

COB series Panel supports for multipole connectors

The **COB** system of panel supports makes it possible to use multipole connectors within electric panels without the traditional metallic enclosures as protection is assured by the electric panel itself or other container.

N.B.: connectors must not be connected and disconnected under load or when live.

The **COB** system is approved by **UL** as support for multipole connectors (UL ECBT2 and ECBT8 file E115072), as well as by **DNV-GL** and **Bureau Veritas** maritime applications on board ships.

The **COB** system may be assembled in the three following ways:

- On panels with window snap fastening device (**Figure 1**).
- On DIN EN 60715 rails, both lengthways and crossways to the support (**Figure 2**).
- On fixed panels using screws (**Figure 2**).

The COB system offers the following advantages:

- Reduction in cost and space with respect to metallic enclosures plus traditional terminal blocks enabling "modular" wiring inside panels, very handy in case of maintenance: fast replacement of devices and entire sections leading to shorter downtime.
- Possibility of pre-wiring and testing of the connectors at bench, fastening the commissioning of the installation on site.
- Easy wiring inspection and tests with coupled connectors, thanks to rear access to the inserts by the overturning (connector hinged and locked on the base support).
- Fast mounting in panels thanks to the snap fastening device on the DIN EN 60715 rails.
- Sturdy support structure, specific to the size of each insert, it does not require any preparation.
- Broad passage for housing of conductor cables.

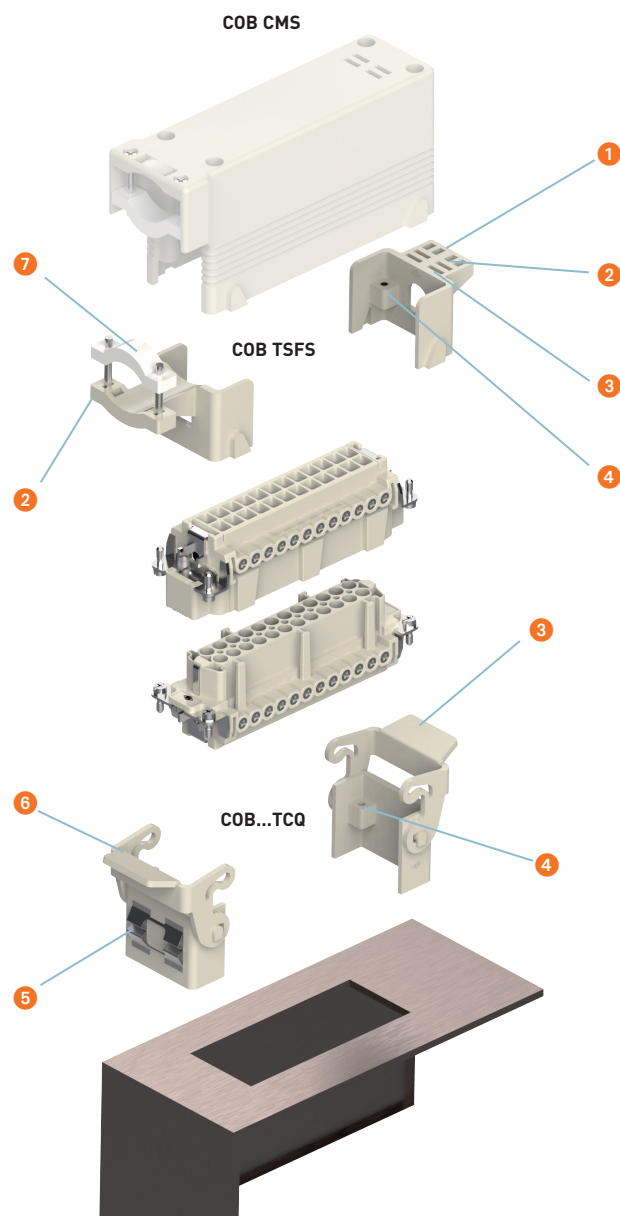
- Mobile parts prearranged for the clamping of bundles of conductors of multi-core cables, to prevent contact with the connector contacts.

The COB system satisfies the most varied installation needs thanks to the interchangeability of the connector inserts. The inserts can be installed as per the table here under.

In addition, the **COB...BC** supports may house the ILME **CR...AD1** and **CR...AD2** series plates for the D-SUB inserts (miniature-connectors).

Figure 1: COB TCQ + COB TSFS (COB...CMS, alternative)

- Snap fastening in window (mounting via adaptor plates described on page 654), panels or control panels.



