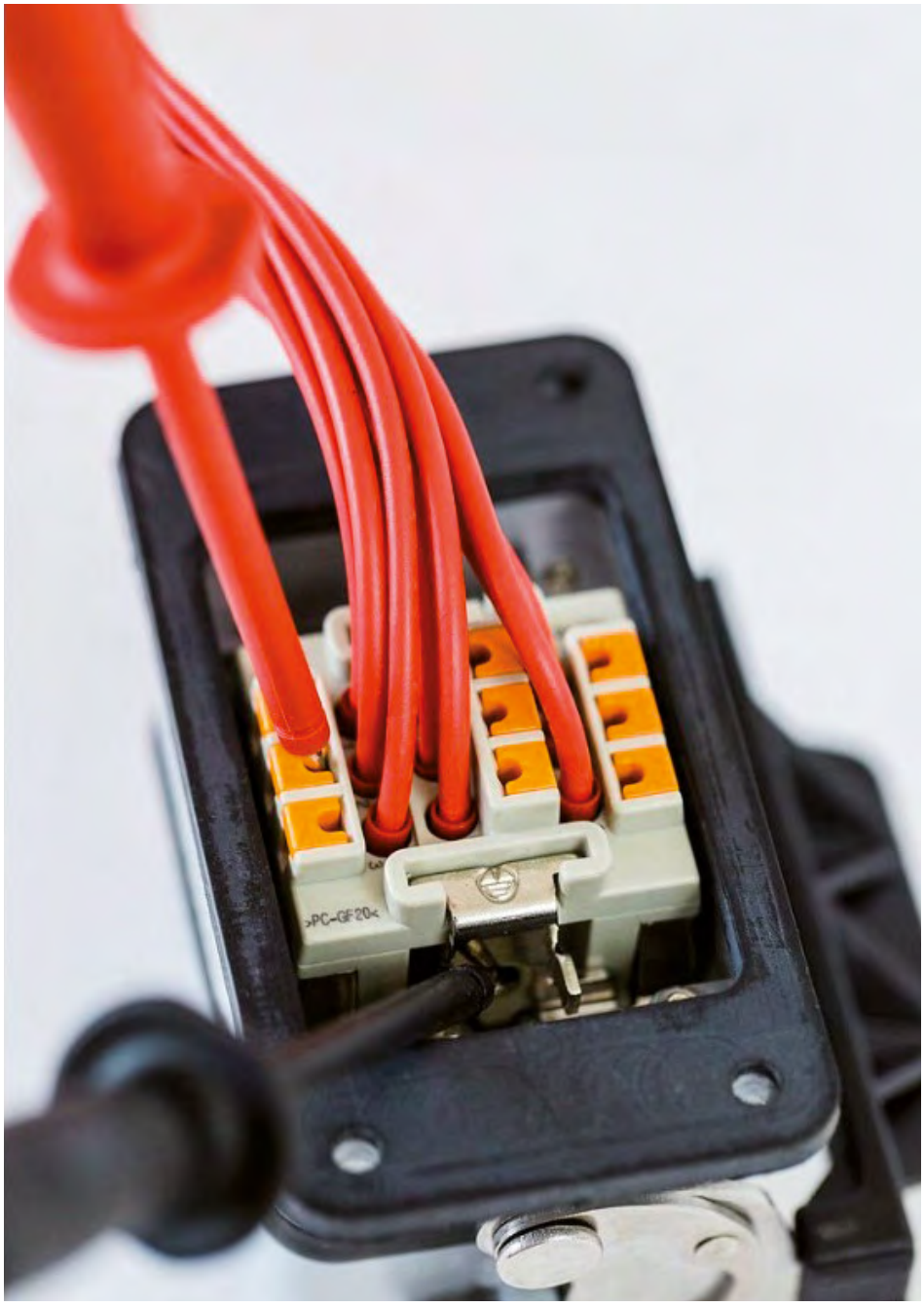
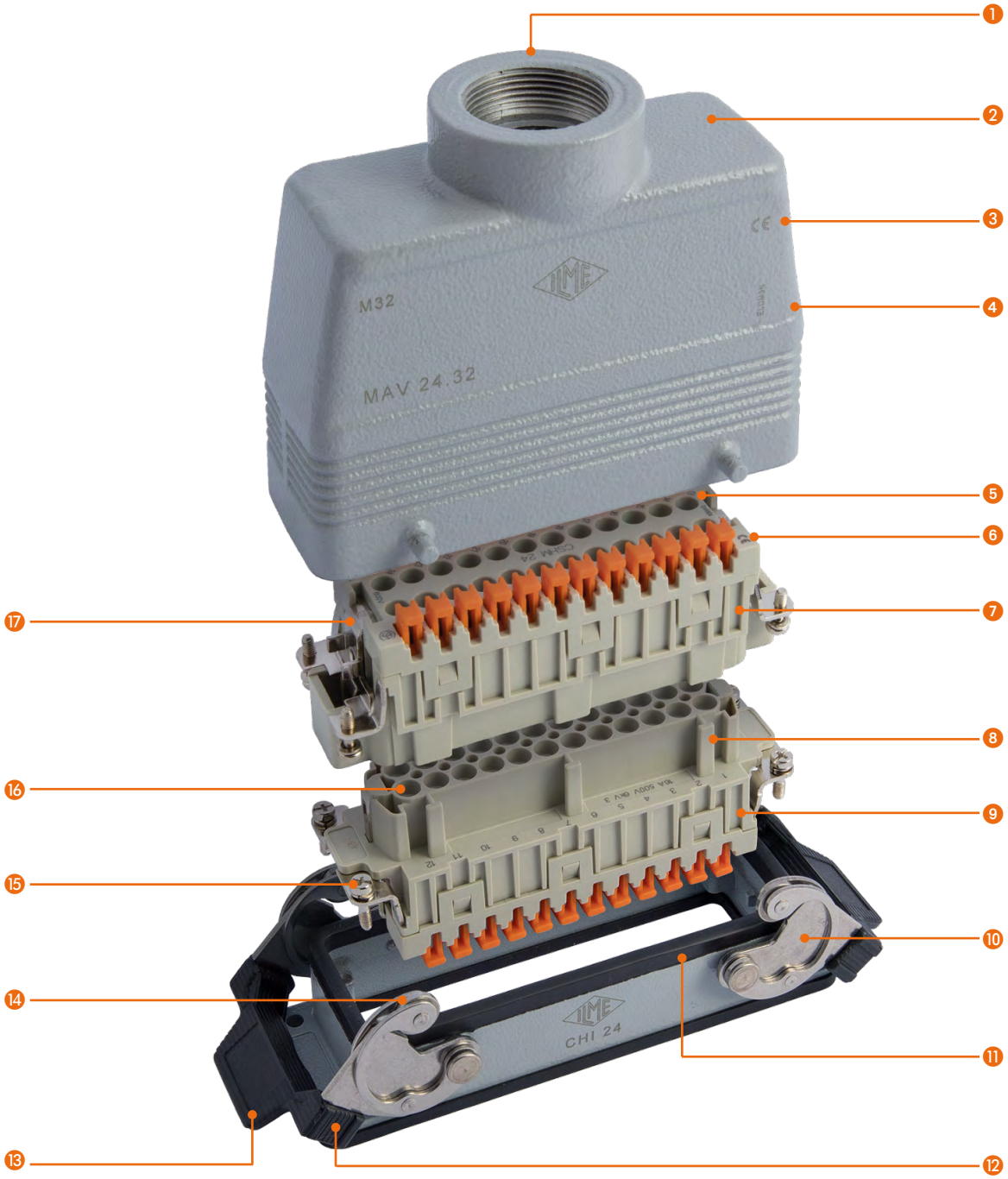

