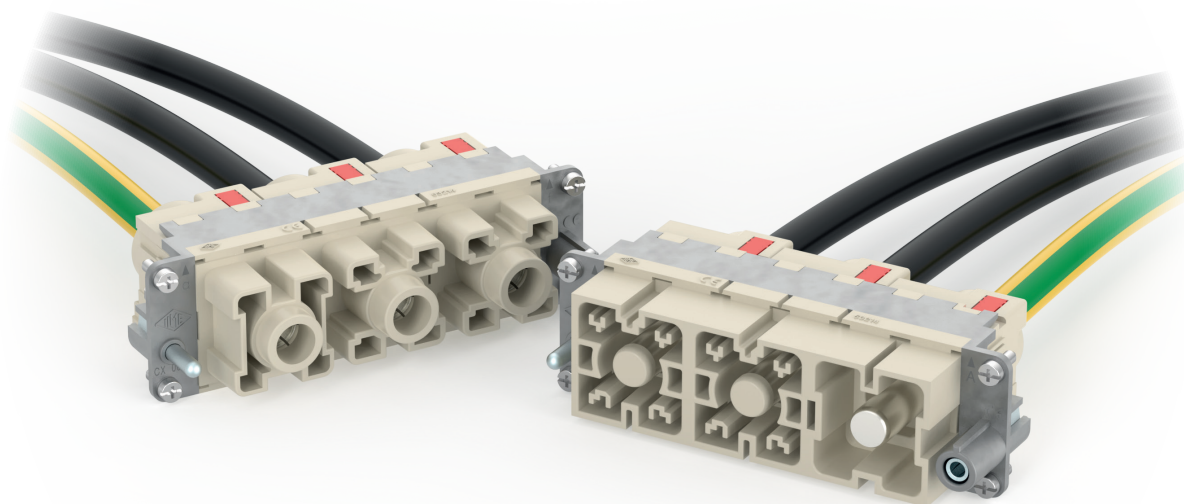


MIXO 300 A modules and crimp contacts

Line modules: **CX 01 30** (16..70 mm²) and **CX 01B 30** (95, 120 mm²)

PE modules: **CX 01 30PE** (16..70 mm²) and **CX 01B 30PE** (95, 120 mm²)

Crimp contacts: **C30** series of sizes 16, 25, 35, 50, 70, 95 and 120



MIXO CX 01 30 and CX 01B 30, line modules

1 P: 300 A 1000 V 8 kV 3 – 1300 V_{DC}

MIXO CX 01 30PE and CX 01B 30PE, PE modules

1 P: 300 A



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TECHNICAL FEATURES



Watch our
technical clip

The requirements to increase **up to 300 A** the current loading of the available MIXO 200 A CX 01 Y connector modules, with the necessity to fit in the same size the required **larger wires** (95 mm² and 120 mm²), while at the same time keeping the possibility to use such module with the range of sizes of the MIXO 200 A modules, led to a complete overhaul of the solution.

This resulted in the necessity of splitting the wider wire range into two separate sizes of module, due to the need to differentiate the rear contact holding part to accommodate different wire sheathing diameters and to retain contacts with remarkably different barrel size, and required the **development of a new wider series of crimp contacts**, with the need for **more powerful crimp tools**.

Given the different size of the dedicated new **C30 series crimp contacts**, which also include **protected male contacts**, i.e., male contacts with insulating tip that provide **finger proof safety** to said male connector modules, two sizes of module are foreseen for the *line version* and two sizes for the *PE version*. The new MIXO 2-slot-sized connector modules for the **new C30 series crimp contacts** are available in two sizes:

- Q **01** (regular), for use with **new series C30 crimp contacts** of sizes 16, 25, 35, 50 and 70;
- Q **01B** (large), for use with **new series C30 crimp contacts** of larger sizes 95 and 120.

The two sizes thus cover different ranges of wiring, and each one is available in **line version** (insulated) and in **PE version** (where a reliable bonding contact between the power PE crimp contact and the metal MIXO frame is made possible), for a total of 4 different male modules and 4 different female modules, for use with the **new series C30 crimp contacts**.

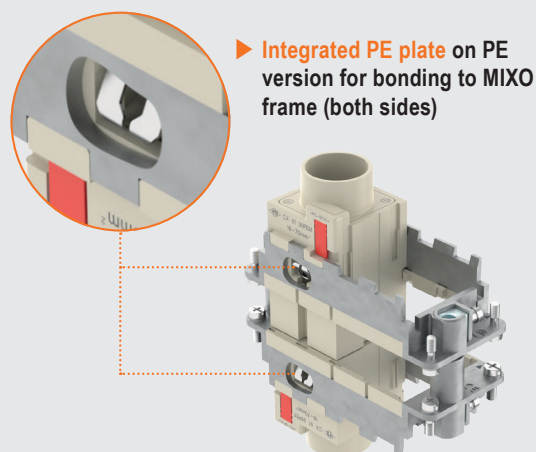
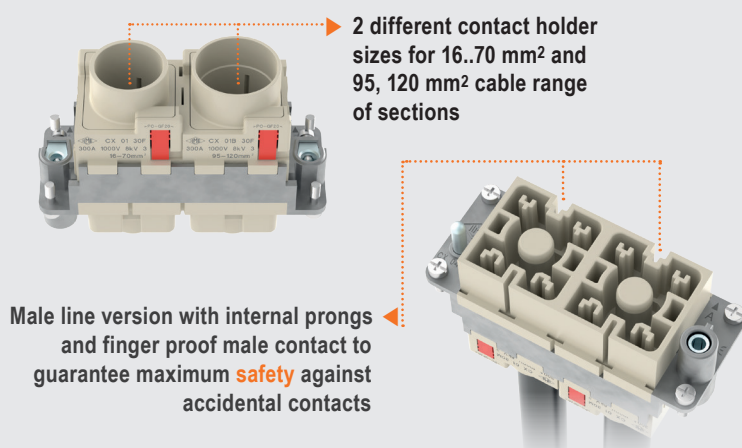
Together, they widen the range of cross-sectional areas that the previously available MIXO 200 A (line modules CX 01 Y and PE modules CX 01 YPE) enabled, to include also the new sizes 95 mm² and 120 mm², AWG 3/0 and 4/0, thus allowing an increase of current-carrying capacity of these modules up to 300 A in the same size.

- Q The design of the modules allows use up to and including **1300 V_{DC}** according to the latest edition of EN IEC 60664-1:2020.
- Q **Series C30 crimp contacts** are designed to use the more popular hexagonal DIN 48084 press crimping (in use for DIN 46235 cable end-sleeves). Two dedicated crimping tools (manual hydraulic and battery operated hydraulic) are provided and described on pages 54-55.

- Q Like the previously available MIXO 200 A ones, the new 300 A modules **are made in two parts**: a modular connector insulating body and a contact holder retained in the body by red-coloured locking tabs (proprietary technology); however, the new modules **are provided fully assembled**, as contact holding function is provided by elastic tongues in the contact holder that allow the insertion of the crimped connection without need for removing the contact holder.
- Q The contact holders of the “01” and the “01B” differ in that the shroud necessary for maintaining creepage distances, thus embracing the wire sheathing and the crimp barrel used by the crimped connection needs to be larger in the “01B” size (95 mm²..120 mm², AWG 3/0..4/0) than in the “01” size (16 mm²..70 mm², AWG 6..2/0) wire range. To avoid mistakes, the two module sizes are duly marked with the relevant size range of corresponding C30 crimp contacts.
- Q The **CX 01 30M** and **CX 01B 30M** male inserts' mating face is provided with suitable insulating prongs, so that, when used in combination with the finger proof crimp male contacts series C30 (C30MA 16 P through C30MA 120 P, see page 43), they result in finger proof male connectors. This feature is new compared to the previously available MIXO 200 A modules and crimp contacts series CY.
- NOTE – This additional safety feature is particularly useful to avoid electric shock whenever hazardous voltage may be still present for a certain period (e.g., due to discharge of capacitors) on the male side of the connection after disconnection.
- Q Current-temperature derating diagrams (current-carrying capacity curves) for **CX 01 30** module are like those of the equivalent CX 01 Y 200 A crimp versions (same wiring range). For **CX 01B 30** module, covering the larger wire sizes 95 mm² and 120 mm², AWG 3/0 and 4/0, new diagrams are under development to cover the extended range up to 300 A.
- Q Conductors stripping length: see **series C30 crimp contacts** pages.
- Q Silver plated contacts.
- Q Max diameter of wire sheathings:
 - ø 18,5 mm for size **01** modules (wire size 70 mm² / AWG 2/0)
 - ø 22,4 mm for size **01B** modules (wire size 120 mm² / AWG 4/0)

CERTIFICATIONS

- cURus, CQC, DNV, BV, EAC pending.
- **CE** and **UKCA** markings.
- **RoHS**:
 - modular inserts: compliant;
 - series C30 crimp contacts: compliant with exemption 6(c).



N.B.: Wall sectioned on purpose to show the PE contact between PE plate and MIXO frame.

CX 01 30F/30M – CX 01B 30F/30M 1 pole 300 A – 1000 V – 1300 V_{DC}

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports

page:

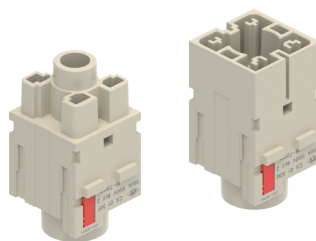
frames for modular units*

317

* enclosures: housings or high construction hoods

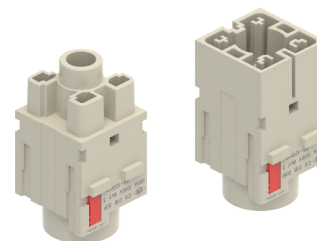
refer to CN.19 pages

modular units, crimp connections
16...70 mm²



FROM JUNE 2023

modular units, crimp connections
95, 120 mm²



FROM JUNE 2023

description

part No.

part No.

without contacts (to be ordered separately)
female insert for female contacts (16...70 mm²)
male insert for male contacts (16...70 mm²)

[CX 01 30F](#)
[CX 01 30M](#)

without contacts (to be ordered separately)
female insert for female contacts (95, 120 mm²)
male insert for female contacts (95, 120 mm²)

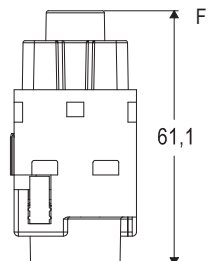
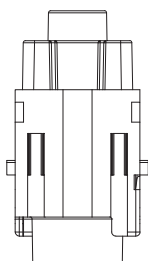
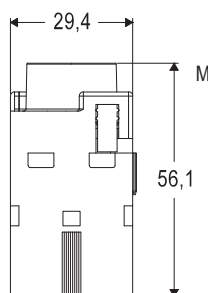
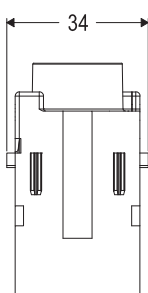
[CX 01B 30F](#)
[CX 01B 30M](#)

- characteristics according to EN 61984:
300 A 1000 V 8 kV 3 – 1300 V_{DC}
300 A 920/1600 V 8 kV 2

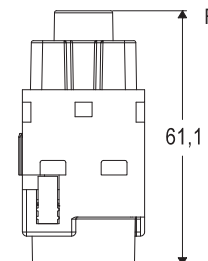
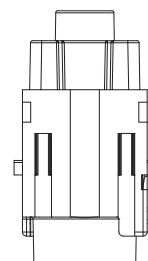
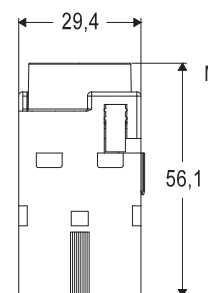
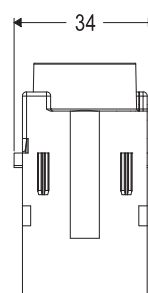
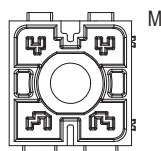
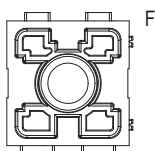
- cURus (ECBT2/8 and PVVA2/8) pending
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0,2 \text{ m}\Omega$
- Max diameter of wire sheathings:
- $\varnothing 18,5 \text{ mm}$ for size 01 modules (wire size 70 mm² / AWG 2/0)
- $\varnothing 22,4 \text{ mm}$ for size 01B modules (wire size 120 mm² / AWG 4/0)

