

GENERAL CATALOGUE

Introduction

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IMPORTANT NOTES

- 1 ILME designs and manufactures complete solutions for Heavy Duty electrical power connections.
The connector (although offered to the user as a variety of elements, usually inserts and enclosures, to allow the selection of the ideal combination) has been **designed as a complete connector** and tested to be compliant with the essential safety requirements of the EU Low Voltage Directive 2014/35/EU and in particular the EN 61984 standard. The design of this “whole” system guarantees that every allowed combination of inserts, enclosures and accessories cannot result as improper.
- 2 The products in this catalogue alone cannot guarantee the best functionality upon installation, as this depends also on their correct **“putting into service”** which must be performed in compliance with the applicable system safety standards and according to the “rule of the art”. Therefore the effectiveness of the installation of the connector depends on the choices of the end user who must also take into account the following safety requirements.
- 3 Connectors must **not be connected or disconnected when live or under load**.
- 4 After wiring the inserts it is necessary **to verify the continuity of the protective earth connections**.
- 5 The **correct coupling of the inserts** is guaranteed only if they are installed (with the four fixing screws supplied *) inside the corresponding enclosures or onto compatible accessories in this catalogue. ILME S.p.A. is not responsible for any different application.
- 6 Wiring of **screw-type terminal connections** must be carried out applying the correct tightening torque in order to avoid false contacts or damage to the conductor, the screw or the terminal.
- 7 **Crimping tools** and **crimp contacts** used should preferably be supplied by the same manufacturer to avoid difficulties with the insertion and retention or damaging of the contacts themselves.
- 8 Correct wiring of **spring-clamp connection inserts** is guaranteed only when the correct screwdriver indicated in the specific catalogue, or possibly on the insert, is used **.
- 9 Avoid forcing the contacts during **connection and disconnection**. Connectors must be coupled and uncoupled in the axial direction with respect to the contacts, without bending and pulling the attached conductor bundles or cables.
- 10 Installation of two **inserts side by side**, in enclosures with two bays, must respect the polarity drawing marked on the insert (or the contact side view, as shown in this catalogue) to avoid inverted coupling.
- 11 Installation of two or more identical **connectors side by side** is recommended only with the use of **coding pins** in order to avoid mismatched couplings.
- 12 In order to keep the declared **degree of protection** (IP code according to EN 60529, or Enclosure Type Rating according to ANSI/UL 50E), enclosures must be completed with cable glands and/or other accessories with at least an equal degree of protection.
- 13 Moreover, the declared **degree of protection** (IP code according to EN 60529, or Enclosure Type Rating according to ANSI/UL 50E) is guaranteed when the enclosures, complete with inserts, are coupled and locked with their locking levers (or devices).
- 14 Connector inserts and their enclosures are generally compatible with similar/equivalent products from other manufacturers, according to the last samples tested. Full compatibility cannot be guaranteed in the event of technical changes made by other manufacturers. In particular, maximum performance of IP68 enclosures (CG-MG, CGK-MGK series) cannot be guaranteed when coupled with other manufacturers' products.
- 15 **Spare parts** are supplied in minimum quantities only with the purpose to replace damaged parts on ILME products. Any custom combination/use of ILME spare parts disrespectful of this restriction, renders the CE marking no longer valid and any ILME safety liability on that use null and void.. To avoid invalidation of warranty, products should be modified or repaired only by ILME: the integrity of their functionality - e.g. their degree of protection - can no longer be guaranteed if products are modified/repared by end-users. In any case, the liability for correct choice, assembly and use is totally at charge of the installer and the end-user.
- 16 ILME S.p.A. takes no responsibility in verifying whether the components herein contained comply with any specific regulations of fields of application.
- 17 ILME cannot be held responsible for individual components in **uses other than those described in this catalogue**.
ILME cannot be held responsible for **incorrect connector selection** in relation to the environmental conditions of the application (e.g.: influence of ambient temperature, moisture, environmental pollution, etc.).

* Except one fixing screw for size “21.21” inserts, two fixing screws for size “32.13” inserts.

** Except for **SQUICH®** inserts (with spring-clamp terminals with actuator button) and **AXYR®** inserts (push-in spring terminals with actuator button) that do not require any tool to operate the terminal.

CE MARKING

As from 1st January 1997, in order to make available electrical products on the European market, the manufacturer must ensure that these bear the relevant **CE marking**, in line with the Low Voltage Directive 73/23/EEC* (implemented in Italy as L. D. 18-10-1977 no. 791) and its modification 93/68/EEC* (implemented in Italy as L.D. 25-11-1996 no. 626/96, published in the supplement to the Gazzetta Ufficiale of 14-12-1996).

The CE marking must be visible on the product or, if this is not possible, on the packaging, the instructions for use or on the warranty certificate. It acts as a declaration by the manufacturer that the product complies with all relevant EU directives regarding its field of application.

ILME products bear the CE marking on the actual product or its packaging.

Almost all ILME products fall within the scope of the Low Voltage Directive. An EU declaration of conformity is required in order to be able to apply the CE marking. This declaration, to which the market is not directly entitled, must be made available to the controlling authorities (in Italy, the Ministry of Economic Development) at all times. In it, the manufacturer declares the technical safety standard(s) followed in the design and manufacture of the product. These standards must be, in decreasing order of preference:

- a European standard (EN prefix)
- a European harmonisation document (HD prefix)
- an IEC International Standard
- a national standard
- in the absence of reference safety standards, the manufacturer's internal specifications guaranteeing compliance with the basic safety requirements of the directive.

Conformity with harmonised technical standards (i.e. ratified by CENELEC) also constitutes presumption of conformity with the basic safety requirements of the directives.

The CE marking of ILME products results from the declaration of conformity of the product to harmonised standards or IEC International Standards.

Through the CE marking, ILME declares full compliance, not merely with the directive's basic safety requirements, but also with those international or national standards on which voluntary safety certification markings are based (e.g. IMQ and VDE). In this way, ILME intends to give the CE marking the value of self-certification in terms of safety, given the loss in legal value of voluntary certifications issued by third parties, ratified by directive 93/68/EEC*.

Notwithstanding the above, practically all ILME products still bear voluntary conformity markings.

The above mentioned EU declaration of conformity becomes null and void when the assembly of products includes one or more components not manufactured by ILME and without CE marking.

The information contained in this catalogue is not binding and may be changed without notice.

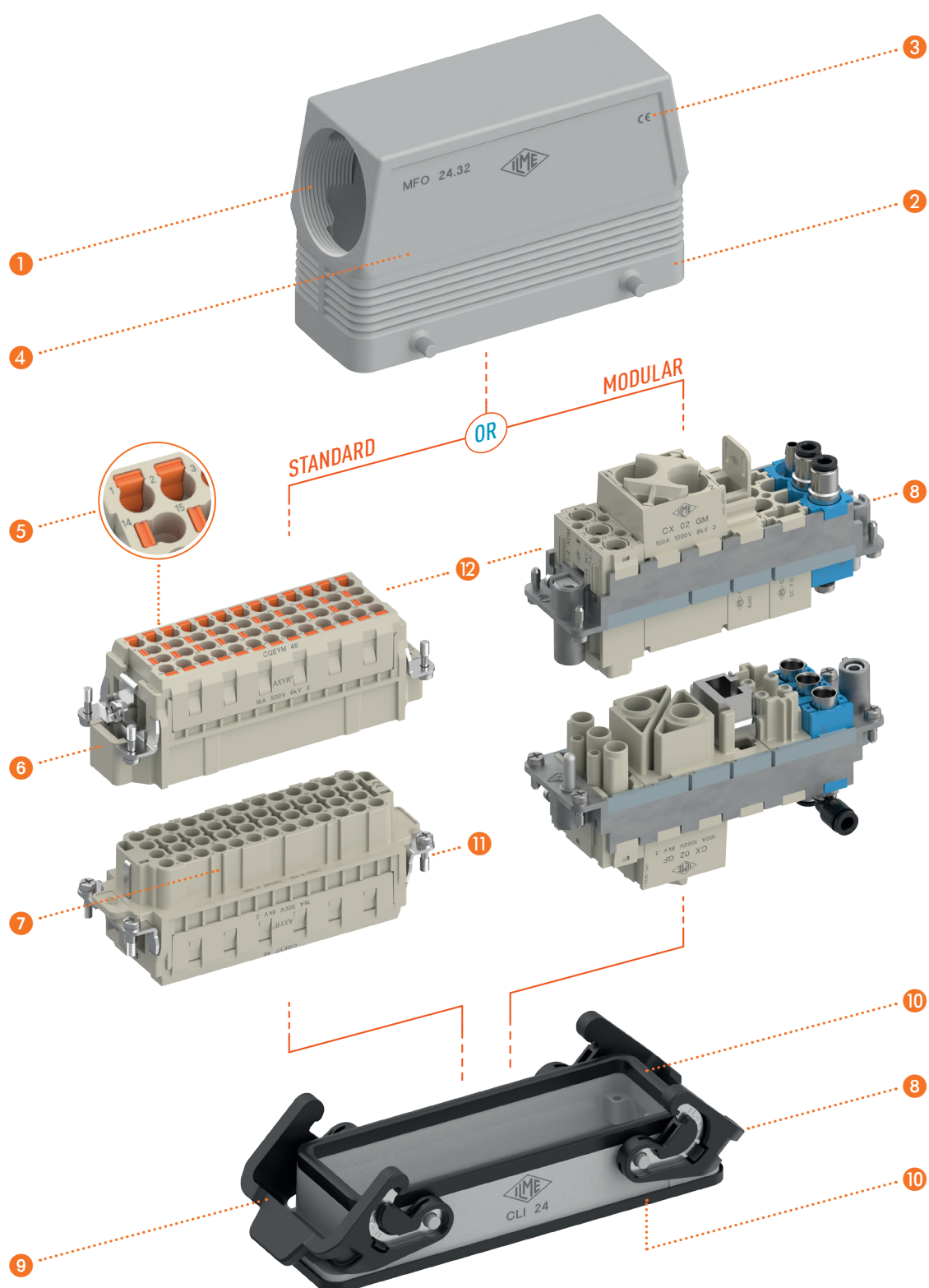
* **Note:** The subsequent legal reference for the Low Voltage Directive was 2006/95/EC, as consolidation of the original Directive 73/23/EEC + Directive 93/68/EEC. On 29th March 2014, the Official Journal of the European Union published the new Low Voltage directive 2014/35/EU dd. 26th February 2014, a recast version of directive 2006/95/EC, which is in force since 20th April 2016.



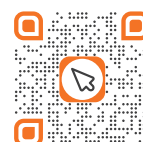
Design, manufacture and distribution
of industrial electrical equipment (IAF 19)
Certificate No. 50 100 11133

MULTIPOLE CONNECTORS

GENERAL FEATURES



- 1 **Threaded cable entry** in various metric thread sizes (types with pre-code "M") in accordance with EN 60423, for cable entry devices in accordance with EN 62444, or Pg thread sizes (types with pre-code "C") (NPT threading on request). May be located vertically, horizontally or frontally.
- 2 Rugged die-cast metal enclosures (die-cast **aluminium or zinc alloy**) and **self-extinguishing thermoplastic resin** enclosures, cULus approved. Surface-mounting, bulkhead, and hood versions are available, with or without hinged or detached protection covers. Standard size enclosures have an internal coding key that prevents the insertion of high voltage inserts series CME (all) and CMCE (only 16+2 poles), while CM (Pg) enclosures series and MM (metric) have no such coding key and contain supplementary insulating strips inside for 830 V inserts.
- 3 **CE marking**, laser-marked on both inserts and enclosures, attesting conformity to the requirements of the Low Voltage Directive (2014/35/EU).
- 4 Metallic enclosures with epoxy-polyester **thermosetting powder coating** (or epoxy coating for harsh environment applications) with high resistance to mechanical stress and external agents. Specific enclosures with no paint coating are available for use at temperatures up to 180 °C or for EMC purposes.
- 5 **The contact position** is identified with numbers or codes on both sides of each insert, laser-marked or printed by mould.
- 6 **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 830 V 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) are available for specific uses with temperatures of up to 180 °C.
- 7 Insert **polarised profiles** with asymmetrical guides to avoid incorrect matings. Inserts have a mechanical life equal to or higher than:
 - 500 mating cycles when equipped with silver plated or gold plated contacts;
 - 200 mating cycles when equipped with tin plated contacts.
- 8 Inserts and enclosures are manufactured in compliance with European standard **EN 61984** (DIN VDE 0627), certified and identified with **UL** (cULus or UL) and **CSA** marks (the CSA mark not for all series).
- 9 **Locking levers** are available in self-extinguishing thermoplastic material, or stainless steel or a combination of both materials, suitable for each application requirement, guaranteeing a perfect closure and tight sealing. Single or double locking, with one or two levers.
- 10 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.
- 11 Captive insert **fastening screws**, with anti-loosening spring washer or under-head knurling.
- 12 Standard inserts or MIXO modular inserts with dedicated termination technology, tool-less **SQUICH®** and **AXYR®** spring, screw and crimp. Protective ⊕ terminals with a wide contact surface are clearly marked on each insert or MIXO modular frame.



Find more
information on
our products at
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COMBINATIONS BETWEEN ENCLOSURES AND INSERTS

Identification of enclosures

Connector inserts and their enclosures are numerous, and finding the correct pairing of one with another may be complex.

To facilitate this operation (in addition to each distinctive part number), the definition of **"size"** has been introduced in this catalogue.

The **"size"** value refers to the **X - Y** fixing screw centre distance which constitutes a unique and shared element between inserts (standard and modular) and enclosures.

Table 1 - Standard inserts / enclosure size reference

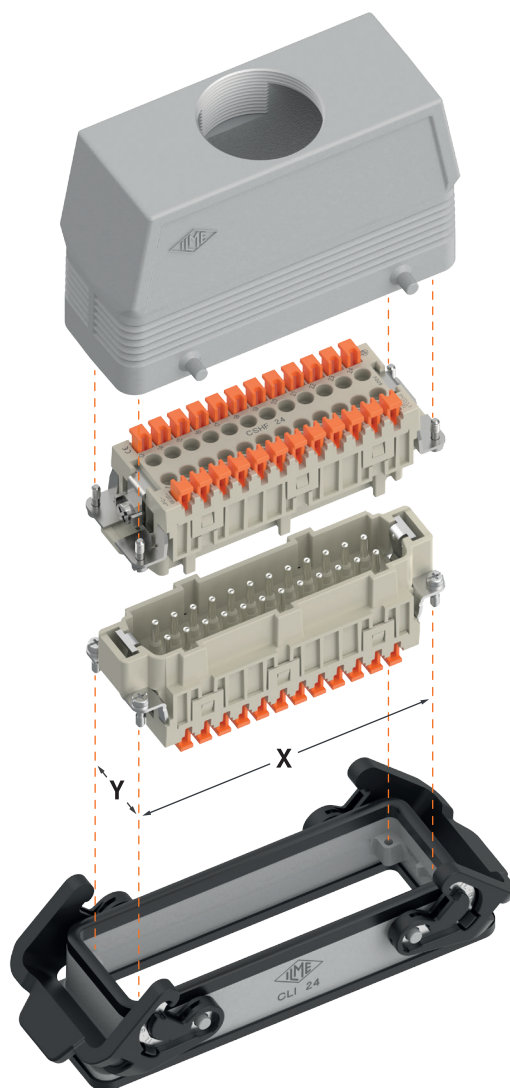
Enclosures identifications#	Enclosures size X – Y	Insert X - Y fixing screw centre distance
03	21.21	(21 × 21 mm)*
08	32.13	32 × 13 mm
15	49.16	49,5 × 16 mm
25	66.16	66 × 16 mm
50 	66.40 	66 × 16 mm (2 inserts)
06	44.27	44 × 27 mm
10	57.27	57 × 27 mm
16	77.27	77,5 × 27 mm
24	104.27	104 × 27 mm
32 	77.62 	77,5 × 27 mm (2 inserts)
48 	104.62 	104 × 27 mm (2 inserts)

The value in this column depicts the historical identification of each enclosure dimension according to the closest compatible insert's polarity (e.g., CLI 06 L with CNEM 06 T).