>PC-GF20<

GENERAL FEATURES OF MULTIPOLE CONNECTORS



1. **Threaded cable entry** in various Pg diameters (types with pre-code “C”) or metric cable entry (types with pre-code “M”) in accordance with EN 60423, for cable entry devices in accordance with EN 62444 (NPT threading on request), may be located vertically, horizontally or frontally.
2. Rugged die-cast **aluminium alloy** or **zinc alloy** (most of CKA, MKA) or **self-extinguishing thermoplastic** enclosures (types CK, MK, CQ 08 and T-TYPE), c UL us approved.
   Surface-mounting, bulkhead, and hood versions available, with or without hinged cover, or with free protection covers. Enclosure types CH-CA (w/ Pg cable entries) and MH-MA (w/ metric cable entries) have an internal tab that prevents the insertion of higher voltage inserts series CME (all) and CMCE (only 16+2 poles), while CM (Pg) enclosures series and MM (metric) dedicated to those 830 V inserts have no tab and contain supplementary insulating strips inside.
3. **CE marking** attesting conformity to the requirements of the Low Voltage directive (2014/35/EU).
4. Metallic enclosures with a coated **finish** of thermosetting epoxy-polyester (epoxy for W-Type, IP68 CG/MG and E-Xtreme®) with high resistance to mechanical stress and external agents. Enclosures for use at temperatures up to 180 °C are treated with special coatings.
   Where improved electromagnetic shielding is necessary, EMC enclosures treated by highly conductive and corrosion resistant RoHS 2 conform surface treatment.
5. **Contact position** identified with numbers or codes on both sides of each insert and printed with a laser system or by mould.
6. **CE marking** attesting conformity to the requirements of the Low Voltage directive (2014/35/EU).
7. **Inserts** are made of UL certified self-extinguishing fibreglass reinforced thermoplastics, and feature an operating temperature range between -40 °C and +125 °C. The inserts CME (all) and CMCE (only 16+2 poles) for 830V have a key that prevents the insertion of inserts for use other than that prescribed (types CM - Pg and MM - metric). For some series, inserts in PPS (polyphenylene sulphide) may be requested for special uses with temperatures of up to 180 °C.
8. Insert **polarised profiles** with asymmetrical guides to avoid incorrect matings. Inserts have a mechanical life equal to or higher than 500 mating cycles.
9. Inserts and enclosures are manufactured in compliance with European standard **EN 61984** (DIN VDE 0627), certified and identified with **UL** (c UL us or UL) and **CSA** marks.
10. Stainless steel **locking levers and springs** guarantee a perfect closure and a tight sealing.
11. Special **sealing gaskets** in vinyl nitrile elastomer, polyurethane or fluoroelastomer (on R-Type enclosures for use with maximum temperatures of 180 °C, on W-Type enclosures for aggressive environments and on E-Xtreme® enclosures for ultimate resistance to corrosion and erosion), anti-aging, oil-resistant, fuel-resistant, together with the cable entry devices (not supplied) provide a degree of protection (IP code per EN IEC 60529 and Enclosure Type Rating per ANSI/UL 50E) for coupled connectors. Special conductive sealing gaskets for S-Type EMC enclosures.
12. **Locking device** available in two versions, simple (with one locking lever), or double (with two locking levers). In metallic enclosures, ILME offers different types of locking levers: vertical (V-Type) or classic (C-Type) rotational closure.
13. Various **handle** solutions are available:
    in self-extinguishing thermoplastic material; in die-cast aluminium, or by stainless steel (either integral or built-in with the lever).
14. **Pins and locking levers** (C-Type as shown in picture) supplied with anti-friction rolls that facilitate closure and limit wear and tear.
15. Captive **insert fastening screws,** with anti-slackening spring washer or under-head knurling.
16. **Silver or gold plated brass contacts** connected to the wires by means of captive screws supplied already slackened (screw-type connectors), with spring-clamp terminal (spring connectors), spring-clamp terminals already open with actuator button (Squich®, as shown in picture), by means of crimping (contacts available separately), or with a built-in 45° terminal block (in turn with screw-type or spring-clamp terminals).
17. Protective **earth terminal** with a wide contact surface.

Find more information on our products at www.ilme.com

STANDARD INSERTS

Inserts are made of UL 94V-0 self-extinguishing thermoplastic resin, normally for use with a maximum ambient temperature of 125 °C; special versions made of >PPS< for use with a maximum ambient temperature of 180 °C.
Screw, crimp or spring connections are available. Contacts are in silver or gold plated brass. Inserts are numbered on both sides by laser marking or moulded.

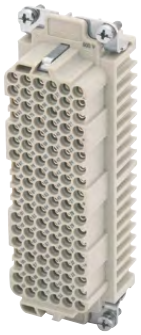
The large number of inserts versions is selected on the basis of rated voltage (50V - 5000V), rated current (5A - 200A max), number of poles and different load combinations required (power and signal poles within the same insert). Inserts are approved in accordance with the applicable safety standards by several third party agencies like UL, CSA, DNV-GL, Bureau Veritas, CQC and EAC. For certifications refer to the summary statement in this catalogue.

SCREW

CNE

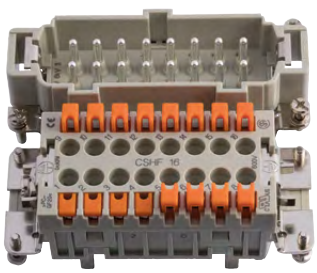
CRIMP

CD - CDD

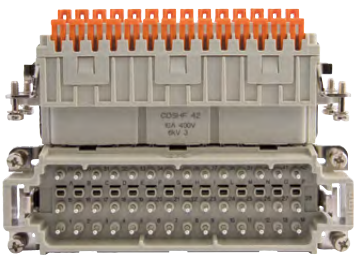


SQUICH® - SPRING

CSH



CDSH



MIXO MODULAR UNITS

The MIXO series is a system composed of modular connector inserts and ancillary parts, able to create a wide diversity of tailored connector solutions, and to satisfy the most specific application needs using the traditional rectangular heavy-duty connector enclosures.

