

## MIXO modular units

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

CYFA 16  
CYFA 25  
CYFA 35  
CYFA 50  
CYFA 70

silver plated

200A male crimp contacts

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

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

- cUL<sup>®</sup> (UL for USA and Canada), CSA<sup>®</sup>, CE, DNV-GL<sup>®</sup>

BUREAU VERITAS<sup>®</sup> ETL 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

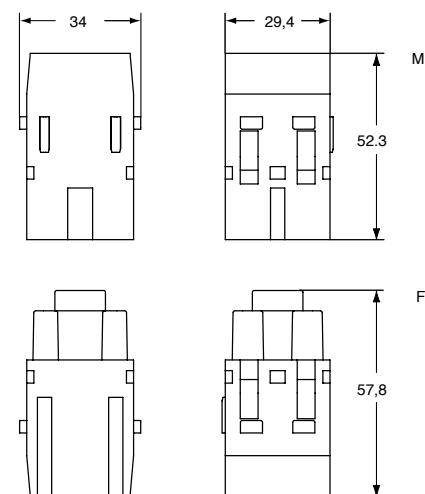
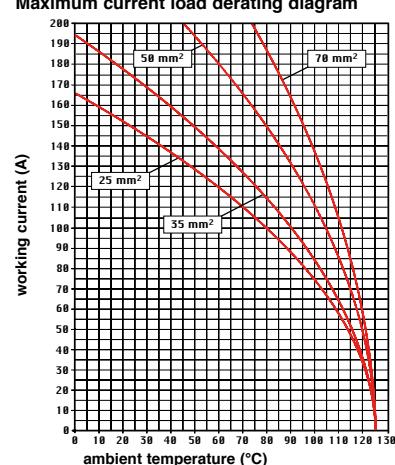
- mechanical life: ≥ 500 cycles

- 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

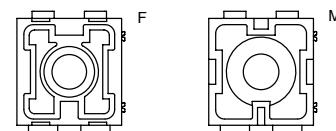
- for max. current load see the connector inserts derating diagram below; for more information see page 28

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

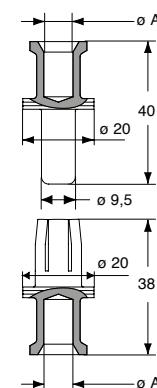


contacts side (front view)

side with reference arrow ▲



- 2 frame slots



**CYF and CYM contacts**

conductor section	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 <sup>2</sup>	AWG 6	one groove (back side)
25 mm <sup>2</sup>	AWG 4	with no grooves
35 mm <sup>2</sup>	AWG 2	one groove
50 mm <sup>2</sup>	AWG 1	two grooves
70 mm <sup>2</sup>	AWG 2/0	with no grooves

CYFA 16  
CYFA 25  
CYFA 35  
CYFA 50  
CYFA 70

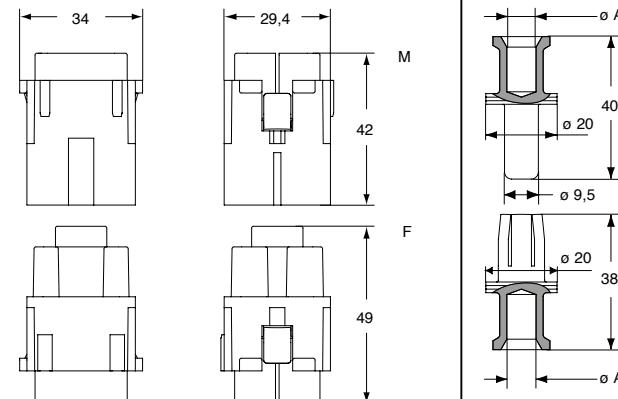
silver plated

200A male crimp contacts

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

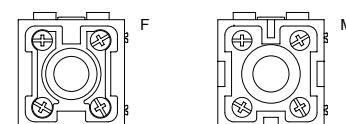
CYMA 16  
CYMA 25  
CYMA 35  
CYMA 50  
CYMA 70

- cUL<sup>®</sup>us (UL for USA and Canada), CE, DNV-GL
- BUREAU VERITAS 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	conductor slot	conductor stripping length (mm)
16 (mm <sup>2</sup> )	6,1	15
25	7,0	15
35	8,2	15
50	9,8	15
70	11,8	15

## MIXO modular units

### 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 page: 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	CX 01 GF	
male inserts for male contacts	CX 01 GM	
100A female crimp contacts		
8-10 mm <sup>2</sup> AWG 8-7	CGFA 10	
16 mm <sup>2</sup> AWG 6-5	CGFA 16	
25 mm <sup>2</sup> AWG 4-3	CGFA 25	
35 mm <sup>2</sup> AWG 2	CGFA 35	
100A male crimp contacts		
8-10 mm <sup>2</sup> AWG 8-7	CGMA 10	
16 mm <sup>2</sup> AWG 6-5	CGMA 16	
25 mm <sup>2</sup> AWG 4-3	CGMA 25	
35 mm <sup>2</sup> AWG 2	CGMA 35	
cable earthing adapter 16 mm <sup>2</sup> (AWG 6-5)	CGT 16	

## MIXO INSERTS

- 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:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

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

- mechanical life:  $\geq 500$  cycles

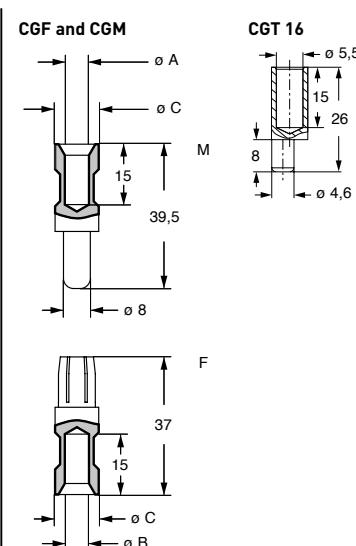
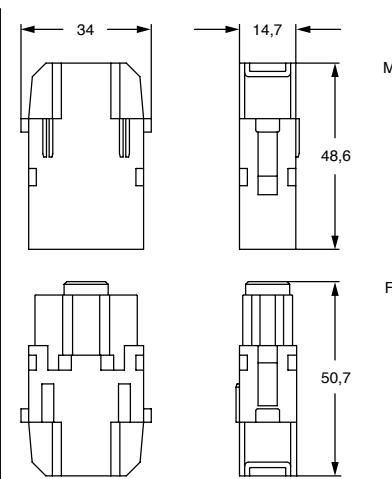
- contact resistance:  $\leq 0,3 \text{ m}\Omega$

- 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

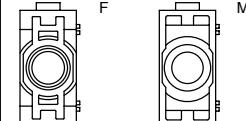
- contact removal only using a screwdriver

- 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

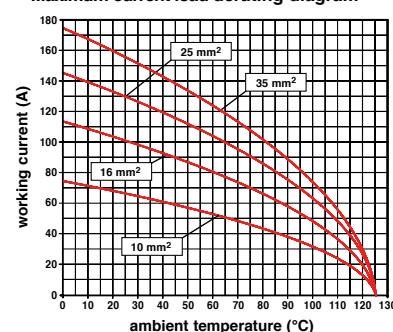
#### CGF and CGM contacts

conductor section (mm <sup>2</sup> )	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

#### 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 mm<sup>2</sup>) 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 01 G, 1 pole connector inserts Maximum current load derating diagram

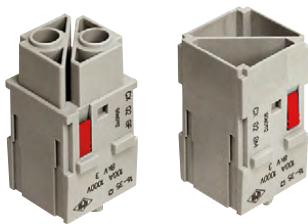


Watch  
our  
online  
tutorial

## 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:  
317modular units,  
crimp connections100A 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)  
male inserts for male contacts 1)