* Due to the single fixing screw of 21.21 inserts, the size is identified by the insert's cross-sectional dimensions.

Table 2 - Modular inserts / enclosure size reference

Modular frame slot identification	Enclosures size X – Y	Modular frame X - Y fixing screw centre distance
01	49.16	49,5 × 16 mm
02	44.27	44 × 27 mm
03	57.27	57 × 27 mm
04	77.27	77,5 × 27 mm
06	104.27	104 × 27 mm
04 (x2)	77.62 	77,5 × 27 mm (2 inserts)
06 (x2)	104.62 	104 × 27 mm (2 inserts)



 These sizes belong to enclosures for double insert.

 All pages that illustrate combinable articles (inserts and enclosures) carry references as per the examples illustrated on the opposite page.

Enclosures identifications#	Enclosures size X - Y	Rated current										
		300 A	100 A	40 A	35 A	16 A	16 A	16 A	16 A	16 A	10 A	10 A
		200 A	80 A	16 A								6,5 A
		100 A	40 A	10 A								
		Inserts series*										
		MIXO CX MIXO RX (HNM)	CX - CXC RX - RXC (HNM)	CQ4 CQ - CQY RQ (HNM)	CP - CPY	CQE - CQEY CQEE RQE - RQEE (HNM)	CNE - CCE CSH - JSH-S - CSHT RSH - RCC (HNM)	CDA - CDC CSAH	CT - CTS CT - CTSE CSS	CMCE CMSE	CD - CDY CDD RD - RDD (HNM)	CDSH CDSH NC RDSH (HNM)
												CK - CKSH
		Inserts polarity + ⊕										
03	21.21			2 3 5 7 12 21							7 8 ▲	3 4
08	32.13			4 8 17								
15	49.16	①*						10			15	
25	66.16							16			25 (CD) 38 (CDD)	
50 (×2)	66.40 ○							32			50 (CD) 76 (CDD)	
06	44.27	②*				10	6 ●		6 ■		24 (CD)	6 (CDSH NC) 9
10	57.27	③*	8/24			18	10		10 ■	3	40 (CD) 42 (CDD)	18
16	77.27	④*	4/0 4/2 12/2 9/42 6/12 6/36		6	32	16		16 ■ 40 ■	6	64 (CD) 72 (CDD)	27
24	104.27	⑥*	8/0 6/6 4/8			46	24		24 ■ 64 ■	10	108 (CDD)	42
32 (×2)	77.62 ○	⑧*			12	64	32 ●		32 ■	12	80 (CD) 144 (CDD)	54
48 (×2)	104.62 ○	⑫*				92	48 ●		48 ■	20	128 (CD) 216 (CDD)	84

The value in this column depicts the historical identification of each enclosure dimension according to the closest compatible insert's polarity (e.g., CLI 06 L with CNEM 06 T).

●* Number of single modular inserts that may be inserted in the enclosures.

* High temperature RY inserts available.

● Except CSHT inserts series.

▲ Polarity without protective ⊕ contact.

○ These sizes belong to enclosures for double insert.

■ Can only be mounted in bulkhead housings.

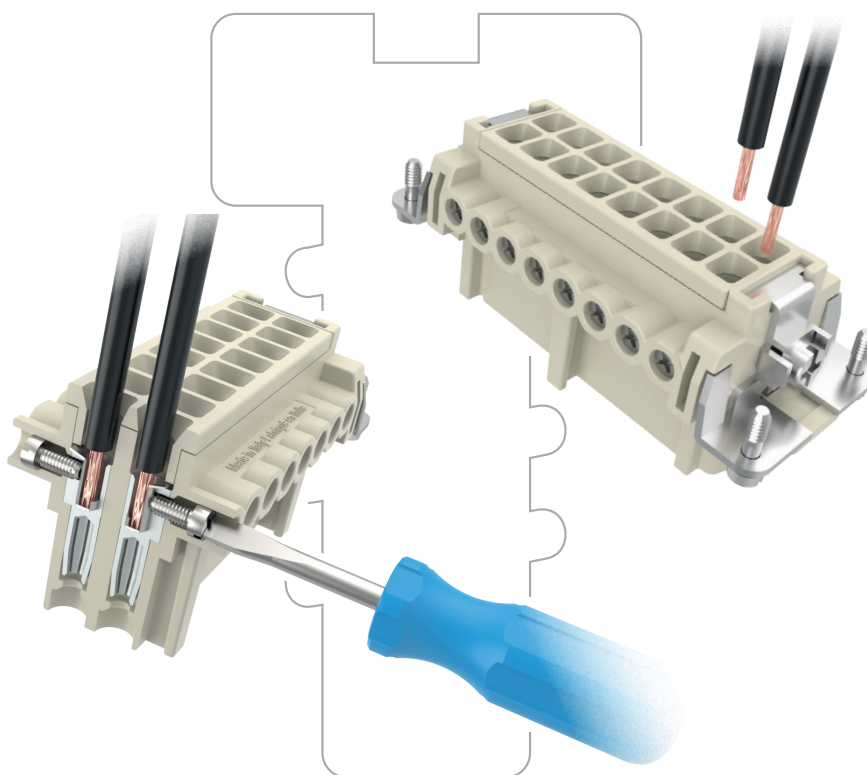
INSERTS TERMINATION TECHNOLOGIES

SCREW

The classic connection

Screw-type inserts represent one of the oldest and widely used connection technologies in the electrical industry. The connections of the conductors to the female and male inserts are made via screws (in conformance with standard EN 60999-1). Screw-type inserts offer a reusable connection for solid and stranded wires either prepared (crimped with insulated or non-insulated wire ferrule of suitable size) or unprepared.

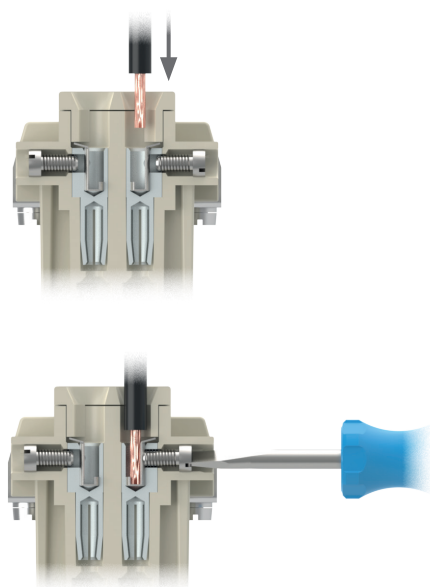
Requiring common and popular tools, like a flat blade screwdriver or a Ph cross-headed screwdriver (see reference page J.2 for recommended tightening torque), the only downside of screw-type connectors is the low resistance to vibration, resulting in a loose connection when the conductor is not adequately secured.



KEY ADVANTAGES

- > Easy assembly and operation, reusable connection.
- > Wide product range: from 10 A to 80 A nominal current and from 0,75 mm² to 16 mm² conductor cross-section (according to the specific insert).
- > Silver or gold-plated contacts.
- > High temperature version (RY) available for use in applications with up to 180 °C ambient temperature.

WIRING

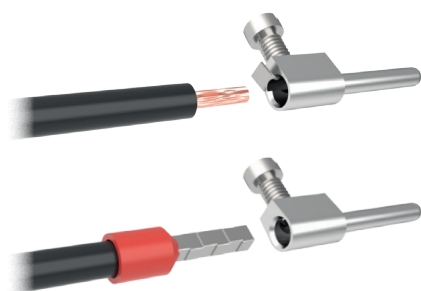


Screw-type terminal connectors feature a cone-shaped terminal cavity to guide the conductor inside the terminal seat securely, stainless steel protection plate for the use of unprepared conductors and galvanized steel terminal screws. All terminals are presented completely open (unscrewed) and ready to be wired.

A standard screwdriver (Ph or flat type; see reference page J.2 for recommended tightening torque) is used to secure the conductor by tightening the terminal screw. The PE terminal is also screw-type and is located on the mounting bracket on pole #1. It covers the same conductor cross-sectional area range as the line terminals.

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

CLAMPING TYPES

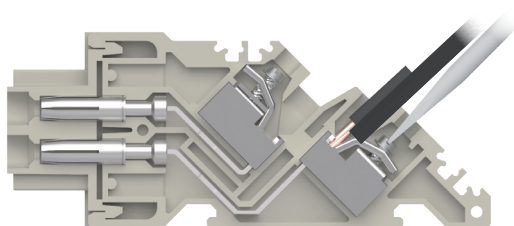


Screw-type connectors series come in two main variants:

- > With pressure (protection) plate, for unprepared conductors, to preserve conductor strands from being cut from the screw head.
- > Without pressure (protection) plate, for prepared conductors (crimped with insulated or non-insulated wire ferrule of suitable size).

☑ The highest conductor cross-sectional area can be used only with unprepared conductors.

BUILT-IN TERMINAL BLOCK



CT series: in this layout, the wires are connected to the female and male insert contacts using 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 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).

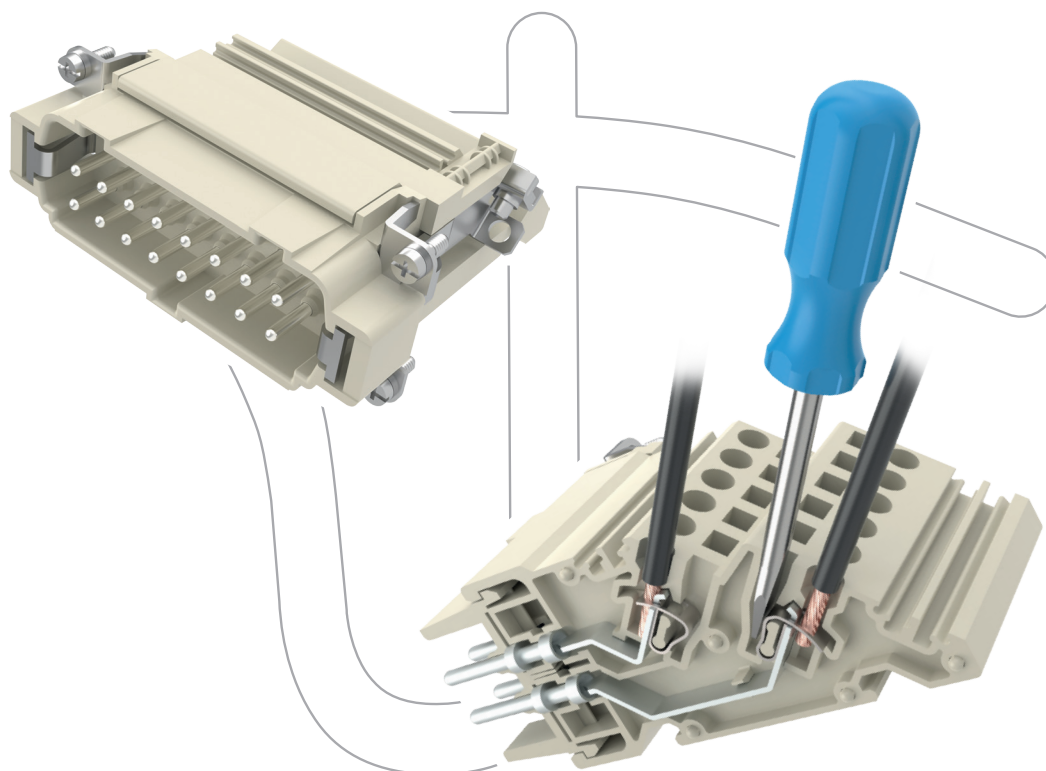
INSERTS TERMINATION TECHNOLOGIES

SPRING

Cage-shaped clamp trap

Spring-type inserts feature a cage-shaped spring clamp to secure each conductor to the contact terminals, granting a stable and vibration-proof connection. The terminal springs must be opened using a suitable flat screwdriver to accommodate the selected stripped wire; once the insertion

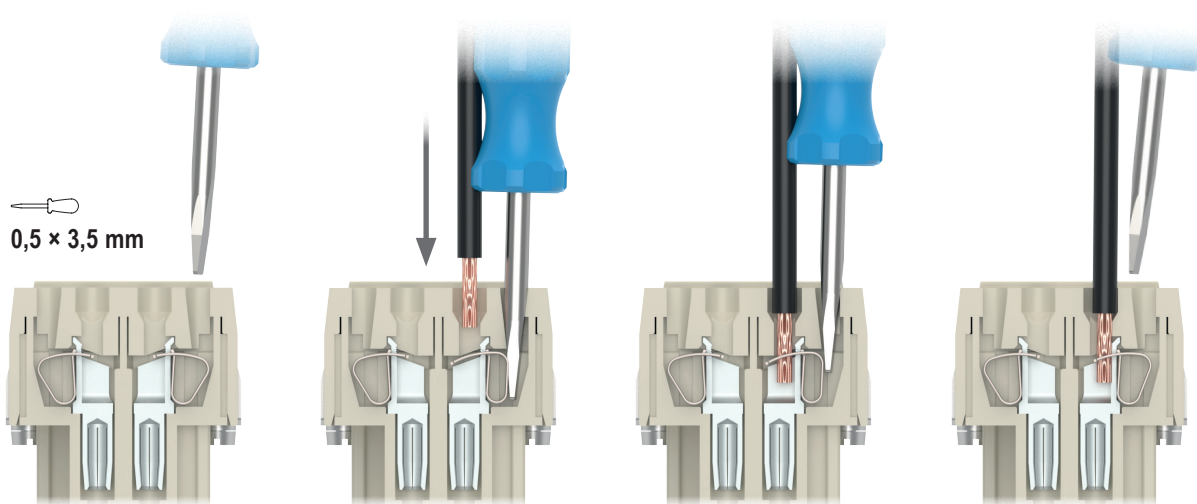
is complete, the spring retains the conductor. Spring clamp connections are described in the international standard IEC 60352-7, particularly the electrical and mechanical characteristics each connection must endure, as the tensile strength and contact resistance requirements.



KEY ADVANTAGES

- > Vibration proof connection.
- > Cost and time effective connection: easy wiring.
- > Compatible with solid or stranded conductors, no special wire preparation needed.
- > Compatibility with corresponding screw-type, crimp and SQUICH® inserts (CCE, CNE, CSH series).

WIRING



0,5 × 3,5 mm

Step 1

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

Step 2

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

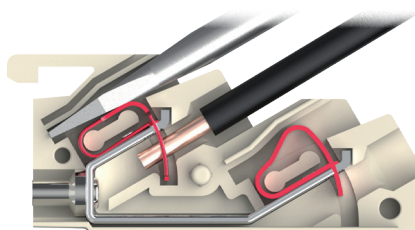
Step 3

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.