Inside a single enclosure it is possible to house various connections of different nature, for example lines for electrical signals (analogue or high-speed digital), electric power lines, quick coupling contacts for conducting compressed air with pressures of up to 8 bar, fibre optic contacts, Ethernet, USB and coaxial networks.

Insert compartments are composed by placing multiple MIXO modules side by side by locking them each other through specific dovetail shaped keys and keyways, to form a single compact block, much easier to handle and fix to the frame than individual “floating” modules; this block is then inserted in a suitably sized MIXO metal frame with predetermined locking slots. Once the single block of modules has been inserted in the frame and locked with the two special locking keys accompanying each MIXO frame, the connector composed in this manner can be inserted and fixed into the chosen enclosure.

CRIMP, SPRING, SCREW

MIXO 4A - 5A
10A - 16A - 40A

CRIMP

MIXO 70A
100A - 200A

CRIMP

MIXO BUS

MIXO POF/MOST®

MIXO COAX, HV, RJ45
D-SUB, USB, PNEUMATIC

INSERTS FEATURES

Inserts	No. of poles [1]			EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL/CSA certification
Series	Main contacts + PE	Aux. contacts	Rated current [2]	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC
CK	3, 4	---	10A	230/400V	4kV	3	400/690V	4kV	2	600V
CKS ▲	3, 4	---	10A	400V	4kV	3	690V	4kV	2	600V
CKSH	3, 4	---	10A	400V	4kV	3	690V	4kV	2	600V
CD	8 (without PE)	---	10A	50V ac / 120V dc	0,8kV	3	---	---	---	50V ac / 120V dc
CD ◈	7, 15, 25, (50), 40, (80), 64, (128)	---	10A	250V ◐	4kV	3	230/400V [**]	4kV	2	600V
RD (HNM)	40, 64	---	10A	250V	4kV	3	230/400V	4kV	2	600V
CT	40, 64	---	10A	250V	4kV	3	230/400V	4kV	2	600V
CTS	40, 64	---	10A	250V	4kV	3	230/400V	4kV	2	600V
CDD	24, 38, (76), 42, 72, (144), 108, (216)	---	10A	---	---	---	250V	4kV	2	600V
RDD (HNM)	24, 42, 72, 108	---	10A	---	---	---	250V	4kV	2	600V
CDS ▲	9, 18, 27, (54), 42, (84)	---	16A	400V	6kV	3	400/690V	6kV	2	600V
CDSH	9, 18, 27, (54), 42, (84)	---	16A	400V	6kV	3	400/690V	6kV	2	600V
CDSH NC	6 (AutoShort NC 6A)	---	6A	250V	4kV	3	500V	4kV	2	600V
CDA	10, 16, (32)	---	16A	250V	4kV	3	230/400V	4kV	2	600V
CDC	10, 16, (32)	---	16A	250V	4kV	3	230/400V	4kV	2	600V
CSAH	10, 16, (32)	---	16A	250V	4kV	3	400V	4kV	2	600V
CQE	10, 18, (20), 32, 46, (64), (92)	---	16A	500V [**]	6kV	3	830V [**]	8kV	2	600V
CQEE	40, 64	---	16A	500V	6kV	3	---	---	---	600V
RQEE (HNM)	40, 64	---	16A	500V	6kV	3	---	---	---	600V
CCE	6, 10, (12), 16, 24, (32), (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
RCE (HNM)	6, 10, 16, 24	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CNE	6, (12), 10, 16, (32), 24, (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CSE ▲	6, (12), 10, 16, (32), 24, (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CSH	6, (12), 10, 16, (32), 24, (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CSH ... S	6, (12), 10, 16, (32), 24, (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CSS	6, (12), 10, 16, (32), 24, (48)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CT	6, (12), 10, 16, 24	---	16A	230/400V	4kV	3	400V	4kV	2	600V
CTSE	6, (12), 10, 16, 24	---	16A	500V	6kV	3	400/690	6kV	2	600V
CME ▲ ●	3, 6, 10, (12), (20), (32)	---	16A	830V	8kV	3	1000V	8kV	2	600V
						---	720/1250V	8kV	2	
	16			400/690V	6kV	3	---	---	---	
	---	2, (4)		500V	6kV	3	---	---	---	
CMSE ▲	3, 6, (12), 10, (20)	---	16A	830V	8kV	3	1000V	8kV	2	600V
							720/1250V	8kV	2	
	---	2, (4)		500V	6kV	3	---	---	---	
CMSH	3, 6, (12), 10, (20)	---	16A	830V	8kV	3	1000V	8kV	2	600V
							720/1250V	8kV	2	
	---	2, (4)		500V	6kV	3	---	---	---	
CMCE	3, 6, (12), 10, (20)	---	16A	830V	8kV	3	1000V	8kV	2	600V
							720/1250V	8kV	2	
	16 ▲ , (32) ▲			400/690V	6kV	3	---	---	---	
	---	2, (4)		500V	6kV	3	---	---	---	

▲ **Available upon request.**

● **CME series requires the CM-MM enclosures with additional insulation (available upon request) or T-TYPE insulated enclosures.**

All inserts with built-in contacts are provided with silver plated contacts, unless otherwise specified.

Inserts Series	Certifications [3]	Contact resistance	Insulation resistance	Ambient temperature limit (°C) [4]		Degree of protection without enclosures	Conductor connection technology						From page
							Axial screw	Screw	Spring	Squich®	45° terminal block	Crimp	
CK	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 2 mΩ	≥ 10 GΩ	-40	+100	IP20 [5]		●					58
CKS ▲	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				-
CKSH	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			63
CD	cUL, CSAc, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	67
CD *)	cUL, CSAc, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	66
RD (HNM)	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	208
CT	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]		●			●		156
CTS	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●		●		156
CDD	cUL, CSAc, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	76
RDD (HNM)	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	210
CDS ▲	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				-
CDSH	UL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			86
CDSH NC	UL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			95
CDA	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]		●					98
CDC	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	104
CSAH	cUL, CSA, (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			99
CQE	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	168
CQEE	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	176
RQEE (HNM)	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	218
CCE	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	130
RCE (HNM)	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	214
CNE	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]		●					110
CSE ▲	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				-
CSH	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			110
CSH ... S	cUL, (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			122
CSS	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				148
CT	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]		●			●		160
CTSE	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●		●		160
CME ▲●	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]		●					-
CMSE ▲	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				-
CMSH	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			136
CMCE	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	137

[1] Polarities shown in brackets may be achieved by using two inserts.
[2] Please check the insert load curves to establish the actual maximum operating current according to the ambient temperature.
[3] The certifications shown in brackets are being applied for.
[4] It may be used with ambient temperatures up to 180 °C by using the insert special version made of PPS (polyphenylene sulfide).
[5] IPXXB.
◈ CD 07: IP67 with thermoplastic enclosures (cannot be used with metal enclosures).
◐ Contacts partially fitted inside an insert allow inserts to be used for applications requiring rated voltages higher than those shown. See CD, CDD, CQE inserts relevant tables.