CX 02 GF  
CX 02 GM

100A female crimp contacts

8-10 mm <sup>2</sup>	AWG 8-7
16 mm <sup>2</sup>	AWG 6-5
25 mm <sup>2</sup>	AWG 4-3
35 mm <sup>2</sup>	AWG 2

100A male crimp contacts

8-10 mm <sup>2</sup>	AWG 8-7
16 mm <sup>2</sup>	AWG 6-5
25 mm <sup>2</sup>	AWG 4-3
35 mm <sup>2</sup>	AWG 2

cable earthing adapter 16 mm<sup>2</sup> (AWG 6-5)CGFA 10  
CGFA 16  
CGFA 25  
CGFA 35

silver plated

CGMA 10  
CGMA 16  
CGMA 25  
CGMA 35

CGT 16

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

- cUL<sup>®</sup> (UL for USA and Canada), CSA<sup>®</sup> cec DNV-GL

EAC certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 GΩ

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

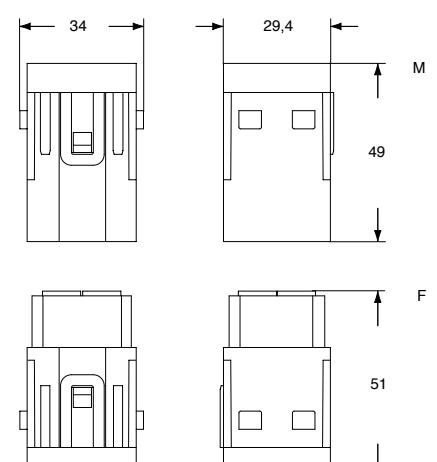
- made of self-extinguishing thermoplastic resin  
UL 94V-0

- mechanical life: ≥ 500 cycles

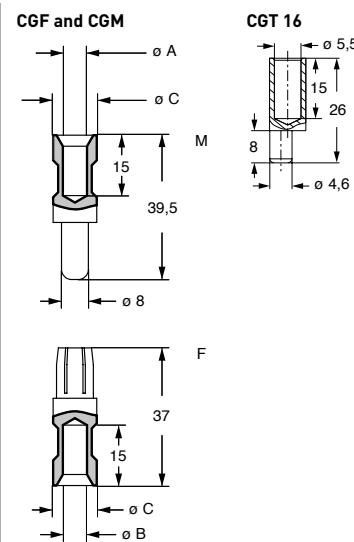
- contact resistance: ≤ 0,3 mΩ

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

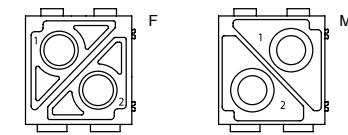
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28



contacts side (front view)



side with reference arrow ▲

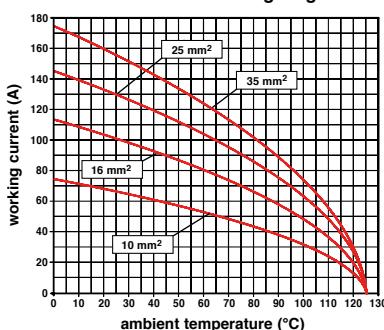


- 2 frame slots

conductor section (mm <sup>2</sup> )	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

## 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 mm<sup>2</sup>) 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

dimensions shown in mm are not binding and may be changed without notice

## MIXO modular units

### 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 page: 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
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without contacts (to be ordered separately)

female inserts for female contacts

CX 02 7F

male inserts for male contacts

CX 02 7M

#### 70A female crimp contacts

10 mm<sup>2</sup> AWG 8 - 7  
16 mm<sup>2</sup> AWG 6 - 5  
25 mm<sup>2</sup> AWG 4 - 3

CX7FA 10  
CX7FA 16  
CX7FA 25

silver plated

#### 70A male crimp contacts

10 mm<sup>2</sup> AWG 8 - 7  
16 mm<sup>2</sup> AWG 6 - 5  
25 mm<sup>2</sup> AWG 4 - 3

CX7MA 10  
CX7MA 16  
CX7MA 25

MIXO INSERTS

- characteristics according to EN 61984:

70A 1000V 8kV 3

70A 1600V 12kV 2

- cULus (UL for USA and Canada), CE, DNV-GL, Bureau VERITAS, EAC 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

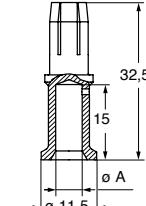
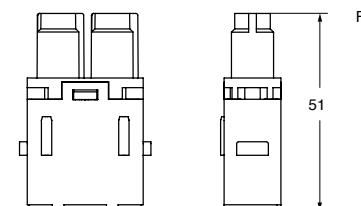
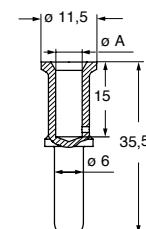
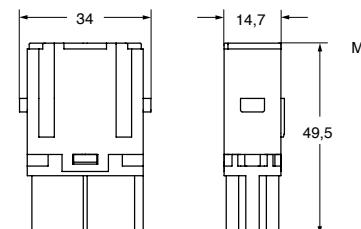
- mechanical life: ≥ 500 cycles

- contact resistance: ≤ 0,5 mΩ

- 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

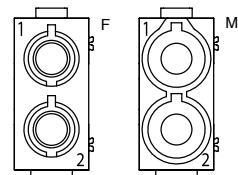
- C7ES removal tool

- 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 ▲



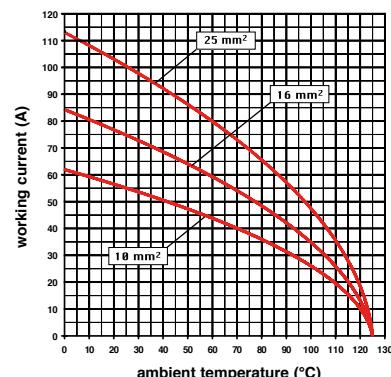
- 1 frame slot

#### CX7F and CX7M contacts

conductor section (mm <sup>2</sup> )	conductor slot ø A (mm)	conductor stripping length (mm)
10	4,3	15
16	5,5	15
25	7,0	15

#### CX 02 7, 2 poles connector inserts

##### Maximum current load derating diagram



dimensions shown in mm are not binding and may be changed without notice

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 02 4F  
CX 02 4M

#### 40A female crimp contacts

1,5 mm <sup>2</sup>	AWG 16	CXFA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXFA 2.5
4 mm <sup>2</sup>	AWG 12	CXFA 4.0
6 mm <sup>2</sup>	AWG 10	CXFA 6.0
10 mm <sup>2</sup>	AWG 8	CXFA 10

#### 40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16	CXMA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXMA 2.5
4 mm <sup>2</sup>	AWG 12	CXMA 4.0
6 mm <sup>2</sup>	AWG 10	CXMA 6.0
10 mm <sup>2</sup>	AWG 8	CXMA 10

#### 1) cable diameter up to 7,5 mm contact size up to 10 mm<sup>2</sup>

- characteristics according to EN 61984:

