

## CT - CTS series

### Inserts with incorporated terminal block for multipole connectors (10A max versions)

#### Use.

The CT-series multipole connectors (with incorporated terminal block) are recommended for greater cost-saving and safety for use on machines and command and control panels.

For control panel mounting, bulkhead housings must be used.

The CT series inserts (10A max versions) are supplied in the plug or socket versions and must be mounted with insertion from the rear of the enclosure (Figures 1 and 2). The space occupied by the terminal block does not allow for the passage of the insert and insertion from the front of the enclosure.

As an alternative to the traditional terminal blocks, the inserts can be mounted inside the control panels on DIN EN 60715 rails (Figure 5) using suitable accessories providing the added advantage of easy sectioning.

The special structure of the CT inserts has all the conductor connections on the same side providing for easier wiring and a complete view of the work area.

The terminal block also has slots for housing the identification wire markers of each contact. Wire markers of different manufacturers may be used such as: Cabur, Grafoplast, Modernotecnica, Phoenix,

Siemens, Wago, Weidmüller.

The CT series is available in the versions "left" and "right" for mounting on the left (Figure 3) or on the right (Figure 4) of the control panel walls.

This characteristic is determined by the position of contact "1" and the ground terminal in the upper part of the insert terminal block for both left and right mounting.

The installation of inserts on DIN rails (Figure 5) inside the control panels is usually made to facilitate the wiring in sectionable parts. In this case the degree of protection for coupled connectors is IP20 (in accordance with EN 60529).

This type of mounting requires supports (CT APE) to be provided to the inserts suitable for mounting on DIN EN 60715 rail.

In addition, CRBF (female) and CRBM (male) coupling screws instead of normal screws are recommended for fixing the inserts to the enclosures (Figure 5) in order to guarantee a stable and safe coupling between the CT and CTS inserts installed on the DIN rails and corresponding CD inserts.

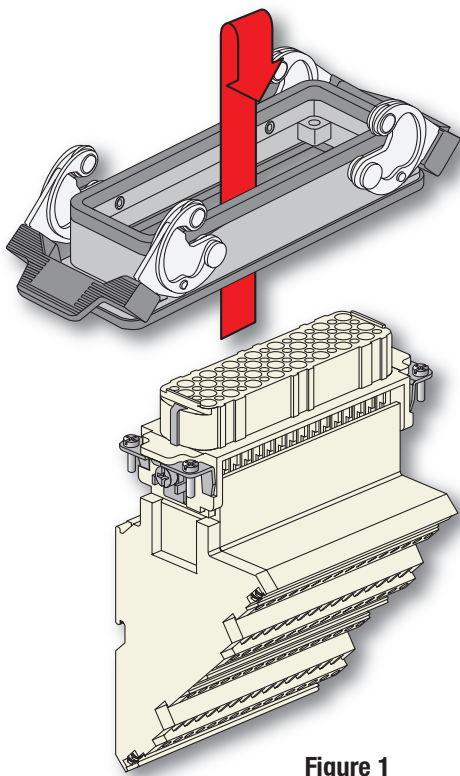


Figure 1

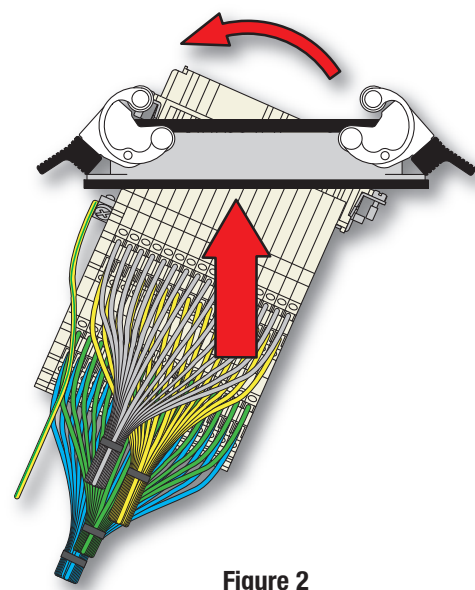


Figure 2

#### Figures 1 and 2 (rear mounting)

The insert is inserted into the bulkhead housing with pre-wired conductors connected at the opposite end.