Supports for connector inserts

types	COB TCQ			
	COB 06 BC	COB 10 BC	COB 16 BC	COB 24 BC
fixed				
types	COB TSF and COB TSFS			
mobile	COB 06 CMS	COB 10 CMS	COB 16 CMS	COB 24 CMS

Insert centre distance

mm	44 x 27	57 x 27	49.5 x 16 * 66 x 16 * 77.5 x 27	104 x 27

Insert series and polarity + ⊕

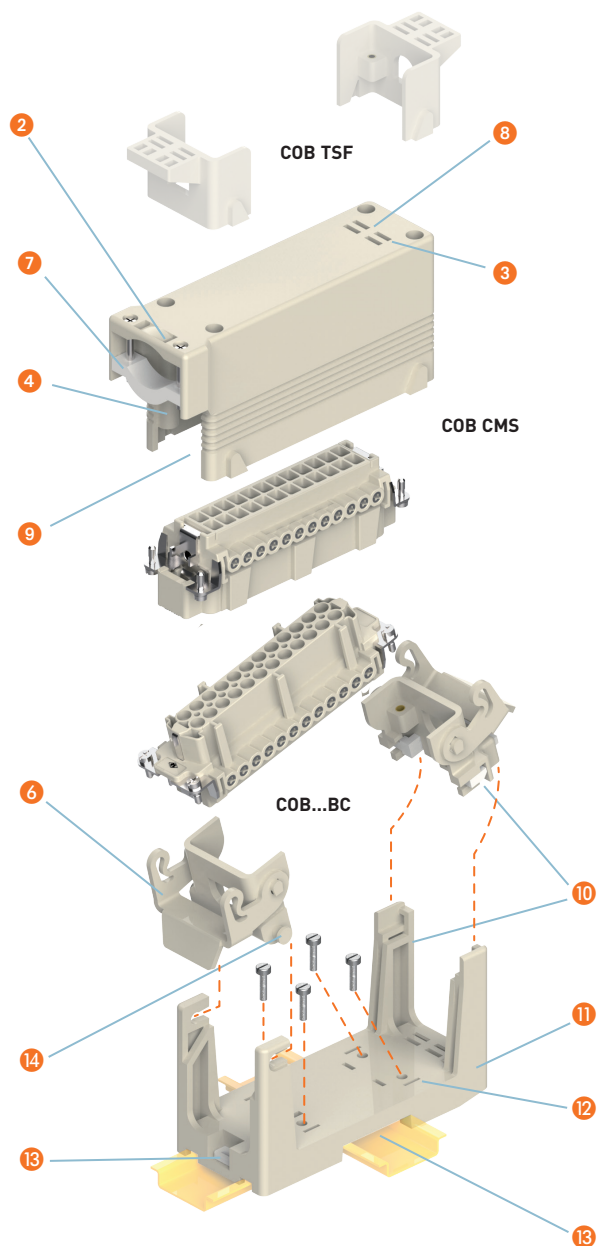
CD			15 *, 25 *, 40	64
CDD	24	42	38 *, 72	108
CDA, CSAH			10 *, 16 *	
CDC			10 *, 16 *	
CDSH, CDS	9	18	27	42
CCE	6	10	16	24
CQE	10	18	32	46
CQEE			40	64
CNE	6	10	16	24
CSH, CSE	6	10	16	24
CMCE		3 + 2	6 + 2	10 + 2 16 + 2
CME		3 + 2	6 + 2	10 + 2 16 + 2
CMSH		3 + 2	6 + 2	10 + 2
CP			6	
CX			4/0, 4/2 6/36, 12/2	4/8 6/6
MIXO	2 modules	3 modules	4 modules	6 modules

Product details

- 1 **COB, TSF** or **COB TSFS** insert support blocks (with cable clamp) for mobile mounting, in self-extinguishing thermoplastic material.
- 2 Passage for cable support bands (from 2,2 to 4,8 mm).
- 3 Locations for insertion of identification tags (size 9 x 20 mm).
- 4 Threaded metallic inserts for screws to fix the connectors and possibility of coded connection with the use of specific pins (ILME part: CR 20, CRM, CRF, CR 20 CX, CRM CX and CRF CX) when identical connectors are used.
- 5 **COB TCQ** insert carrier block for window mounting in self-extinguishing thermoplastic material, with spring snap fastening.
- 6 Locking device with levers in self-extinguishing thermoplastic material for insert coupling.
- 7 Sturdy cable clamp for clamping multipolar cables with a diameter of up to 25 mm or bundles of unipolar conductors.
- 8 **COB...CMS** enclosure for mobile mounting, in self-extinguishing thermoplastic material, IP20 degree of protection.
- 9 Free passage for mounting wired insert with conductor cables.
- 10 Mobile blocks (in **COB...BC** kit) in self-extinguishing thermoplastic material, with quick release device for insert turnover, wiring operations, verifications and maintenance
- 11 **COB...BC** panel support for bulkhead mounting in self-extinguishing thermoplastic material, sturdy block support structure, with broad passage for housing of conductor cables.
- 12 Holes for fixed fastening with screws without DIN EN 60715 rails.
- 13 Snap fastening on DIN EN 60715 rails, both lengthways and crossways to the support.
- 14 Rollover pins that can be released and allow the use of pre-wired inserts.