40A 1000V 8kV 3

- certified

- rated voltage according to UL/CSA: 600V

- 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:  $\geq 500$  cycles

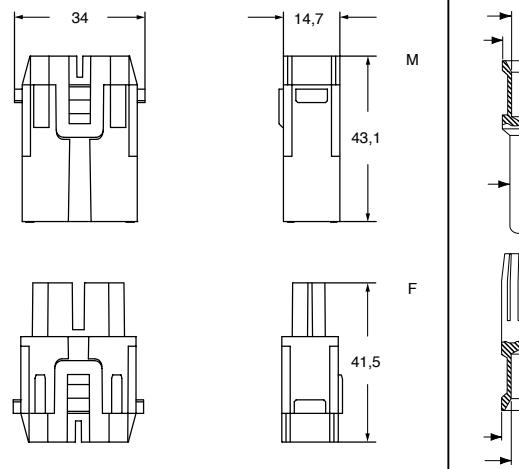
- contact resistance:  $\leq 0,3 \text{ m}\Omega$

- can be mated with CX 02 4A/4B modules

- it is recommended to crimp the contacts

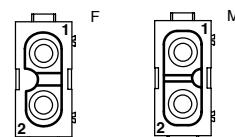
(1,5 - 10 mm<sup>2</sup>), with crimping tools homologated by  
ILME (please see the crimping tool section 40A contacts,  
CXF and CXM series) on pages 708 - 741

- 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 ▲

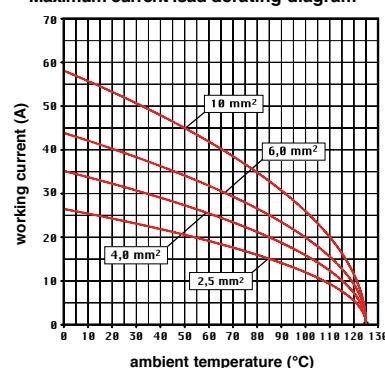


- 1 frame slot

#### CXF and CXM contacts

conductor section (mm <sup>2</sup> )	conductor slot o 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 4, 2 poles connector inserts Maximum current load derating diagram



dimensions shown in mm are not binding and may be changed without notice

## MIXO modular units

### 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 page: 316 - 317

MIXO ONE enclosures page: 369

modular units,  
screw terminal connection  
2,5 - 8 mm<sup>2</sup>



modular units,  
screw terminal connection  
6 - 10 mm<sup>2</sup>



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 mm<sup>2</sup> or extra flexible cables with sections from 2,5 to 6 mm<sup>2</sup>
- do not twist the cables
- fully insert the braids in the rear section of the contact

conductor section (mm <sup>2</sup> )	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

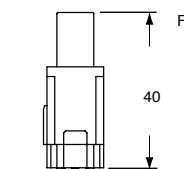
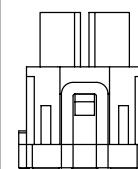
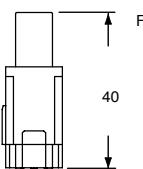
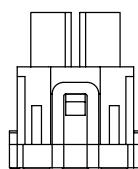
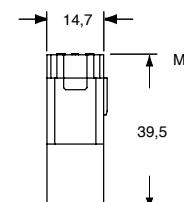
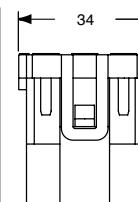
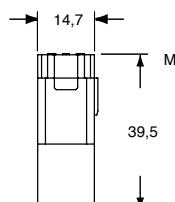
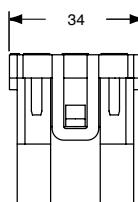
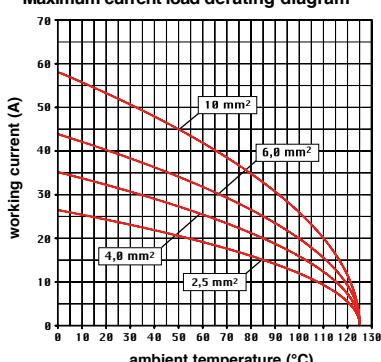
- insert a 2 mm hexagonal key in the front section of the contact and tighten by keeping the cable held down in position
- a 2 mm hexagonal key can be supplied on request, reference **CX AS**



- characteristics according to EN 61984:  
**40A 1000V 8kV 3**  
**40A 1600V 12kV 2**

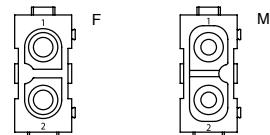
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,5 mΩ
- for max. current load see the connector inserts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

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



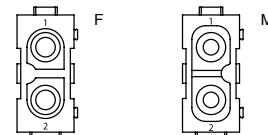
contacts side (front view)

side with reference arrow ▲



contacts side (front view)

side with reference arrow ▲



- inserts for Ø 4mm cables, section: 2,5-8 mm<sup>2</sup> - AWG 14-8
- 1 frame slot

- inserts for Ø 4,8 mm cables, section: 6-10 mm<sup>2</sup> - AWG 10-8
- 1 frame slot

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 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10

40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10

CXFA 1.5  
CXFA 2.5  
CXFA 4.0  
CXFA 6.0

silver plated

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  
- cULus (UL for USA and Canada), CE, DNV-GL  
BUREAU VERITAS EAC certified

- rated voltage according to UL/CSA: 600V

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

- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

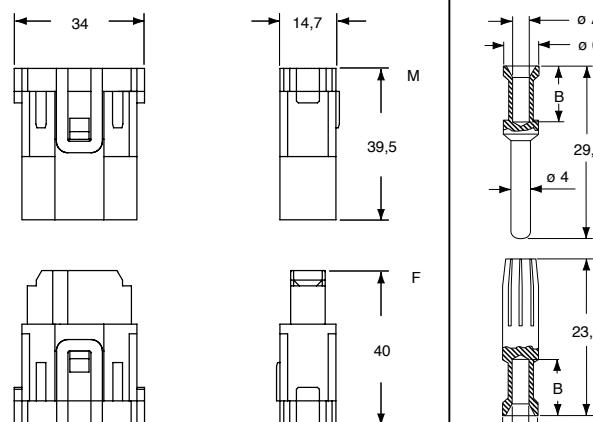
- made of self-extinguishing thermoplastic resin  
UL 94V-0

- mechanical life:  $\geq 500$  cycles

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

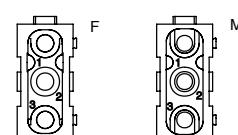
- it is recommended to crimp the contacts with  
crimping tools homologated by ILME (please see  
the crimping tool section 40A contacts, CXF and CXM  
series) on pages 708 - 741

- 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 ▲

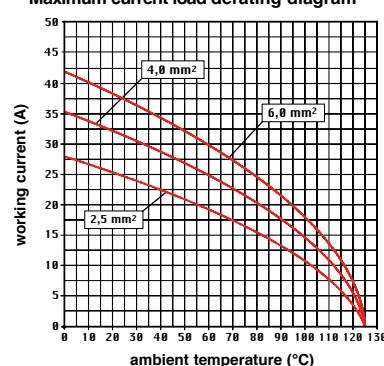


- 1 frame slot

#### CXF and CXM contacts

conductor section (mm <sup>2</sup> )	conductor slot o 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



dimensions shown in mm are not binding and may be changed without notice

## MIXO modular units

### 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 page: 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 mm <sup>2</sup>	AWG 16	CXFA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXFA 2.5
4 mm <sup>2</sup>	AWG 12	CXFA 4.0
6 mm <sup>2</sup>	AWG 10	CXFA 6.0
10 mm <sup>2</sup>	AWG 8	CXFA 10

silver plated

#### 40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16	CXMA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXMA 2.5
4 mm <sup>2</sup>	AWG 12	CXMA 4.0
6 mm <sup>2</sup>	AWG 10	CXMA 6.0
10 mm <sup>2</sup>	AWG 8	CXMA 10

#### 1) cable diameter up to 7,5 mm contact size up to 10 mm<sup>2</sup>

- characteristics according to EN 61984:

**40A 500V 6kV 3**

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

BUREAU VERITAS EAC 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

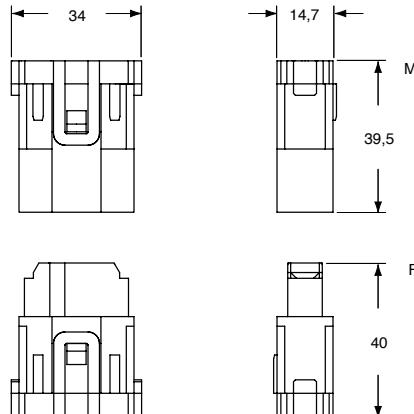
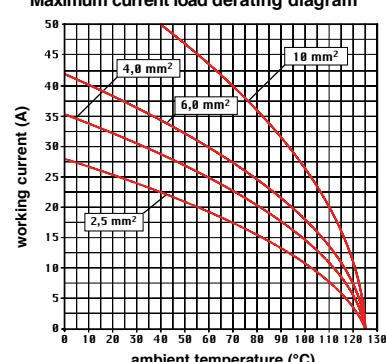
- contact resistance: ≤ 0,3 mΩ

- it is recommended to crimp the contacts

(1,5 - 10 mm<sup>2</sup>), with crimping tools homologated  
by ILME (please see the crimping tool section 40A  
contacts, CXF and CXM series) on pages 708 - 741

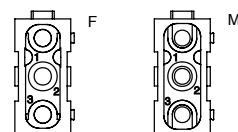
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28

#### 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 <sup>2</sup> )	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

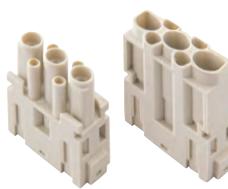
## CX 3/4 XDF/XDM 3 poles (40A - 830V) + 4 poles (10A - 830V)

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 316 - 317  
MIXO ONE enclosures 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  
male inserts for male contacts

CX 3/4 XDF  
CX 3/4 XDM

## 40A female crimp contacts

1,5 mm <sup>2</sup>	AWG 16	CXFA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXFA 2.5
4 mm <sup>2</sup>	AWG 12	CXFA 4.0
6 mm <sup>2</sup>	AWG 10	CXFA 6.0

## 40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16	CXMA 1.5
2,5 mm <sup>2</sup>	AWG 14	CXMA 2.5
4 mm <sup>2</sup>	AWG 12	CXMA 4.0
6 mm <sup>2</sup>	AWG 10	CXMA 6.0

## 10A female crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1	CDFD 0.3
0,5 mm <sup>2</sup>	AWG 20	identification No. 2	CDFD 0.5
0,75 mm <sup>2</sup>	AWG 18	identification No. ②	CDFD 0.7
1 mm <sup>2</sup>	AWG 18	identification No. 3	CDFD 1.0
1,5 mm <sup>2</sup>	AWG 16	identification No. 4	CDFD 1.5
2,5 mm <sup>2</sup>	AWG 14	identification No. 5	CDFD 2.5

## 10A male crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1	CDMD 0.3
0,5 mm <sup>2</sup>	AWG 20	identification No. 2	CDMD 0.5
0,75 mm <sup>2</sup>	AWG 18	identification No. ②	CDMD 0.7
1 mm <sup>2</sup>	AWG 18	identification No. 3	CDMD 1.0
1,5 mm <sup>2</sup>	AWG 16	identification No. 4	CDMD 1.5
2,5 mm <sup>2</sup>	AWG 14	identification No. 5	CDMD 2.5

- characteristics according to EN 61984:

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

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

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

BUREAU VERITAS EAC certified

- rated voltage according to UL/CSA: 600V

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

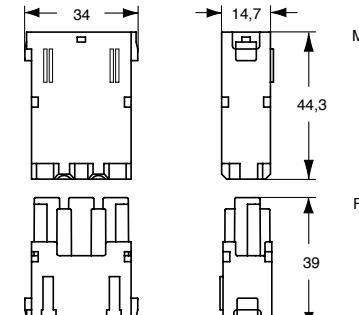
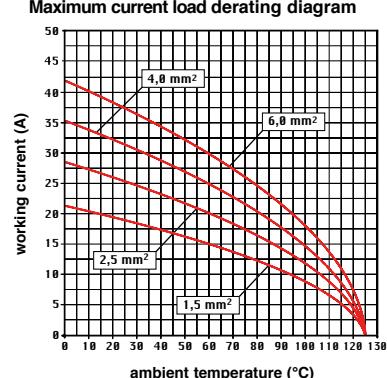
- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

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

- mechanical life:  $\geq 500$  cycles

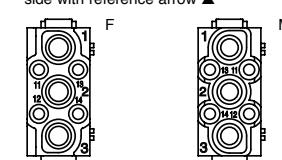
- contact resistance:  $\leq 0,3 \text{ m}\Omega$  (3 poles),  $\leq 3 \text{ m}\Omega$  (4 poles)

- 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

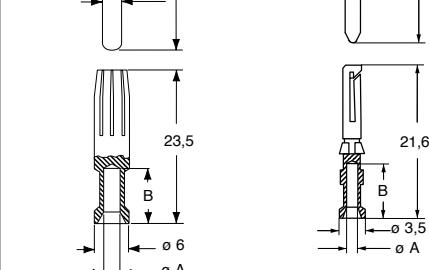
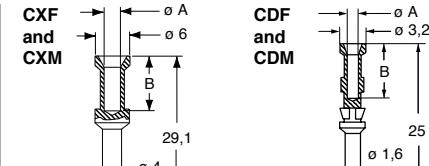
contacts side (front view)

side with reference arrow ▲



- 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 <sup>2</sup> )	conductor slot (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

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

## MIXO modular units

### 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 page: 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

CXFA 1.5  
CXFA 2.5  
CXFA 4.0  
CXFA 6.0

silver plated

40A female crimp contacts

1,5 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> AWG 10

40A male crimp contacts

1,5 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> AWG 10

CXMA 1.5  
CXMA 2.5  
CXMA 4.0  
CXMA 6.0

- characteristics according to EN 61984:

40A 830V 8kV 3

40A 1000V 8kV 2

- c<sup>DL</sup>us (UL for USA and Canada), c<sup>SA</sup> (CEC) DNV-GL

BUREAU VERITAS ERL 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

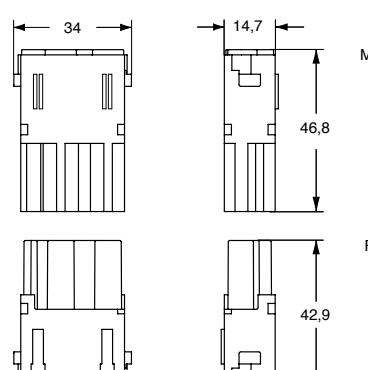
- mechanical life: ≥ 500 cycles

- contact resistance: ≤ 0,3 mΩ

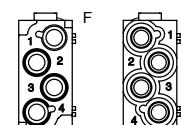
- for spare lock-in tab CX CFMX see SPARE SPARTS catalogue

