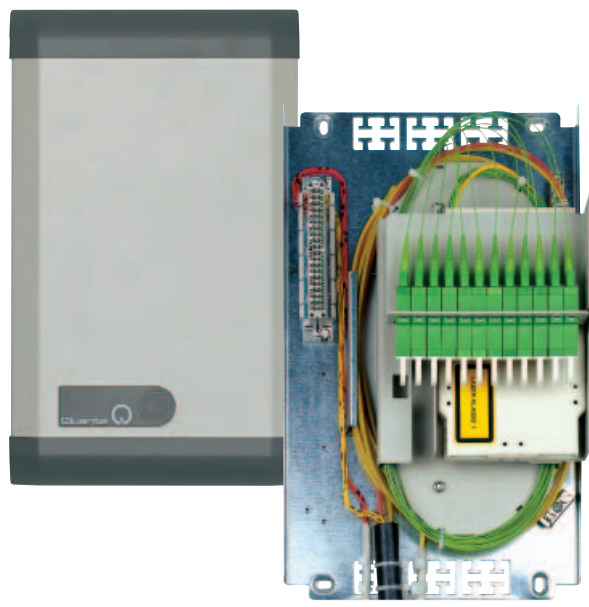
#### 3M VKA 2/GF

The VKA 2/GF optical fibre distribution box is specifically designed as an interior transfer or termination point for optical fibre runs. It is well-suited to environments where space is limited and cost effective solution is required.

The VKA 2/GF houses two FO splicing cassettes which can hold up to 24 splice connections. With the addition of a connector mounting plate (optional) the boxes can also be used as patch distribution frame.

If hybrid cables are used, the modular design of the VKA 2/GF makes it possible for either two 10 pair or one 20 pair copper connector block (SID-CD) to be accommodated.

Protection rating: IP 40 (DIN 40050)

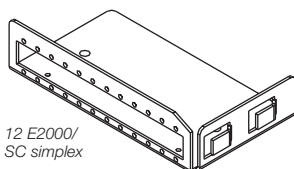


#### Highlights:

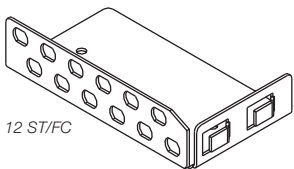
- Splice or patch distribution frame for 24 splice connections (2 FO splicing cassettes)
- FO connector mounting plates for 12 connectors E2000/SC, ST/FC or 6 connectors SC duplex
- Accommodates hybrid cables using copper connector blocks, either 2x10 pair or 1x20 pair (SID-CD). Overvoltage protection can be used
- Lockable
- Remote monitoring via lid contact

### Type/Order text

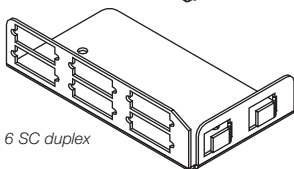
### Ref.-No.



12 E2000/SC simplex



12 ST/FC



6 SC duplex

#### VKA 2/GF for 24 splice connections

Dimensions (HxWxD): 330 x 200 x 100 mm  
 Weight: approx. 2,1 kg;  
 Packaging: 1 unit

#### Delivery:

- Base plate with earth terminal and attachment for copper connector block
- Cassette tray for FO splicing cassettes
- 2 FO splicing cassettes with splice protection holder
- Housing lid with snap closure
- Various cable straps, assembly instructions

#### FO connector mounting plates

|                     |              |
|---------------------|--------------|
| 12 E2000/SC simplex | 52138-019 30 |
| 12 ST/FC            | 52138-018 30 |
| 6 SC duplex         | 52138-016 30 |

#### Lock kits

|                  |              |
|------------------|--------------|
| VKA lock kit Q2  | 52096-523 00 |
| VKA lock kit Q3  | 52096-521 00 |
| VKA lock kit Q15 | 52096-526 00 |



#### VKA-Lid contact

|   |              |
|---|--------------|
| Lid contact only useable in combination with lock kit | 52096-519 00 |
|---|--------------|

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## 7.2 3M™ VKA Distribution boxes