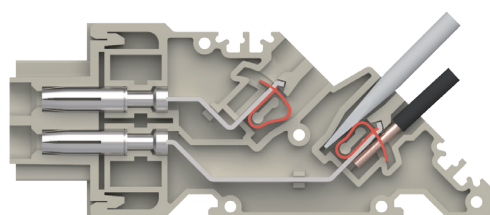
DUAL SPRING TERMINAL



CSS Connector series

Equipped with two spring terminals per contact, the insert is designed for a circuit to be branched off. Series CSS inserts share the mating interface (dimensions) with equally sized inserts of series CNE (screw-type), CCE (crimp-type), CSH (spring-type with actuator button SQUICH®), CT (screw-type with 45° terminal block) and CTSE (spring type with 45° terminal block). They are ideal as motor connectors, connecting motor windings in star and delta configurations.

BUILT-IN TERMINAL BLOCK



CTS-CTSE Connector series

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 a wire preparation (CTSE inserts).

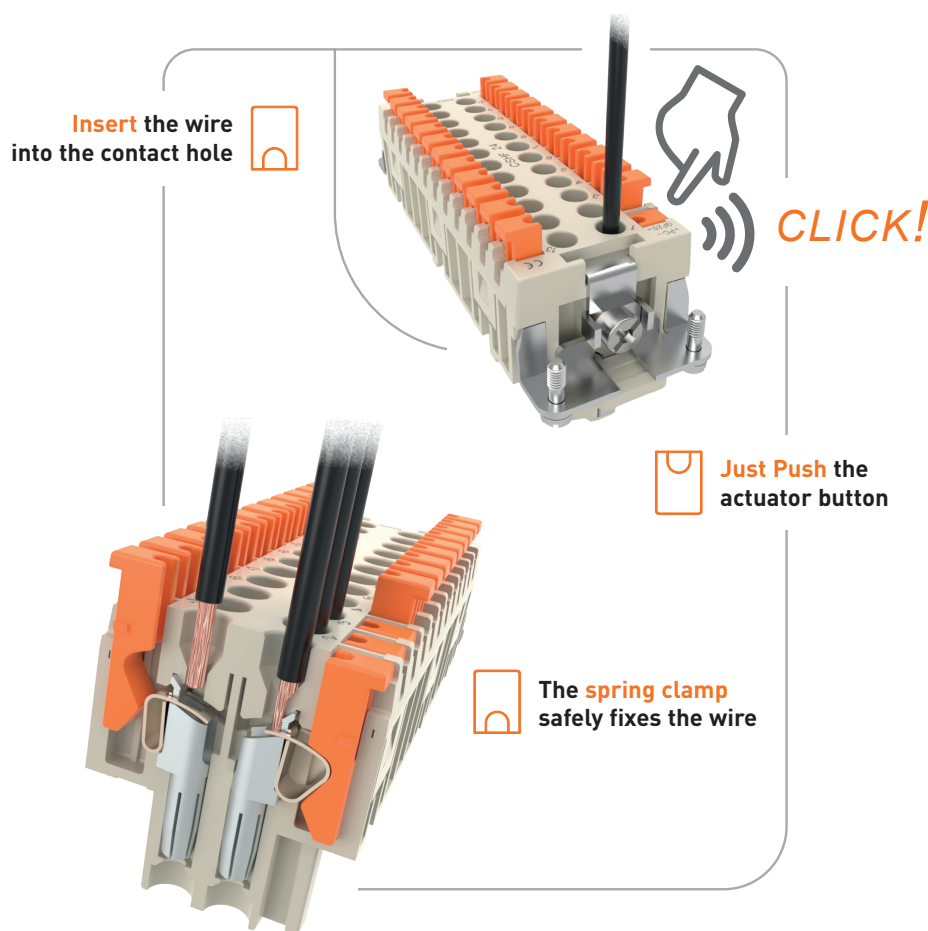
INSERTS TERMINATION TECHNOLOGIES

SQUICH®

Tool-less connection, Just Push

The cornerstone of ILME R&D activity focusing on easy installation and safe wiring gets its pioneering example in the SQUICH® technology. Based on well-known and proven spring technology, SQUICH® allows tool-less connection **at the push of a button**, while providing all the advantages

of traditional springs, such as resistance to temperature changes, shock and vibration. Compatible with flexible, prepared or solid wire, any application benefits from a safe and reliable electrical connection.



KEY ADVANTAGES

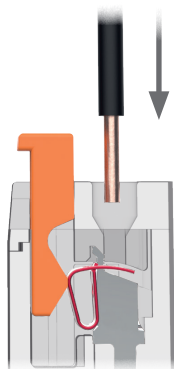
- > No special wire preparation, other than stripping.
- > No need for wiring tools.
- > Excellent fastening solution and great resistance to strong vibrations.
- > Reduced wiring time, up to 50%.
- > Suitable for solid and flexible wires, both prepared and unprepared, with a cross sectional area range of 0,14 mm² to 2,5 mm².
- > Correct wiring can be checked by inserting a test probe into the probing slot of the actuator buttons.

Watch our
Video

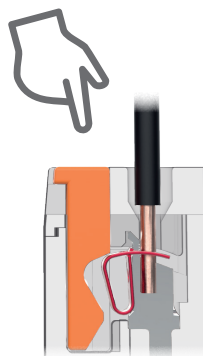


WIRING

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

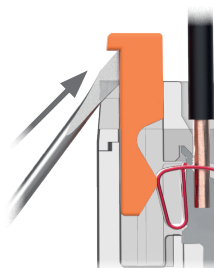


- > Deeply insert the wire into the contact hole previously stripped and twisted



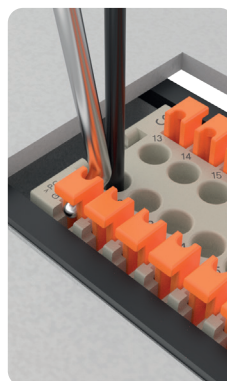
- > Push the actuator button to close the spring terminal

RE-OPENING with screwdriver



- > Insert a **0,5 × 3,5 mm flat blade screwdriver** in the actuator button side window and pull it up by levering down to release the wire from the spring clamp

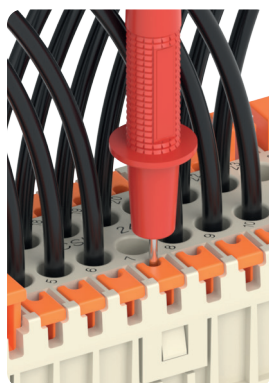
RE-OPENING with CSHES



CSHES allows the release of the connection from a SQUICH® terminal without disassembling the connector from the bulkhead mounting housing.

Not suitable for CKSH and CX 05 SH, whose re-opening can be done with a flat blade screwdriver.

PROBING SLOT



- > **Easy to access** probing slot on buttons for measuring devices, even with mounted connector.

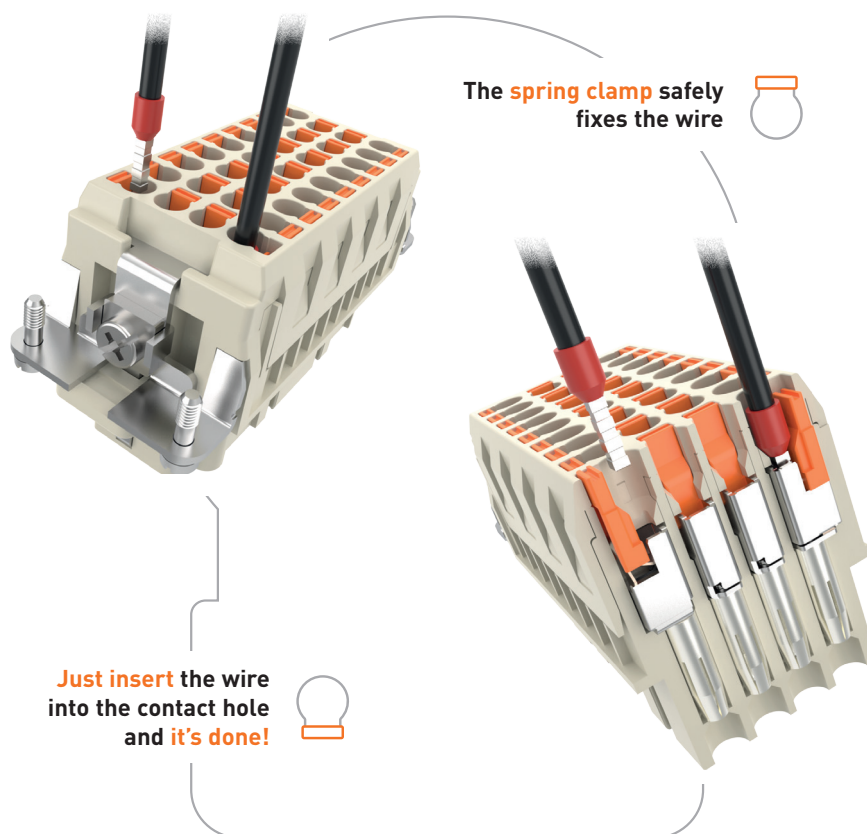
INSERTS TERMINATION TECHNOLOGIES

AXYR®

Tool-less, high-density & fast connection

AXYR® is the new rapid connection technology developed by ILME to optimize work times and methods, enabling industries of all sectors to reach their automation targets more effectively. An **extremely compact push-in spring termination** which equals crimp connectors in high density,

therefore guaranteeing an equivalent electrical performance. Wiring in axis is the formula that recaps the technology strong point as it enables **straightforward tool-less wiring**. Operations require one simple step: wire insertion.



KEY ADVANTAGES

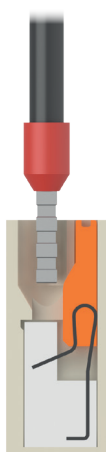
- > **High density tool-less connection.** Compatible with corresponding crimp connectors. No need for any crimping tool.
- > **Easy and fast.** Easy wiring by the actuator buttons. Suitable for any wire: solid and stranded, either end-sleeve prepared or unprepared.
- > **Safe.** Spring clamp connection resistant to mechanical stress and vibrations.
- > AXYR® features an harmonic steel spring and a tiny, yet stiff, properly designed actuator button working together to allow a **simple push-in action** guaranteeing a safe wiring.
- > Wire release with a **simple** flat-blade screwdriver.
- > **Machined** brass contacts.
- > Thanks to a **boxed terminal**, the wire contact pressure does not rely upon surrounding insulating parts, likely to possibly relax under heating when the connector is under current load.

Watch our
Video



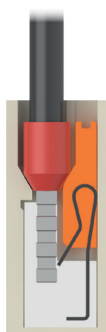
WIRING simple push-in action

Solid or Prepared wires:
Cross-sectional Area $\geq 0,75 \text{ mm}^2$ / 18 AWG



1

Deeply insert the solid or prepared wire into the contact hole

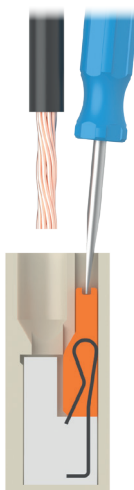


2

The wire is safely secured by the spring clamp

WIRING with flat-blade screwdriver

Stranded wires: All Cross-sectional Areas
Solid or Prepared wires: Cross-sectional Area $< 0,75 \text{ mm}^2$ / 18 AWG

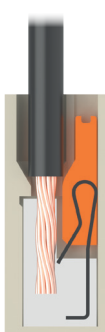


1

Push down the actuator button by a flat-blade screwdriver

-  0,5 × 3 mm max. for 10 A
-  0,5 × 3,5 mm max. for 16 A
-  0,8 × 4,5 mm max. for 40 A

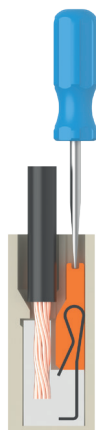
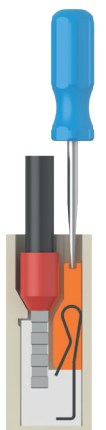
insert the stranded wire, previously stripped and twisted, into the contact hole, or the solid or prepared wire of small size



2

The wire is safely secured by the spring clamp

RE-OPENING



R

Push down the actuator button by a flat-blade screwdriver to remove the wire:

-  0,5 × 3 mm max. for 10 A
-  0,5 × 3,5 mm max. for 16 A
-  0,8 × 4,5 mm max. for 40 A

INSERTS TERMINATION TECHNOLOGIES

CRIMP

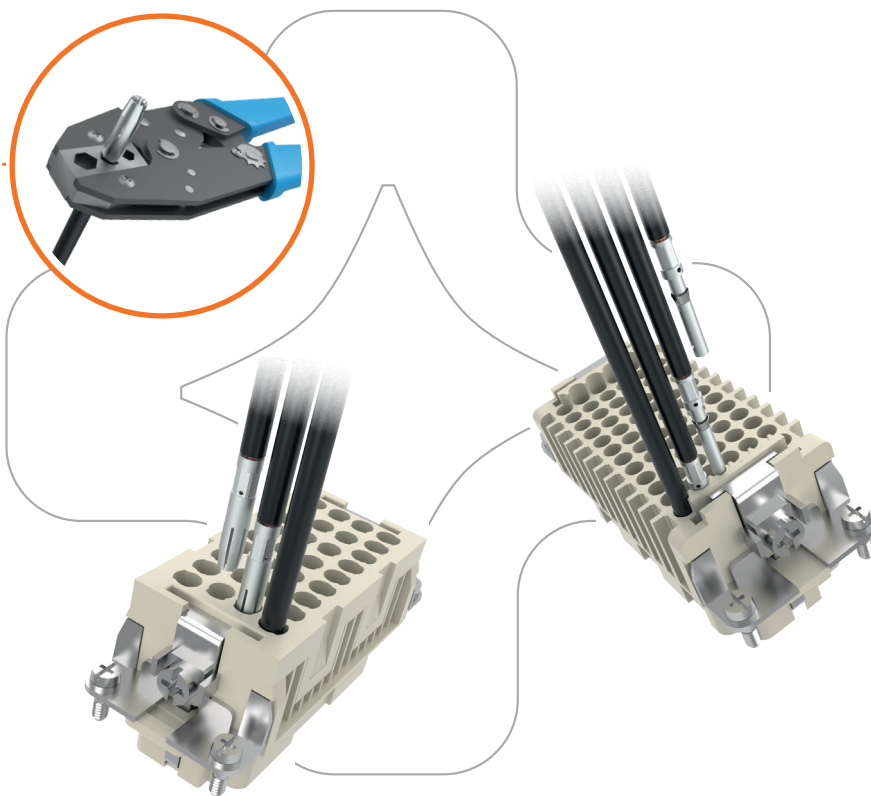
Compact, space-saving & high-density connection

The crimp connection is an irreversible, non-reusable connection between one or two conductors and a crimp contact. It is obtained by **compression deformation** (cold forming) and consequent reshaping of the contact crimping stem or crimp barrel.

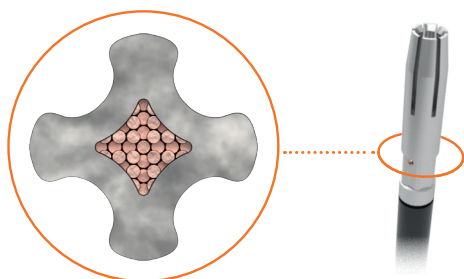
A good crimp connection is provided by a suitable combination between the **crimping dies**, the **contact** crimp barrel (hence the crimp contact), and the cross-section of the conductor.

The crimped connections for wire sections up to 10 mm² are covered by the EN 60352-2:2006 European standard equivalent to the IEC 60352-2 Issue 2 (2006-02) international standard.

For cross-sectional areas higher than 10 mm², up to 70 mm² the reference standard has been the **NF F 61-030:1989** French standard until its withdrawal in favour of **EN 50467:2011**, which relates to electrical connectors on board railway rolling stock.