INSERTS FEATURES

Inserts	No. of poles [1]			EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL/CSA certification
Series	Main contacts + PE	Aux. contacts	Rated current [2]	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC
CP	6, (12)	---	35A	400/690V	6kV	3	---	---	---	600V
CQ 21	21 (without PE)	---	6,5A	50V ac / 120V dc	0,8kV	3	---	---	---	50V ac / 120V dc
CQ 07	7	---	10A	400V	6kV	3	---	---	---	600V
CQ 12	12	---	10A	400V	6kV	3	400/690V	6kV	2	600V
CQ 05	5	---	16A	230/400V	4kV	3	320/500V	4kV	2	600V
CQ4 02	2	---	40A	400V	6kV	3	---	---	---	600V
CQ4 02 H	2	---	40A	830V	6kV	3	---	---	---	600V
CQ4 03	3	---	40A	400V	6kV	3	---	---	---	600V
CQ 17	17	---	10A	160V	2,5kV	3	250V	4kV	2	250V
CQ 08	8	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CQ 04/2	4 + PE	---	40A	400/690V	6kV	3	---	---	---	600V
	---	2	10A	250V	4kV	3	---	---	---	
CX 8/24	8	---	16A	230/400V	4kV	3	400V	4kV	2	600V
	---	24	10A	160V	2,5kV	3	250V	4kV	2	
CX 6/12	6 + PE	---	40A	690V	8kV	3	---	---	---	600V
	---	12	10A	230/400V	6kV	3	---	---	---	
CX 6/36	6	---	40A	690V	8kV	3	---	---	---	600V
	---	36	10A	160V	2,5kV	3	250V	4kV	2	
CX 12/2	12	---	40A	690V	8kV	3	---	---	---	600V
	---	2	10A	---	---	---	250V	4kV	3	
RX 12/2 (HNM)	12	---	40A	690V	8kV	3	---	---	---	600V
	---	2	10A	---	---	---	250V	4kV	3	
CX 6/6	6 + PE	---	100A	690V	8kV	3	---	---	---	600V
	---	6	16A	400V	6kV	3	---	---	---	
CX 4/0	4	0	80A	830V	8kV	3	---	---	---	600V
CX 4/2	4	---	80A	830V	8kV	3	---	---	---	600V
	---	2	16A	400V	6kV	3	400/690V	6kV	2	
CX 4/8	4	---	80A	400V	6kV	3	400/690V	6kV	2	600V
	---	8	16A	230/400V	4kV	3	400V	4kV	2	
CXL 2/4	2	---	---	---	---	---	---	---	---	600V
	---	4	10A	25V	0,8kV	3	---	---	---	
CLK 04	4 (seats/poles)	---	---	Contacts for glass fibre 50 / 125 µm or 62,5 / 125 µm or for 1 mm ∅ POF						
CX 1/2 BD	1 CX 01 B /BC, CX 04 B, CX 08 B ◈		16/10/4A	50V	0,8kV	3	---	---	---	50V
	---	2	10A	50V	0,8kV	3	---	---	---	50V

[1] Polarities shown in brackets may be achieved by using two inserts.
[2] Please check the insert load curves to establish the actual maximum operating current according to the ambient temperature.
[3] The certifications shown in brackets are being applied for.
[4] It may be used with ambient temperatures up to 180 °C by using the insert special version made of PPS (polyphenylene sulfide).
[5] IPXXB.
[6] IPXXA.
◈ Multi-axial shielded connectors CX 04 B (4P, 10A) or CX 08 B (8P, 5A) or coaxial connectors CX 01 B (10A) or CX 01 BC (16A).

All inserts with built-in contacts are provided with silver plated contacts, unless otherwise specified.

Inserts Series	Certifications [3]	Contact resistance	Insulation resistance	Ambient temperature limit (°C) [4]		Degree of protection without enclosures	Conductor connection technology						From page
							Axial screw	Screw	Spring	Squich®	45° terminal block	Crimp	
CP	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,5 mΩ	≥10 GΩ	-40	+125	IP20 [5]		●					178
CQ 21	cUL, (CSA), DNV-GL, BV	≤ 4 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	190
CQ 07	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	187
CQ 12	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	189
CQ 05	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	186
CQ4 02	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 0,3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	182
CQ4 02 H	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 0,3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	183
CQ4 03	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 0,3 mΩ	≥10 GΩ	-40	+125	IP1X [6]						●	184
CQ 17	cUL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	193
CQ 08	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	192
CQ 04/2	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						● ●	191
CX 8/24	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 1 mΩ ≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						● ●	194
CX 6/12	UL, (CSA), (CQC), DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	197
CX 6/36	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 3 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	198
CX 12/2	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	199
RX 12/2 (HNM)	(cUL), (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	221
CX 6/6	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]						●	206
CX 4/0	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ	≥10 GΩ	-40	+125	IP20 [5]		●					200, 202
CX 4/2	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]		●					201, 203
CX 4/8	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 1 mΩ	≥10 GΩ	-40	+125	IP20 [5]		●					204
CXL 2/4	UL, CSA, DNV-GL, BV	≤ 3 mΩ	≥10 GΩ	-40	+70	IP20 [5]						● ●	250, 251
CLK 04	cUL, CSA, DNV-GL, BV	---	≥10 GΩ	-40	+70	IP20 [5]						●	239
CX 1/2 BD	cUL, CSA, (CQC), DNV-GL, BV	≤ 1 mΩ (CC) ≤ 3 mΩ (CD) ≤ 4 mΩ (CI) ≤ 3 mΩ	≥10 GΩ ≥10 GΩ	-40	+70	IP20 [5]						●	243