- 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

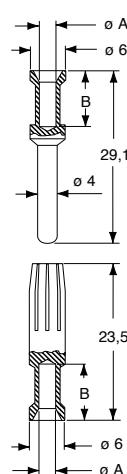
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28



contacts side (front view)  
side with reference arrow ▲



- 1 frame slot

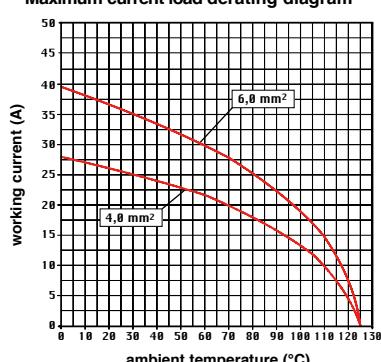


CXF and CXM contacts

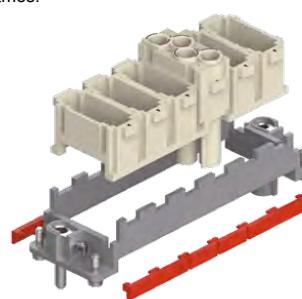
conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

- 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



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



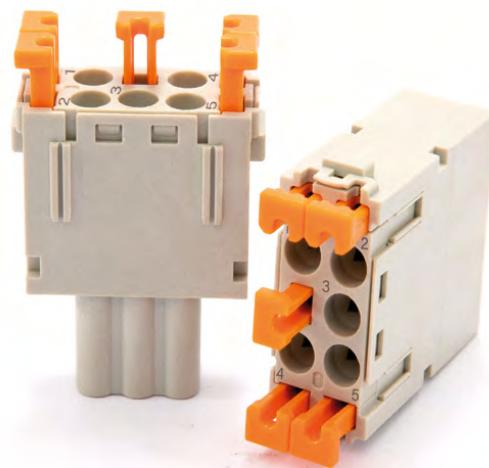
## CX 05 SHF/SHM

### MIXO - SQUICH®

**SQUICH®** technology has now been applied to the ILME MIXO series of modular connectors. Main aim is to make wiring an installation easier and safer on every possible connector.

On this purpose, the new MIXO SQUICH® 5 poles is the improved version of the CX 05 SF/SM spring clamp module:

- **consistently reduced wiring time**, as the actuator buttons are supplied lifted, in "open terminal" position, so that the stripped wires can be directly inserted;
- **operator skill independence**: thanks to the SQUICH® proprietary technology a simple pressure on the top of the actuator button triggers the locking of the conductor in the terminal, avoiding the need of a specific screwdriver and the relevant skill in its correct choice and application;
- **great resistance to strong vibrations** inherent to self-compensating spring-clamp technology;
- **no special wire preparation** (only stripping at the correct length);
- it allows the **use of both rigid and flexible** copper conductors, with a range of cross-sectional area between 0,14 mm<sup>2</sup> and 2,5 mm<sup>2</sup> (26 AWG to 14 AWG);
- for conductors prepared with **crimped ferrules**, the maximum cross-sectional area is 1,5 mm<sup>2</sup>;
- possibility to insert the **test probe** of a measurement instrument in the dedicated cavity on the actuator button (proprietary design);
- **silver plated** contacts;
- simple re-opening of a terminal (if needed) using a 0,5 x 3 mm flat blade screwdriver on the actuator button dedicated side window (on terminal #3 use the same screwdriver under any of the two lateral projections of the actuator button head; after removing the wire from the relevant terminal #1 or #4).



MIXO INSERTS



Watch  
our  
SQUICH®  
video

## MIXO modular units

### CX 05 SHF/SHM 5 poles + 16A - 400V SQUICH®

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

**MIXO ONE enclosures** page: 369

Suitable for every conductor type  
(prepared with ferrule, unprepared and solid)  
up to cross-sectional area 2,5 mm<sup>2</sup>

#### modular units, SQUICH®-spring terminal connection



description

part No.

spring terminals with actuator button  
female inserts with female contacts  
male inserts with male contacts

**CX 05 SHF**  
**CX 05 SHM**

- characteristics according to EN 61984:

**16A 400V 6kV 3**

**16A 500V 6kV 2**

- cURus, CSA, CQC, DNV-GL, BV, EAC pending

- rated voltage according to UL/CSA: 600V

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

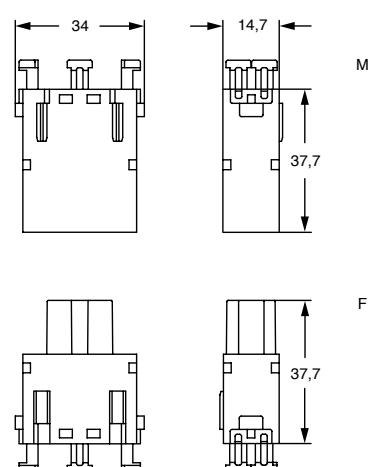
- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

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

- mechanical life:  $\geq 500$  cycles

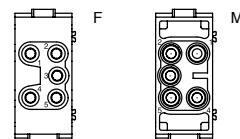
- contact resistance:  $\leq 3 \text{ m}\Omega$

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



contacts side (front view)

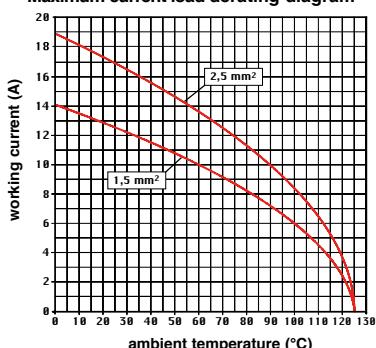
rear view, side with reference arrow ▲



- 1 frame slot

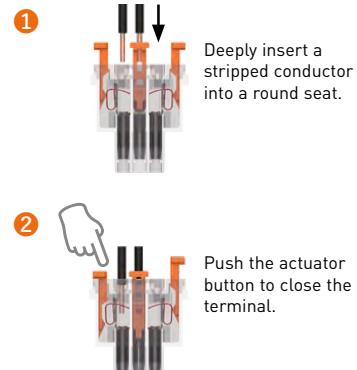
- inserts for cables with the following cross-sectional area: 0,14 - 2,5 mm<sup>2</sup> - AWG 26 - 14
- conductors stripping length: 9...11 mm

#### CX 05 SH, 5 power poles connector inserts Maximum current load derating diagram

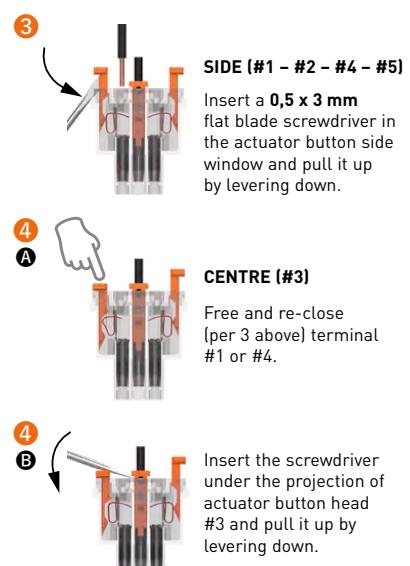


#### MIXO CX 05 SHF/M SQUICH®-spring connection technology

##### WIRING



##### RE-OPENING



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

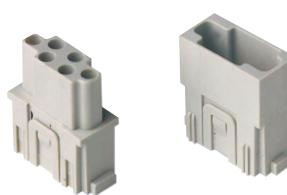
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units page: 316 - 317

MIXO ONE enclosures 369

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series) on pages 708 - 741

### modular units, crimp connections



16A crimp contacts  
standard or for advanced opening  
silver and gold plated



STANDARD

ADVANCED OPENING

description

part No.

part No

without contacts (to be ordered separately)

female inserts for female contacts

male inserts for male contacts

CX 06 CF  
CX 06 CM

#### 16A female crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCFA 0.3  
CCFA 0.5  
CCFA 0.7  
CCFA 1.0  
CCFA 1.5  
CCFA 2.5  
CCFA 3.0  
CCFA 4.0