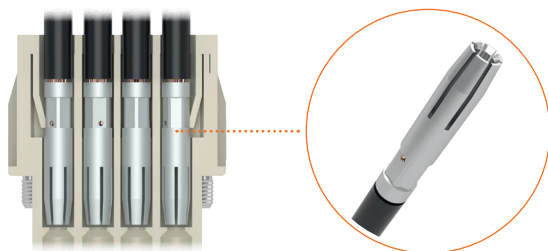
Crimped contact cross section



KEY ADVANTAGES

- > Lower voltage drop across the connection.
- > High stability in time even in the presence of vibrations.
- > High durability in presence of corrosion (gas-tightness).
- > High-density connection.

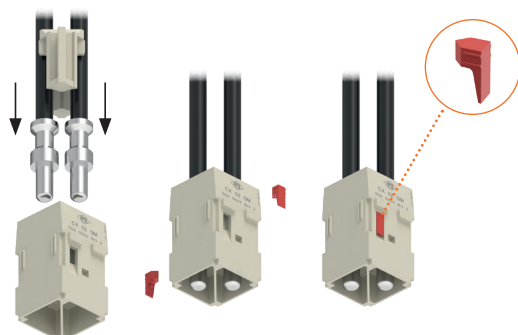
CRIMP INSERTS with retention device inside insert



Once crimped with the right combination of the crimping tool and locator, the crimp contacts series CI (5 A), CC (16 A), CX (40 A), and CX7 (80 A and 70 A) are securely held in place inside each insert by using a specifically designed contact holder.

Each contact entry is tapered to facilitate wire insertion and avoid any damage after the crimping operation.

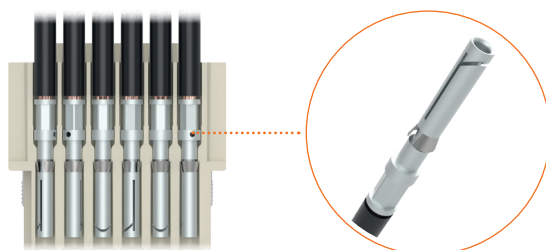
CRIMP INSERTS with retention device



High-power crimp contacts for standard inserts and MIXO modules, series CG (100 A), CY (200 A), and C30 (300 A), are securely held in place inside each insert by red-coloured locking tabs.

This innovative design, patented by ILME, does not require removal tools to extract the crimped contacts.

CRIMP INSERTS with retention device on contacts



Contacts series CD (10 A) features an elastic retention element directly on the contact body. The CD series compatible inserts don't require a specific contact holder.

Once crimped with the right combination of the crimping tool and locator, the contacts are inserted inside the inserts.

INSERTION AND REMOVAL TOOLS



For safe removal of the contacts from the inserts (for inspection or re-wiring), it's crucial to use ILME's specific removal tools. These tools are designed to prevent inappropriate removal of the contacts, thereby preserving the integrity of the retaining system and ensuring the safety of the connection.

Specific insertion tools are also available where small wire cross-section wires don't allow a simple contact insertion (see Chapter G- for removal and insertion tools).

CRIMP CONTACTS OVERVIEW

ILME crimp contacts are available in silver or gold-plated versions (contacts above 70 A are silver-plated only).

Gold-plated crimp contacts are recommended for applications with low-rated currents and low-rated voltages.

Thanks to the electrical characteristics of gold, signal deterioration is prevented, and excellent resistance to the surface oxidation of the contacts is achieved. In particular, gold-plated contacts are recommended with signals with less than ± 5 mA current and ± 5 V voltage.

Rated current	Plating	Wire cross-section								
		mm²	120	95	70	50	35	25	16	10
		AWG	4/0	3/0	2/0	1	2	4	6	8
300 A	silver plated		C30MA 120 P C30MA 120 C30FA 120	C30MA 95 P C30MA 95 C30FA 95	C30MA 70 P C30MA 70 C30FA 70	C30MA 50 P C30MA 50 C30FA 50	C30MA 35 P C30MA 35 C30FA 35	C30MA 25 P C30MA 25 C30FA 25	C30MA 16 P C30MA 16 C30FA 16	
200 A				CYMA 70 CYFA 70	CYMA 50 CYFA 50	CYMA 35 CYFA 35	CYMA 25 CYFA 25	CYMA 16 CYFA 16		
100 A						CGMA 35 CGFA 35	CGMA 25 CGFA 25	CGMA 16 CGFA 16	CGMA 10 CGFA 10	
80 A / 70 A							CX7MA 25 P CX7MA 25 CX7FA 25	CX7MA 16 P* CX7MA 16* CX7FA 16*	CX7MA 10 P CX7MA 10 CX7FA 10	
40 A									CXMA 10 CXFA 10	
16 A ²)										
10 A										
6,5 / 5 / 4 A ¹)										
16 A	gold plated									
10 A										
6,5 / 5 / 4 A ¹)										
80 A / 70 A	HNM						RX7M2D 25 P RX7M2D 25 RX7F2D 25	RX7M2D 16 P* RX7M2D 16* RX7F2D 16*	RX7M2D 10 P RX7M2D 10 RX7F2D 10	
40 A									RXM2D 10 RXF2D 10	
16 A										
10 A										
6,5 / 5 / 4 A ¹)										

¹⁾ Please check each insert derating diagram to establish the actual maximum operating current according to the ambient temperature.

²⁾ CC series, 16 A male contacts also available in advanced opening version (see codes CC..AN).

* RX7 and CX7 series contacts also available for extra-flexible Class 6 conductors (for 16 mm² - AWG 6 wire cross-section only).

Standard ILME gold treatment is carried out in accordance with MIL-G-45204C Class 00, Type II, Grade C and ASTM B488-01 Class 0.5, Type II, Grade C. The basic or high-thickness gold-plated contacts comply with EN 61984: 2009, IEC 60512, and EN 60352-2:1994 (same as the standard version).

ILME crimp contacts are compatible with flexible copper conductors of class 5 (flexible) or 6 (more flexible than class 5), according to EN IEC 60228.

Please refer to Section F for additional information regarding ILME crimp contacts series.

Rated current	Plating	Wire cross-section										
		mm²	6	4	3	2,5	1,5	1	0,75	0,5	0,14-0,37	0,08-0,21
		AWG	10	12	12	14	16	18	18	20	26-22	28-24
300 A	silver plated											
200 A												
100 A												
80 A / 70 A		CX7MA 6.0 P CX7MA 6.0 CX7FA 6.0										
40 A		CXMA 6.0 CXFA 6.0	CXMA 4.0 CXFA 4.0		CXMA 2.5 CXFA 2.5	CXMA 1.5 CXFA 1.5						
16 A 2)			CCMA 4.0 CCFA 4.0	CCMA 3.0 CCFA 3.0	CCMA 2.5 CCFA 2.5	CCMA 1.5 CCFA 1.5	CCMA 1.0 CCFA 1.0	CCMA 0.7 CCFA 0.7	CCMA 0.5 CCFA 0.5	CCMA 0.3 CCFA 0.3		
10 A					CDMA 2.5 CDFA 2.5	CDMA 1.5 CDFA 1.5	CDMA 1.0 CDFA 1.0	CDMA 0.7 CDFA 0.7	CDMA 0.5 CDFA 0.5	CDMA 0.3 CDFA 0.3		
6,5 / 5 / 4 A 1)								CIMA 0.7 CIFA 0.7	CIMA 0.5 CIFA 0.5	CIMA 0.3 CIFA 0.3	CIMA 0.2 CIFA 0.2	
16 A	gold plated		CCMD 4.0 CCFD 4.0	CCMD 3.0 CCFD 3.0	CCMD 2.5 CCFD 2.5	CCMD 1.5 CCFD 1.5	CCMD 1.0 CCFD 1.0	CCMD 0.7 CCFD 0.7	CCMD 0.5 CCFD 0.5	CCMD 0.3 CCFD 0.3		
10 A					CDMD 2.5 CDFD 2.5	CDMD 1.5 CDFD 1.5	CDMD 1.0 CDFD 1.0	CDMD 0.7 CDFD 0.7	CDMD 0.5 CDFD 0.5	CDMD 0.3 CDFD 0.3		
6,5 / 5 / 4 A 1)								CIMD 0.7 CIFD 0.7	CIMD 0.5 CIFD 0.5	CIMD 0.3 CIFD 0.3	CIMD 0.2 CIFD 0.2	
80 A / 70 A	HNM	RX7M2D 6.0 P RX7M2D 6.0 RX7F2D 6.0										
40 A		RXM2D 6.0 RXF2D 6.0	RXM2D 4.0 RXF2D 4.0		RXM2D 2.5 RXF2D 2.5	RXM2D 1.5 RXF2D 1.5						
16 A			RCM2D 4.0 RCF2D 4.0	RCM2D 3.0 RCF2D 3.0	RCM2D 2.5 RCF2D 2.5	RCM2D 1.5 RCF2D 1.5	RCM2D 1.0 RCF2D 1.0	RCM2D 0.7 RCF2D 0.7	RCM2D 0.5 RCF2D 0.5	RCM2D 0.3 RCF2D 0.3		
10 A					RDM2D 2.5 RDF2D 2.5	RDM2D 1.5 RDF2D 1.5	RDM2D 1.0 RDF2D 1.0	RDM2D 0.7 RDF2D 0.7	RDM2D 0.5 RDF2D 0.5	RDM2D 0.3 RDF2D 0.3		
6,5 / 5 / 4 A 1)								RIMD 0.7 RIFD 0.7	RIMD 0.5 RIFD 0.5	RIMD 0.3 RIFD 0.3	RIMD 0.2 RIFD 0.2	

SD series 10 A stamped crimp contacts

Stamped, 10 A open crimp barrel contacts without insulation grip for stranded copper wires.

Available with silver plating in one performance level (PL1) for up to 500 mating cycles, either as loose-part contacts or in 5,000-piece reels.

			Loose contacts (200 pcs. per box package)	Reel package (5 000 pcs. in large-sized reel)
				
Rated current	Wire cross-section	Performance level (PL)	Packaging	
10 A	0,37-1 mm ² AWG 24-18	PL1 ≥ 500 cycles	SDFA 1.0 SDMA 1.0	SDFA 1.0R SDMA 1.0R
	1,5-2,5 mm ² AWG 16-14		SDFA 2.5 SDMA 2.5	SDFA 2.5R SDMA 2.5R

SI series 5 A stamped crimp contacts

Stamped, 5 A open crimp barrel contacts with insulation grip for stranded copper wires.

Available with different selective gold plating thickness (over nickel) according to three required performance levels: PL1 – PL2 – PL3, respectively for 500, 250 and 50 mating cycles.

			Loose contacts (200 pcs. per box package)	Coil package (500 pcs. in compact-sized coil)	Reel package (10 000 pcs. in large-sized reel)
					
Rated current	Wire cross-section	Performance level (PL)	Packaging		
5 A	0,21-0,52 mm ² AWG 24-20	PL1 ≥ 500 cycles	SIM1D 0.2 SIF1D 0.2	SIM1D 0.2C SIF1D 0.2C	SIM1D 0.2R SIF1D 0.2R
		PL2* ≥ 250 cycles	SIM2D 0.2 SIF2D 0.2	SIM2D 0.2C SIF2D 0.2C	SIM2D 0.2R SIF2D 0.2R
		PL3 ≥ 50 cycles	SIM3D 0.2 SIF3D 0.2	SIM3D 0.2C SIF3D 0.2C	SIM3D 0.2R SIF3D 0.2R
5 A	0,08-0,21 mm ² AWG 28-24	PL1 ≥ 500 cycles	SIM1D 0.5 SIF1D 0.5	SIM1D 0.5C SIF1D 0.5C	SIM1D 0.5R SIF1D 0.5R
		PL2* ≥ 250 cycles	SIM2D 0.5 SIF2D 0.5	SIM2D 0.5C SIF2D 0.5C	SIM2D 0.5R SIF2D 0.5R
		PL3 ≥ 50 cycles	SIM3D 0.5 SIF3D 0.5	SIM3D 0.5C SIF3D 0.5C	SIM3D 0.5R SIF3D 0.5R

* PL2 available on stock; PL1 and PL3 available upon request.



INSERTS FEATURES

21.21 SIZE INSERTS

SECTION A

Inserts series	No. of poles		Rated current ¹⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main + PE	Aux.									
CQ4 02 H	2	—	40 A	830 V	6 kV	3	—	—	—	600 V	Crimp
CQ4 02	2	—	40 A	400 V	6 kV	3	—	—	—	600 V	Crimp
CQ4 03	3	—	40 A	400 V	6 kV	3	—	—	—	600 V	Crimp
CQ4 03/2	3	—	40 A	400 V	6 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
CQ 05	5	—	16 A	230 / 400 V	4 kV	3	320 / 500 V	4 kV	2	600 V	Crimp
CQY 05	5	—	16 A	230 / 400 V	4 kV	3	—	—	—	600 V	AXYR® Spring
CQ 07	7	—	10 A	400 V	6 kV	3	—	—	—	600 V	Crimp
CQ 12	12	—	10 A	400 V	6 kV	3	400 / 690 V	6kV	2	600 V	Crimp
CQ 21	21 (without PE)	—	6,5 A	50 V _{AC} / 120 V _{DC}	0,8 kV	3	—	—	—	250 V	Crimp
CK	3, 4	—	10 A	230 / 400 V	4 kV	3	400 / 690 V	4 kV	2	600 V	Screw
JK	3, 4	—	10 A	400 V	4 kV	3	400 / 690 V	4 kV	2	600 V	Screw
CKD	3, 4	—	10 A	230 / 400 V	4 kV	3	400 / 690 V	4 kV	2	600 V	Screw
CKSH	3, 4	—	10 A	400 V	4 kV	3	690 V	4 kV	2	600 V	SQUICH® Spring
CD 	7	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Crimp
CDY 	7	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	AXYR® Spring
CD	8 (without PE)	—	10 A	50 V _{AC} / 120 V _{DC}	0,8 kV	3	—	—	—	50 V _{AC} / 120 V _{DC}	Crimp
CDY	8 (without PE)	—	10 A	50 V _{AC} / 120 V _{DC}	0,8 kV	3	—	—	—	50 V _{AC} / 120 V _{DC}	AXYR® Spring

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

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

♦ **CD 07 and CDY 07:** IP67 with thermoplastic enclosures (cannot be used with metal enclosures).