# CT - CTS series

## Inserts with incorporated terminal block for multipole connectors

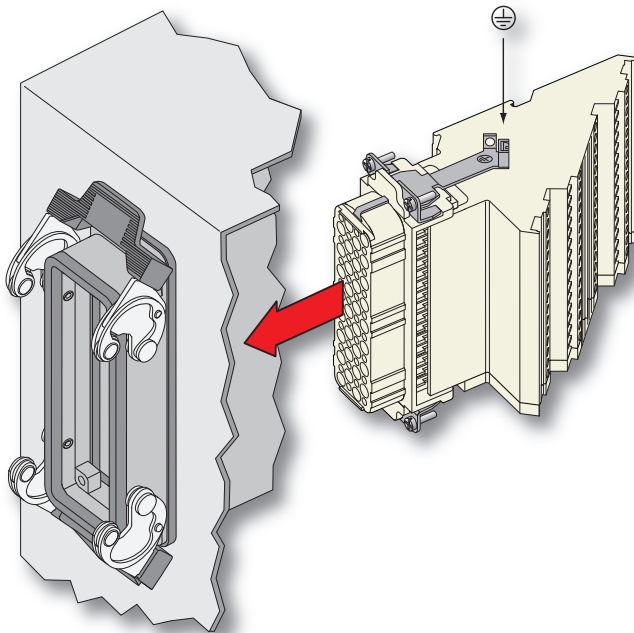


Figure 3 (left mounting)

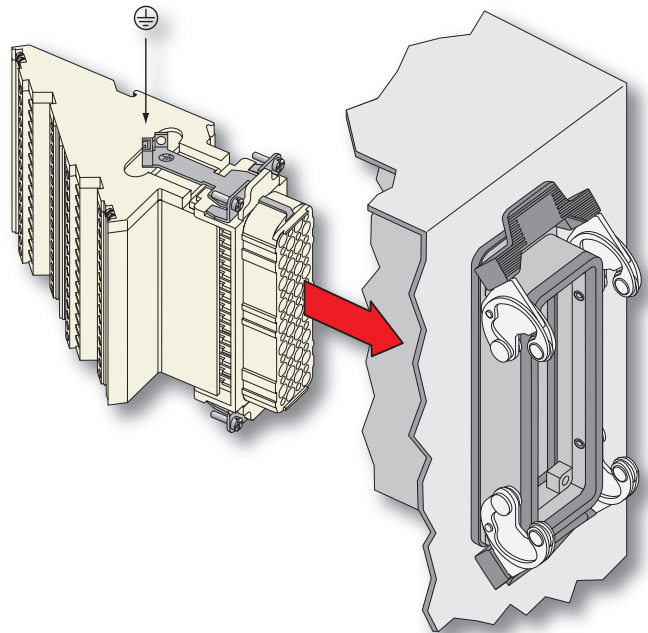


Figure 4 (right mounting)

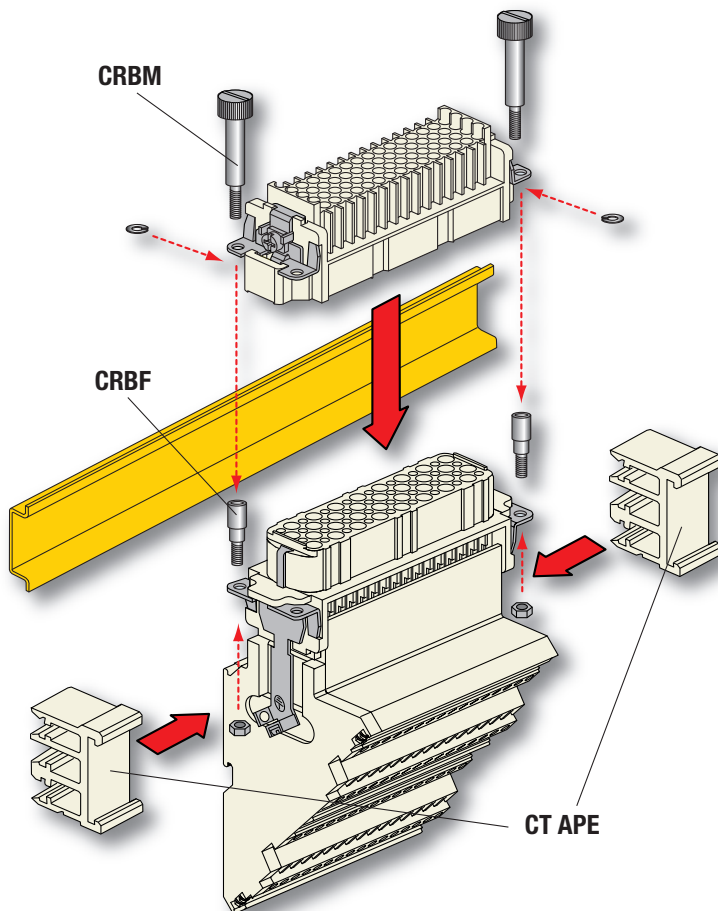
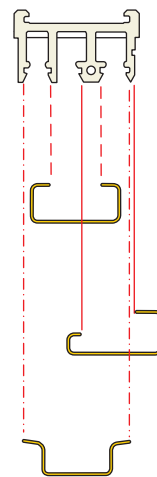