CCFD 0.3  
CCFD 0.5  
CCFD 0.7  
CCFD 1.0  
CCFD 1.5  
CCFD 2.5  
CCFD 3.0  
CCFD 4.0

silver plated

gold plated+

#### 16A male crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCMA 0.3  
CCMA 0.5  
CCMA 0.7  
CCMA 1.0  
CCMA 1.5  
CCMA 2.5  
CCMA 3.0  
CCMA 4.0

CCMD 0.3  
CCMD 0.5  
CCMD 0.7  
CCMD 1.0  
CCMD 1.5  
CCMD 2.5  
CCMD 3.0  
CCMD 4.0

#### 16A male crimp contacts for advanced opening

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves

CC 0.5 AN  
CC 0.7 AN  
CC 1.0 AN  
CC 1.5 AN  
CC 2.5 AN

+ for basic or high thickness  
gold plating, please refer  
to page 675

- characteristics according to EN 61984:

**16A 500V 6kV 3**

**16A 400/690V 6kV 2**

- certified by

- rated voltage according to UL/CSA: 600V

- 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

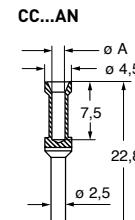
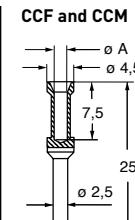
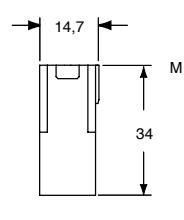
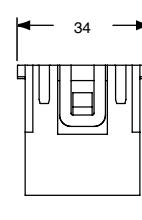
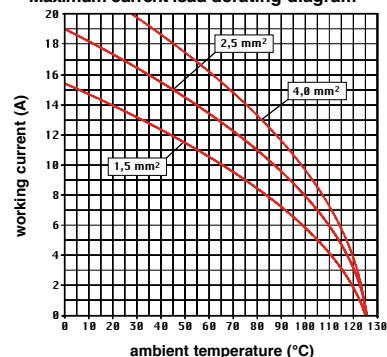
- mechanical life:  $\geq 500$  cycles

- contact resistance:  $\leq 1 \text{ m}\Omega$

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

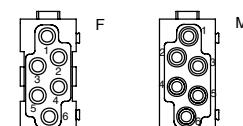
#### CX 06 C, 6 poles connector inserts

#### Maximum current load derating diagram



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

#### CCF, CCM and CC...AN contacts

conductor section (mm <sup>2</sup> )	conductor slot ø A (mm)	conductor stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

dimensions shown in mm are not binding and may be changed without notice

## MIXO modular units

### CX 06P CF/CM 6 poles protected 16A - 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

- we recommend the use of CRF / CRM code pins together with relevant MIXO frame

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series) on pages 708 - 741

#### modular units, crimp connections



16A crimp contacts  
standard or for advanced opening  
silver and gold plated



STANDARD



ADVANCED OPENING

#### RATING 830V

description	part No.	part No.
without contacts (to be ordered separately)		
female inserts for female contacts	CX 06P CF	
male inserts for male contacts	CX 06P CM	
16A female contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	one groove	CCFA 0.3
0,5 mm <sup>2</sup> AWG 20	with no grooves	CCFA 0.5
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CCFA 0.7
1 mm <sup>2</sup> AWG 18	one groove	CCFA 1.0
1,5 mm <sup>2</sup> AWG 16	two grooves	CCFA 1.5
2,5 mm <sup>2</sup> AWG 14	three grooves	CCFA 2.5
3 mm <sup>2</sup> AWG 12	one wide groove	CCFA 3.0
4 mm <sup>2</sup> AWG 12	with no grooves	CCFA 4.0
16A male contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	one groove	CCMA 0.3
0,5 mm <sup>2</sup> AWG 20	with no grooves	CCMA 0.5
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CCMA 0.7
1 mm <sup>2</sup> AWG 18	one groove	CCMA 1.0
1,5 mm <sup>2</sup> AWG 16	two grooves	CCMA 1.5
2,5 mm <sup>2</sup> AWG 14	three grooves	CCMA 2.5
3 mm <sup>2</sup> AWG 12	one wide groove	CCMA 3.0
4 mm <sup>2</sup> AWG 12	with no grooves	CCMA 4.0
16A male crimp contacts for advanced opening		
0,5 mm <sup>2</sup> AWG 20	with no grooves	CC 0.5 AN
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CC 0.7 AN
1 mm <sup>2</sup> AWG 18	one groove	CC 1.0 AN
1,5 mm <sup>2</sup> AWG 16	two grooves	CC 1.5 AN
2,5 mm <sup>2</sup> AWG 14	three grooves	CC 2.5 AN

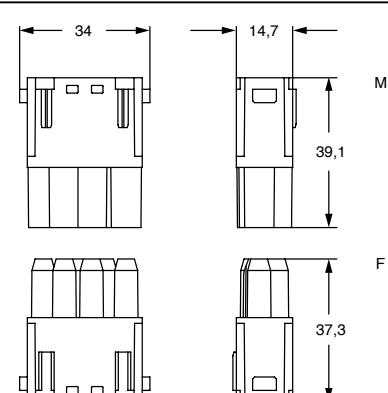
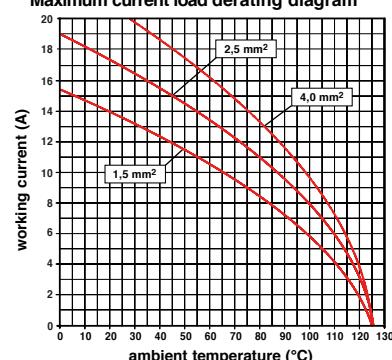
+ for basic or high thickness gold plating, please refer to page 675

silver plated

gold plated+

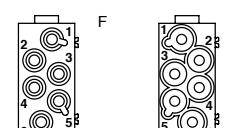
- characteristics according to EN 61984:
- 16A 830V 8kV 3**
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28

#### CX 06P C, 6 poles connector inserts Maximum current load derating diagram



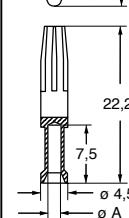
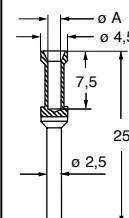
contacts side (front view)

side with reference arrow ▲



- 1 frame slot

#### CCF and CCM



#### CC...AN contacts

conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

## MIXO modular units

### CX 08 CF/CM 8 poles 16A - 400V



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.

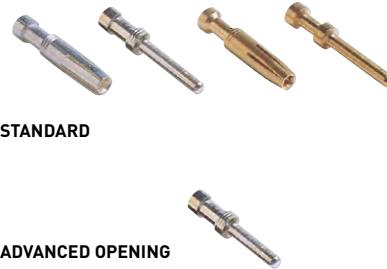
frames for modular units	page: 316 - 317
MIXO ONE enclosures	369

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series) on pages 708 - 741

#### modular units, crimp connections



16A crimp contacts  
standard or for advanced opening  
silver and gold plated



part No

description part No.