MIXO INSERTS FEATURES

Inserts	No. of poles [1]	Aux. contacts	Rated current [2]	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL/CSA certification
Series	Main contacts + PE			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC
CX 01 Y	1 (without PE)	---	200A	1000V	8kV	3	920/1600V	8kV	2	600V
CX 01 YPE	PE	---	200A	---	---	3	---	---	---	600V
CX 02 G	2 (without PE)	---	100A	1000V	8kV	3	920/1600V	8kV	2	600V
CX 01 G	1 (without PE)	---	100A	830V	8kV	3	---	---	---	600V
CX 02 7	2 (without PE)	---	70A	1000V	8kV	3	1600V	12kV	2	600V
CX 02 4A	2 (2,5 - 8 mm^2) (without PE)	---	40A	1000V	8kV	3	1600V	12kV	2	600V
CX 02 4B	2 (6 - 10 mm^2) (without PE)	---	40A	1000V	8kV	3	1600V	12kV	2	600V
CX 02 4	2 (without PE)	---	40A	1000V	8kV	3	---	---	---	600V
CX 03 4	3 (without PE)	---	40A	400/690V ◈	6kV	3	---	---	---	600V
CX 03 4B	3 (without PE)	---	40A	500V ◈	6kV	3	---	---	---	600V
CX 3/4 XD	3 (without PE)	---	40A	830V	8kV	3	---	---	---	600V
	---	4	10A							
CX 04 X	4 (without PE)	---	40A	830V	8kV	3	1000V	8kV	2	600V
CX 05 S ▲	5 (without PE)	---	16A	400V	6kV	3	500V	6kV	2	600V
CX 05 SH	5 (without PE)	---	16A	400V	6kV	3	500V	6kV	2	600V
CX 06 C	6 (without PE)	---	16A	500V	6kV	3	400/690V	6kV	2	600V
CX 06P C	6 protected (without PE)	---	16A	830V	8kV	3	---	---	---	600V
CX 08 C	8 (without PE)	---	16A	400V	6kV	3	400/690V	6kV	2	600V
CX 20 C	20 (without PE)	---	16A	500V	6kV	3	830V	8kV	2	600V
CX 12 D	12 (without PE)	---	10A	250V	4kV	3	---	---	---	600V
CX 17 D	17 (without PE)	---	10A	160V	2,5kV	3	250V	4kV	2	250V
CX 42 D	42 (without PE)	---	10A	150V	2,5kV	3	---	---	---	250V
CX 02 H	2 (without PE)	---	16A	2900/5000V	15kV	3	---	---	---	---
CX 02 CH	2 (without PE)	---	16A	2500V	15kV	3	---	---	---	---
CX 25 I ▲ ⦿	25 (without PE)	---	4A	50V	0,8kV	3	160V	2,5kV	2	600V
CX 25 IB	25 (without PE)	---	4A	50V	0,8kV	3	160V	2,5kV	2	600V
CX 03 P	3	---	---	pneumatic contacts for compress air up to 8 bar						
CX 02 P	2	---	---	---	---	---	---	---	---	---
CX 02 B	2 ◐ (without PE)	---	---	50V	0,8kV	3	---	---	---	50V
CX 01 B	1 (+ shield) (75 W coax)	---	10A	50V	0,8kV	3	---	---	---	50V
CX 01 BC	1 (+ shield) (50 W coax)	---	16A	50V	0,8kV	3	---	---	---	50V
CX 04 B	4 (+ shield)	---	10A	50V	0,8kV	3	---	---	---	50V
CX 08 B	8 (+ shield)	---	5A	50V	0,8kV	3	---	---	---	50V
CX 08 I6	8 (+ shield)	---	5A	50V	0,8kV	3	---	---	---	50V
CX 01 J	1 RJ-45 insert Cat. 5	---	---	---	---	---	---	---	---	50V
	---	4	10A	250V	4kV	3	---	---	---	600V
CX 02 J	2 RJ-45 inserts Cat. 5	---	---	---	---	---	---	---	---	50V
	---	8	10A	250V	4kV	3	---	---	---	600V
CX 01 J8	1 RJ45 insert Cat. 6	---	1A	50V	0,8kV	3	---	---	---	50V
CX 01 U	1 USB insert	---	1A	50V	0,8kV	3	---	---	---	(50V)
CX 01 9V	9 (+ shield)	---	5A	50V	0,8kV	3	---	---	---	(50V)
CX 01 9VTF	2 (+ shield) for RS-485 bus T-connections	---	5A	50V	0,8kV	3	---	---	---	(50V)
CX 04 L	4	---	---	contacts for POF or MOST® (POF) fibre optic contacts E DIN 41626-3						
CX 04 R	4	---	1,5A	50V	0,8kV	3	crimp coaxial contacts DIN 41626-2			---
CX 04 SC	4 (seats/poles)	---	---	contacts for ∅ 1 mm plastic POF or MOST® fibre optic, coaxial contacts DIN 41626						

▲ **Available upon request.**

[1] Polarities shown in brackets may be achieved by using two inserts.

[2] Please check the insert load curves to establish the actual maximum operating current according to the ambient temperature.

[3] The certifications shown in brackets are being applied for.

[4] It may be used with ambient temperatures up to 180 °C by using the insert special version made of PPS (polyphenylene sulfide).

[5] IPXXB.