Figure 5 (mounting on DIN rail)



**CT APE**  
possibility of coupling to DIN EN 60715 rail (for a greater stability of the CT inserts of 40 and 64 poles we recommend using the two CT APE supports)

**EN 60715  
C 30**

**EN 60715  
G 32**

**EN 60715  
TH 35-7,5 and TH 35-15**

Accessories for CT inserts

- support for mounting on DIN rail (**CT APE** page 476)
- inserts coupling screws (**CRBM** and **CRBF** page 476)
- cable-clamping plates (**CRAD** and **CRAS** page 476)

enclosures \*) :  
size "77.27"

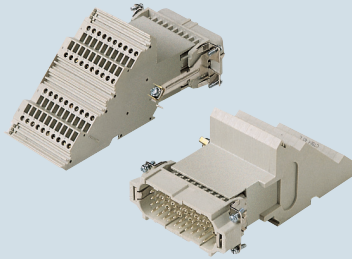
page:

C-TYPE IP65/IP66 .....	250
C7 IP67, two levers .....	276
V-TYPE IP65/IP66, single lever .....	282/292
W-TYPE for aggressive environments .....	375
EMC .....	394
central lever .....	408
LS-TYPE .....	454

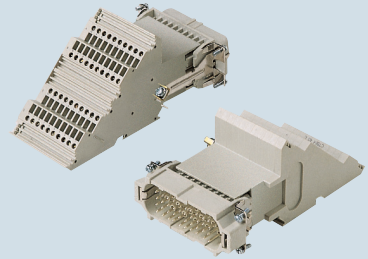
\*) only bulkhead mounted housings

- can be mated with CD inserts
- rear-mounted inserts

**terminal block inserts  
screw terminal connection**



**terminal block inserts  
spring terminal connection**



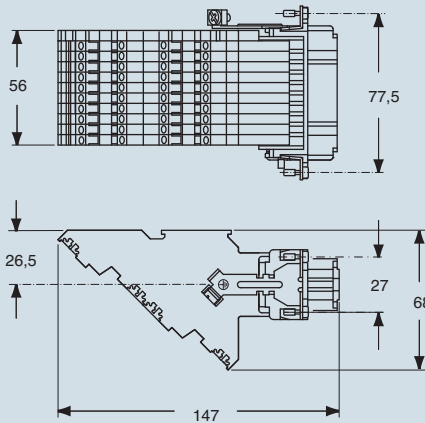
description	part No.	part No.	part No.	part No.
side-mounting (see page 63) female inserts with female contacts 1) male inserts with male contacts 1)	left CTF 40 L CTM 40 L	right CTF 40 R CTM 40 R	left CTSf 40 L CTSM 40 L	right CTSf 40 R CTSM 40 R
side-mounting (see page 63) female inserts with female contacts male inserts with male contacts				

1) for non-prepared conductors

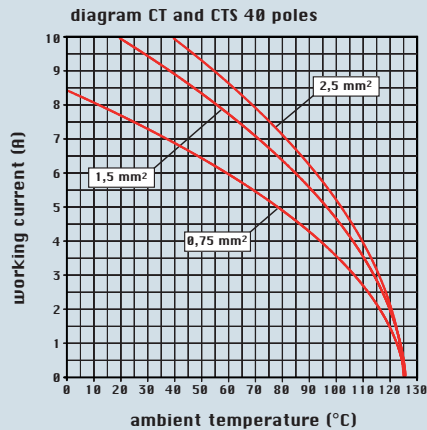
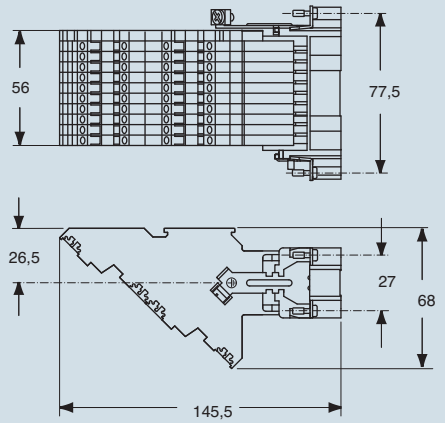
- characteristics according to EN 61984:  
**10A 250V 4kV 3**  
**10A 230/400V 4kV 2**

