



main features

MIXO CX 4 X modular connectors

The new **CX 04 X** inserts have the same dimensions of **CX 03 4 F/M** inserts, **but have 4 seats for crimp contacts series CX (40A_{max})** used in power circuits.

Thanks to the enhanced insulation, the rated voltage of the module is equivalent to 830V, in compliance with standards EN 61984 and EN 60664-1, with an impulse withstand voltage of 8 kV for pollution degree 3 even between signal contacts.

Their key characteristic **lies in the fact that they guarantee maximum safety even in case of accidental contact with fingers (IPXXB or IP2X)**. Safety is guaranteed as standard on female contacts, but also on male contacts.

This feature is important as it ensures full compliance with the recent safety standard **EN 60204-1**, concerning electric equipment fitted on machines and in particular with the requirements of Article 6.2.4 *concerning protection against residual voltage*:

Live parts having a residual voltage greater than 60V after the supply has been disconnected shall be discharged to 60V or less within a time period of 5 s after disconnection of the supply voltage provided that this rate of discharge does not interfere with the proper functioning of the equipment.

Exempted from this requirement are components having a stored charge of 60 µC or less.

Where this specified rate of discharge would interfere with the proper functioning of the equipment, a durable warning notice drawing attention to the hazard and stating the delay required before the enclosure may be opened shall be displayed at an easily visible location on or immediately adjacent to the enclosure containing the capacitances.

In the case of plugs or similar devices, the withdrawal of which results in the exposure of conductors (for example pins), the discharge time shall not exceed 1 s, otherwise such conductors shall be protected against direct contact to at least an IP2X or IPXXB. If neither a discharge time of 1 s nor a protection of at least IP2X or IPXXB can be achieved (for example in the case of removable collectors on conductor wires, conductors bars, or slip-ring assemblies, see 12.7.4), additional switching devices or an appropriate warning device (for example a warning notice in accordance with 16.1) shall be applied.

The IP2X or IPXXB protection offered by **CX 04 XM** modules fitted with CX contacts ensures greater design flexibility as it enables, for example, connectors to be used for drives of electric motors (frequency converters) and in all applications where voltage could be present on both sides of the connector (for example power circuits in loop configuration, opening, circuits of battery-chargers).

NOTE

Female inserts are supplied with two red lock tabs that must be used to assemble the inserts on the frame instead of the grey ones supplied with the frame.

code inserts (MIXO series)		CX..X
No. of poles	main contacts	4
rated current ¹⁾		40A
EN 61984 pollution degree 3	rated voltage	830V
	rated impulse withstand voltage	8kV
	pollution degree	3
contact resistance		≤ 0,3 mΩ
insulated resistance		≥ 10 GΩ
ambient temperature limit (°C)	min	-40
	max	+125
degree of protection	with enclosures	IP65, IP66, IP67, IP68, IP69K (according to type)
	without enclosures	IP20 also on male contacts
conductor connections		crimp
conductor cross-section main contacts	mm ²	1.5+6
stripping length main contacts	mm	9 (1.5+2.5 mm ²)
		9.6 (4+6 mm ²)
mechanical endurance (rating cycles)		≥500

1) Please check the insert load curves to establish the actual maximum operating current according to the ambient temperature.





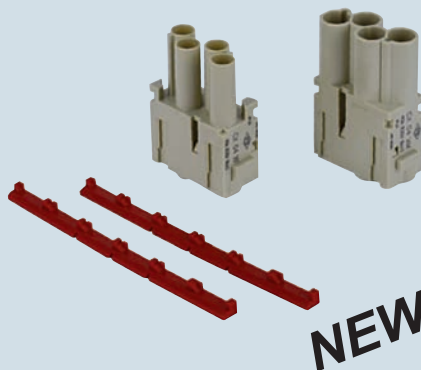
MIXO modular units

4 poles 40A - 830V

the modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support

frames for modular units CX...T/TF/TM

modular units,
crimp connections



40A crimp contacts
silver plated



description

part No.

part No.

without contacts (to be ordered separately)
- female inserts for female contacts
- male inserts for male contacts

CX 04 XF
CX 04 XM

40A female crimp contacts
1.5 mm² AWG 16
2.5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

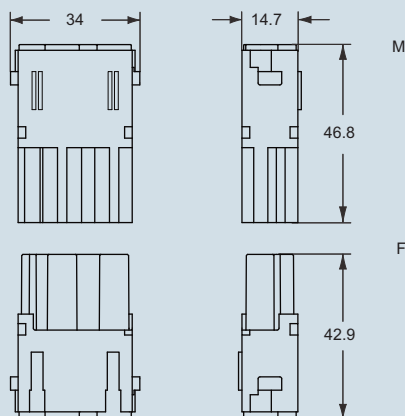
40A male crimp contacts
1.5 mm² AWG 16
2.5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

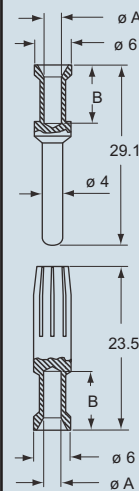
silver plated

- characteristics according to EN 61984:
- 40A 830V 8kV 3**
- 40A 1000V 8kV 2**
- 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: ≥ 500 cycles
- contact resistance: $\leq 0.3 \text{ m}\Omega$
- for contact crimping instructions, please see the crimping tool section (40A contacts, CXF and CXM series)
- male and female contacts to test of contact with fingers
- for maximum current load, see the following load curves inserts

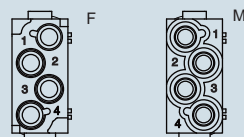
dimensions in mm



dimensions in mm



contacts side (front view)
side with reference arrow ▲

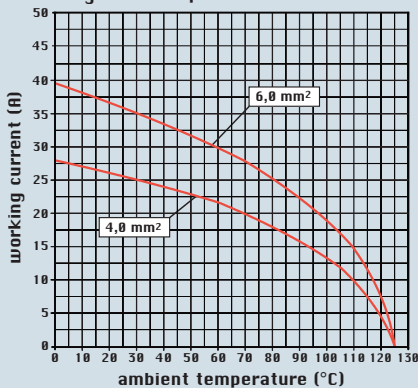


- 1 frame slot

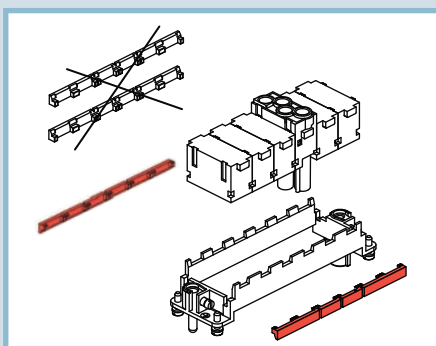
CXF and CXM contacts

conductor section mm ²	conductor slot $\varnothing A$ (mm)	conductor stripping lenght B (mm)
1.5	1.8	9
2.5	2.2	9
4	2.85	9.6
6	3.5	9.6

diagram CX 04 poles



dimensions shown are not binding and may be changed without notice



Female inserts are supplied with two red lock tabs that must be used instead of those supplied with the frames.