Inserts Series	Certifications [3]	Contact resistance	Insulation resistance	Ambient temperature limit (°C) [4]		Degree of protection without enclosures	Conductor connection technology						From page
							Axial screw	Screw	Spring	Squich®	45° terminal block	Crimp	
CX 01 Y	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,2 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	262
CX 01 YPE	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,2 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	263
CX 02 G	UL, CSA, CQC, DNV-GL, EAC	≤ 0,3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	265
CX 01 G	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 0,3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	264
CX 02 7	cUL, CSAc, CQC, DNV-GL, BV, EAC	≤ 0,5 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	266
CX 02 4A	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,5 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]	●						267
CX 02 4B	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,5 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]	●						268
CX 02 4	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	268, 321
CX 03 4	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	269, 322
CX 03 4B	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	270, 323
CX 3/4 XD	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 0,3 mΩ ≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	271, 324
CX 04 X	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				272, 325
CX 05 S ▲	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]			●				-
CX 05 SH	(cUL), (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]				●			274
CX 06 C	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	275, 327
CX 06P C	(UL), (CSA), (CQC), DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	276, 326
CX 08 C	UL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	277, 328
CX 20 C	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	278, 329
CX 12 D	UL, CSAc, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	281, 330
CX 17 D	cUL, CSAc, CQC, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	282, 331
CX 42 D	(cUL), (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 3 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	283, 332
CX 02 H	(cUL), (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	280
CX 02 CH	(cUL), (CSA), (CQC), (DNV-GL), (BV), (EAC)	≤ 1 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	279
CX 25 I ▲	cUL, CSA, DNV-GL, BV	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	-
CX 25 IB	(UL), (CSA), DNV-GL, BV	≤ 4 mΩ	≥ 10 GΩ	-40	+125	IP20 [5]						●	284
CX 03 P	UL, CSA, DNV-GL, BV	---	≥ 10 GΩ	-40	+80	IP20 [5]	snap-in						312
CX 02 P	UL, CSA, DNV-GL, BV	---	≥ 10 GΩ	-40	+80	IP20 [5]	snap-in						312
CX 02 B	UL, CSA, CQC, DNV-GL, BV	---	≥ 10 GΩ	-40	+125	IP20 [5]	snap-in						288 - 292
CX 01 B	UL, CSA, CQC, DNV-GL, BV	≤ 3 mΩ	≥ 10 GΩ	-40	+85	IP20 [5]						●	291
CX 01 BC	UL, CSA, CQC, DNV-GL, BV	≤ 1 mΩ	≥ 10 GΩ	-40	+85	IP20 [5]						●	289
CX 04 B	UL, CSA, CQC, DNV-GL, BV	≤ 3 mΩ	≥ 10 GΩ	-40	+85	IP20 [5]						●	291
CX 08 B	UL, CSA, (CQC), DNV-GL, BV	≤ 4 mΩ	≥ 10 GΩ	-40	+85	IP20 [5]						●	293
CX 08 I6	(UL), (CSA), (CQC), (DNV-GL), (BV)	≤ 4 mΩ	≥ 10 GΩ	-40	+85	IP20 [5]						●	286
CX 01 J	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ ≤ 3 mΩ	≥ 10 GΩ ≥ 10 GΩ	-40 -40	+120 +120	IP20 [5] IP20 [5]						● ●	304
CX 02 J	cUL, CSA, CQC, DNV-GL, BV, EAC	≤ 3 mΩ ≤ 3 mΩ	≥ 10 GΩ ≥ 10 GΩ	-40 -40	+120 +120	IP20 [5] IP20 [5]						● ●	306
CX 01 J8	cUL, (CSA), DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-40	+70	IP20 [5]						●	302
CX 01 U	cUL, CSA, DNV-GL, BV, EAC	≤ 3 mΩ	≥ 10 GΩ	-25	+80	IP20 [5]						●	294
CX 01 9V	---	---	≥ 10 GΩ	-40	+70	IP20 [5]						●	296
CX 01 9VTF	---	---	≥ 10 GΩ	-40	+70	IP20 [5]		●					298
CX 04 L	cUL, CSA, (CQC), DNV-GL, BV, EAC	≤ 30 mΩ	≥ 1 GΩ	-40	+85	IP20 [5]							299
CX 04 R	(UL), (CSA), DNV-GL, BV	◧	≥ 5 GΩ	-40	+125	IP20 [5]						●	300
CX 04 SC	(UL), (CSA), DNV-GL, BV	---	≥ 10 GΩ	-40	+85	IP20 [5]						●	301

◈ With cable ∅ up to 5 mm (CX 03 4), with cable ∅ up to 7,5 mm (CX 03 4B).
◐ Multi-axial shielded connectors CX 04 B (4P, 10A) or CX 08 B (8P, 5A) or coaxial connectors CX 01 B (10A) or CX 01 BC (16A).
◧ Centre contact resistance ≤ 10 mΩ; outer contact resistance ≤ 3 mΩ.
⦿ Suitable for CI crimp contacts up to size 0.5.
All inserts with built-in contacts are provided with silver plated contacts, unless otherwise specified.

RECOMMENDED TIGHTENING TORQUE

- insert terminal screws, including PE terminal and fixing screws
- axial screw insert, MIXO series CX 02 4A / CX 02 4B
- enclosures assembly screws

Insert terminal screws, including PE terminal and fixing screws

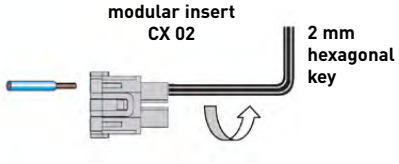
Increasing the tightening torque of terminal screws does not considerably improve the contact resistance. The screw torques are selected according to standard EN 60999-1, to provide excellent mechanical, thermal and electric behaviour. The conductor or terminal may be damaged if the recommended values are significantly exceeded.

Screw size	Connector type	Recommended tightening torque		Recommended size of screwdriver
		(Nm)	(lb.in)	
	LINE TERMINALS			
M2,5	CT 40, 64	0,4	3,5	0,5 x 3
M2,6	CT 06..24	0,4	3,5	0,5 x 3
M3	CK	0,5	4,4	0,5 x 3
M3	CDA	0,5	4,4	Ph0 or 0,6 x 3,5
M3	CNE, CME	0,5	4,4	Ph0 or 0,8 x 4
M3	CX 4/2, CX 4/8 (16A)	0,5	4,4	0,6 x 3,5
M3	CX 4/8 Q (16A)	0,5	4,4	Ph0
M4	CP	1,2	10,6	Ph1 or 0,8 x 4
M6	CX 4/.. (80A)	2,5	22,1	1,0 x 5,5
	PE TERMINAL			
M3	CK, CQ 05, CQ 07, CQ 12	0,5	4,4	0,5x3
M4	all series except CD 15, CD 25, CDA, CDC, CSAH, MIXO	1,2	10,6	Ph2 or 1,0 x 5,5
M3,5	series CD 15, CD 25, CDA, CDC, CSAH	0,8	7,1	Ph1 or 0,8 x 5,5
M3	small PE terminal, MIXO frames series	0,5	4,4	Ph1 or 1,0 x 4,5
M4	large PE terminal, MIXO frames series	1,2	10,6	Ph1 or 1,0 x 5,5
M4	PE terminal, MIXO ONE enclosures	1,2	10,6	Ph1 or 1,0 x 5,5
	FASTENING SCREWS			
M3	CK, CKS, CKSH, CD 07, CD 08, CQ 05, CQ 07, CQ 12, CQ 21, CQ4 02 /02 H, CQ4 03, CX 1/2 BD	0,5	4,4	Ph1 or 0,8 x 5,5
M3	screw for fastening inserts to enclosures of all series except T-Type, CQ-MQ 08 and MIXO ONE	0,8	7,1	Ph1 or 0,8 x 4
Ø 2,9	screws for fastening "32.13" inserts CQ 04/2, CQ 08, CQ 17 to CQ-MQ 08 enclosures	0,7	6,2	Ph1
M3	screw for fastening inserts to T-Type enclosures	0,5	4,4	Ph1 or 0,8 x 4
Ø 2,9	series MIXO ONE enclosures, assembly of top and bottom parts	0,8	7,1	Ph1
M4	CYR 16.3, CYR 24.4 cable pass-through hoods, assembly of two halves	1,2	10,6	Ph2 or 1,0 x 5,5
M4	CYG 16 in-line joint, assembly of two halves and mounting of two bulkhead mounting housings size "77.27"	1,2	10,6	Ph2 or 1,0 x 5,5
M5	series BIG enclosures, assembly of top and bottom parts	1,0	8,8	Ph2

Axial screw insert, MIXO series CX 02 4A / CX 02 4B

The connections of the conductors to the female and male inserts are made via axial screw. Fully insert the stripped wire in the back of the contact (axial screw terminals are supplied fully opened); while holding the wire down, insert a 2 mm hexagonal key in the front of the contact and tighten to recommended torque. After assembling the complete connector periodically check that the contact is screwed tight by re-applying the proper tightening torque.