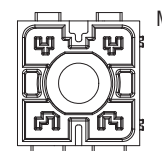
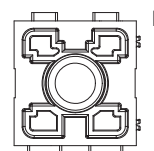
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue.



contacts side (front view)
side with reference arrow ▲



contacts side (front view)
side with reference arrow ▲





300 A silver plated crimp contacts



FROM JUNE 2023

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

300 A female crimp contacts

16 mm ²	AWG 6
25 mm ²	AWG 4
35 mm ²	AWG 2
50 mm ²	AWG 1
70 mm ²	AWG 2/0
95 mm ²	AWG 3/0
120 mm ²	AWG 4/0

- [C30FA 16](#)
- [C30FA 25](#)
- [C30FA 35](#)
- [C30FA 50](#)
- [C30FA 70](#)
- [C30FA 95](#)
- [C30FA 120](#)

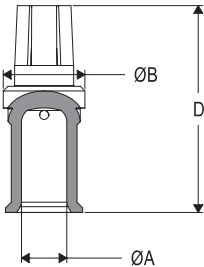
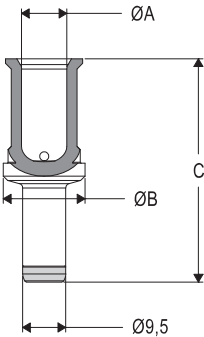
silver plated

300 A male finger proof crimp contacts

16 mm ²	AWG 6
25 mm ²	AWG 4
35 mm ²	AWG 2
50 mm ²	AWG 1
70 mm ²	AWG 2/0
95 mm ²	AWG 3/0
120 mm ²	AWG 4/0

- [C30MA 16 P](#)
- [C30MA 25 P](#)
- [C30MA 35 P](#)
- [C30MA 50 P](#)
- [C30MA 70 P](#)
- [C30MA 95 P](#)
- [C30MA 120 P](#)

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section for 300 A contacts, C30FA, C30MA series at pages 54-55).



C30FA and C30MA..P contacts

conductor section (mm ²)	conductor slot ø A (mm)	ø B (mm)	C (mm)	D (mm)	conductor stripping length (mm)
16	5,5	18	42,7	39,1	19
25	7	18	42,7	39,1	19
35	8,2	18	43,7	40,1	20
50	10	18	49,2	45,6	22,5
70	11,5	18	49,2	45,6	22,5
95	13,5	21	49,2	45,6	22,5
120	15,5	21	49,2	45,6	22,5



CX 01 30PEF/30PEM – CX 01B 30PEF/30PEM 1 pole 300 A

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports

page:

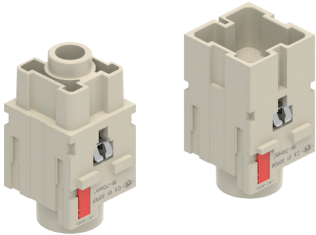
frames for modular units*

317

* enclosures: housings or high construction hoods

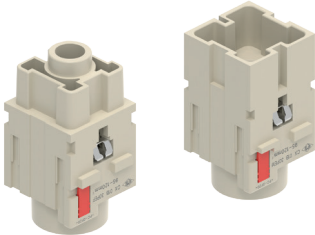
refer to CN.19 pages

modular units, crimp connections
PE module for earth termination,
16...70 mm²



FROM JUNE 2023

modular units, crimp connections
PE module for earth termination,
95, 120 mm²



FROM JUNE 2023

description

part No.

part No.

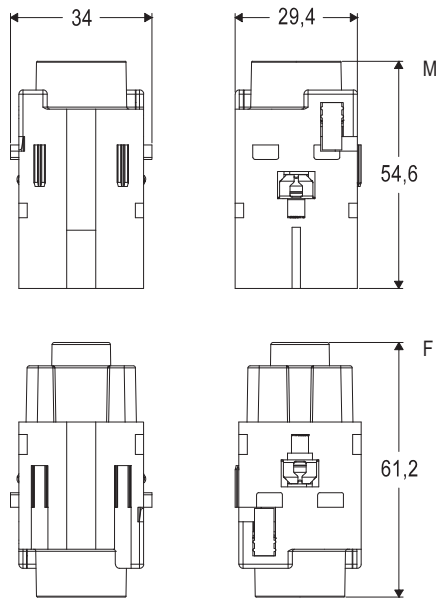
without contacts (to be ordered separately)
PE female insert for female contacts (16...70 mm²)
PE male insert for male contacts (16...70 mm²)

[CX 01 30PEF](#)
[CX 01 30PEM](#)

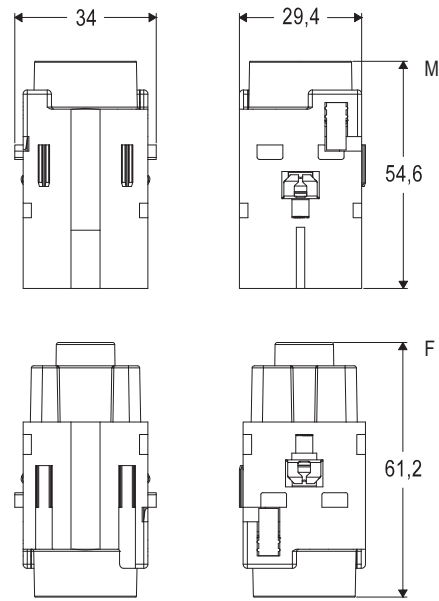
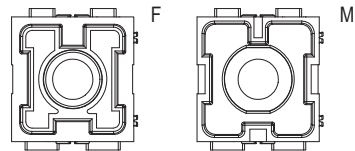
without contacts (to be ordered separately)
PE female insert for female contacts (95, 120 mm²)
PE male insert for male contacts (95, 120 mm²)

[CX 01B 30PEF](#)
[CX 01B 30PEM](#)

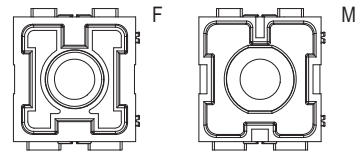
- cURus (ECBT2/8 and PVVA2/8) pending
- CQC, DNV, BV, EAC pending
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,2 mΩ
- Max diameter of wire sheathings:
 - ø 18,5 mm for size 01 modules (wire size 70 mm² / AWG 2/0)
 - ø 22,4 mm for size 01B modules (wire size 120 mm² / AWG 4/0)



contacts side (front view)
side with reference arrow ▲



contacts side (front view)
side with reference arrow ▲





300 A silver plated crimp contacts



 FROM JUNE 2023

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

300 A female crimp contacts

16 mm ²	AWG 6
25 mm ²	AWG 4
35 mm ²	AWG 2
50 mm ²	AWG 1
70 mm ²	AWG 2/0
95 mm ²	AWG 3/0
120 mm ²	AWG 4/0

- [C30FA 16](#)
- [C30FA 25](#)
- [C30FA 35](#)
- [C30FA 50](#)
- [C30FA 70](#)
- [C30FA 95](#)
- [C30FA 120](#)

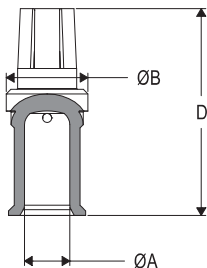
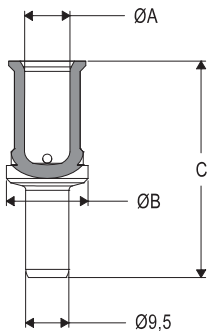
silver plated

300 A male crimp contacts

16 mm ²	AWG 6
25 mm ²	AWG 4
35 mm ²	AWG 2
50 mm ²	AWG 1
70 mm ²	AWG 2/0
95 mm ²	AWG 3/0
120 mm ²	AWG 4/0

- [C30MA 16](#)
- [C30MA 25](#)
- [C30MA 35](#)
- [C30MA 50](#)
- [C30MA 70](#)
- [C30MA 95](#)
- [C30MA 120](#)

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section for 300 A contacts, C30FA, C30MA series at pages 54-55).



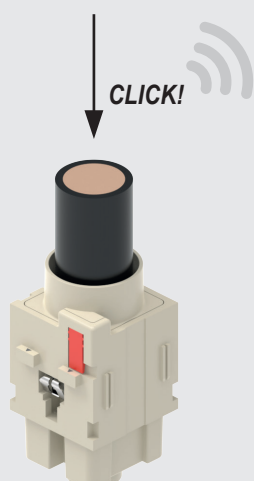
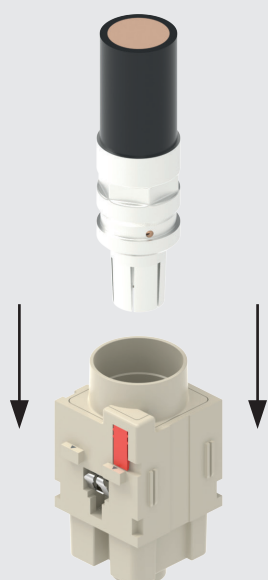
C30FA and C30MA contacts

conductor section (mm ²)	conductor slot ø A (mm)	ø B (mm)	C (mm)	D (mm)	conductor stripping length (mm)
16	5,5	18	41,2	39,1	19
25	7	18	41,2	39,1	19
35	8,2	18	42,2	40,1	20
50	10	18	47,7	45,6	22,5
70	11,5	18	47,7	45,6	22,5
95	13,5	21	47,7	45,6	22,5
120	15,5	21	47,7	45,6	22,5

ASSEMBLY INSTRUCTIONS

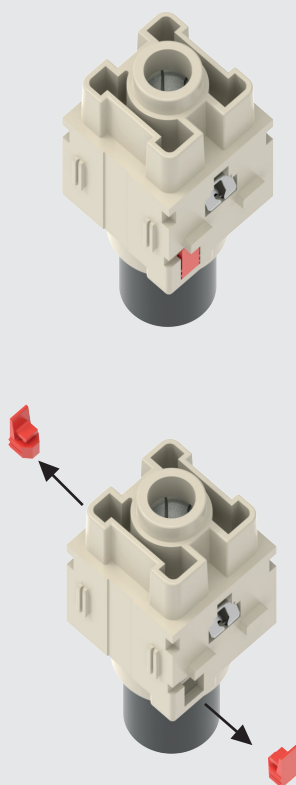
CX 01/01B 30PE – MIXO 300 A PE MODULE

CONTACT INSERTION

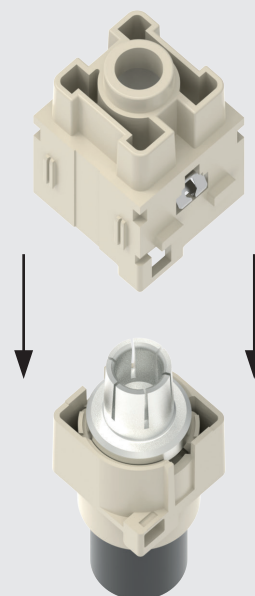


CONTACT REMOVAL

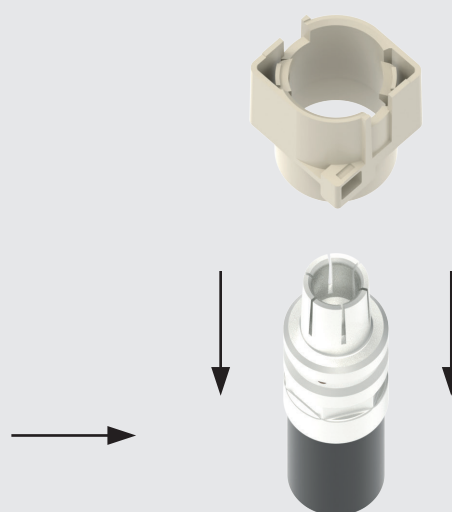
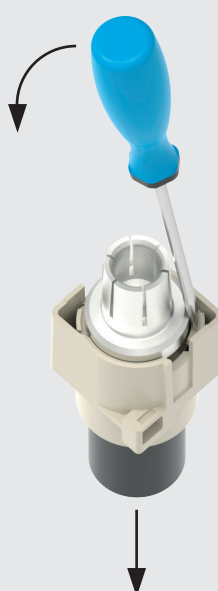
1