Figure 2: COB...BC + COB...CMS (COB TSF, alternative)

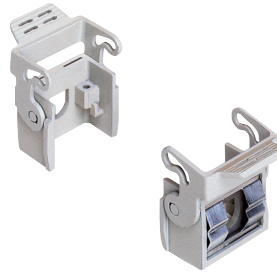
- snap fastening on DIN EN 60715 rails both lengthways and crossways to the support
- installation in panels or control panels, with fixed fastening with screws.



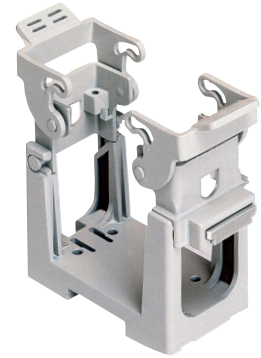
For inserts size "44.27", "57.27", "77.27", "104.27"

inserts		page:
CD	40, 64 poles + ⊕	70 and 72
CDD	24, 42, 72, 108 poles + ⊕	76 - 81
CDS	9, 18, 27, 42 poles + ⊕	-
CDSH	9, 18, 27, 42 poles + ⊕	86 - 89
CDSH NC	6 poles + ⊕	95
CNE	6, 10, 16, 24 poles + ⊕	110 - 113
CSE	6, 10, 16, 24 poles + ⊕	-
CSH	6, 10, 16, 24 poles + ⊕	110 - 113
CSH S	6, 10, 16, 24 poles + ⊕	122 - 125
CCE	6, 10, 16, 24 poles + ⊕	130 - 133
CME	3+2, 6+2, 10+2 (aux) poles + ⊕	136 - 140
CMSH	3+2, 6+2, 10+2 (aux) poles + ⊕	136 - 140
CMCE	3+2, 6+2, 10+2 (aux) poles + ⊕	137 - 141
CSS	6, 10, 16, 24 poles + ⊕	148 - 151
CQE	10, 18, 32, 46 poles + ⊕	168 - 171
CQEE	40, 64 poles + ⊕	176 - 177
CP	6 poles + ⊕	178
CX	8/24, 6/36, 12/2 poles + ⊕	194 - 199
CX	4/0, 4/2, 4/8, 6/6 poles + ⊕	200 - 206
MIXO	2, 3, 4, 6 modules	232 - 287

connector carrier for faceplate mounting in window, snap fastening



connector carrier baseplate for mounting on DIN EN 60715 rail or fixed mounting using screws



description

part No.

part No.

kit with 2 elements, for coupling of inserts with screw fixing centre distance (short side = 27 mm)

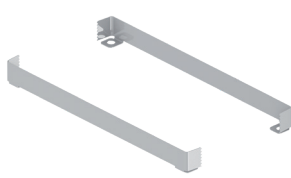
COB TCQ

kit comprising frame and mobile blocks, for insert coupling: with screw fixing centre distance of 44 x 27 mm with screw fixing centre distance of 57 x 27 mm with screw fixing centre distance of 77,5 x 27 mm with screw fixing centre distance of 104 x 27 mm

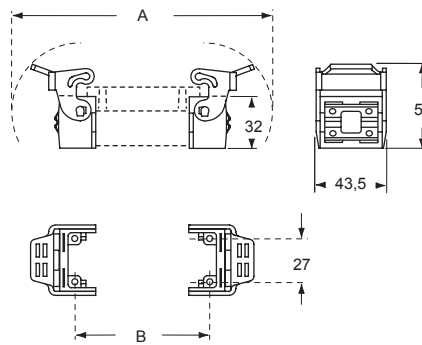
COB 06 BC
COB 10 BC
COB 16 BC
COB 24 BC

It is the responsibility of the installer to verify the continuity of the PE protective earth circuit ⊕ between the two halves of the connector.