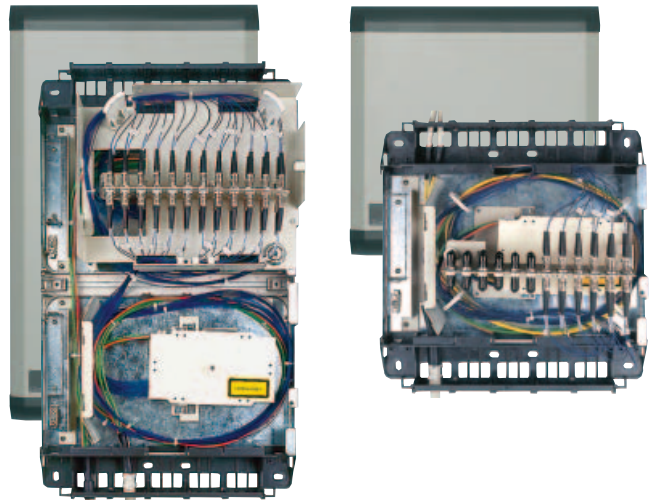
### 3M™ VKA 4/GF, 3M™ VKA 8/GF

#### Description

#### 3M VKA 4/GF, 3M VKA 8/GF

VKA 4/GF and VKA 8/GF are optical fibre distribution frames capable of housing upto 48 and 96 splice connections in either four or eight FO splicing cassettes, respectively. These capacities can be further expanded to 72 or 144 splice connections by the addition of a further 2 or 4 splicing cassettes. In these cases it will not be possible to install a FO connector mounting plate.

Using optional connector mounting plates, the two splice distribution frames can be converted to patch distribution frames. The VKA 4/GF can be equipped with one, the VKA 8/GF with two connector mounting plates. For the use of hybrid cables (with copper leads), there is a provision for the installation of 10 pair copper connector blocks (SID-CT).

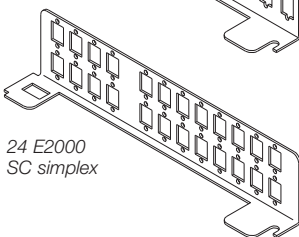
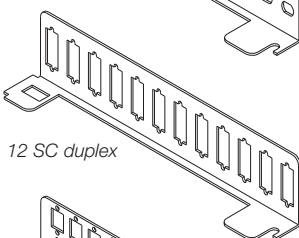
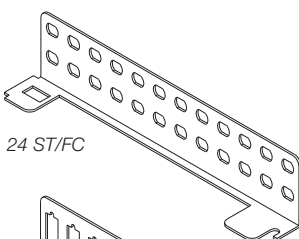


#### Highlights:

- Capacity as:  
Patch distribution frame, 48 (VKA 4/GF) or 96 (VKA 8/GF) splice connections  
Splice distribution frame, 72 (VKA 4/GF) or 144 (VKA 8/GF) splice connections
- Connector mounting plates for SC, E2000, FC or SC connections
- Copper termination for hybrid cables possible with overvoltage protection
- Remote monitoring via lid contact

#### Type/Order text

#### Ref.-No.



#### VKA 4/GF for 48 splice connections

#### VKA 8/GF for 96 splice connections

Protecting rating: IP 40 (DIN 40050)  
Dimensions (H x W x D): 330 x 330 x 125 mm, 550 x 330 x 125 mm  
Weight: approx. 2,8 / 4,9 kg; Packaging: 1 unit

#### Delivery:

- Base plate with earth terminal and attachment materials for copper connector blocks
- Cassette tray for FO splicing cassettes
- 4 or 8 splicing cassettes with splice protection holder
- 1 or 2 splicing cassette lids
- Plastic cable inlets and clamping
- Housing lid with snap closure
- Various cable straps
- Assembly instructions