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

CX 08 CF  
CX 08 CM

#### 16A female crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCFA 0.3  
CCFA 0.5  
CCFA 0.7  
CCFA 1.0  
CCFA 1.5  
CCFA 2.5  
CCFA 3.0  
CCFA 4.0

CCFD 0.3  
CCFD 0.5  
CCFD 0.7  
CCFD 1.0  
CCFD 1.5  
CCFD 2.5  
CCFD 3.0  
CCFD 4.0

silver plated

gold plated+

#### 16A male crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCMA 0.3  
CCMA 0.5  
CCMA 0.7  
CCMA 1.0  
CCMA 1.5  
CCMA 2.5  
CCMA 3.0  
CCMA 4.0

CCMD 0.3  
CCMD 0.5  
CCMD 0.7  
CCMD 1.0  
CCMD 1.5  
CCMD 2.5  
CCMD 3.0  
CCMD 4.0

#### 16A male crimp contacts for advanced opening

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves

CC 0.5 AN  
CC 0.7 AN  
CC 1.0 AN  
CC 1.5 AN  
CC 2.5 AN

+ for basic or high thickness  
gold plating, please refer  
to page 675

- characteristics according to EN 61984:

**16A 400V 6kV 3**  
**16A 400/690V 6kV 2**  
- certified

- rated voltage according to UL/CSA: 600V

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

- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

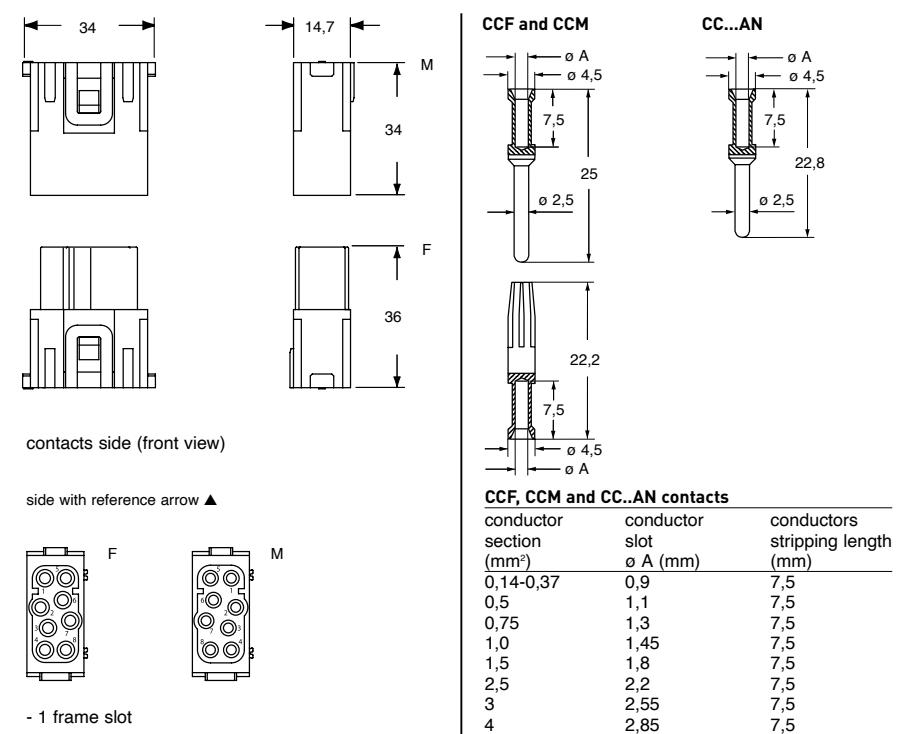
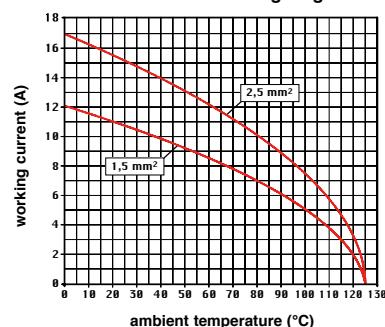
- made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life:  $\geq 500$  cycles

- contact resistance:  $\leq 1 \text{ m}\Omega$

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

#### CX 08 C, 8 poles connector inserts Maximum current load derating diagram



dimensions shown in mm are not binding and may be changed without notice

## MIXO modular units

### CX 20 CF/CM 20 poles 16A - 500V

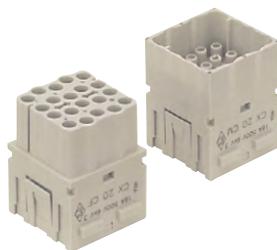
The modular inserts must be installed in suitable frames, which are then mounted in traditional enclosures or in COB panel supports.

frames for modular units

page:  
316 - 317

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series) on pages 708 - 741

#### modular units, crimp connections



16A crimp contacts  
standard or for advanced opening  
silver and gold plated



STANDARD



ADVANCED OPENING

description	part No.	part No.
without contacts (to be ordered separately)		
female inserts for female contacts 1)	CX 20 CF	
male inserts for male contacts 1)	CX 20 CM	
16A female crimp contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	one groove	CCFA 0.3
0,5 mm <sup>2</sup> AWG 20	with no grooves	CCFA 0.5
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CCFA 0.7
1 mm <sup>2</sup> AWG 18	one groove	CCFA 1.0
1,5 mm <sup>2</sup> AWG 16	two grooves	CCFA 1.5
2,5 mm <sup>2</sup> AWG 14	three grooves	CCFA 2.5
3 mm <sup>2</sup> AWG 12	one wide groove	CCFA 3.0
4 mm <sup>2</sup> AWG 12	with no grooves	CCFA 4.0
16A male crimp contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	one groove	CCMA 0.3
0,5 mm <sup>2</sup> AWG 20	with no grooves	CCMA 0.5
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CCMA 0.7
1 mm <sup>2</sup> AWG 18	one groove	CCMA 1.0
1,5 mm <sup>2</sup> AWG 16	two grooves	CCMA 1.5
2,5 mm <sup>2</sup> AWG 14	three grooves	CCMA 2.5
3 mm <sup>2</sup> AWG 12	one wide groove	CCMA 3.0
4 mm <sup>2</sup> AWG 12	with no grooves	CCMA 4.0
16A male crimp contacts for advanced opening		
0,5 mm <sup>2</sup> AWG 20	with no grooves	CC 0.5 AN
0,75 mm <sup>2</sup> AWG 18	one groove (back side)	CC 0.7 AN
1 mm <sup>2</sup> AWG 18	one groove	CC 1.0 AN
1,5 mm <sup>2</sup> AWG 16	two grooves	CC 1.5 AN
2,5 mm <sup>2</sup> AWG 14	three grooves	CC 2.5 AN

+ for basic or high thickness gold plating, please refer to page 675

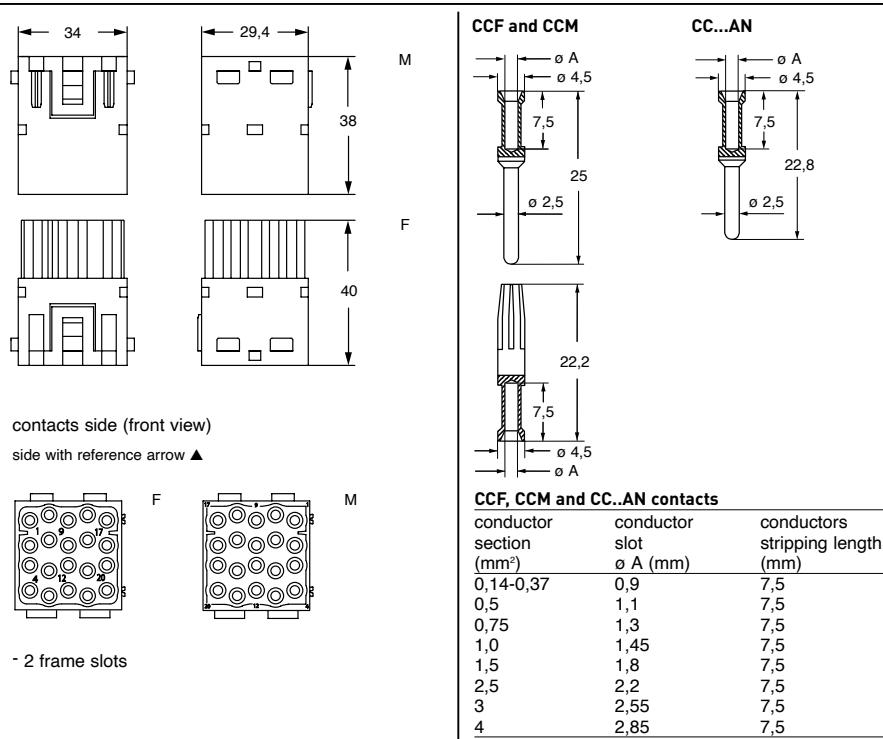
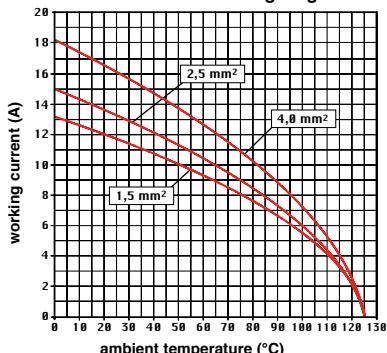
silver plated