21.21 SIZE DATA INSERTS

SECTION A

Inserts series	No. of poles		Rated current ¹⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Main + PE	Aux.		Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
CJ K	1 RJ45 Cat. 5	—	2,1 A	35 V _{AC} / 50 V _{DC}	—	—	—	—	—	35 V _{AC} / 50 V _{DC}	Crimp
CJK 8..T	1 RJ45 Cat. 6 _A	—	1 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CJK 8I..T	1 RJ45 Cat. 6 _A	—	1 A	50 V	0,8 kV	3	—	—	—	50 V	IDC
CJK 8M	1 RJ45	—	—	for 1 RJ45 Cat. 6 _A Class E _A or 1 RJ45 Cat. 6 _A							—
CUK 2FT	1 USB 2.0	—	—	—	—	—	—	—	—	—	—
CUK 3FT	1 USB 3.0	—	—	—	—	—	—	—	—	—	—
CX 1/2 BD	1 CX 01 B/BC (1 pole)	—	10,16 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
	1 CX 04 B (4 poles)	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	
	1 CX 08 B (8 poles)	—	4 A	50 V	0,8 kV	3	—	—	—	50 V	
	—	2	10 A	50 V	0,8 kV	3	—	—	—	50 V	
CLK 04	4 (seats/poles)	—	—	contacts for glass fibre 50 / 125 µm or 62,5 / 125 µm or for 1 mm Ø POF							Crimp

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

32.13 SIZE INSERTS

SECTION B

Inserts series	No. of poles		Rated current ¹⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main + PE	Aux.									
CQ 04/2E	4	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
CQ 04/2	4	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
CQ 04/2B	4	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
CQ 08E	8	—	16 A	500 V	6 kV	3	400 / 690 V	8 kV	2	600 V	Crimp
CQY 08E	8	—	16 A	500 V	6 kV	3	400 / 690 V	8 kV	2	600 V	AXYR® Spring
CQ 08	8	—	16 A	500 V	6 kV	3	400 / 690 V	8 kV	2	600 V	Crimp
CQ 17	17	—	10 A	160 V	2,5 kV	3	250 V	4 kV	2	600 V	Crimp

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

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

SLIM SIZE INSERTS

SECTION B

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main + PE ¹⁾	Aux.									
CDA	10, 16, (32)	—	16 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Screw
CDC	10, 16, (32)	—	16 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Crimp
CSAH	10, 16, (32)	—	16 A	250 V	4 kV	3	400 V	4 kV	2	600 V	SQUICH® Spring
CD 	15, 25, (50)	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Crimp
CDD 	38, (76)	—	10 A	—	—	—	250 V	4 kV	2	600 V	Crimp

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

¹⁾ Number of poles shown in brackets may be achieved by using two inserts.

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

 Contacts partially fitted inside an insert allow inserts to be used for applications requiring rated voltages higher than those shown. See **CD** and **CDD** inserts relevant tables.

STANDARD SIZE INSERTS

SECTION B

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Main + PE ¹⁾	Aux.		Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
CNE	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Screw
CCE	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
CSH	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	SQUICH® Spring
JSH-S	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	—	—	—	600 V	SQUICH® Spring
CSHT	10, 16, 24	—	16 A	500 V	6 kV	3	—	—	—	600 V	SQUICH® Spring
CQE 	10, 18, 32, (64), 46, (92)	—	16 A	500 V	6 kV	3	830 V	8 kV	2	600 V	Crimp
CQEY	10, 18, 32, (64), 46, (92)	—	16 A	500 V	6 kV	3	830 V	8 kV	2	600 V	AXYR® Spring
CQEE	40, 64	—	16 A	500 V	6 kV	3	—	—	—	600 V	Crimp
CD 	40, (80), 64, (128)	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Crimp
CDD 	24, 42, 72, (144), 108, (216)	—	10 A	—	—	—	250 V	4 kV	2	600 V	Crimp
CDSH	9, 18, 27, (54), 42, (84)	—	10 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	SQUICH® Spring
CDSH NC	6 – AutoShort NC	—	6,5 A	250 V	4 kV	3	500 V	4 kV	2	600 V	SQUICH® Spring
CP	6, (12)	—	35 A	400 / 690 V	6 kV	3	—	—	—	600 V	Screw
CPY	6, (12)	—	35 A	400 / 690 V	6 kV	3	—	—	—	600 V	AXYR® Spring
CT	6, 10, 16, 24	—	16 A	230 / 400 V	4 kV	3	400 V	4 kV	2	600 V	Screw 45° terminal block
CTSE	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Spring 45° terminal block
CT	40, 64	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Screw 45° terminal block
CTS	40, 64	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Spring 45° terminal block
CSS	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Spring
CMCE	3, 6, (12), 10, (20)	—	16 A	830 V	8 kV	3	1000 V	8 kV	2	600 V	Crimp
	3, 6, (12), 10, (20)	—	16 A	830 V	8 kV	3	720 / 1250 V	8 kV	2	600 V	
	—	2, (4)	16 A	500 V	6 kV	3	—	—	—	600 V	
CMSH	3, 6, (12), 10, (20)	—	16 A	830 V	8 kV	3	1000 V	8 kV	2	600 V	SQUICH® Spring
	3, 6, (12), 10, (20)	—	16 A	830 V	8 kV	3	720 / 1250 V	8 kV	2	600 V	
	—	2, (4)	16 A	500 V	6 kV	3	—	—	—	600 V	

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

¹⁾ Number of poles shown in brackets may be achieved by using two inserts.

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

 Contacts partially fitted inside an insert allow inserts to be used for applications requiring rated voltages higher than those shown.
See **CD, CDD and CQE** inserts relevant tables.

COMBINED INSERTS

SECTION B

Inserts series	No. of poles		Rated current ¹⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Main + PE	Aux.		Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
CX 8/0	8	—	100 A	690 V	8 kV	3	—	—	—	600 V	Crimp
CX 6/6	6	—	100 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	6	16 A	400 V	6 kV	3	—	—	—	600 V	
CX 4/0	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Screw
CX 4/2	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Screw
	—	2	16 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	
CXC 4/2	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Crimp
	—	2	16 A	400 V	6 kV	3	—	—	—	600 V	
CX 4/8	4	—	80 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Screw
	—	8	16 A	230 / 400 V	4 kV	3	400 V	4 kV	2	600 V	
CXC 4/8	4	—	80 A	400 V	6 kV	3	—	—	—	600 V	Crimp
	—	8	16 A	230 / 400 V	4 kV	3	—	—	—	600 V	
CX 12/2	12	—	40 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
CX 6/12	6	—	40 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	12	10 A	230 / 400 V	4 kV	3	—	—	—	600 V	
CX 9/42	9	—	40 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	42	10 A	250 V	4 kV	3	—	—	—	600 V	
CX 6/36	6	—	40 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	36	10 A	160 V	2,5 kV	3	250 V	4 kV	2	600 V	
CX 8/24	8	—	16 A	230 / 400 V	4 kV	3	400 V	4 kV	2	600 V	Crimp
	—	24	10 A	160 V	2,5 kV	3	250 V	4 kV	2	600 V	

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

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

MIXO POWER AND SIGNAL MODULAR INSERTS

SECTION C

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts	Aux.		Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
CX 01(B) 30	1	—	300 A	1000 V	8 kV	3	920 / 1600 V	8 kV	2	600 V	Crimp
CX 01(B) 30PE	PE contact	—	—	—	—	—	—	—	—	—	Crimp
CX 01 30A	1	—	300 A	1000 V	8 kV	3	—	—	—	600 V	90° screw
CX 01 30PEA	PE contact	—	—	—	—	—	—	—	—	—	90° screw
CX 01 Y	1	—	200 A	1000 V	8 kV	3	920 / 1600 V	8 kV	2	600 V	Crimp
CX 01 YPE	PE contact	—	—	—	—	—	—	—	—	—	Crimp
CX 01 YA	1	—	200 A	1000 V	8 kV	3	—	—	—	600 V	90° screw
CX 01 YPEA	PE contact	—	—	—	—	—	—	—	—	—	90° screw
CX 02 G	2	—	100 A	1000 V	8 kV	3	920 / 1600 V	8 kV	2	600 V	Crimp
CX 01 G	1	—	100 A	830 V	8 kV	3	—	—	—	600 V	Crimp
CX 01 GPE	PE contact	—	—	—	—	—	—	—	—	—	Crimp
CX 01 PE	PE contact	—	—	—	—	—	—	—	—	—	Screw
CX 02 7	2	—	70 A	1000 V	8 kV	3	1600 V	12 kV	2	600 V	Crimp
CX 02 4A	2	—	40 A	1000 V	8 kV	3	1600 V	12 kV	2	600 V	Screw
CX 02 4B	2	—	40 A	1000 V	8 kV	3	1600 V	12 kV	2	600 V	Screw
CX 02 4H	2	—	40 A	2500 / 5000 V	15 kV	3	—	—	—	5000 V	Crimp
CX 02 4	2	—	40 A	1000 V	8 kV	3	—	—	—	600 V	Crimp
CX 02 4Y	2	—	40 A	1000 V	8 kV	3	—	—	—	600 V	AXYR® Spring
CX 04 X	4	—	40 A	830 V	8 kV	3	1000 V	8 kV	2	600 V	Crimp
CX 04 XY	4	—	40 A	830 V	8 kV	3	—	—	—	600 V	AXYR® Spring
CX 3/4 XD	3	—	40 A	830 V	8 kV	3	—	—	—	600 V	Crimp
	—	4	10 A	830 V	8 kV	3	—	—	—	600 V	
CX 03 4B	3	—	40 A	500 V	6 kV	3	—	—	—	600 V	Crimp
CX 03 4	3	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	Crimp
CX 03 4Y	3	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	AXYR® Spring
CX 02 H	2	—	16 A	2900 / 5000 V	15 kV	3	—	—	—	5000 V	Crimp
CX 02 CH	2	—	16 A	2500 V	15 kV	3	—	—	—	2500 V	Crimp
CX 06P C	6	—	16 A	830 V	8 kV	3	—	—	—	600 V	Crimp
CX 20 C	20	—	16 A	500 V	6 kV	3	830 V	8 kV	2	600 V	Crimp
CX 06 C	6	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
CX 06 CY	6	—	16 A	500 V	6 kV	3	—	—	—	600 V	AXYR® Spring
CX 08 C	8	—	16 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
CX 08 CY	8	—	16 A	400 V	6 kV	3	—	—	—	600 V	AXYR® Spring
CX 05 SH	5	—	16 A	400 V	6 kV	3	500 V	6 kV	2	600 V	SQUICH® Spring
CX 12 D	12	—	10 A	250 V	4 kV	3	—	—	—	600 V	Crimp

MIXO POWER AND SIGNAL MODULAR INSERTS

SECTION C

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main ¹⁾	Aux.									
CX 12 DY	12	—	10 A	250 V	4 kV	3	—	—	—	600 V	AXYR® Spring
CX 17 D	17	—	10 A	160 V	2,5 kV	3	250 V	4 kV	2	600 V	Crimp
CX 42 D	42	—	10 A	150 V	2,5 kV	3	—	—	—	250 V	Crimp
CX 25 IB	25	—	4 A	50 V	0,8 kV	3	160 V	2,5 kV	2	600 V	Crimp
CX 36 I	36	—	4 A	32 V	0,8 kV	3	—	—	—	30 V	Crimp
CX FM	Dummy module										—

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

¹⁾ PE connection for MIXO modules is provided on each MIXO frame, except for MIXO-specific PE versions identified in the product table by "PE contact".

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

MIXO SHIELDED AND BUS MODULAR INSERTS

SECTION C

Inserts series	No. of poles		Rated current 2)	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main 1)	Aux.									

Shielded modular inserts

CX 08 D5	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 D5..2	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 D5G	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 D5G..2	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 I6	8	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 I6G	8	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 20S I	20	—	4 A	32 V	0,8 kV	3	—	—	—	32 V	Crimp
CX 20S IG	20	—	4 A	32 V	0,8 kV	3	—	—	—	32 V	Crimp

Shielded bus

CX 02 B	2	—	—	50 V	0,8 kV	3	—	—	—	50 V	—
CX 01 BC	1 (+ shield) (50 Ω coax)	—	16 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 01 B	1 (+ shield) (75 Ω coax)	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 04 B	4 (+ shield)	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
CX 08 B	8 (+ shield)	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp

¹⁾ PE connection for MIXO modules is provided on each MIXO frame, except for MIXO-specific PE versions identified in the product table by "PE contact".

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

MIXO DATA MODULAR INSERTS

SECTION C

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology	
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC		
	Main ¹⁾	Aux.										
CX 01 J8	1 RJ45 Cat.6 _A	—	1 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp	
CX 01 J8I	1 RJ45 Cat.6 _A	—	1 A	50 V	0,8 kV	3	—	—	—	50 V	IDC	
CX 01 J8U	1 RJ45	—	1 A	for 1 RJ45 Cat. 6 _A Class E _A or 1 RJ45 Cat. 6 _A							Patch-cord	
CX 01 J	1 RJ45 Cat.5	—	—	—	—	—	—	—	—	50 V	Crimp	
	—	4	10 A	250 V	4 kV	3	—	—	—	600 V		
CX 02 J	2 RJ45 Cat.5	—	—	—	—	—	—	—	—	50 V	Crimp	
	—	8	10 A	250 V	4 kV	3	—	—	—	600 V		
CX 01 U	1 USB insert	—	1 A	50 V	0,8 kV	3	—	—	—	50 V	—	
CX 01 MI	1 HDMI insert	—					—	—	—		—	
CX 01 9V	9 (+ shield)	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp	
CX 01 9V2	9 (+ shield)	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp	
CX 01 9VT	2 (+ shield) for RS-485 bus T-connection	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Screw	
CX 04 R	4	—	1,5 A	50 V	0,8 kV	3	crimp coaxial contacts DIN 41626-T2			50 V	Crimp	
CX 04 L	4	—	contacts for POF or MOST® fibre optic contacts DIN 41626-3									Crimp
CX 04 SC	4 (seats/poles)	—	contacts for glass fibre optic of 50 / 125 µm or 62,5 / 125 µm or for POF of Ø 1 mm									Crimp
CX 06 LC	6 (seats/poles)	—	contacts for glass fibre optic of 9 / 125 µm or 50 / 125 µm or 62,5 / 125 µm									Crimp

¹⁾ PE connection for MIXO modules is provided on each MIXO frame, except for MIXO-specific PE modules identified in the product table by "PE contact".

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

MIXO PNEUMATIC MODULAR INSERTS

SECTION C

Inserts	No. of poles	Main features	Conductor connection technology
	Main contacts		
CX 03 P	3 plastic pneumatic contacts	for compress air up to 8 bar, for tube inner diameter (ID) Ø 1,6-3,0-4,0-6,0 mm	—
CX 02 P	2 plastic pneumatic contacts	for compress air up to 8 bar, for tube inner diameter (ID) Ø 6,0 mm	—
CX 03 MP	3 metal pneumatic contacts	for compress air up to 10 bar, for tube inner and outer diameter (ID/OD) Ø 3,0-4,0-6,0 mm	—
CX 02 MPB	2 metal pneumatic contacts	for compress air up to 10 bar, for tube inner and outer diameter (ID/OD) Ø 8,0-10 mm	—

PCB ADAPTERS FOR INSERTS

SECTION D

Inserts series	No. of poles		Rated current	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main	Aux.									