2



3

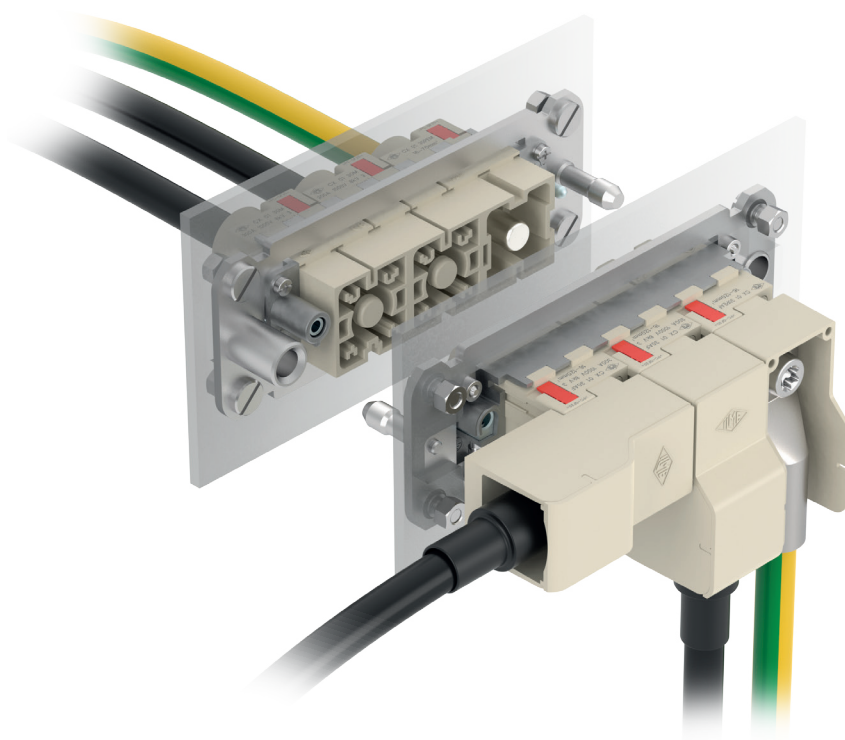


MIXO 300 A modules

For 90°-angled screw terminal connection

Line modules: CX 01 30A (16..120 mm²)

PE modules: CX 01 30PEA (16..120 mm²)



MIXO CX 01 30 A line modules

1 P: 300 A 1000 V 8 kV 3 – 1300 V_{DC}

MIXO CX 01 30PEA, PE modules

1 P: 300 A



Find out more
www.ilme.com

TECHNICAL FEATURES

High-power modules in the 70 A – 300 A current range relate to conductors with large wire-cross-section, even up to 120 mm². Such wires are often difficult to handle, having reduced bending radius and requiring an adequate installation room, often not available.

The new **MIXO CX 01 30A** line module and **CX 01 30PEA** PE module are the solution introduced by ILME to widen the potential of the MIXO high-current series, modules with the same compatible electrical rating and mating interface of the 300 A crimp version described in the previous pages but designed to **minimize its space installation requirements**.

Q The male and female contacts for the angled 300 A module allow the **connection of DIN 46235** pre-insulated crimp cable lugs (using M8 TORX® T45 screw), available on the market in the dimension for wire cross-sectional areas of 10, 16, 25, 35, 50, 70, 95 and 120 mm².

Q To keep the proper electrical insulation, ILME designed a **special insulating cover plate**, avoiding accidental contact between cable lugs of adjacent modules and saving the **nominal voltage rating of 1000 V and 1300 V_{DC}** planned for the 300 A modules.

This cover plate has been furtherly improved compared with the previously available 200 A 90°-angled module CX 01 YAF/ M, in that it now includes a further snap-in closing cap, that prevent touch with live parts inside a cabinet previously demanded to the assembler of the distribution panel.

Q The **300 A angled module** can be used inside the ILME bulkhead mounting housings as a natural extension of a busbar connection or for powering control cabinets, HVAC systems and batteries for energy storage backup applications.

Q Line male modules **CX 01 30AM** and **CX 01B 30AM** come by default **with finger proof contact** (PE modules do not require any finger proof safety).



Q Current-temperature derating diagrams (current-carrying capacity curves) for size **CX 01 30A** line module and **CX 01 30PEA** PE module are like those of the equivalent CX 01 YA and CX 01 YPEA 200 A versions (same wiring range). For size **CX 01B 30A** and **CX 01B PEA** modules, covering the larger wire sizes 95 mm² and 120 mm² (AWG 3/0 and 4/0), new diagrams are under development to cover the extended range up to 300 A.

Q Conductors stripping length: 9..11 mm.

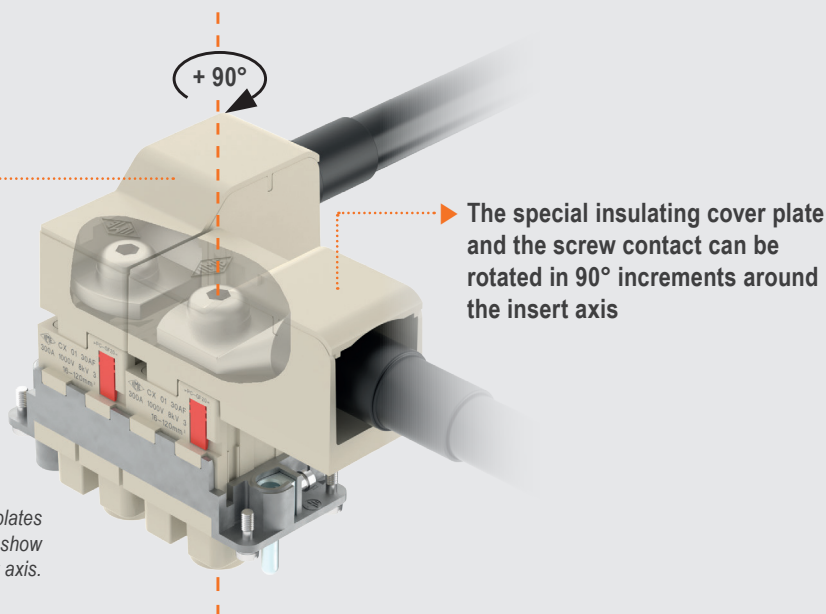
Q Silver plated contacts.

Q Tightening torque for TORX® T45 socket bolt for fixing the cable lug: 10 Nm.

CERTIFICATIONS

- cURus, CQC, DNV, BV, EAC pending.
-  and  markings.
- RoHS: compliant with exemption 6(c).

Special insulating cover plate
to avoid accidental contact
between any conductive element
(side by side installation)



The special insulating cover plate
and the screw contact can be
rotated in 90° increments around
the insert axis

N.B.: The surfaces of the special insulating cover plates have been made partially transparent on purpose to show the 90° increments around the insert axis.



CX 01 30AF/30AM 1 pole 300 A – 1000 V – 1300 V_{DC}

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports

page:

frames for modular units*

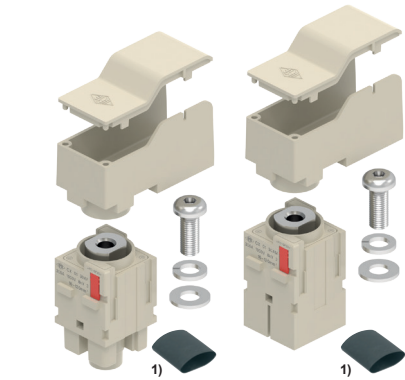
317

* enclosures: bulkhead mounting housings only

1) supplied with heat-shrinking insulating tubes, to be used with tubular cable lug (not supplied)

refer to CN.19 pages

modular units, screw terminal connection



FROM JUNE 2023

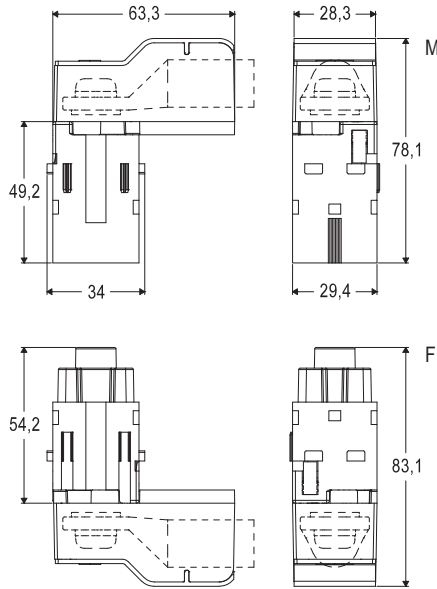
description

part No.

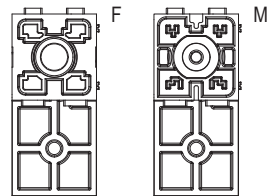
screw terminal connection - 90° angled
female insert with female contacts
male insert with male contacts

[CX 01 30AF](#)
[CX 01 30AM](#)

- characteristics according to EN 61984:
300 A 1000 V 8 kV 3 – 1300 V_{DC}
- cURus (ECBT2/8 and PVVA2/8) pending
- CQC, DNV, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^{\circ}\text{C} \dots +125 \text{ }^{\circ}\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue.



contacts side (front view)
side with reference arrow ▲





CX 01 30PEAF/30PEAM 1 pole 300 A

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports

page:

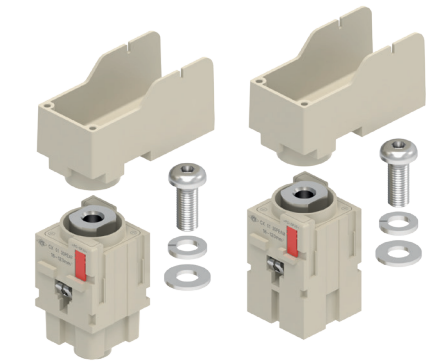
frames for modular units*

317

* enclosures: bulkhead mounting housings only

refer to CN.19 pages

modular units, screw PE terminal connection



FROM JUNE 2023

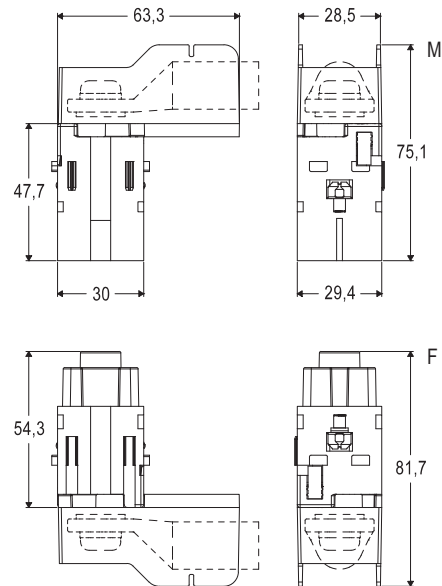
description

part No.