- UL, CSA, CCC \*, GL, EAC certified
- \* CQC certification being applied for
- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- are made of self-extinguishing thermoplastic resin UL 94 V0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 4 \text{ m}\Omega$
- for maximum current load, see the following load curves inserts, for more information see page 557

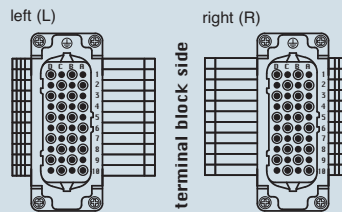
dimensions in mm  
**female inserts (CTF and CTSf)**



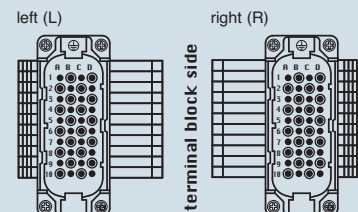
**male inserts (CTM and CTSM)**



contacts side (front view)  
**female inserts (CTF and CTSf)**

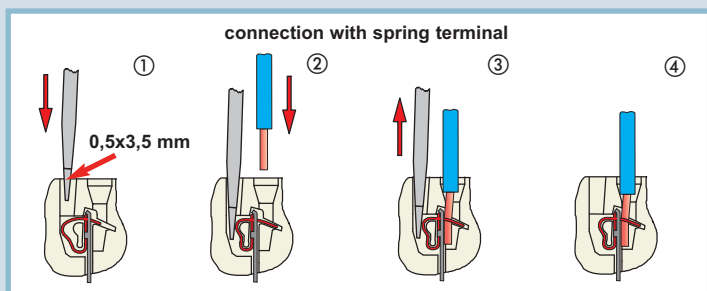


**male inserts (CTM and CTSM)**



- CT inserts with plate, for section conductors: 0.75 - 2.5 mm<sup>2</sup> - AWG 18 - 14
- conductors stripping length: 12 mm
- terminal screw torque: 0.4 Nm (3.54 lb.in), for more information see page 34 and 35

- CTS spring inserts for section conductors: effective sections for non-prepared conductors 0.14 - 2.5 mm<sup>2</sup> - AWG 26 - 14
- effective sections for prepared conductors 0.14 - 1 mm<sup>2</sup> - AWG 26 - 18
- conductors stripping length: 9...11 mm



dimensions shown are not binding  
and may be changed without notice

CT - CTS

enclosures \*) :  
size "104.27"

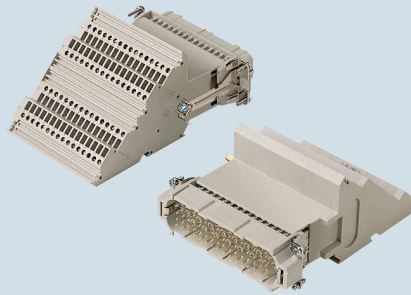
page:

C-TYPE IP65/IP66 .....	258
C7 IP67, two levers .....	277
V-TYPE IP65/IP66, single lever .....	283/296
W-TYPE for aggressive environments .....	376
EMC .....	395
central lever .....	410
LS-TYPE .....	456

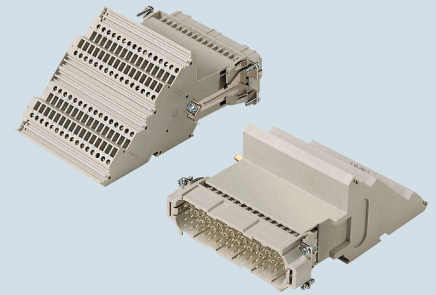
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- can be mated with CD inserts
- rear-mounted inserts