PCB adapters for 21.21 size inserts

CIF Q05 2.4	5	—	10 A	250 V	4 kV	3	—	—	—	250 V	—
CIF Q07 2.4	7	—	7,5 A	250 V	4 kV	3	—	—	—	250 V	—
CIF Q12 2.4	12	—	7,5 A	250 V	4 kV	3	—	—	—	250 V	—

PCB adapters for 32.13 size inserts

CIF Q4/2 2.4	4	—	30 A	—	—	—	400 / 690 V	6 kV	2	600 V	—
	—	2	7,5 A	—	—	—	250 V	4 kV	2	250 V	
CIF Q08 1.6	8	—	16 A	—	—	—	230 / 400 V	4 kV	2	600 V	—

PCB adapters for standard size inserts and MIXO modular inserts

CIF 2.4	6	—	7,5 A	160 V	4 kV	3	—	—	—	160 V	—
CIF 5 2.4	5	—	7,5 A	160 V	4 kV	3	—	—	—	160 V	—
CIF X17 2.4	17	—	7,5 A	160 V	4 kV	3	—	—	—	160 V	—

HNM INSERTS

SECTION H

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main + PE ¹⁾	Aux.									
21.21 size inserts											
CQ4 03	3	—	40 A	400 V	6 kV	3	—	—	—	600 V	Crimp
RQ 05	5	—	16 A	230 / 400 V	4 kV	3	320 / 500 V	4 kV	2	600 V	Crimp
CQ 21	21 (without PE)	—	6,5 A	50 V _{AC} / 120 V _{DC}	0,8 kV	3	—	—	—	250 V	Crimp
CD	8 (without PE)	—	10 A	50 V _{AC} / 120 V _{DC}	0,8 kV	3	—	—	—	50 V _{AC} / 120 V _{DC}	Crimp
Standard size inserts											
RCE	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
RSH	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	SQUICH® Spring
RQEE	40, 64	—	16 A	500 V	6 kV	3	—	—	—	600 V	Crimp
RD 	40, (80), 64, (128)	—	10 A	250 V	4 kV	3	230 / 400 V	4 kV	2	600 V	Crimp
RDD 	24, 42, 72, (144), 108, (216)	—	10 A	—	—	—	250 V	4 kV	2	600 V	Crimp
RDSH	9, 18, 27, (54), 42, (84)	—	10 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	SQUICH® Spring
Combined inserts											
RXC 4/2	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Crimp
	—	2	16 A	400 V	6 kV	3	—	—	—	600 V	
RXC 4/8	4	—	80 A	400 V	6 kV	3	—	—	—	600 V	Crimp
	—	8	16 A	230 / 400 V	4 kV	3	—	—	—	600 V	
RX 12/2	12	—	40 A	690 V	8 kV	3	—	—	—	600 V	Crimp
	—	2	10 A	250 V	4 kV	3	—	—	—	600 V	
Power and signal MIXO modular inserts ³⁾											
CX 02 7	2	—	70 A	1000 V	8 kV	3	1600 V	12 kV	2	600 V	Crimp
CX 02 4	2	—	40 A	1000 V	8 kV	3	—	—	—	600 V	Crimp
CX 04 X	4	—	40 A	830 V	8 kV	3	1000 V	8 kV	2	600 V	Crimp
CX 3/4 XD	3	—	40 A	830 V	8 kV	3	—	—	—	600 V	Crimp
	—	4	10 A	830 V	8 kV	3	—	—	—	600 V	
CX 03 4B	3	—	40 A	500 V	6 kV	3	—	—	—	600 V	Crimp
CX 03 4	3	—	40 A	400 / 690 V	6 kV	3	—	—	—	600 V	Crimp
CX 06P C	6	—	16 A	830 V	8 kV	3	—	—	—	600 V	Crimp
CX 20 C	20	—	16 A	500 V	6 kV	3	830 V	8 kV	2	600 V	Crimp
CX 06 C	6	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
CX 08 C	8	—	16 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Crimp
CX 12 D	12	—	10 A	250 V	4 kV	3	—	—	—	600 V	Crimp
CX 17 D	17	—	10 A	160 V	2,5 kV	3	250 V	4 kV	2	600 V	Crimp
CX 42 D	42	—	10 A	150 V	2,5 kV	3	—	—	—	250 V	Crimp
CX 25 IB	25	—	4 A	50 V	0,8 kV	3	160 V	2,5 kV	2	600 V	Crimp
CX 36 I	36	—	4 A	32 V	0,8 kV	3	—	—	—	30 V	Crimp

 All HNM inserts with built-in contacts are provided with **HNM gold plated contacts**; those without built-in contacts shall be equipped with HNM gold plated contacts.

¹⁾ Number of poles shown in brackets are achieved by using two inserts.

²⁾ Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

³⁾ PE connection for MIXO modules is provided on each MIXO frame, except for MIXO-specific PE modules identified in the product table by "PE contact".

 Contacts partially fitted inside an insert allow inserts to be used for applications requiring rated voltages higher than those shown. For **RD** and **RDD** inserts, refer to CD and CDD relevant tables inserts at page B.81.

HNM INSERTS

SECTION H

Inserts series	No. of poles		Rated current ²⁾	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main ¹⁾	Aux.									

MIXO Shielded modular inserts

RX 08 D5	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 08 D5..2	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 08 D5G	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 08 D5G..2	8	—	10 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 08 I6	8	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 08 I6G	8	—	5 A	50 V	0,8 kV	3	—	—	—	50 V	Crimp
RX 20 I	20	—	4 A	32 V	0,8 kV	3	—	—	—	32 V	Crimp
RX 20 IG	20	—	4 A	32 V	0,8 kV	3	—	—	—	32 V	Crimp

MIXO Pneumatic modular inserts

CX 03 MP	3 metal pneumatic contacts	for compress air up to 10 bar, for inner or outer diameter tube (ID/OD) Ø 3,0-4,0-6,0 mm									—
CX 02 MPB	2 metal pneumatic contacts	for compress air up to 10 bar, for inner or outer diameter tube (ID/OD) Ø 8,0-10 mm									—

✎ All HNM inserts with built-in contacts are provided with **HNM gold plated contacts**; those without built-in contacts shall be equipped with HNM gold plated contacts.

- 1) PE connection for MIXO modules is provided on each MIXO frame, except for MIXO-specific PE modules identified in the product table by "PE contact".
- 2) Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

180 °C INSERTS

SECTION I

Inserts series	No. of poles		Rated current 2)	EN 61984 (2009-06) pollution degree 3			EN 61984 (2009-06) pollution degree 2			UL / CSA certification	Conductor connection technology
	Contacts			Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage	Rated impulse voltage	Pollution degree	Rated voltage AC or DC	
	Main + PE 1)	Aux.									

21.21 size inserts

CK..RY	3, 4	—	10 A	230 / 400 V	4 kV	3	400 / 690 V	4 kV	2	600 V	Screw
--------	------	---	------	-------------	------	---	-------------	------	---	-------	-------

Standard size inserts

CNE..RY	6, 10, 16, (32), 24, (48)	—	16 A	500 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Screw
CP..RY	6, (12)	—	35 A	400 / 690 V	6 kV	3	—	—	—	600 V	Screw

Combined inserts

CX 4/0 RY	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Screw
CX 4/2 RY	4	—	80 A	830 V	8 kV	3	—	—	—	600 V	Screw
	—	2	16 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	
CX 4/8 RY	4	—	80 A	400 V	6 kV	3	400 / 690 V	6 kV	2	600 V	Screw
	—	8	16 A	230 / 400 V	4 kV	3	400 V	4 kV	2	600 V	

✎ All 180 °C inserts with built-in contacts are provided with **silver plated contacts**, unless otherwise specified.

- 1) Number of poles shown in brackets are achieved by using two inserts.
- 2) Please check the insert derating diagrams to establish the actual maximum operating current according to the ambient temperature.

ENCLOSURES SERIES

LOCKING SYSTEMS

The connection coupling's stability and protection against accidental openings is ensured by single or double locking devices comprising levers, springs and pegs – or screws or bayonets – in stainless steel, entirely in plastic, or in a combination of both.

ILME provides specific solutions for each application environment, giving the user the maximum choice in compatibility, reliability and performance.

C-TYPE Lever



The C-TYPE lever is a stainless steel lever with thermoplastic handles, designed to reduce the wear of the pegs on the hoods significantly, thanks to the presence of riveted rolls on a double spring mechanism.

Degree of protection
IP65 / IP66 / IP69

The C-TYPE locking system provides **smooth closure**, resilience and compensation for any coupling tolerance.

IL-BRID Lever



The IL-BRID mechanism, a lever made of thermoplastic with a stainless-steel core, combines the technical characteristics of both materials for a **durable** but significantly **low-wear design**.

Degree of protection
IP65 / IP66 / IP69

The IL-BRID locking lever is compatible with the entire range of ILME enclosures with pegs (in single or double-lever configuration) and offers an IP65 or IP66/ IP69 degree of protection, depending on the model.

V-TYPE Lever



The V-TYPE closing principle consists of a 2-step movement, thanks to the patented designed hinged elements pivoted on the housing: the lever is moved above the housing pegs and then pressed downwards to engage the locking mechanism.

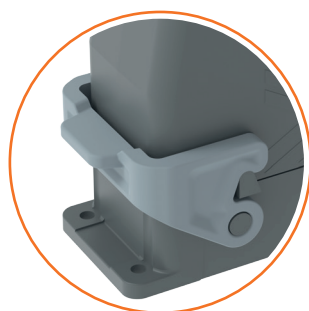
Degree of protection
IP66 / IP67 / IP69

The **tight seal** after closure and the simplicity of the movement are the essential attributes that only ILME has managed to combine into a single lever.

JEI®-P Lever

Single-block locking lever in self-extinguishing thermoplastic material with **enhanced ergonomics and reduced dimension**, ideal for basic requirements and less demanding environments.

Degree of protection
IP65

T-TYPE Lever

The locking levers of T-TYPE series feature the same characteristics of the JEI®-P version: they have been designed in self-extinguishing thermoplastic material, grey RAL 7001 colour for standard and aggressive environment applications, **ergonomic and space-saving**.

Degree of protection
IP65 / IP66 / IP69

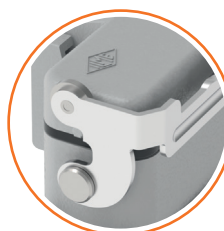


T-TYPE **HYGIENIC** lever, blue coloured, in **metal detectable thermoplastic material**, cleaning-oriented surface. For food and beverage applications.

Levers for Slim Enclosures**IL-BRID SLIM**

IL-BRID lever designed for slim enclosures.

IP65 / IP66 / IP69

**RIGID SLIM**

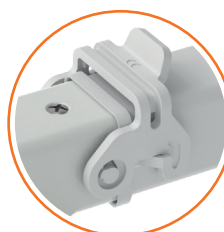
Stainless steel rigid lever for slim enclosures.

IP66 / IP67 / IP69

Levers for Compact Enclosures**21.21 C-TYPE**

Stainless steel resilient lever for 21.21 size enclosures.

- IP44
- IP66 / IP67 / IP69 with
CKR 65 kit

**21.21 THERMOPLASTIC**

Thermoplastic lever for 21.21 size enclosures.

Available in:
- White colour
- Black colour

**21.21 RIGID**

Rigid stainless or galvanized steel lever for 21.21 size enclosures.

- IP44
- IP66 / IP67 / IP69
with CKR 65 kit



- **HYGIENIC** lever in metal detectable thermoplastic material. For food and beverage applications.

IP65 / IP66 / IP69

ENCLOSURES SERIES

HOODS / HOUSINGS



ILME enclosures are available in many versions with different combinations of component materials, each suitable for specific environmental installation conditions from standard industrial heavy-duty applications to aggressive environments (outdoor or indoor) and specific sectors such as high temperature and electromagnetic compatibility.

Enclosures are made in die-cast aluminium (or zinc) alloy with a thermosetting powder coating or self-extinguishing insulating thermoplastic material.

They are designed to be resistant to impacts and mechanical solid stress.



ENCLOSURES SERIES - HOODS / HOUSINGS

SERIES

DESCRIPTION

Compact 21.21 size

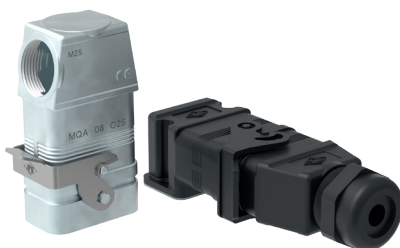


The enclosure series 21.21 represents the ideal match for the same size compact and versatile connector inserts.

Industrial heavy-duty applications can benefit from a comprehensive product range in terms of installation possibilities (bulkhead-mounted, surface-mounted and cable-to-cable joints) and specific environment requirements.

Available for aggressive environment in W-TYPE and E-Xtreme® version. Available for EMC, HYGIENIC, High temperature and HNM version.

Compact 32.13 size



The thermoplastic CQ/MQ series enclosures and the equivalent metal CQA/MQA versions offer a compact and easy-to-assemble solution for general use or specific applications.

Once completed and fitted with a suitably rated cable gland or conduit fitting, they ensure an IP66/IP67/IP69 degree of protection according to IEC/EN 60529 for outdoor or indoor environments.

Available for standard and EMC applications.

MIXO ONE and MIXO TWO

Special enclosures for modular inserts



MIXO ONE is the aluminium housing system designed by ILME to accept the wide range of MIXO series single-sized modules. These robust connector enclosures (3 hood variants and 1 bulkhead mounting housing) transform each single MIXO module into a completely independent connector.

MIXO TWO is the compact metal enclosure system designed by ILME to accept two of the wide range of MIXO series single-sized modules. These robust zinc die-cast connector enclosures are available as bulkhead, angled bulkhead mounting housings, and four hood variants, differing by the position and size of the cable entry: M25 or M32, horizontal or vertical.

Slim enclosures



Slim-size enclosures offer a practical compromise between compactness and connection density for industrial heavy-duty applications.

The product range is identified by its distinctive sizes: 49.16 and 66.16 for a single insert layout and 66.40 for a double insert layout. Slim-size enclosures have an IL-BRID locking device that combines the thermoplastic material's smoothness with the stainless steel's sturdiness. Slim size enclosures are also available with rigid stainless steel lever for IP67 degree of protection.

Available for aggressive environments in W-TYPE, E-Xtreme® or EMC versions.

MATERIALS	✓ CERTIFICATIONS	PAGE
Compact 21.21 size > Made of zinc die-cast alloy with epoxy-polyester coating or self-extinguishing thermoplastic material. > Lever in metal or self-extinguishing thermoplastic. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer or FKM elastomer (aggressive environment versions) or conductive elastomer (EMC versions).	IP44 IP66 / IP67 / IP69 with CKR 65 kit IP68 (CGK / MGK series)  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	A.44
Compact 32.13 size > Made of zinc die-cast alloy, with zinc coating or self-extinguishing thermoplastic material. > Lever in metal or self-extinguishing thermoplastic. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer or conductive elastomer (EMC versions).	IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.4
MIXO ONE and MIXO TWO MIXO ONE > Made of aluminium die-cast alloy. > Lever in stainless steel. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer. MIXO TWO > Made of zinc die-cast alloy with epoxy-polyester coating. > IL-BRID lever self-extinguishing thermoplastic material with stainless steel core. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	C.104 C.108
Slim enclosures > Made of aluminium die-cast alloy with epoxy-polyester coating (epoxy coating for aggressive environment versions). > IL-BRID lever self-extinguishing thermoplastic material with stainless steel core. Slim size enclosures are also available with rigid stainless steel lever for IP67 degree of protection. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer or FKM elastomer (aggressive environment versions) or conductive elastomer (EMC versions).	IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.12

ENCLOSURES SERIES - HOODS / HOUSINGS

SERIES

DESCRIPTION

C-TYPE



The iconic C-TYPE Class series has been developed for use in electrical and electronic machinery, control units, electrical panels, control equipment, industrial environments, and anywhere else a reliable and easily disconnectable connection is required for power and signal circuits.

The C-TYPE locking system provides smooth closure, resilience, and compensation for any coupling tolerance.

IL-BRID



Specific industrial applications demand the design of equally customized connection solutions capable of covering each distinct installation requirement.

Among the enclosures' locking systems introduced by ILME in its product offer, the IL-BRID mechanism, a lever in thermoplastic material with a stainless-steel core, combines the technical characteristics of both these materials for durable but significantly low-wear design.

JEI®-P



The JEI®-P enclosure series features a fully thermoplastic locking lever, whose design is derived from the IL-BRID locking lever(s).

The series covers the standard enclosure sizes 44.27, 57.27, 77.27, and 104.27 with single and double levers, resulting in a versatile and ergonomic space-saving solution, allowing multiple installations side by side.