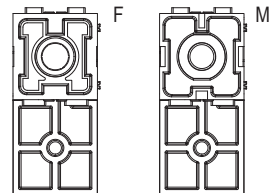
- screw terminal connection - 90° angled
- PE female insert with female contacts
- PE male insert with male contacts

[CX 01 30PEAF](#)
[CX 01 30PEAM](#)

- cURus (ECBT2/8 and PVVA2/8) pending
- CQC, DNV, BV, EAC pending
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ

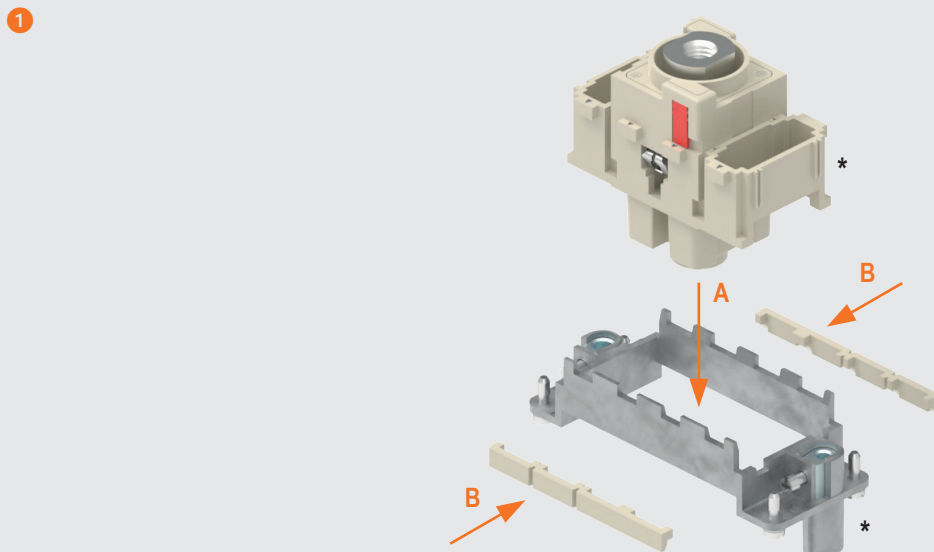


contacts side (front view)
side with reference arrow ▲

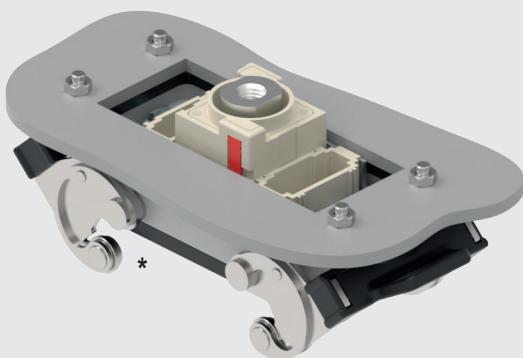


ASSEMBLY INSTRUCTIONS

CX 01 30PEA – MIXO 300 A 90° ANGLED PE MODULE

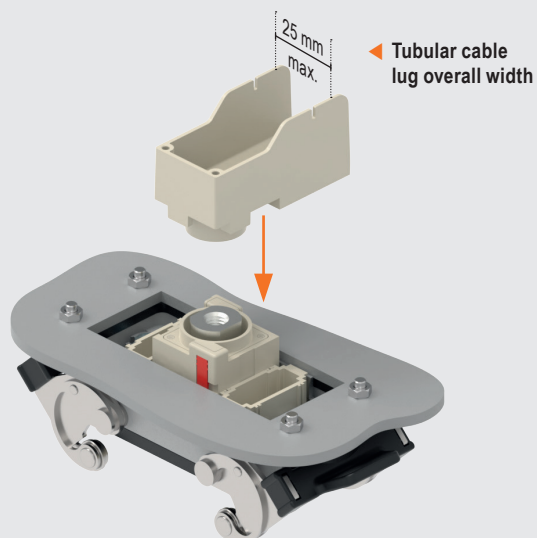


2 For bulkhead mounting housing only

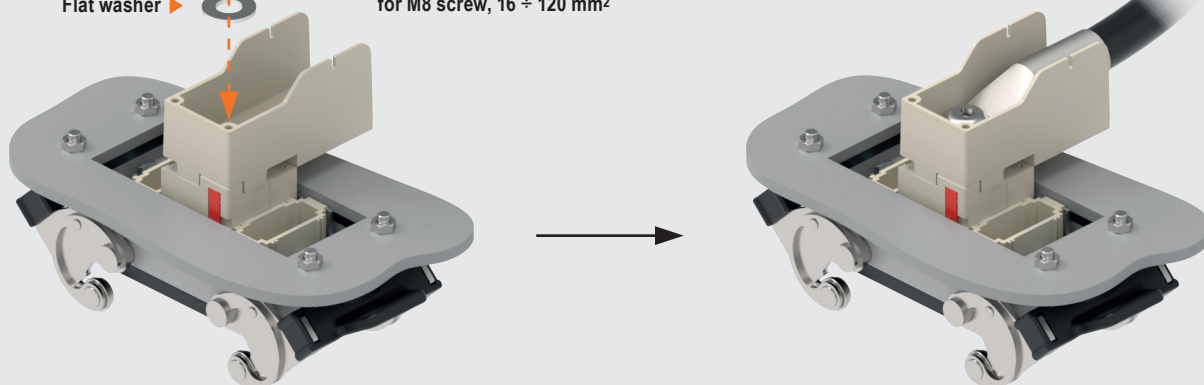
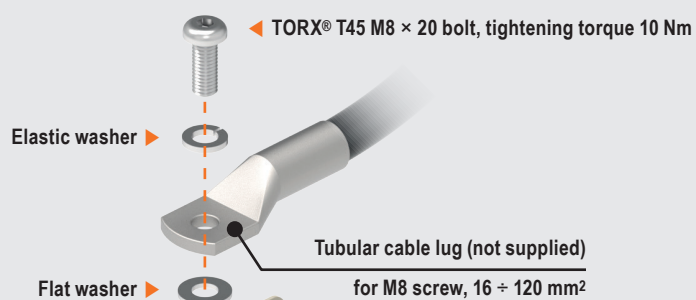


* Frame size, additional MIXO modules and housing levers may vary from those depicted

3



4



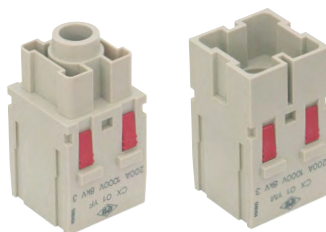
CX 01 YF/YM 1 pole 200A - 1000V

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports.

frames for modular units*

page:
317

modular units, crimp connections



200A silver plated crimp contacts
heat shrink tube



* enclosures: housings or high construction hoods

description

part No.

part No

without contacts (to be ordered separately)

female inserts for female contacts

male inserts for male contacts

CX 01 YF
CX 01 YM

200A female crimp contacts

16 mm ²	AWG 6	one groove (back side)
25 mm ²	AWG 4	with no grooves
35 mm ²	AWG 2	one groove
50 mm ²	AWG 1	two grooves
70 mm ²	AWG 2/0	with no grooves

200A male crimp contacts

16 mm ²	AWG 6	one groove (back side)
25 mm ²	AWG 4	with no grooves
35 mm ²	AWG 2	one groove
50 mm ²	AWG 1	two grooves
70 mm ²	AWG 2/0	with no grooves

CYFA 16
CYFA 25
CYFA 35
CYFA 50
CYFA 70

silver plated

CYMA 16
CYMA 25
CYMA 35
CYMA 50
CYMA 70

heat shrink tube for CYFA/CYMA 16 contacts or for
conductor with total external Ø < 10 mm

CR TT

- characteristics according to EN 61984:

200A 1000V 8kV 3
200A 920/1600V 8kV 2

- cULus (UL for USA and Canada), SR, CEC, DNV-GL

BUREAU VERITAS ENE certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 GΩ

- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin UL 94V-0

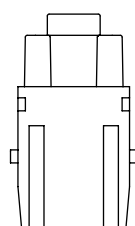
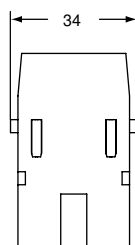
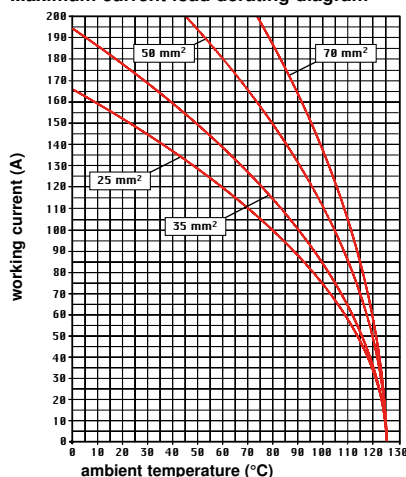
- mechanical life: ≥ 500 cycles

- contact resistance: ≤ 0,2 mΩ

- it is recommended to crimp the contacts with
crimping tools homologated by ILME (please see
the crimping tool section 200A contacts, CYF and CYM
series) on pages 708 - 741

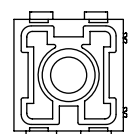
- for max. current load see the connector inserts derating
diagram below; for more information see page 28

CX 01 Y, 1 pole connector inserts (MIXO 200A)
Maximum current load derating diagram

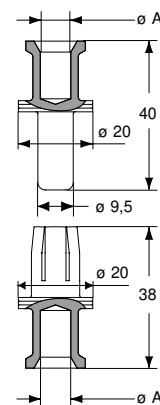
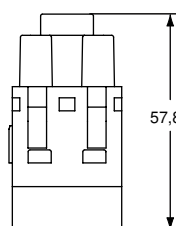
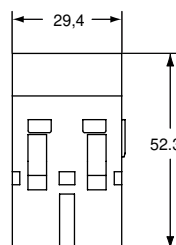


contacts side (front view)

side with reference arrow ▲



- 2 frame slots



CYF and CYM contacts

conductor section Ø A (mm ²)	conductor slot (mm)	conductor stripping length (mm)
16	6,1	15
25	7,0	15
35	8,2	15
50	9,8	15
70	11,8	15



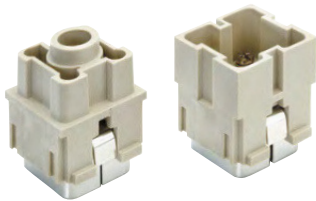
CX 01 YPEF/YPEM 1 PE pole 200A

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports.

frames for modular units*

page:
317

modular units, crimp connections
PE module for earth termination



200A silver plated crimp contacts



* enclosures: housings or high construction hoods

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

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

CX 01 YPEF
CX 01 YPEM

200A female crimp contacts

16 mm ²	AWG 6	one groove (back side)
25 mm ²	AWG 4	with no grooves
35 mm ²	AWG 2	one groove
50 mm ²	AWG 1	two grooves
70 mm ²	AWG 2/0	with no grooves

200A male crimp contacts

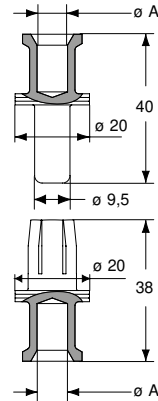
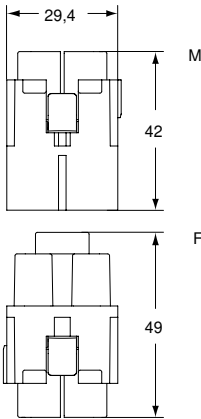
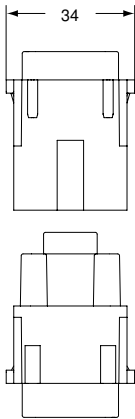
16 mm ²	AWG 6	one groove (back side)
25 mm ²	AWG 4	with no grooves
35 mm ²	AWG 2	one groove
50 mm ²	AWG 1	two grooves
70 mm ²	AWG 2/0	with no grooves

CYFA 16
CYFA 25
CYFA 35
CYFA 50
CYFA 70

silver plated

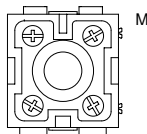
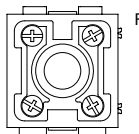
CYMA 16
CYMA 25
CYMA 35
CYMA 50
CYMA 70

- cULus (UL for USA and Canada), EAC certified
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,2 mΩ
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 200A contacts, CYF and CYM series) on pages 708 - 741



contacts side (front view)

side with reference arrow ▲



- 2 frame slots

CYF and CYM contacts

conductor section ø A (mm ²)	conductor slot (mm)	conductor stripping length (mm)
16	6,1	15
25	7,0	15
35	8,2	15
50	9,8	15
70	11,8	15

MIXO CX 01 YAF /YAM 1 pole 200 A - 1000 V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.