**terminal block inserts  
screw terminal connection**



**terminal block inserts  
spring terminal connection**



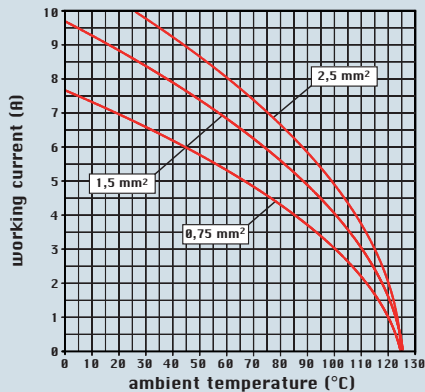
description	part No.	part No.	part No.	part No.
side-mounting (see page 63) female inserts with female contacts 1) male inserts with male contacts 1)	left <b>CTF 64 L</b> <b>CTM 64 L</b>	right <b>CTF 64 R</b> <b>CTM 64 R</b>	left <b>CTS F 64 L</b> <b>CTSM 64 L</b>	right <b>CTS F 64 R</b> <b>CTSM 64 R</b>
side-mounting (see page 63) female inserts with female contacts male inserts with male contacts				

1) for non-prepared conductors

- characteristics according to EN 61984:

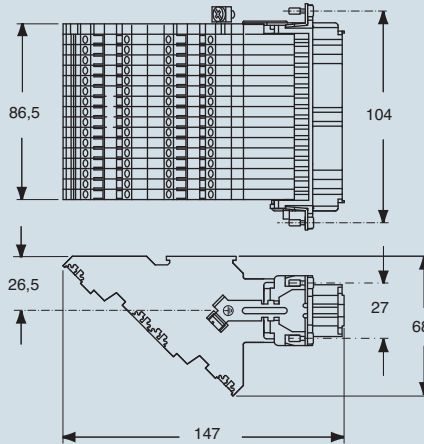
- 10A 250V 4kV 3**
- 10A 230/400V 4kV 2**
- UL, CSA, CCC \*, GL, EAC certified
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- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
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- are made of self-extinguishing thermoplastic resin UL 94 V0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 4 \text{ m}\Omega$
- for maximum current load, see the following load curves inserts, for more information see page 557

diagram CT and CTS 64 poles

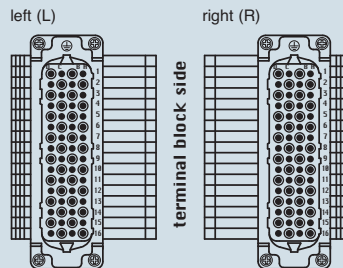


dimensions in mm

**female inserts (CTF and CTSF)**

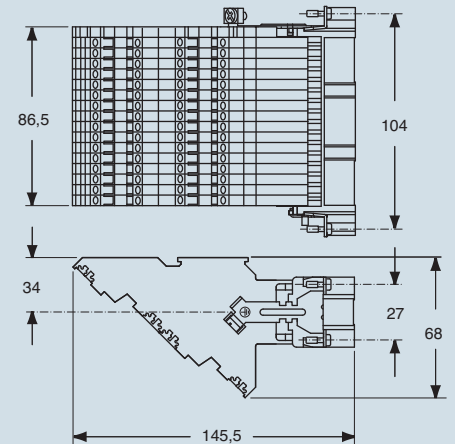


contacts side (front view)  
**female inserts (CTF and CTSF)**

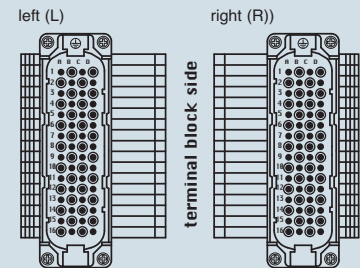


- CT inserts with plate, for section conductors: 0.75 - 2.5 mm<sup>2</sup> - AWG 18 - 14
- conductors stripping length: 9...11 mm
- terminal screw torque: 0.4 Nm (3.54 lb.in), for more information see page 34 and 35

**male inserts (CTM and CTSM)**



contacts side (front view)  
**male inserts (CTM and CTSM)**



- CTS spring inserts for section conductors: effective sections for non-prepared conductors 0.14 - 2.5 mm<sup>2</sup> - AWG 26 - 14
- effective sections for prepared conductors 0.14 - 1 mm<sup>2</sup> - AWG 26 - 18
- conductors stripping length: 9...11 mm

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**connection with spring terminal**