V-TYPE



The performance requirements in connection protection are increasingly varied and specialized. To respond to this wide range of needs, ILME has developed several original solutions, including the innovative V-TYPE lever.

This proprietary lever, due to the vertical closing movement, offers an IP66/ IP67/IP69 degree of protection (according to EN 60529) when fitted with a complete and coupled connector and used with ILME standard hoods in die-cast aluminium moulded (without adapter).

MATERIALS	✓ CERTIFICATIONS	PAGE
C-TYPE > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > C-TYPE locking device with self-extinguishing thermoplastic handles, springs and pins in stainless steel. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65 / IP66 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.46
IL-BRID > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > IL-BRID locking device in self-extinguishing thermoplastic material and stainless steel core. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65 / IP66 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.88
JEI®-P > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > JEI®-P locking device in self-extinguishing thermoplastic material. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.110
V-TYPE > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > V-TYPE locking device in stainless steel. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65 / IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.122

ENCLOSURES SERIES - HOODS / HOUSINGS

SERIES

DESCRIPTION

IP68



For applications in the railway sector and whenever the following characteristics are demanded: high pressure, impact and corrosion resistance, with degree of protection IP68. They also guarantee a good shielding for electromagnetic compatibility.

W-TYPE



The W-TYPE enclosure series for aggressive environments is designed for industrial applications with particularly aggressive external agents.

The jet-black RAL 9005 colour identifies the series and, together with a pre-coating chromate conversion treatment RoHS 2 compliant, provides 50% improved corrosion resistance in salt spray tests (according to UNI EN ISO 9227).

E-Xtreme®



E-Xtreme® series hoods and housings are intended for highly demanding environments. The unique patented protective coating applied before the coating guarantees maximum protection against pollution, erosion and long-term exposure to corrosive agents.

Up to 3 000 hours in salt spray test (EN ISO 9227).

EMC



The ILME EMC series of connector enclosures and accessories has been designed for use in electrical/electronic equipment for machines.

Available as bulkhead mounting housings and hood versions in various sizes 44.27, 57.27, 77.27 and 104.27, they not only maintain the robustness and reliability of standard types but also offer increased high-frequency shielding characteristics, setting them apart from other options in the market.

MATERIALS	✓ CERTIFICATIONS	PAGE
IP68 › Made of aluminium die-cast alloy with epoxy powder coating. › Locking device with either screws or bayonets (types with suffix B). › Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP66 / IP68 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.138
W-TYPE › Made of aluminium die-cast alloy with epoxy powder coating. › V-TYPE or C-TYPE locking device with self-extinguishing thermoplastic handles, springs and pins in stainless steel. › FKM Fluoroelastomer gaskets (with improved resistance to chemicals and aging).	IP65 / IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.152
E-Xtreme® › Made of aluminium die-cast alloy with special plasma coating and epoxy powder coating. › V-TYPE or C-TYPE locking device with self-extinguishing thermoplastic handles, springs and pins in stainless steel. › FKM Fluoroelastomer gaskets (with improved resistance to chemicals and aging).	IP65 / IP66 / IP67 / IP68 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.172
EMC › Made of aluminium die-cast alloy. › IL-BRID locking device in self-extinguishing thermoplastic material and stainless steel core or C-TYPE stainless steel locking levers. › Conductive elastomer gaskets.	IP65 / IP66 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4	E.200

ENCLOSURES SERIES - HOODS / HOUSINGS

SERIES

DESCRIPTION

T-TYPE and T-TYPE/W



Alongside the wide range of traditional metallic enclosures for multipole connectors, ILME first "pioneered" a series of enclosures in self-extinguishing thermoplastic material in the standard sizes 44.27, 57.27, 77.27, and 104.27.

The series design results in significant structural solidity and mechanical robustness, offering a technical, cost-effective solution for protecting connector inserts.

T-TYPE/H and T-TYPE/C



The HYGIENIC multi-pole connector enclosures version (series T-TYPE/H and T-TYPE/C) has been designed for installation on food industry machines and equipment.

Based upon the standard T-TYPE enclosure series, materials have been selected to comply with the requirements laid down by chapter 2.1 of Machinery Directive 2006/42/EC for accidental contact with food products and compatible with the cleaning and sanitising agents typically used in the food industry.

Based on the requirements outlined in EHEDG Guideline n. 32 "Materials of construction for food equipment in contact with food". Tested by Ecolab for compatibility with detergents and cleaning agents.

Central Lever



The series is specifically designed for industrial applications with limited installation space. Central Lever enclosures can be installed, placed side-by-side, and opened in a single operation.

BIG



BIG series introduces a significant change in the hood design and has been specifically developed to meet the wiring market's requirements in terms of conductor dimension and installation space.

The enclosures integrate the existing inserts range and are ideal for structured and complex wiring installations (e.g., power contacts with large wire cross-sections, pneumatic contacts and large wire bundles)

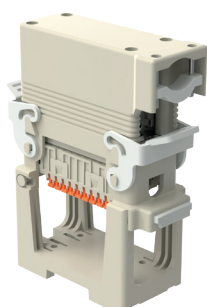
MATERIALS	✓ CERTIFICATIONS	PAGE
T-TYPE and T-TYPE/W > Structurally solid and mechanically robust, built using BC-MUL® moulding technique together with the use of MIL.BOX® UL 94V-2 material. > JEI®-P locking device in self-extinguishing thermoplastic material. > Built-in gaskets in polyurethane (standard) or FKM elastomer (-W).	IP65  UL 50 / UL 50E (NEMA 250) Type 12 (T-TYPE standard and T-TYPE /W) Type 4 / 4X Indoor Use Only (T-TYPE /W housings and T-TYPE standard hoods, only when combined with /W, /H and /C, counterpart)	E.222
T-TYPE/H and T-TYPE/C > Structurally solid and mechanically robust, built using BC-MUL® moulding technique together with the use of MIL.BOX® UL 94V-2 material. > JEI®-P locking device in self-extinguishing thermoplastic material. > Built-in gaskets in HNBR rubber or SILICONE (-C) rubber formulated in accordance with FDA Guideline 21 CFR §177.2600.	IP66 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 Type 4 / 4X Indoor Use Only	E.240
Central Lever > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > Single lever compact stainless steel locking device. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.252
BIG > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > V-TYPE locking device in stainless steel. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65 / IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.264

ENCLOSURES SERIES - HOODS / HOUSINGS

SERIES

DESCRIPTION

COB



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 others container.

The system may be assembled on panels with window snap fastening device; on DIN EN 60715 rails, both lengthways and crossways to the support; on fixed panels using screws.

LS-TYPE



The LS-TYPE enclosures are the ideal solution for the entertainment industry (lighting system power supply and related mixer and dimmer panels), including theatre stages, film sets, radio and TV studios, discos, trade fair booths, concert halls and night public events, indoors and outdoors.

All parts are in elegant RAL 9005 black, suitable for situations and locations where they should not be visible in the dark.

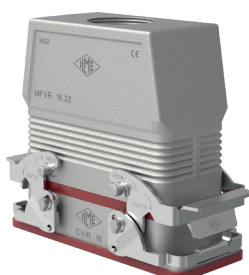
HNM



The HNM series of connector enclosures has been developed to be combined with the HNM series multipole connector inserts to provide the same reliable protection as the standard series but for a consistently extended, high number of matings.

When the number of 500 mating cycles guaranteed life of standard connector hoods and housings is insufficient to provide a reasonably long-life span in those connector applications that by function are foreseen to be subject to very frequent connections and disconnections, it is necessary to opt for a solution able to increase that guaranteed lifetime. The HNM series of connector enclosures achieves this goal, extending the guaranteed number of matings up to 10 000 (5 000 for the 21.21 size).

180 °C



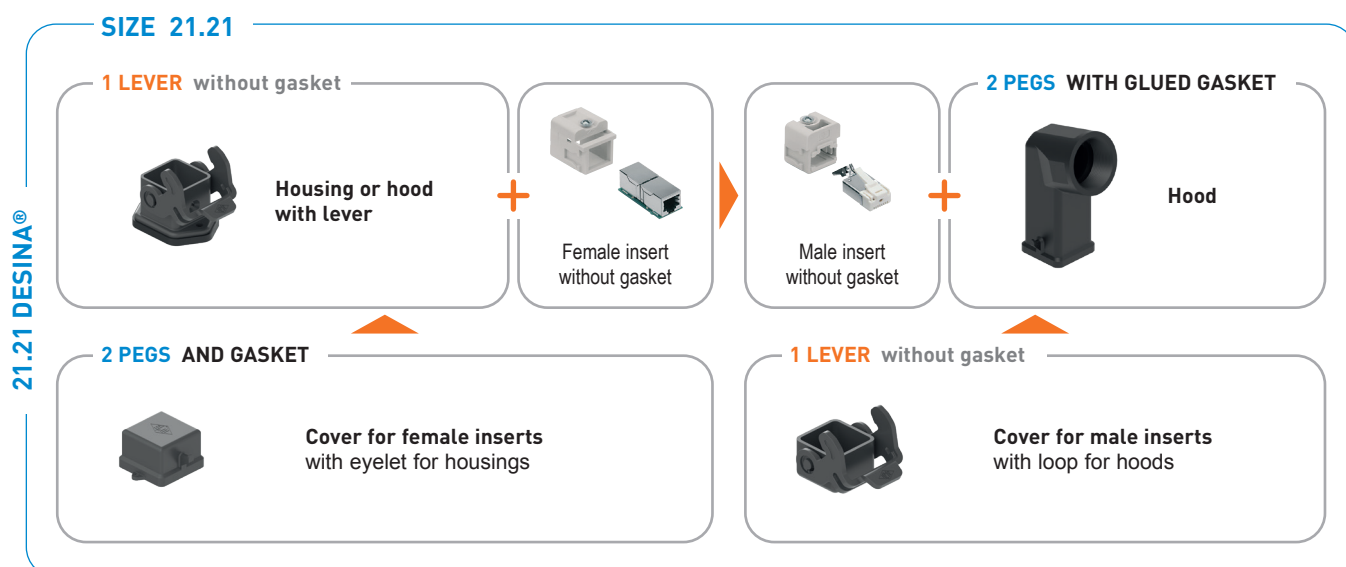
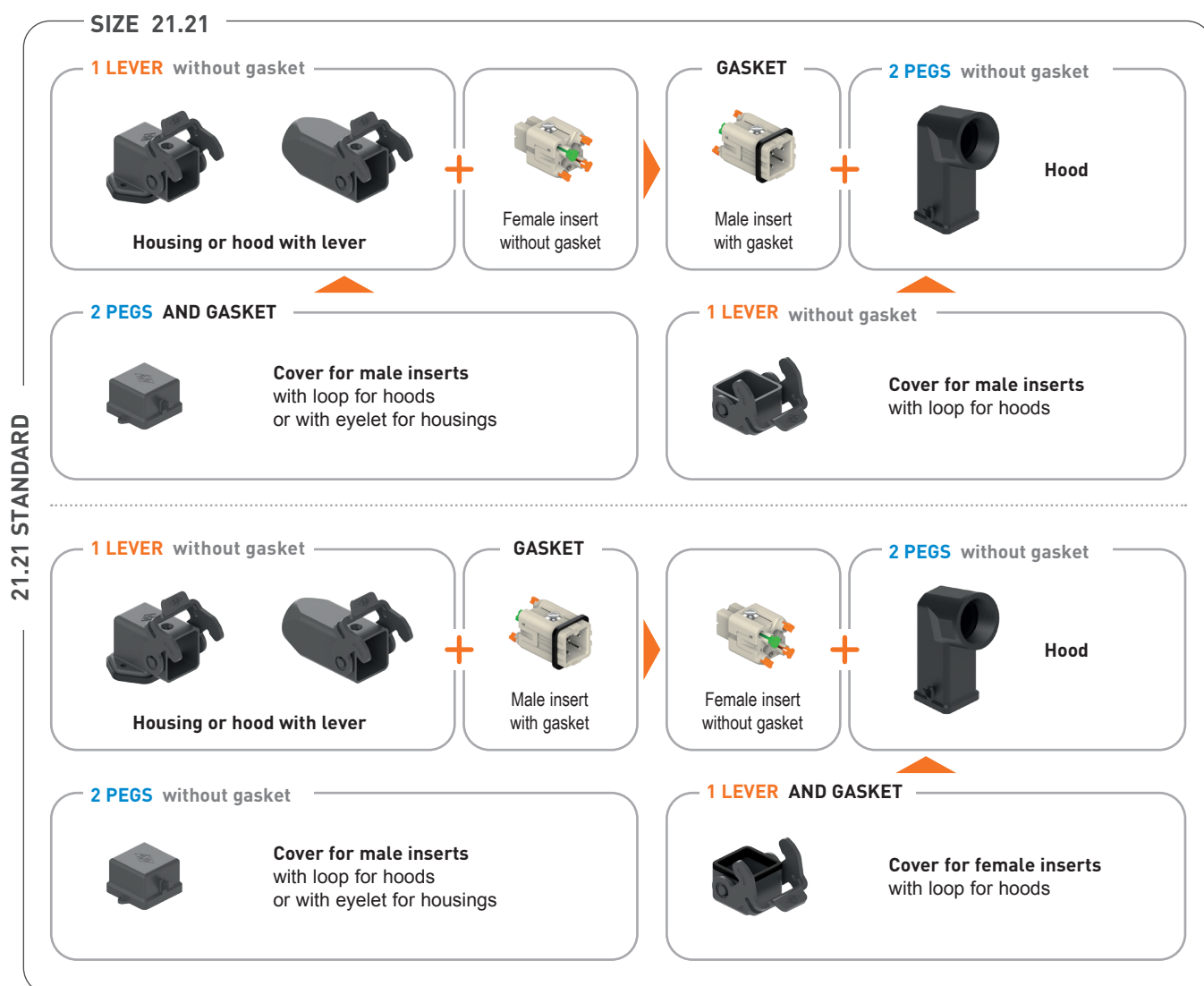
Series specifically developed for industrial applications where the temperatures can reach up to 180 °C. The aluminium die-cast unpainted enclosures are equipped with stainless steel levers and FKM red gaskets.

Available in the sizes 21.21, 44.27, 57.27, 77.27, 104.27, 77.62, and 104.62, to be used in combination with the ILME high-temperature connector inserts made by self-extinguishing thermoplastic material ("PPS" polyphenylene sulphide).

MATERIALS	✓ CERTIFICATIONS	PAGE
COB > Self-extinguishing thermoplastic insulating materials, UL certified (COB supports, locking levers, hoods), compatible with the -40 °C / +125 °C operating temperature range of connector inserts.	IP20 	E.282
LS-TYPE > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > JEI®-P locking device in self-extinguishing thermoplastic material. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	E.294
HNM > Made of aluminium die-cast alloy. > V-TYPE locking device in stainless steel. > Gaskets in anti-aging, oil resistant, grease resistant and fuel resistant NBR elastomer.	IP65  UL 50 / UL 50E (NEMA 250) Type 12 / 4 / 4X	H.70
180 °C > Made of aluminium die-cast alloy with epoxy-polyester powder coating. > V-TYPE locking device in stainless steel. > Gaskets in FKM, anti-aging heat resistant fluoroelastomer.	IP65 / IP66 / IP67 / IP69  UL 50 / UL 50E (NEMA 250) Type 12 / 4	I.14

Housings, hoods, and covers selection guide

Coupling enclosures with **any type of locking lever** with the following sizes:

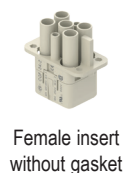
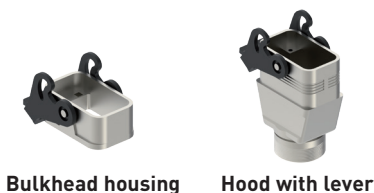


NOTE: All components in each coupling must be selected from the same size.