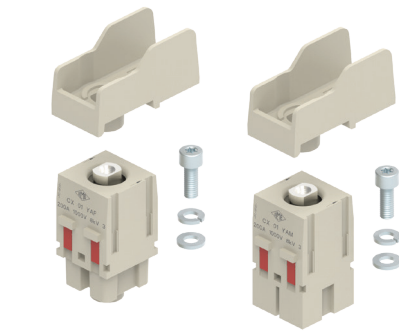
page: 317

frames for modular units*

* enclosures: bulkhead mounting housings only

refer to CN.19 pages

modular units,
screw terminal connection - 90° angled



FROM APRIL 2022

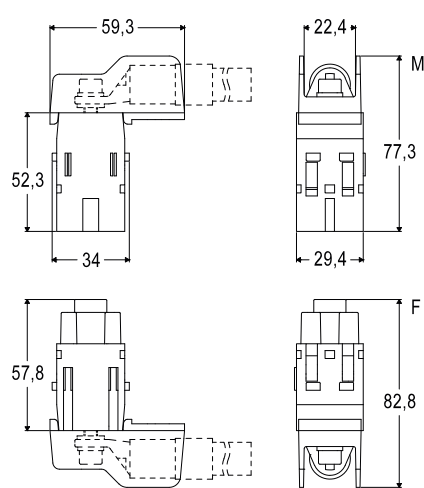
description

part No.

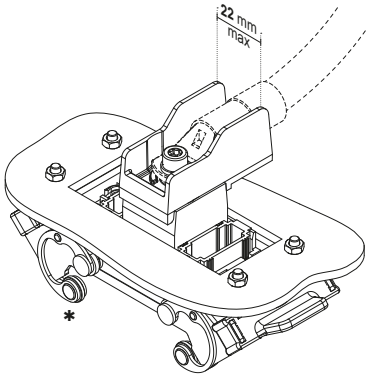
screw terminal connection - 90° angled
female insert with female contact
male insert with male contact

CX 01 YAF
CX 01 YAM

- characteristics according to EN 61984:
200 A 1000 V 8 kV 3
- cURus (ECBT2/8 and PVVA2/8) pending
- CSA, CQC, EAC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue

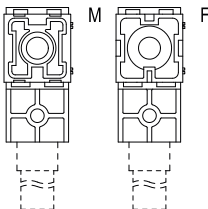


- Pre-insulated tubular cable lug overall width: 22 mm max.

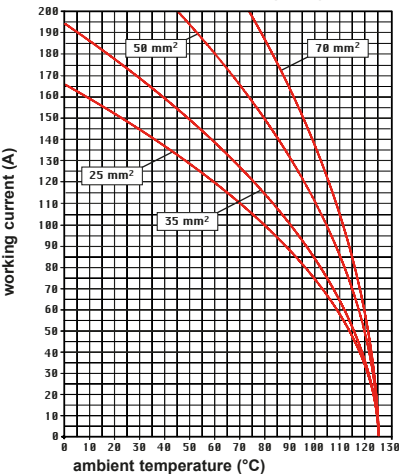


* Frame size, additional MIXO modules and housing levers may vary from those depicted.

contacts side (front view)
side with reference arrow ▲



CX 01 YA, 1 pole connector inserts (MIXO 200A)
Maximum current load derating diagram



2 frame slots

CX 01 GF/GM 1 pole 100A - 830V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.

Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units* page:
316 - 317

MIXO ONE enclosures 369

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units,
crimp connections



100A silver plated crimp contacts,
PE adapter



description

part No.

part No.

without contacts (to be ordered separately)

female inserts for female contacts

male inserts for male contacts

CX 01 GF
CX 01 GM

100A female crimp contacts

8-10 mm² AWG 8-7

16 mm² AWG 6-5

25 mm² AWG 4-3

35 mm² AWG 2

CGFA 10

CGFA 16

CGFA 25

CGFA 35

silver plated

100A male crimp contacts

8-10 mm² AWG 8-7

16 mm² AWG 6-5

25 mm² AWG 4-3

35 mm² AWG 2

CGMA 10

CGMA 16

CGMA 25

CGMA 35

cable earthing adapter 16 mm² (AWG 6-5)

CGT 16

- characteristics according to EN 61984:

100A 830V 8kV 3

- certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin
UL 94V-0

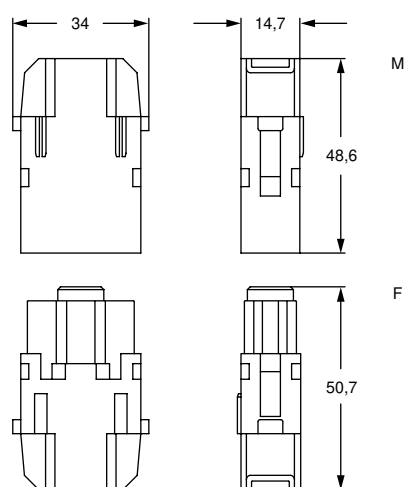
- mechanical life: ≥ 500 cycles

- contact resistance: $\leq 0,3 \text{ m}\Omega$

- it is recommended to crimp the contacts with
crimping tools homologated by ILME (please see
the crimping tool section 100A contacts, CGF and CGM
series) on pages 708 - 741

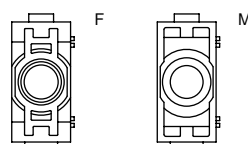
- contact removal only using a screwdriver

- for max. current load see the connector inserts derating
diagram below; for more information see page 28



contacts side (front view)

side with reference arrow ▲

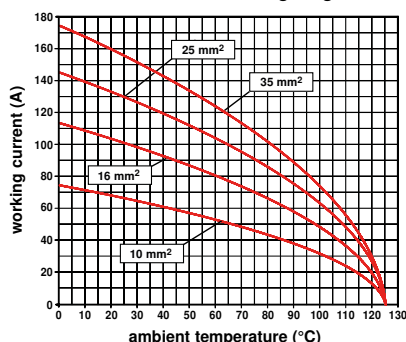


- 1 frame slot



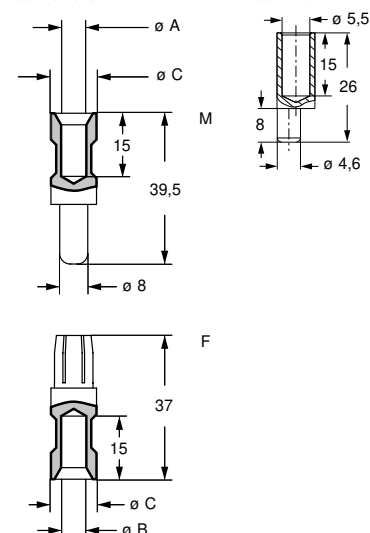
Watch
our
online
tutorial

CX 01 G, 1 pole connector inserts
Maximum current load derating diagram



CGF and CGM

CGT 16



CGF and CGM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor slot ø B (mm)	conductor slot ø C (mm)	conductor stripping length (mm)
8-10	4,3	4,3	13	15
16	5,5	5,5	13	15
25	7,0	7,0	13	15
35	7,9	8,2	12,5	15

How to use the PE adapter (CGT 16):

- 1) Strip 15 mm of flexible PE protective cable
- 2) Crimp the cable on the CGT 16 adapter by using the CGPZ pliers with the CGD 16 C matrix
- 3) Fix the adapter tip in the larger earth terminal (6 mm²) of frames CX...TM/TF
- 4) To be used with bulkhead mounting housings or high construction hoods
- 5) Cannot be used with T-TYPE series

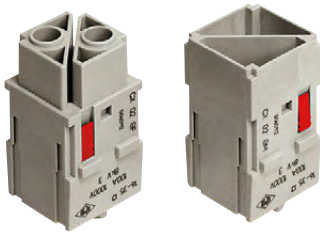
CX 02 GF/GM 2 poles 100A - 1000V

The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures* or in COB panel supports.

frames for modular units*

page:
317

modular units,
crimp connections



100A silver plated crimp contacts,
PE adapter



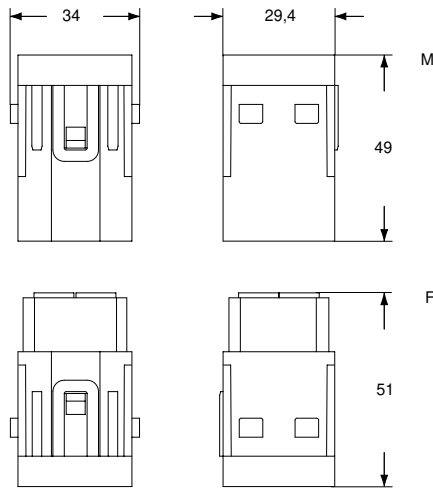
* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

description	part No.	part No.
without contacts (to be ordered separately)		
female inserts for female contacts ¹⁾	CX 02 GF	
male inserts for male contacts ¹⁾	CX 02 GM	
100A female crimp contacts		
8-10 mm ² AWG 8-7		CGFA 10
16 mm ² AWG 6-5		CGFA 16
25 mm ² AWG 4-3		CGFA 25
35 mm ² AWG 2		CGFA 35
100A male crimp contacts		
8-10 mm ² AWG 8-7		CGMA 10
16 mm ² AWG 6-5		CGMA 16
25 mm ² AWG 4-3		CGMA 25
35 mm ² AWG 2		CGMA 35
cable earthing adapter 16 mm ² (AWG 6-5)		CGT 16

silver plated

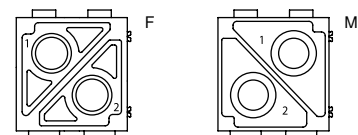
¹⁾ on request, version with pole 3/4 numbering,
references: CX 02 GFN, CX 02 GMN

- characteristics according to EN 61984:
100A 1000V 8kV 3
100A 920/1600V 8kV 2
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 0,3 \text{ m}\Omega$
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 100A contacts, CGF and CGM series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28

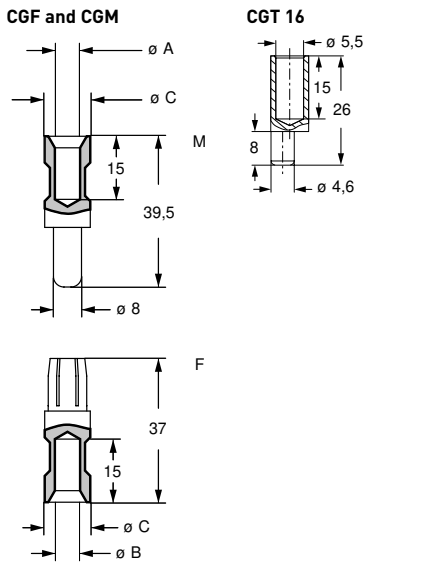


contacts side (front view)

side with reference arrow ▲



- 2 frame slots

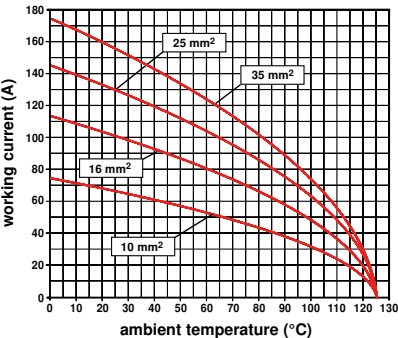


CGF and CGM contacts				
conductor section (mm ²)	conductor slot $\varnothing A$ (mm)	conductor slot $\varnothing B$ (mm)	conductor slot $\varnothing C$ (mm)	conductor stripping length (mm)
8-10	4,3	4,3	13	15
16	5,5	5,5	13	15
25	7,0	7,0	13	15
35	7,9	8,2	12,5	15

How to use the PE adapter (CGT 16):

- 1) Strip 15 mm of flexible PE protective cable
- 2) Crimp the cable on the CGT 16 adapter by using the CGPZ pliers with the CGD 16 C matrix
- 3) Fix the adapter tip in the larger earth terminal (6 mm²) of frames CX...TM/TF
- 4) To be used with bulkhead mounting housings or high construction hoods
- 5) Cannot be used with T-TYPE series

CX 02 G, 2 poles connector inserts
Maximum current load derating diagram



CX 02 7F/7M 2 poles 70A - 1000V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.

Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units* page: 317

MIXO ONE enclosures 369

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units, crimp connections



70A silver plated crimp contacts



description

part No.

part No

without contacts (to be ordered separately)

female inserts for female contacts

male inserts for male contacts

CX 02 7F

CX 02 7M

70A female crimp contacts

10 mm² AWG 8 - 7

16 mm² AWG 6 - 5

25 mm² AWG 4 - 3

CX7FA 10

CX7FA 16

CX7FA 25

70A male crimp contacts

10 mm² AWG 8 - 7

16 mm² AWG 6 - 5

25 mm² AWG 4 - 3

CX7MA 10

CX7MA 16

CX7MA 25

silver plated

- characteristics according to EN 61984:

70A 1000V 8kV 3

70A 1600V 12kV 2

- (UL for USA and Canada),

certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 G Ω

- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin

UL 94V-0

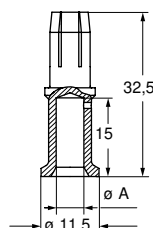
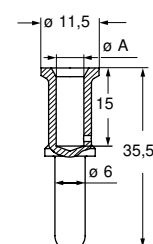
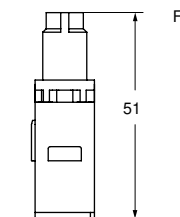
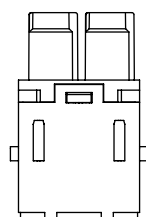
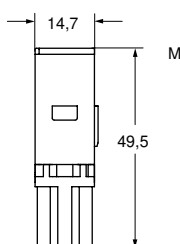
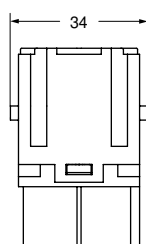
- mechanical life: ≥ 500 cycles

- contact resistance: $\leq 0,5$ m Ω

- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 70A contacts, CX7F and CX7M series) on pages 708 - 741

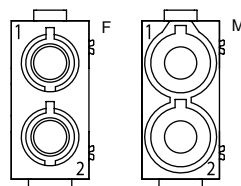
- **C7ES** removal tool

- for max. current load see the connector inserts derating diagram below; for more information see page 28



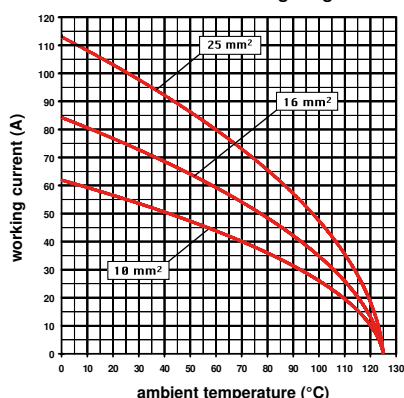
contacts side (front view)

side with reference arrow ▲



- 1 frame slot

CX 02 7, 2 poles connector inserts
Maximum current load derating diagram



CX7F and CX7M contacts

conductor section (mm ²)	conductor slot ϕ A (mm)	conductor stripping length (mm)
10	4,3	15
16	5,5	15
25	7,0	15



The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units* 316 - 317

MIXO ONE enclosures 369

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units, crimp connections



40A silver plated crimp contacts



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

without contacts (to be ordered separately)
female inserts for female contacts ¹⁾
male inserts for male contacts ¹⁾

CX 02 4F
CX 02 4M

40A female crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10
10 mm² AWG 8

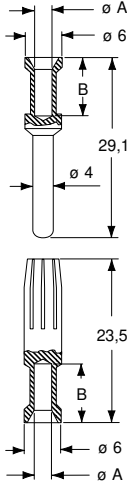
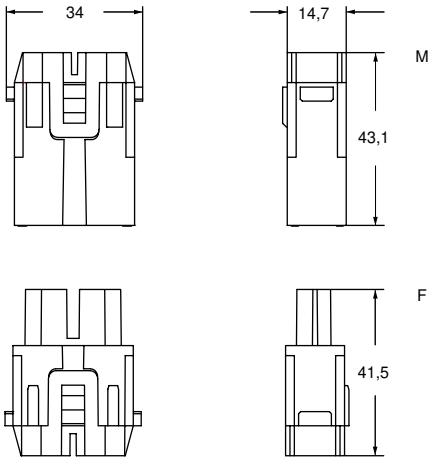
CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0
CXFA 10

silver plated

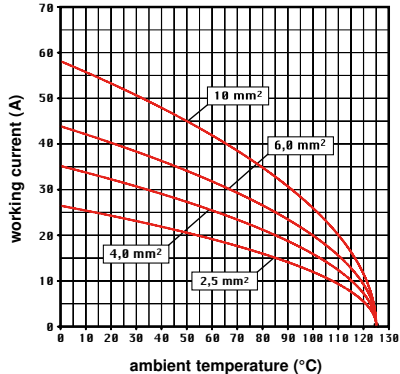
40A male crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10
10 mm² AWG 8

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0
CXMA 10

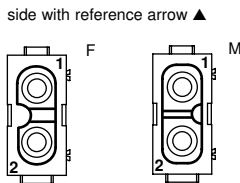
- ¹⁾ cable diameter up to 7,5 mm
contact size up to 10 mm²
- characteristics according to EN 61984:
40A 1000V 8kV 3
 - certified
 - rated voltage according to UL/CSA: 600V
 - insulation resistance: ≥ 10 GΩ
 - ambient temperature limit: -40 °C ... +125 °C
 - made of self-extinguishing thermoplastic resin UL 94V-0
 - mechanical life: ≥ 500 cycles
 - contact resistance: ≤ 0,3 mΩ
 - can be mated with CX 02 4A/4B modules
 - **it is recommended to crimp the contacts** (1,5 - 10 mm²), **with crimping tools homologated by ILME** (please see the crimping tool section 40A contacts, CXF and CXM series) on pages 708 - 741
 - for max. current load see the connector inserts derating diagram below; for more information see page 28



CX 02 4, 2 poles connector inserts
Maximum current load derating diagram



contacts side (front view)



- 1 frame slot

CXF and CXM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6
10	4,3	15

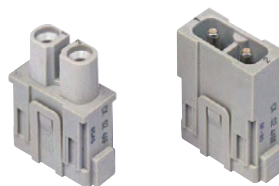
CX 02 4AF/4AM - CX 02 4BF/4BM 2 poles 40A - 1000V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures or in COB panel support.
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

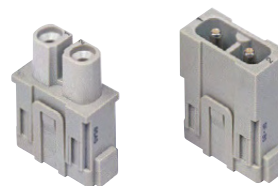
frames for modular units 316 - 317

MIXO ONE enclosures 369

modular units,
screw terminal connection
2,5 - 8 mm²



modular units,
screw terminal connection
6 - 10 mm²



description

part No.

part No

female inserts with female contacts
male inserts with male contacts

CX 02 4AF
CX 02 4AM

female inserts with female contacts
male inserts with male contacts

CX 02 4BF
CX 02 4BM

- use flexible cables with sections from 2,5 to 10 mm² or extra flexible cables with sections from 2,5 to 6 mm²
- do not twist the cables
- fully insert the braids in the rear section of the contact

conductor section (mm ²)	conductor stripping length (mm)	tightening torque (Nm)
2,5	5+1	1,5
4	5+1	1,5
6	8+1	2
10	8+1	2

- insert a 2 mm hexagonal key in the front section of the contact and tighten by keeping the cable held down in position
- a 2 mm hexagonal key can be supplied on request, reference CX AS

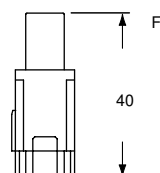
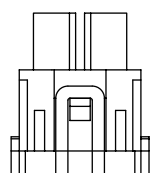
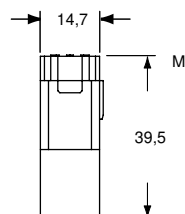
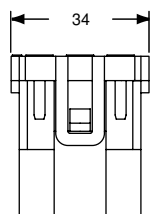
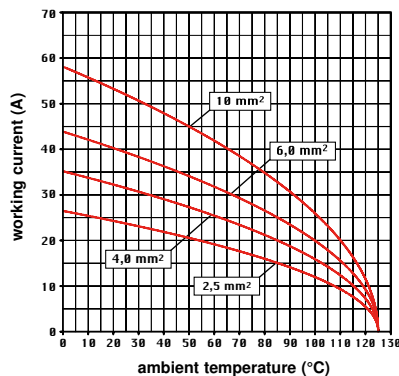


- characteristics according to EN 61984:

40A 1000V 8kV 3
40A 1600V 12kV 2

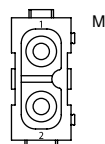
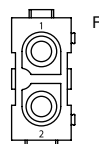
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,5 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28

CX 02 4A/B, 2 poles connector inserts
Maximum current load derating diagram

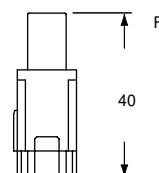
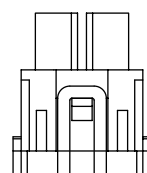
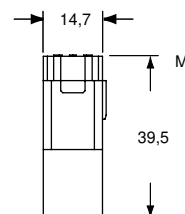
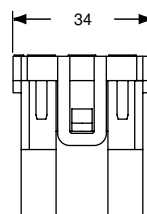


contacts side (front view)

side with reference arrow ▲

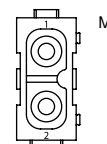
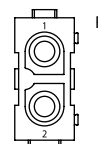


- inserts for Ø 4mm cables, section: 2,5-8 mm² - AWG 14-8
- 1 frame slot



contacts side (front view)

side with reference arrow ▲



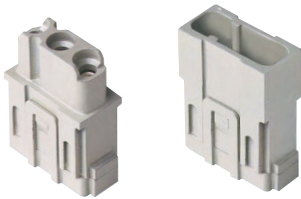
- inserts for Ø 4,8 mm cables, section: 6-10 mm² - AWG 10-8
- 1 frame slot

CX 03 4F/4M 3 poles 40A - 400/690V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures or in COB panel support.
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units	page: 316 - 317
MIXO ONE enclosures	369

modular units, crimp connections



40A silver plated crimp contacts



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

without contacts (to be ordered separately)
female inserts for female contacts ¹⁾
male inserts for male contacts ¹⁾

CX 03 4F
CX 03 4M

40A female crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

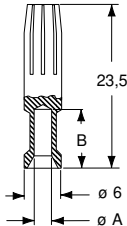
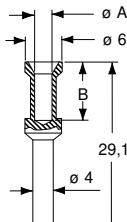
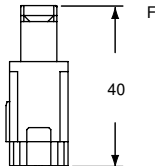
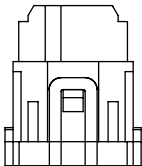
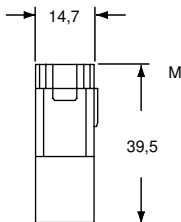
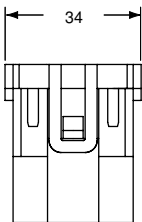
silver plated

40A male crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

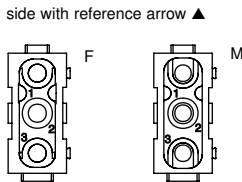
CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

¹⁾ cable diameter up to 5 mm

- characteristics according to EN 61984:
40A 400/690V 6kV 3
- (UL for USA and Canada), certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin
UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, CXF and CXM series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)

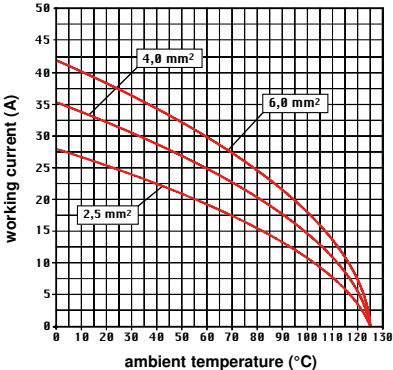


- 1 frame slot

CXF and CXM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

CX 03 4, 3 poles connector inserts
Maximum current load derating diagram



CX 03 4BF/4BM 3 poles 40A - 500V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.