#### FO connector holders

##### 24 ST/FC

52138-010 30

##### 12 SC duplex

52138-012 30

##### 24 E2000 / SC simplex

52138-013 30

Installation above the FO splicing cassettes

#### Lock kits

##### VKA lock kit Q2

52096-523 00

##### VKA lock kit Q3

52096-521 00

##### VKA lock kit Q15

52096-526 00

#### VKA-Lid contact

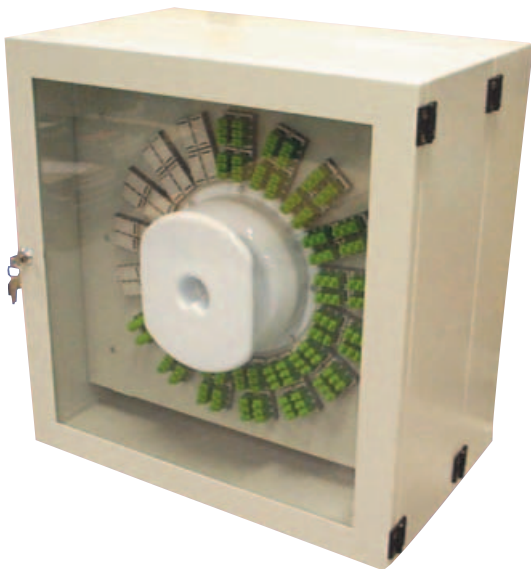
52096-519 00

Lid contact only useable in combination with lock kit

# 7.3 Proptic box

## 3M™ Proptic C200 box

### Description



The 3M Proptic C200 housing is a compact assembly ideal for passive network nodes or subscriber interfaces. This fully stand-alone module allows for distribution of 204 connection points over a height of only 600 mm. All functions, including securing and splicing, are accessible from the front, since the distribution panel is hinged.

### Technical characteristics:

#### Dimensions:

Height 600 mm - Width 585 mm - Depth 370 mm

#### Cables:

Lead-in : at the back from the bottom

Number : 6 ports capable of accommodating 1 BPEM cable securing clamp each (dia. 8 to 25)

16 additional ports are available at the base of the module.

These universal ports provide for hooking up pre-wired or break out cables directly to the chamber using a Rilsan clamp

Splicing : 18 cassettes of 12 splices i.e. 216 single fusion splices.

#### Kit Composition :

The housing is delivered fully assembled with its template.

The pigtailed are connected to the rear of the adaptors, with their free ends on hold in the cassettes in groups of 12.

#### Other Supplies :

Covers for the unused locations on the distribution panel.

Kit of marking caps (alphanumeric) for all of the 204 connections.

Kit of corrugated conduits (int. dia. 2.5 mm) from the securing devices up to the cassettes (1 conduit supplied for 6 pigtailed)

BPEM securing kit P/N: NN 4 71 024 0000 for two cables from 8 to 13 mm

Captive nuts and attachment screws

#### To be ordered separately :

Additional securing devices (input for more than two cables)

Jumper / Patch cords

#### Classic 19" Housing



Number of Pre-wired points  
From 72 to 204 points

Fibre and connectors Mono-mode fibre G652

EC

SC/PC

SC/UPC

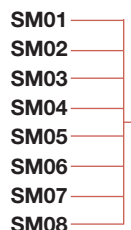
SC/APC

FC/PC

FC/UPC

FC/APC

ST



Mono-mode fibre G652 Connection with alignment sleeve

SM09

SC/PC With sleeve

SM10

SC/UPC With sleeve

SM11

SC/APC With sleeve

SM12

FC/PC With sleeve

SM13

FC/UPC With sleeve

SM14

FC/APC With sleeve

Multimode fibre 62.5/125

MM01

ST

MM02

SC

On request : mono-mode fibre G655, multi-mode fibre 50/125, other connectors and special layouts.

#### Accessories

##### Kit of 6 jumpers

Cable Structure

900 microns (standard)

1.5 mm

Fibre and connectors Mono-mode fibre G652

EC

SC/PC

SC/UPC

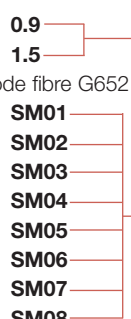
SC/APC

FC/PC

FC/UPC

FC/APC

ST



Mono-mode fibre G652 Connection with alignment sleeve

SM09

SC/PC With sleeve

SM10

SC/UPC With sleeve

SM11

SC/APC With sleeve

SM12

FC/PC With sleeve

SM13

FC/UPC With sleeve

SM14

FC/APC With sleeve

Multimode fibre 62.5/125

MM01

ST

MM02

SC

Other Accessories: See page for Accessories common to Racks and Housings