Coupling enclosures with **any type of locking lever** with the following sizes:

SIZE 32.13

1 LEVER without gasket



GASKET



2 PEGS without gasket

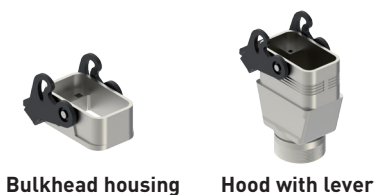


2 PEGS AND GASKET



Cover for female inserts
Available only for CQ/MQ
Thermoplastic series

1 LEVER without gasket



2 PEGS without gasket



2 PEGS without gasket

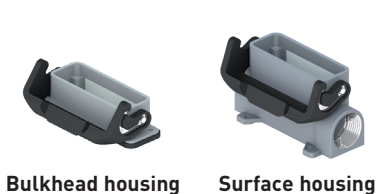


Cover for male inserts
Available only for CQ/MQ
Thermoplastic series

COMPACT ENCLOSURES

SIZE 49.16 | 66.16

1 LEVER without gasket



2 PEGS AND GASKET



2 PEGS AND GASKET



**Cover
with eyelet for bulkhead
or surface housings**

2 PEGS AND GASKET



**Cover
with loop
for hoods**

1 LEVER without gasket



**Cover
with loop
for hoods**

SLIM ENCLOSURES

NOTE: All components in each coupling must be selected from the same size.

Housings, hoods, and covers selection guide

Coupling enclosures with **any type of locking lever** with the following sizes:

SIZE 44.27 | 57.27 | 77.27 | 104.27 | 77.62 | 104.62 | 66.40

1 LEVER AND GASKET



Bulkhead housing

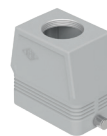


Surface housing



Hood with lever

2 PEGS without gasket



Hood

2 PEGS without gasket



Cover with eyelet for bulkhead or surface housings

2 PEGS without gasket



Cover with loop for hoods

1 LEVER AND GASKET



Cover with loop for hoods

2 LEVERS AND GASKET



Bulkhead housing



Surface housing



Hood with levers

4 PEGS without gasket



Hood

4 PEGS without gasket



Cover with eyelet for bulkhead or surface housings

4 PEGS without gasket



Cover with loop for hoods

2 LEVERS AND GASKET



Cover with loop for hoods

SIZE 44.27 | 57.27 | 77.27 | 104.27 | 77.62 | 104.62 | 66.40

4 PEGS AND GASKET



Bulkhead housing



Surface housing

2 LEVERS without gasket



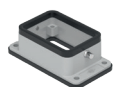
Hood

4 PEGS AND GASKET



Cover with loop for hoods

2 PEGS AND GASKET



Bulkhead housing

1 LEVER without gasket



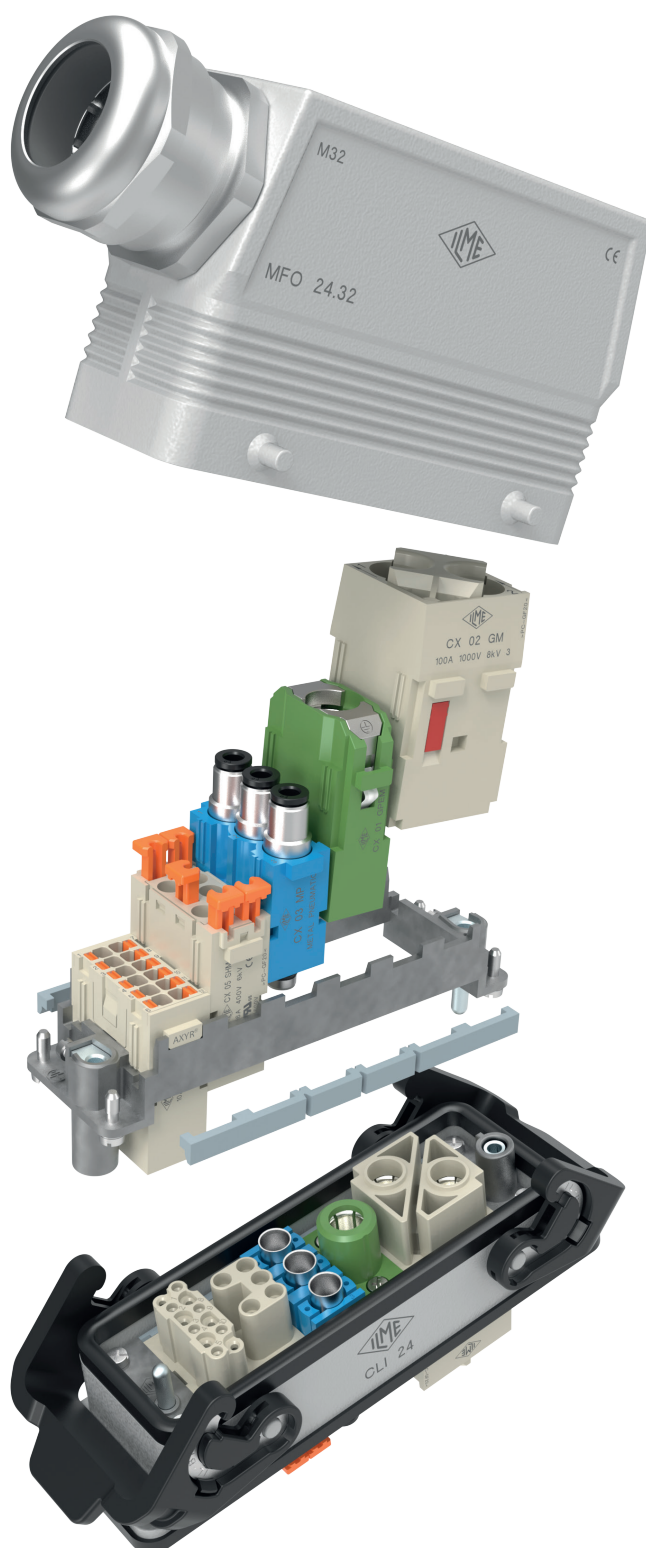
Hood

2 PEGS AND GASKET



Cover with loop for hoods

NOTE: All components in each coupling must be selected from the same size.



ENCLOSURES FEATURES

21.21 SIZE ENCLOSURES

SECTION A

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Heavy-Duty Applications								
CK – MK	21.21	03	Thermoplastic	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
CKX – MKX	21.21	03	Thermoplastic with metal lever	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
CKA – MKA	21.21	03	Metallic	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
Aggressive Environments								
CKAW – MKA	21.21	03	W-TYPE	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
CKAE – MKA	21.21	03	E-Xtreme®	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
CKG – MKG	21.21	03	IP68 high protection	M20 M25	Pg 13,5	IP66 / IP68 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
Specialized Applications								
CKAS – MKAS	21.21	03	EMC (Electromagnetic shielding)	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
CKH – MKH	21.21	03	HYGIENIC series for food and beverage	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +70 °C

* With CKR 65 kit.

ENCLOSURES FOR MIXO MODULAR INSERTS

SECTION C

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
MIXO ONE CXA – MXA	for 1 module	01	Metallic	M25 M32	—	IP65	12 / 4 / 4X	-40 °C ... +125 °C
MIXO TWO CXA – MXA	for 2 modules	02	Metallic with IL-BRID lever(s)	M25 M32	—	IP65	12 / 4 / 4X (pending)	-40 °C ... +125 °C

32.13 SIZE ENCLOSURES

SECTION E

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Heavy-Duty Applications								
CQ – MQ	32.13	08	Thermoplastic	M25	Pg 16 Pg 21	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CQA – MQA*	32.13	08	Metallic	M25	—	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
Specialized Applications								
CQS – MQS*	32.13	08	Thermoplastic metallized EMC (Electromagnetic shielding)	—	Pg 16 Pg 21	IP66 / IP67	12	-40 °C ... +125 °C

* CR 08 EMC gasket available for improved electromagnetic shielding.

SLIM SIZE ENCLOSURES

SECTION E

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Heavy-Duty Applications								
CZ – MZ	49.16 66.16	15 25	Metallic with IL-BRID lever(s)	M20 M25	Pg 13,5 Pg 16 Pg 21	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
JP – JM	49.16 66.16	15 25	Metallic with JEI®-P lever(s)	M20 M25	—	IP65	12 / 4 / 4X	-40 °C ... +125 °C
CH – MH	66.40	50	Metallic with C-TYPE lever(s)	M25 M32 M40	Pg 21 Pg 29	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CHX – MHX	66.40	50	Metallic with rigid lever(s)	M32	Pg 21 Pg 29	IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CZ7 – MZ7	49.16 66.16	15 25	IP67	M25	—	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
Aggressive Environments								
CZ7W – MZ7W	49.16 66.16	15 25	W-TYPE with rigid lever(s)	M20 M25	Pg 13,5 Pg 16 Pg 21	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CHW – MHW	66.40	50	W-TYPE with C-TYPE lever(s)	M25 M32 M40	Pg 21 Pg 29	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CHXW – MHXW	66.40	50	W-TYPE with rigid lever(s)	M32	Pg 21	IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CZ7E – MZ7E	49.16 66.16	15 25	E-Xtreme® with rigid lever(s)	M20 M25	—	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
CHE – MHE	66.40	50	E-Xtreme® with C-TYPE lever(s)	M25 M32 M40	—	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
Specialized Applications								
CZ7S – MZ7S	49.16 66.16	15 25	EMC (Electromagnetic shielding) with rigid lever(s)	M20 M25	Pg 13,5 Pg 16 Pg 21	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C

STANDARD SIZE ENCLOSURES

SECTION E

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Heavy-Duty Applications								
CH – CA – CF MH – MA – MF	44.27	06	Standard metallic with C-TYPE lever(s)	M20	Pg 16 Pg 21 Pg 29 Pg 36 Pg 42	IP65 / IP66 / IP69	12 / 4 / 4X*	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
	77.62	32		M50				
104.62	48	M63						
CL – ML	44.27	06	Standard metallic with IL-BRID lever(s)	M20	—	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
JPI – JMP – JPC	44.27	06	Standard metallic with JEI®-P lever(s)	M20	—	IP65	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
C7I – M7P	44.27	06	IP67 with V-TYPE lever(s)	M20	Pg 16 Pg 21 Pg 29	IP65 / IP66 / IP67 / IP69	12 / 4 / 4X*	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
CV – MV	44.27	06	Standard metallic with V-TYPE lever(s)	M20	Pg 16 Pg 21 Pg 29	IP65 / IP66 / IP69	12 / 4 / 4X*	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
TCHI – TMA – TCHC	44.27	06	T-TYPE for standard applications	M25	—	IP65	12**	-40 °C ... +90 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24						
THIW – TAPW TAVW – THCW	44.27	06	T-TYPE/W for aggressive environments	M25	—	IP66 / IP69	12 / 4 / 4X (Indoor Use Only)	-40 °C ... +90 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24						
..YC – ..GYC – ..YX	44.27	06	Standard metallic with Central lever	M25	Pg 21 Pg 29 Pg 36	IP65	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24		M50				
CB – MB	44.27	06	BIG	M20	—	IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40 M50				
Aggressive Environments								
C7IW – M7..W – MA..W – CA..W – MF..W	44.27	06	W-TYPE with V-TYPE lever(s)	M20	Pg 21 Pg 29	IP65 / IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				

* ..LP versions with plastic cover have not the UL approval.

** 4/4X Indoor Use Only: hoods and covers without gasket or lever(s), when coupled with T-TYPE /W, T-TYPE /H or T-TYPE /C housings with gasket and/or lever(s).

STANDARD SIZE ENCLOSURES

SECTION E

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
CHIW – MA..W – CA..W	44.27	06	W-TYPE with C-TYPE lever(s)	M25	Pg 21 Pg 29 Pg 36	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24		M50				
	77.62	32						
	104.62	48						
C7IE – M7PE MH..E – MF..E	44.27	06	E-Xtreme® with V-TYPE lever(s)	M20	—	IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
CH..E – MA..E	44.27	06	E-Xtreme® with C-TYPE lever(s)	M20	—	IP65 / IP66 / IP67 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24		M40				
	77.62	32		M50				
	104.62	48						
CG..E – MG..E	44.27	06	E-Xtreme® IP68 high protection version	M25	—	IP66 / IP68 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24		M50				
CG – MG	44.27	06	IP68 high protection	M25	Pg 21 Pg 29 Pg 36	IP66 / IP68 / IP69	12 / 4 / 4X	-40 °C ... +125 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24		M50				
Specialized Applications								
CLIS – ML..S – MH..S – CH..S – MF..S – CF..S	44.27	06	EMC (Electromagnetic shielding) with IL-BRID lever(s)	M25	Pg 21 Pg 29	IP65 / IP66 / IP69	12 / 4	-40 °C ... +125 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24						
CHIS – MA..S – CA..S	44.27	06	EMC (Electromagnetic shielding) with C-TYPE lever(s)	M32	Pg 21	IP65 / IP66 / IP69	12 / 4	-40 °C ... +125 °C
	57.27	10						
	77.27	16						
	104.27	24						
THIH – TA..H THCH	44.27	06	HYGIENIC /H series or food and beverage	M25	—	IP66 / IP69	12 / 4 / 4X (Indoor Use Only)	-40 °C ... +70 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24						
THIC – TA..C THCC	44.27	06	HYGIENIC /C series for food and beverage for low temperatures	M25	—	IP66 / IP69	12 / 4 / 4X (Indoor Use Only)	-50 °C ... +70 °C
	57.27	10		M32				
	77.27	16		M40				
	104.27	24						
COB	44.27	06	COB system for switch cabinet	—	—	IP20	—	-40 °C ... +125 °C
	57.27	10						
	77.27	16						
	104.27	24						
CH..N – MH..N – MF..N	44.27	06	LS-TYPE Light and Sound applications with JEI®-P lever(s)	M20	—	IP65	12 / 4 / 4X*	-40 °C ... +125 °C
	57.27	10		M25				
	77.27	16		M32				
	104.27	24						

* ..LP versions with plastic cover have not the UL approval.

HNM ENCLOSURES

SECTION H

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Specialized Applications								
RKAX..	21.21	03	Metallic	M20 M25	Pg 11	IP44 IP66 / IP67 / IP69*	12 4 / 4X*	-40 °C ... +125 °C
RV – RH – RF	44.27 57.27 77.27 104.27	06 10 16 24	Standard metallic with V-TYPE lever(s)	M20 M25 M32 M40	—	IP65 / IP66 / IP69	12 / 4 / 4X	-40 °C ... +125 °C

* With CKR 65 kit.

180 °C ENCLOSURES

SECTION I

Series	Size	Size ID	Version	Cable entry		IP (EN 60529)	UL 50 Type (NEMA 250 type)	Ambient temperature
Specialized Applications								
CKAXR – MKAXR MKAR	21.21	03	Metallic	M20 M25	—	IP44	12 / 4 / 4X	-40 °C ... +180 °C
CV..R – MV..R MH..R – MF..R CH..R	44.27 57.27 77.27 104.27 77.62 104.62	06 10 16 24 32 48	Standard metallic with V-TYPE lever(s)	M20 M25 M32 M40	—	IP65	12 / 4 / 4X	-40 °C ... +180 °C