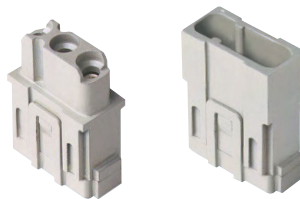
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units* page: 316 - 317

MIXO ONE enclosures 369

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units, crimp connections



40A silver plated crimp contacts



description

part No.

part No

without contacts (to be ordered separately)

female inserts for female contacts ¹⁾

male inserts for male contacts ¹⁾

CX 03 4BF
CX 03 4BM

40A female crimp contacts

1,5 mm² AWG 16

2,5 mm² AWG 14

4 mm² AWG 12

6 mm² AWG 10

10 mm² AWG 8

40A male crimp contacts

1,5 mm² AWG 16

2,5 mm² AWG 14

4 mm² AWG 12

6 mm² AWG 10

10 mm² AWG 8

CXFA 1.5

CXFA 2.5

CXFA 4.0

CXFA 6.0

CXFA 10

silver plated

CXMA 1.5

CXMA 2.5

CXMA 4.0




CXMA 6.0

CXMA 10

¹⁾ cable diameter up to 7,5 mm
contact size up to 10 mm²

- characteristics according to EN 61984:

40A 500V 6kV 3

- cULus (UL for USA and Canada),   

-   certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin

UL 94V-0

- mechanical life: ≥ 500 cycles

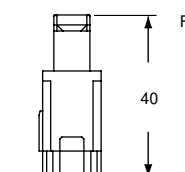
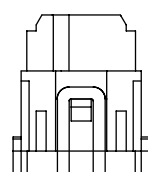
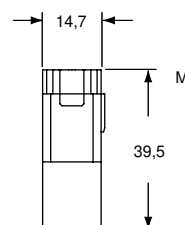
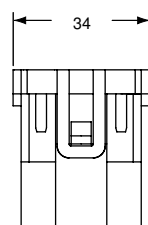
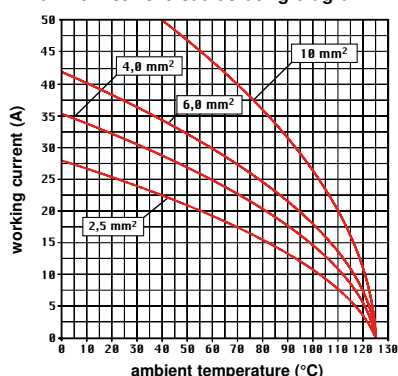
- contact resistance: $\leq 0,3 \text{ m}\Omega$

- **it is recommended to crimp the contacts**
(1,5 - 10 mm²), **with crimping tools homologated**

by ILME (please see the crimping tool section 40A
contacts, CXF and CXM series) on pages 708 - 741

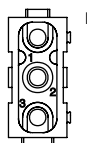
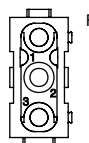
- for max. current load see the connector inserts derating
diagram below; for more information see page 28

CX 03 4B, 3 poles connector inserts
Maximum current load derating diagram

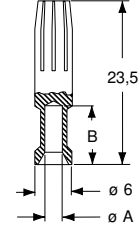
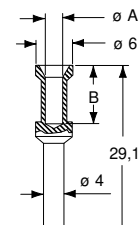


contacts side (front view)

side with reference arrow ▲



- 1 frame slot



CXF and CXM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6
10	4,3	15

CX 3/4 XDF/XDM 3 poles (40A - 830V) + 4 poles (10A - 830V)

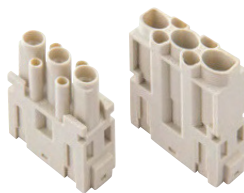
The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures or in COB panel support. Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

page:

frames for modular units
MIXO ONE enclosures316 - 317
369

- male and female contacts finger proof
- their key characteristic lies in the fact that they guarantee maximum safety even in case of accidental contact with fingers (IP2X or IPXXB). Safety is guaranteed as standard on female contacts, but also on male contacts. This feature is important as it ensures full compliance with the recent safety standard **EN 60204-1**, concerning electric equipment fitted on machines and in particular with the requirements of Article 6.2.4 concerning protection against residual voltage. **In the case of plugs or similar devices, the withdrawal of which results in the exposure of conductors (for example pins), the discharge time shall not exceed 1 s, otherwise such conductors shall be protected against direct contact to at least an IP2X or IPXXB.**

modular units, crimp connections

40A and 10A crimp contacts
silver and gold plated

description	part No.	part No.
without contacts (to be ordered separately)		
female inserts for female contacts	CX 3/4 XDF	
male inserts for male contacts	CX 3/4 XDM	
40A female crimp contacts		
1,5 mm ² AWG 16		CXFA 1.5
2,5 mm ² AWG 14		CXFA 2.5
4 mm ² AWG 12		CXFA 4.0
6 mm ² AWG 10		CXFA 6.0
40A male crimp contacts		
1,5 mm ² AWG 16		CXMA 1.5
2,5 mm ² AWG 14		CXMA 2.5
4 mm ² AWG 12		CXMA 4.0
6 mm ² AWG 10		CXMA 6.0
10A female crimp contacts		
0,14-0,37 mm ² AWG 26-22	identification No. 1	CDFA 0.3
0,5 mm ² AWG 20	identification No. 2	CDFA 0.5
0,75 mm ² AWG 18	identification No. ②	CDFA 0.7
1 mm ² AWG 18	identification No. 3	CDFA 1.0
1,5 mm ² AWG 16	identification No. 4	CDFA 1.5
2,5 mm ² AWG 14	identification No. 5	CDFA 2.5
10A male crimp contacts		
0,14-0,37 mm ² AWG 26-22	identification No. 1	CDMA 0.3
0,5 mm ² AWG 20	identification No. 2	CDMA 0.5
0,75 mm ² AWG 18	identification No. ②	CDMA 0.7
1 mm ² AWG 18	identification No. 3	CDMA 1.0
1,5 mm ² AWG 16	identification No. 4	CDMA 1.5
2,5 mm ² AWG 14	identification No. 5	CDMA 2.5

silver plated

* for basic or high thickness gold plating, please refer to page 674

gold plated+

- characteristics according to EN 61984:

3 poles 40A 830V 8kV 3**4 poles 10A 830V 8kV 3**

- cULus (UL for USA and Canada),

- certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 G Ω

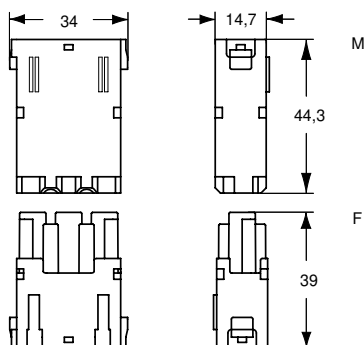
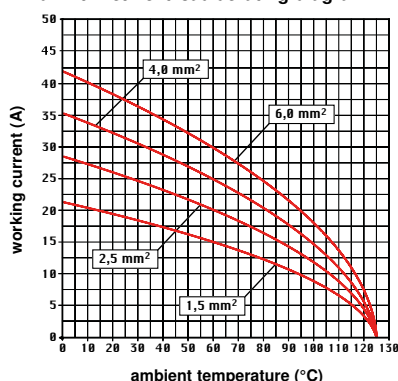
- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin UL 94V-0

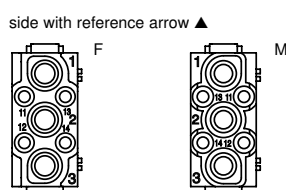
- mechanical life: ≥ 500 cycles- contact resistance: $\leq 0,3$ m Ω (3 poles), ≤ 3 m Ω (4 poles)

- for max. current load see the connector inserts derating diagram below; for more information see page 28

CX 3/4 XD, 3/4 poles connector inserts
Maximum current load derating diagram

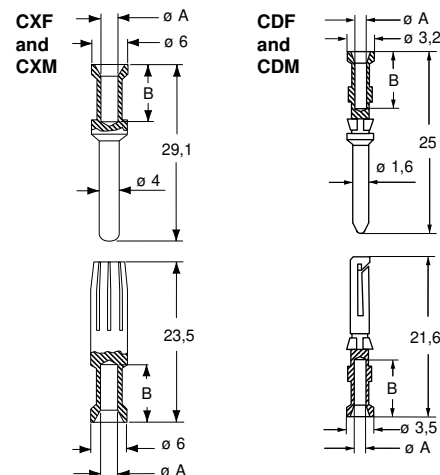


contacts side (front view)



- 1 frame slot

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, CXF, CXM series and 10A contacts CDF, CDM series) on pages 708 - 741

**CXF and CXM contacts**

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

CDF and CDM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

CX 04 XF/XM 4 poles 40A - 830V

The modular inserts must be installed in suitable frames which are then mounted in traditional enclosures* or in COB panel support.

Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units* page: 316 - 317

MIXO ONE enclosures 369

* enclosures: bulkhead mounting housings, high construction housings or high construction hoods

modular units, crimp connections with red lock-in tab (included)



40A silver plated crimp contacts



description

part No.

part No

without contacts (to be ordered separately)

(module red lock-in tab included)

female inserts for female contacts

male inserts for male contacts

CX 04 XF
CX 04 XM

40A female crimp contacts

1,5 mm² AWG 16

2,5 mm² AWG 14

4 mm² AWG 12

6 mm² AWG 10

40A male crimp contacts

1,5 mm² AWG 16

2,5 mm² AWG 14

4 mm² AWG 12

6 mm² AWG 10

CXFA 1.5
CXFA 2.5
CXFA 4.0
CXFA 6.0

CXMA 1.5
CXMA 2.5
CXMA 4.0
CXMA 6.0

silver plated

- characteristics according to EN 61984:

40A 830V 8kV 3

40A 1000V 8kV 2

- cULus (UL for USA and Canada),

certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin UL 94V-0

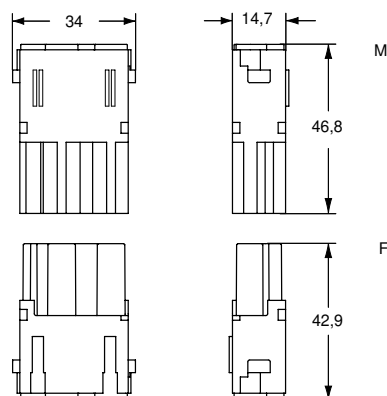
- mechanical life: ≥ 500 cycles

- contact resistance: $\leq 0,3 \text{ m}\Omega$

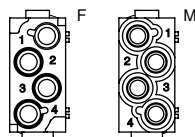
- for spare lock-in tab **CX CFMX** see SPARE SPARTS catalogue

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, CXF and CXM series) on pages 708 - 741

- for max. current load see the connector inserts derating diagram below; for more information see page 28