Optional PE earth jumpers (page 655)



COB TCQ

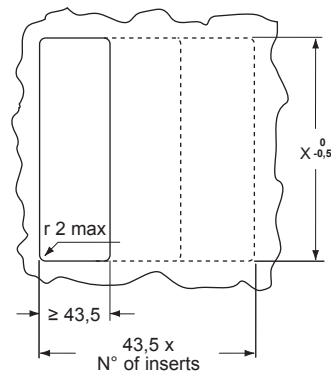


COB TCQ

for inserts	A	B
with centre distance 44 x 27 mm	120	44
with centre distance 57 x 27 mm	133	57
with centre distance 77,5 x 27 mm	153,5	77,5
with centre distance 104 x 27 mm	180	104

panel cut-out COB TCQ

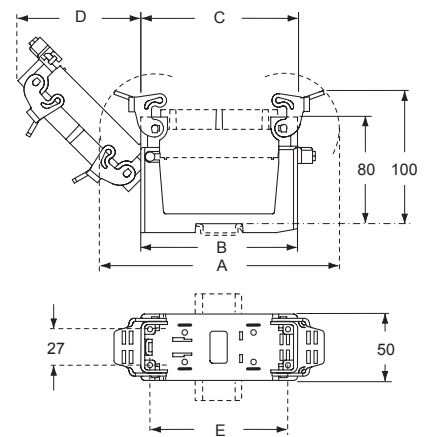
window size on plate thickness 1,3-3 mm



for insert coupling:	X _{0,5}
with centre distance 44 x 27 mm	65
with centre distance 57 x 27 mm	78
with centre distance 77,5 x 27 mm	98
with centre distance 104 x 27 mm	125

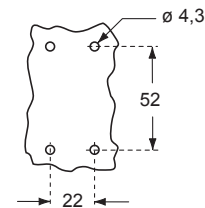
COB BC

overall dimensions with longitudinal DIN rails

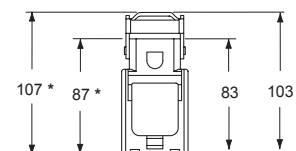


part No.	A	B	C	D	E
COB 06 BC	120	91,5	58	50	44
COB 10 BC	133	91,5	71	59,5	57
COB 16 BC	153,5	91,5	91,5	74	77,5
COB 24 BC	180	118	118	93	104

panel cut-out COB BC



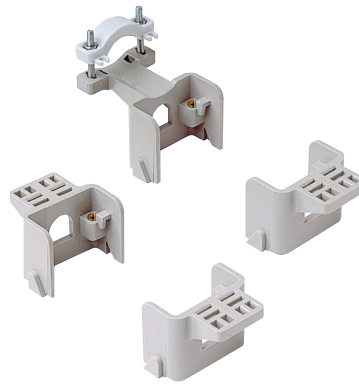
overall dimensions without DIN rails (values with "asterisk") overall dimensions with longitudinal DIN rails



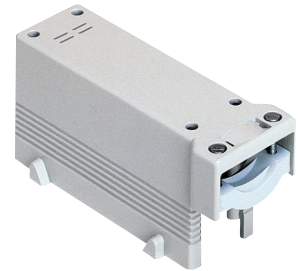
For inserts size "44.27", "57.27", "77.27", "104.27"

inserts		page:
CD	40, 64 poles + ⊕	70 and 72
CDD	24, 42, 72, 108 poles + ⊕	76 - 81
CDS	9, 18, 27, 42 poles + ⊕	-
CDSH	9, 18, 27, 42 poles + ⊕	86 - 89
CDSH NC	6 poles + ⊕	95
CNE	6, 10, 16, 24 poles + ⊕	110 - 113
CSE	6, 10, 16, 24 poles + ⊕	-
CSH	6, 10, 16, 24 poles + ⊕	110 - 113
CSH S	6, 10, 16, 24 poles + ⊕	122 - 125
CCE	6, 10, 16, 24 poles + ⊕	130 - 133
CME	3+2, 6+2, 10+2 (aux) poles + ⊕	136 - 140
CMSH	3+2, 6+2, 10+2 (aux) poles + ⊕	136 - 140
CMCE	3+2, 6+2, 10+2 (aux) poles + ⊕	137 - 141
CSS	6, 10, 16, 24 poles + ⊕	148 - 151
CQE	10, 18, 32, 46 poles + ⊕	168 - 171
CQEE	40, 64 poles + ⊕	176 - 177
CP	6 poles + ⊕	178
CX	8/24, 6/36, 12/2 poles + ⊕	194 - 199
CX	4/0, 4/2, 4/8, 6/6 poles + ⊕	200 - 206
MIXO	2, 3, 4, 6 modules	232 - 287

insert carrier blocks for mobile mounting



insert carrier insulated enclosures for mobile mounting



description	part No.	part No.
-------------	----------	----------

kit with 2 elements, for coupling of inserts
with screw fixing centre distance (short side = 27 mm)
with handle for cable support bands
with handle for cable support or cable clamp bands