— Usable conductor cross-sections (EN 60228 Class 5):
  from 2,5 to 8 mm^2 (14 AWG to 10 AWG) (CX 02 4AF/M)
  from 6 to 10 mm^2 (10 AWG to 8 AWG) (CX 02 4BF/M)
  (extra-flexible EN 60228 class 6: 2.5... 6 mm^2 (14 AWG to 10 AWG)
— Use only stranded flexible copper conductors
— Do not twist the strands!
— Tightening torque with 2 mm hexagonal Allen key:
  1,5 Nm (13,3 lb.in) max for conductors with section 2,5 ... 4 mm^2 (14 AWG to 12 AWG)
  2 Nm (17,7 lb.in) max for conductors with section 6 ... 10 mm^2 (10 AWG to 8 AWG)
— Stripping length: 8^{+1} mm



Enclosures assembly screws

In the table below, the recommended minimum and maximum tightening torque to apply to the fixing screws of ILME bulkhead mounting housings are shown, assuming the use of steel screws (bolts) with 8.8 resistance class and a good fixing panel surface according to the requirements mentioned therein.

Series	Number of screws	Screw size	Recommended torque		Flange sealing element
			(Nm)	(lb.in)	
CK/MK, CKX, CKA/MKA, CQ	2	M3	0,8 – 1,0	7,1 – 8,9	Gasket
MIXO ONE	4	M3	TBA	TBA	Gasket
CZI 15 /25	4	M3	0,8 – 1,0	7,1 – 8,9	Gasket
CHI 50	4	M4	1,2 – 1,8	10,6 – 15,9	Gasket
CHI 06 /10 /16 /24	4	M4	0,8 – 1,2	7,1 – 8,9	Gasket
CHI 32	4	M4	1,2 – 1,8	10,6 – 15,9	Gasket
CHI 48	4	M6	3,0 – 3,6	26,6 – 31,9	Gasket
CGK/MGK (IP68)	2	M4	0,8 – 1,2	7,1 – 8,9	O-ring
CGI/ MGI 06/ 10/ 16/ 24 (IP68)	2	M6	3,0 – 3,6	26,6 – 31,9	O-ring
T-Type, T-Type/H, T-Type/C, T-Type/W	4	M4	0,8 – 1,2	7,1 – 8,9	Gasket

To guarantee the declared IP degree of protection of the housings reported in this catalogue, according to EN IEC 60529 or to the relevant Type rating per ANSI/UL 50 and 50E (for those products bearing approval to those ratings), the surface of the mounting panel must meet the following requirements (definitions are provided in ISO 4287 standard):

– Waviness Wt ≤ 0,2 mm over a distance of 200 mm (measured on the panel without load)

– Roughness Ra ≤ 16 µm

NOTE: The values of tightening torque indicated in the above table are just recommended values, that must be related – by the designer of the final application – to the resistance class of the screws (not included in the delivery), with the assumption that the mounting panel is sufficiently rigid (stiff). If the deflection of the panel, under the effect of tightening the screws, is greater than 0,7 mm over a distance of 100 mm, it is necessary to use the counter-flanges mentioned in our catalogue or the special flange gaskets available upon request (please contact our Sales Department). For the CGI/MGI IP68 enclosures the specific counter-flanges mentioned in our catalogue are always recommended.

RANGE OF CONDUCTOR CROSS-SECTIONAL AREA AND STRIPPING LENGTH

Connector inserts connection technique	Range of conductor cross-sectional area		Stripping length
Screw	**(mm^2)**	**AWG**	**(mm)**
CK	0,75 – 2,5	18 – 14	6
CX 4/2, CX 4/8 (poles 16A) [1]	0,75 – 4	18 – 12	7
	0,75 – 2,5	18 – 14	7
CNE [1]	0,5 – 4	20 – 12	7
CNE..X	0,25 – 2,5	24 – 14	7
CDA [1]	0,5 – 4	20 – 12	7
CDA..X	0,25 – 2,5	24 – 14	7
CT 06..24	0,75 – 2,5	18 – 14	12
CT 40 and 64	0,75 – 2,5	18 – 14	12
CME [1]	0,5 – 4	20 – 12	7
CME..X	0,5 – 2,5	20 – 14	7
CP [1]	0,75 – 6	18 – 10	10,5
CX 4/.. (80A poles)	4 – 16	12 – 5	14
Crimp			
MIXO (5A), CX 25 IB	0,08 – 0,75	28 – 18	4
CQ 21	0,08 – 0,5	28 – 20	4
CDD, CD, MIXO (10A), CQ 12, CQ 07	0,14 – [2,5]*	26 – 14	8 – *[6 for 2,5 mm^2]
CCE, CDC, CMCE, CQ, CQE, CQEE, MIXO (16A)	0,14 – 4	26 – 12	7,5
CX, MIXO (40A), CQ4 03	1,5 – 2,5	16 – 14	9
	4 – 6	12 – 10	9.6
MIXO (70A)	10 – 25	7 – 4	15
MIXO (100A), CX 6/6	10 – 35	7 - 2	15
MIXO (200A)	16 – 70	6 - 2/0	15
Spring			
CSE, CSH, CTSE 06..24, CMSH, MIXO [CX 05 S [2], CX 05 SH], CSS	0,14 – 2,5	26 – 14	9 - 11
CTS 40/64	0,14 – 2,5 unprepared 0,14 – 1 prepared	26 – 14 unprepared 26 – 18 prepared	9 - 11
CKS, CKSH, CDS, CDSH, CSAH	0,14 – 2,5 unprepared 0,14 – 1,5 prepared	26 – 14 unprepared 26 – 16 prepared	9 - 11

[1] For CNE, CDA, CP, CME, "CX 4/8 – pole 16A" series connectors with screw terminal and conductor protection plate, the use of ferrules is not necessary (= unprepared conductor). The use of ferrules (= prepared conductor) causes a reduction in maximum useful cross-section to the lower size (e.g. 4 mm^2 unprepared - 2,5 mm^2 prepared).

[2] Available upon request.