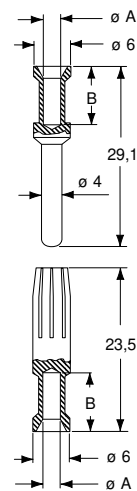
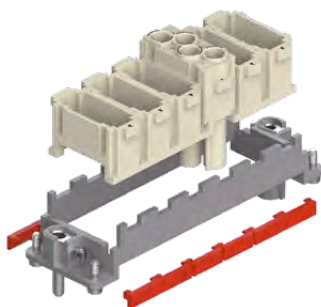


contacts side (front view)
side with reference arrow ▲



- 1 frame slot

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

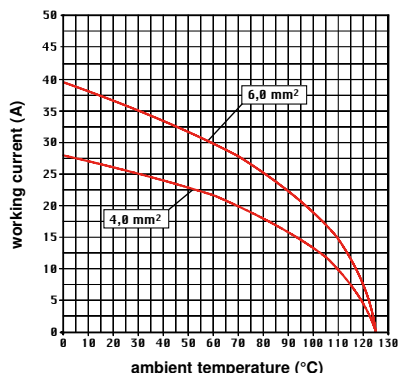


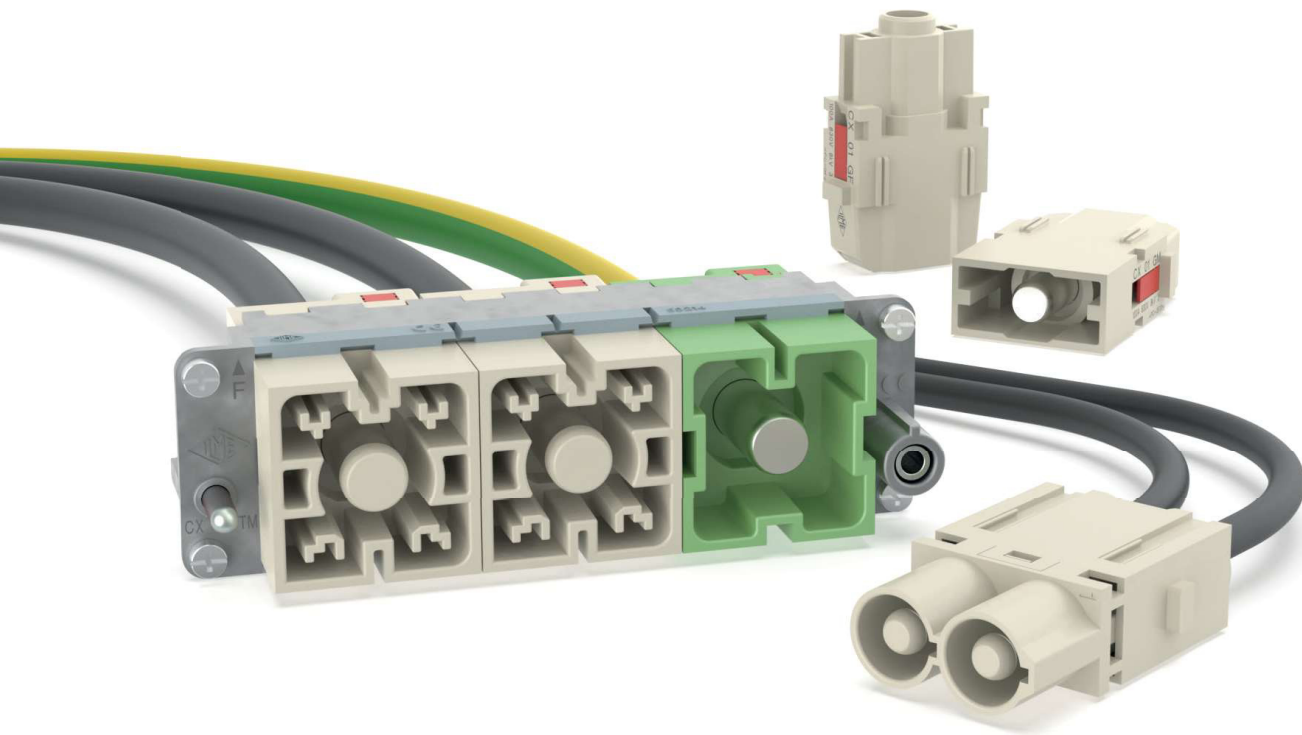
CXF and CXM contacts

conductor section (mm ²)	conductor slot ϕA (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

- male and female contacts finger proof
- their key characteristic lies in the fact that they guarantee maximum safety even in case of accidental contact with fingers (IP2X or IPXXB). Safety is guaranteed as standard on female contacts, but also on male contacts. This feature is important as it ensures full compliance with the recent safety standard EN 60204-1, concerning electric equipment fitted on machines and in particular with the requirements of Article 6.2.4 concerning protection against residual voltage. In the case of plugs or similar devices, the withdrawal of which results in the exposure of conductors (for example pins), the discharge time shall not exceed 1 s, otherwise such conductors shall be protected against direct contact to at least an IP2X or IPXXB.

CX 04 X, 4 poles connector inserts
Maximum current load derating diagram





PE modules for MIXO frames



MIXO CX 01 PE

These single-sized modular inserts (male and female) can be combined with all modules requiring the transfer of the PE line in mating connector parts only when mounted in the CX 02 /03 /04 /06 PDF /PDM plastic docking frame corresponding part.

The module has a fool-proof keying in order not to allow its installation and use in a metallic frame of MIXO series. In fact, this PE module is not deemed to provide equipotential bonding between the power PE contact and the metallic frame. Not compatible with CX 01 GPE.

- > "First-make, last-break" function versus any line contact in nearby.

The screw-type terminal can accept PE lines:

- > unprepared flexible (class 5) or rigid (class 1) copper conductors: from 2,5 mm² / AWG 14 to 16 mm² / AWG 6;
- > prepared (ferruled) flexible (class 5) copper conductors: from 1,5 mm² / AWG 16 to 16 mm² / AWG 6.

MIXO CX 01 GPE

The MIXO modular connector series can employ the 1-slot-sized PE module for series CG (100 A) crimp contacts, connecting protective earth lines with large conductor cross sectional areas ranging from 10 mm² / AWG 8 to 35 mm² / AWG 2.

This PE module is particularly suitable in combination with CX 01 GF /M (1-pole, 1-slot sized) and CX 02 GF /GM (2-pole, 2-slot sized) 100 A modules once keeping the same size for the PE wire and the power (phase/neutral) wires so that special multi-core cables with reduced PE size are no longer required.

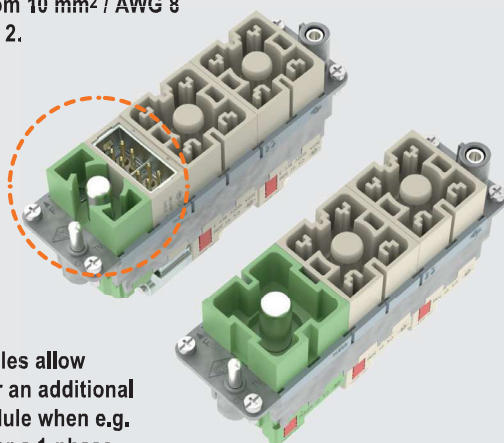
- > "First-make, last-break" function versus any line contact in nearby;
- > integrated PE springs for bonding to MIXO frames (both sides).



FOCUS

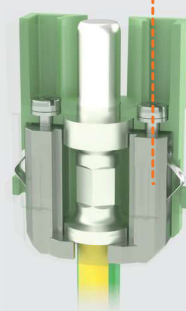
CX 01 GPE insert's features

- ▶ The **1-slot sized PE module** allows the connection of PE lines with large conductor cross sectional areas ranging from 10 mm² / AWG 8 to 35 mm² / AWG 2.

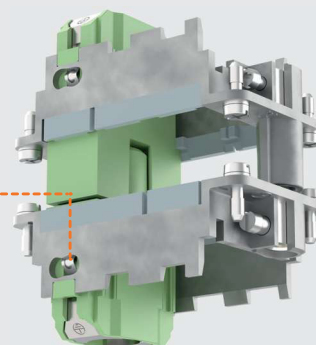


- ▶ CX 01 GPE modules allow **leaving space** for an additional single-sized module when e.g. 2× CX 01 YF /M for a 1-phase circuit are required in a 6-slots MIXO frame.

- ▶ **Integrated PE springs** for bonding to MIXO frames (both sides).

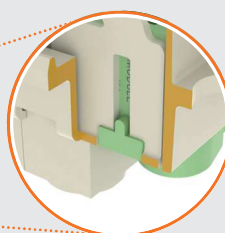
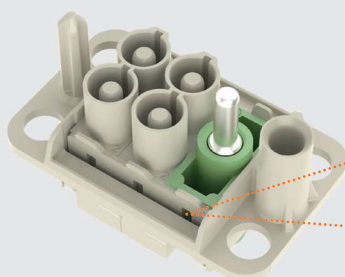


- ▶ **Metallic contact holders** to retain the PE crimped contact and ground to the MIXO frame.

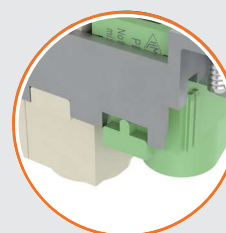


FOCUS

CX 01 PE fool-proof keying



▶ ALLOWED



▶ NOT ALLOWED!

- ▶ The CX 01 PE module has a fool-proof keying in order not to allow its installation and use in a metallic frame of MIXO series.

CX 01 GPE

size **1 module**
1 PE pole


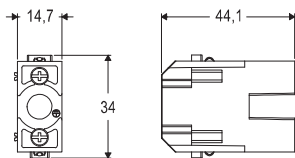

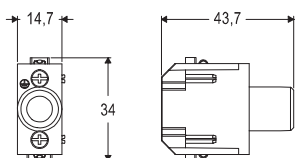



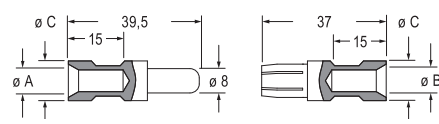
Crimp connection

EN 61984 rating	—
Rated voltage (UL / CSA)	—
Insulation resistance	—
Contact resistance	≤ 0,3 mΩ
Ambient temperature limit	-40 °C ... +125 °C
Mechanical life (cycles)	≥ 500

CE UK (pending: EAC)

(pending: CQC, DNV and BV)

(pending: cURus)

Item	Description	Part No.	Dimension	
	PE male insert for male contact Without contact (to be ordered separately)	CX 01 GPEM		
	PE female insert for female contact Without contact (to be ordered separately)	CX 01 GPEF		
	100 A crimp contacts section (mm²) section (AWG) 8-10 8-7 16 6-5 25 4-3 35 2	Male  CGMA 10 CGMA 16 CGMA 25 CGMA 35	Female  CGFA 10 CGFA 16 CGFA 25 CGFA 35	

Wiring information, CG contacts

conductor section (mm²)	conductor slot ø A (mm)	conductor slot ø B (mm)	conductor slot ø C (mm)	stripping length (mm)
8-10	4,3	4,3	13	15
16	5,5	5,5	13	15
25	7,0	7,0	13	15
35	7,9	8,2	12,5	15

Wire diameter: up to 11,5 mm.

It is recommended to use the crimping tools and removal tools homologated by ILME (please see page F.23)



Watch our clip

Materials

Insert	polycarbonate (PC)
UL 94 flame rating	V-0
Colour	green, RAL 6011
Contacts	copper alloy, silver ● plated

Accessories

Pages

MIXO Frames

Metal frames for modular units	C.94-95
Thermoplastic docking frames	C.98-101

Enclosures

Insulating MIXO holder	C.103
MIXO ONE	C.106-107
MIXO TWO	C.110-111

CX 01 PE

size **1 module**
1 PE pole


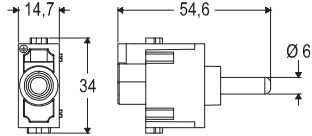

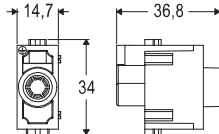
Screw connection

EN 61984 rating	—
Rated voltage (UL / CSA)	—
Insulation resistance	—
Contact resistance	≤ 0,3 mΩ
Ambient temperature limit	-40 °C ... +125 °C
Mechanical life (cycles)	≥ 500

CE UK (pending: EAC)

(pending: CQC, DNV and BV)

(pending: cURus)

Item	Description	Part No.	Dimension
	PE male inserts with male contacts Screw terminal connection	CX 01 PEM	
	PE female inserts with female contacts Screw terminal connection	CX 01 PEF	

Materials	
Insert	polycarbonate (PC)
UL 94 flame rating	V-0
Colour	green, RAL 6011
Contacts	built-in, copper alloy, silver ● plated

Wiring information	
Wire cross sectional area	2,5 mm² - 16 mm² (AWG 14-6)
- unprepared	
- prepared	1,5 mm² - 16 mm² (AWG 16-6)
Stripping length	14 mm
Terminal screw torque	2,5 Nm (22.2 lb.in)

Accessories	Pages
MIXO Frames	
Thermoplastic docking frames	C.98-101