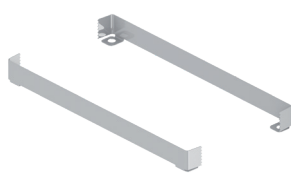
COB TSF
COB TSFS

side entry, with cable clamp
for insert coupling:
with screw fixing centre distance of 44 x 27 mm
with screw fixing centre distance of 57 x 27 mm
with screw fixing centre distance of 77,5 x 27 mm
with screw fixing centre distance of 104 x 27 mm

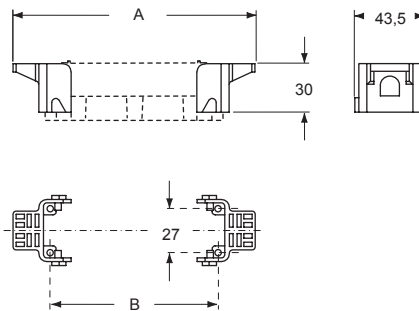
COB 06 CMS
COB 10 CMS
COB 16 CMS
COB 24 CMS

It is the responsibility of the installer to verify the continuity of the PE protective earth circuit ⊕ between the two halves of the connector.

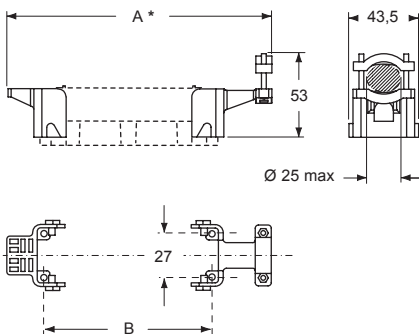
Optional PE earth jumpers (page 655)



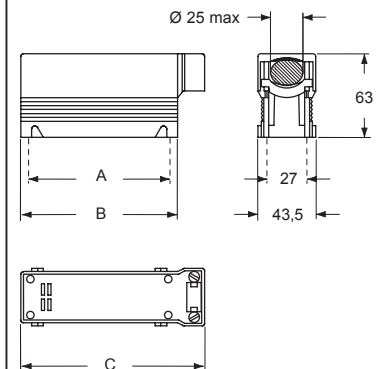
COB TSF



COB TSFS



COB CMS



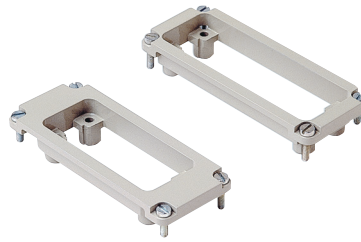
part No.	A	B	C
COB 06 CMS	44	58	74
COB 10 CMS	57	71	87
COB 16 CMS	77,5	91,5	107,5
COB 24 CMS	104	118	134

for inserts	A	A*	B
with centre distance 44 x 27 mm	90	104	44
with centre distance 57 x 27 mm	103	117	57
with centre distance 77,5 x 27 mm	123,5	137,5	77,5
with centre distance 104 x 27 mm	150	164	104

For inserts size "49.16", "66.16"

inserts		page:
CD	15, 25 poles + ⊕	68 - 69
CDD	38 poles + ⊕	77
CSAH	10, 16 poles + ⊕	99 - 101
CDA	10, 16 poles + ⊕	98 - 100
CDC	10, 16 poles + ⊕	104 - 105
MIXO	1 module	232 - 287

**adaptor plates
for insert mounting**



**levers for coupling
with metallic enclosures**



description	part No.	part No.
mounting on COB series articles (see below) for 1 insert with centre distance of 49,5 x 16 mm	CR 15/16	
mounting on COB series articles (see below) for 1 insert with centre distance of 66 x 16 mm	CR 25/16	
kit with 2 elements, to be mounted instead of the standard levers to be coupled with: COB TCQ and COB...BC ¹⁾		COB L

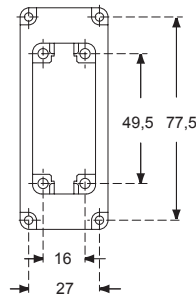
¹⁾ They allow the mounting of aluminium hoods with 4 pegs, size 55.27, 77.27 and 104.27

Adaptors plates

They allow the inserting of inserts of "49.16" and "66.16" on the following COB series articles: COB TCQ, COB 16 BC, COB TSF, COB TSFS, COB 16 CMS

It is the responsibility of the installer to verify the continuity of the PE protective earth circuit ⊕ between the two halves of the connector.

CR 15/16



CR 25/16