CONDUCTOR CONNECTION TECHNOLOGY

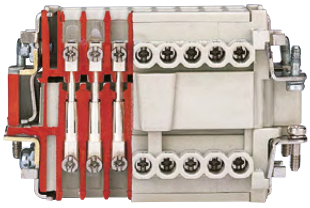
SCREW

For all inserts with screw terminals it is important that the right torsional torque is applied to the screws in order to prevent wrong contacts or damage to the conductor, the screw or the terminal.

The **10A and 16A crimp contacts** are available either silver or gold-plated.

The **gold-plated crimp contacts** are recommended for applications with very low rated currents and rated voltages. Thanks to the conduction characteristics of gold, the deterioration of signals is prevented and an excellent resistance to the surface oxidation of the contacts is obtained. In particular, gold-plated contacts are recommended with signals with ≤ 5 mA current and ≤ 5V voltage.

With screw terminal connections with or without wire protection



CK - CDA - CNE - CME - CP - CX

The connections of the conductors to the female and male inserts are made via screws (in accordance with standard EN 60999-1).

Two different types of clamping are possible:
- with pressure plate for unprepared conductors;
- without wire protection that requires the conductors to be prepared with bush terminals.

Clamping types

with wire protection

without wire protection

CX..A / CX..B

The connections of the conductors to the female and male inserts is made via screws in accordance with standard.

Fully insert the wire in the back of the contact; insert a 2 mm hexagonal key in the front of the contact and tighten by holding down the cable (page 20).

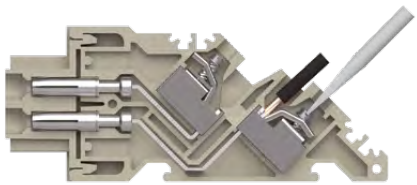
Screw connected in built-in terminal block

CT

In this layout the wires are connected to the socket and plug insert contacts by means of a screw for all CT inserts (in compliance with EN 60999-1).

The inserts contain:
- a terminal block at 45° for fixed installation on electrical panels or on built-in DIN EN 60715 rail, for easier wire cabling and identification operations
- screw connection with pressure plate which does not require the wires to be prepared (CT inserts).

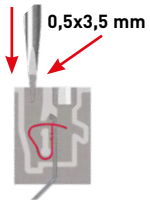
CT connection technology



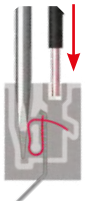
INCORPORATED TERMINAL BLOCK

Connection technology

step 1
Insert the flat blade screwdriver tip in the dedicated square-shaped cavity provided outside the terminal and push it down perpendicularly to the access surface, up to the bottom. Acting as a wedge, the screwdriver tip pushes forward the spring, to open the wire clamping window.



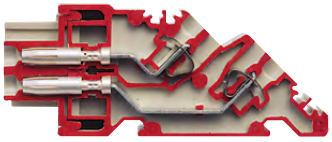
step 2
Insert the wire previously stripped at the right length all the way down in the round terminal cavity.



step 3
Remove the screwdriver tip. The spring clamps now the wire in the terminal.

step 4
Pull gently on the wire to ensure that it is firmly clamped in the spring terminal.

Built-in terminal block

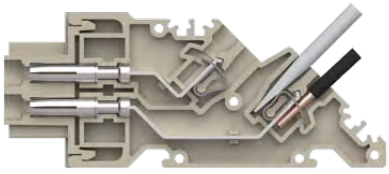


CTSE - CTS

With terminal block at 45° built-in for fixed installation on electrical panels or on built-in DIN EN 60715 rail, for easier wire cabling and identification operations.

Spring terminal connection which does not require wire preparation (CTSE inserts).

CTSE connection technology



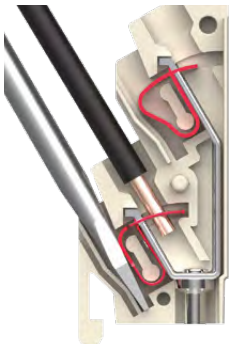
Dual spring terminal

CSS

Equipped with two terminals per contact.

This type of connection allows a circuit to be branched off.

CSS connection technology



0,5 x 3,5 mm blade

SQUICH® - SPRING

Connection without tools

The wires are connected to the insert contacts by a spring terminal with patented actuator button.

Key advantages:

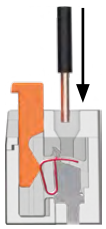
- No special wire preparation, other than stripping
- No need for wiring tools
- Excellent fastening solution and great resistance to strong vibrations
- Suitable for solid and flexible wires, both ferruled and unferruled, with a cross sectional area range of 0,14 mm^2 to 2,5 mm^2
- Reduced wiring time, up to 50%
- Correct wiring can be checked by inserting a test probe into the perforated shape of the actuator buttons

SQUICH® - spring

Connection technology

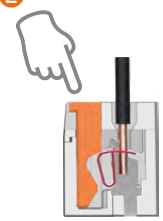
WIRING

1



Deeply insert a stripped conductor into a round seat.

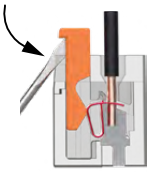
2



Push the actuator button to close the terminal.

RE-OPENING

3



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

Spring connected contacts with actuator button

SQUICH®

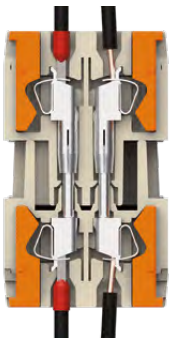
CKSH

All the advantages of SQUICH® connection technology in size “21.21”. Vertical and straight termination and dedicated coding pins.

Watch our SQUICH® video

Spring connected contacts with actuator button

SQUICH®



CSH

Parent insert of the connection technology. Quick, simple and safe wiring for a practically error-free installation.

CMSH

Specific version for voltages up to 830 V.
The CMSH inserts can be used with all types of enclosures.

Spring connected contacts with actuator button

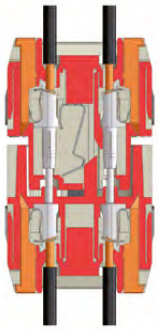
SQUICH®

CDSH

High density without tools.
The CDSH insert is the answer to the continuous demand for greater number of poles and smaller dimensions. It offers a maximum number of 84 poles in the same space of standard series. Inserts can be coded by CR CDS pin to avoid incorrect coupling.

Spring clamp contacts with actuator button, with NC shorting contacts

SQUICH®



CDSH NC

The AutoShort connector, suitable for interfacing measuring current transformers. 3 pairs of contacts with AutoShort NC (normally closed) element to protect the measuring current transformer's secondary windings. It can be used either with metal or thermoplastics enclosures, size "44.27".

Spring connected contacts with actuator button

SQUICH®

CSAH

This version implements the SQUICH® concept in a miniaturized version with a high contact density. Slim design for 400V needs.
Inserts can be mated with CDA/CDC series.