gold plated+

- 1) on request, version with 3 fastened CX 20 CF/CM inserts with poles numbered from 1 – 60 references: CX 60 CF, CX 60 CM
- characteristics according to EN 61984:
- 16A 500V 6kV 3**
- 16A 830V 8kV 2**
- cULus (UL for USA and Canada),
- BUREAU VERITAS certified
- rated voltage according to UL/CSA: 600V
- 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:  $\geq 500$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28

#### CX 20 C, 20 poles connector inserts

##### Maximum current load derating diagram



**HT 2 poles single module 16A - 2500V**

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\* 316 - 317

MIXO ONE enclosures 369

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

1) supplied with heat shrink insulating tubes for the rear of the contacts

**high voltage modular units,  
crimp connections**

**16A crimp contacts  
silver and gold plated**


description

part No.

part No

without contacts (to be ordered separately)

high voltage female inserts for female contacts

**CX 02 CHF**

high voltage male inserts for male contacts

**CX 02 CHM**

contact holder removal tool

**CH1ES**

16A female crimp contacts

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCFA 0,5	CCFD 0,5
CCFA 0,7	CCFD 0,7
CCFA 1,0	CCFD 1,0
CCFA 1,5	CCFD 1,5
CCFA 2,5	CCFD 2,5
CCFA 3,0	CCFD 3,0
CCFA 4,0	CCFD 4,0

gold plated+

16A male crimp contacts

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCMA 0,5	CCMD 0,5
CCMA 0,7	CCMD 0,7
CCMA 1,0	CCMD 1,0
CCMA 1,5	CCMD 1,5
CCMA 2,5	CCMD 2,5
CCMA 3,0	CCMD 3,0
CCMA 4,0	CCMD 4,0

gold plated+

- characteristics according to EN 61984 2):

**16A 2500V 15kV 3**

<sup>2)</sup> used for guidance as applicable

- CURus, CSA, CQC, DNV-GL, BV, EAC pending

- 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

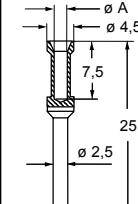
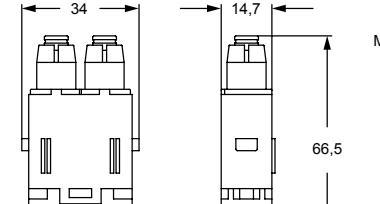
- mechanical life:  $\geq 500$  cycles

- contact resistance:  $\leq 1 \text{ m}\Omega$

- It is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF and CCM series) on pages 708 - 741

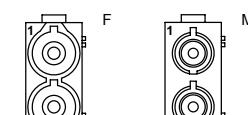
- contact holder removal tool: CH1ES

CH1ES



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

**CCF and CCM contacts**

conductor section (mm <sup>2</sup> )	conductor slot ø A (mm)	conductors stripping length (mm)
0,5	1,1	9,5
0,75	1,3	9,5
1,0	1,45	9,5
1,5	1,8	9,5
2,5	2,2	9,5
3	2,55	9,5
4	2,85	9,5

+ for basic or high thickness gold plating, please refer to page 675

Watch our online tutorial

## MIXO modular units

### HT 2 poles 16A - 2900/5000V

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:  
316

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

1) supplied with heat shrink insulating tubes for the rear of the contacts

high voltage modular units,  
crimp connections  
contact holder removal tool



16A crimp contacts  
silver and gold plated



description

part No.

part No.

without contacts (to be ordered separately)

high voltage female inserts for female contacts

CX 02 HF

high voltage male inserts for male contacts

CX 02 HM

contact holder removal tool

CHES

16A female crimp contacts

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCFA 0.5	CCFD 0.5
CCFA 0.7	CCFD 0.7
CCFA 1.0	CCFD 1.0
CCFA 1.5	CCFD 1.5
CCFA 2.5	CCFD 2.5
CCFA 3.0	CCFD 3.0
CCFA 4.0	CCFD 4.0

silver plated  
gold plated+

16A male crimp contacts

0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

CCMA 0.5	CCMD 0.5
CCMA 0.7	CCMD 0.7
CCMA 1.0	CCMD 1.0
CCMA 1.5	CCMD 1.5
CCMA 2.5	CCMD 2.5
CCMA 3.0	CCMD 3.0
CCMA 4.0	CCMD 4.0

silver plated  
gold plated+

- characteristics according to EN 61984 2):

**16A 2900/5000V 15kV 3**

2) used for guidance as applicable

- cURus, CSA, CQC, DNV-GL, BV, EAC pending

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

- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$

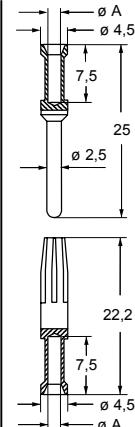
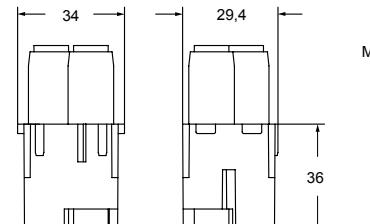
- made of self-extinguishing thermoplastic resin  
UL 94V-0

- mechanical life:  $\geq 500$  cycles

- contact resistance:  $\leq 1 \text{ m}\Omega$

- It is recommended to crimp the contacts with  
crimping tools homologated by ILME (please  
see the crimping tool section 16A contacts, CCF  
and CCM series) on pages 708 - 741

- contact holder removal tool: CHES

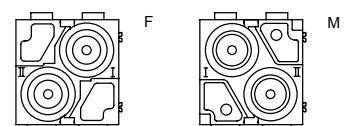


CHES



contacts side (front view)

side with reference arrow ▲



- 2 frame slots

#### CCF and CCM contacts

conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors stripping length (mm)
0,14-0,37	0,9	9,5
0,5	1,1	9,5
0,75	1,3	9,5
1,0	1,45	9,5
1,5	1,8	9,5
2,5	2,2	9,5
3	2,55	9,5
4	2,85	9,5

+ for basic or high thickness gold plating,  
please refer to page 675

## CX 12 DF/DM 12 poles 10A - 250V

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 connections10A crimp contacts,  
silver and gold plated

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

## RATING 250V

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

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

CX 12 DF  
CX 12 DM

10A female crimp contacts  
0,14-0,37 mm<sup>2</sup> AWG 26-22 identification No. 1  
0,5 mm<sup>2</sup> AWG 20 identification No. 2  
0,75 mm<sup>2</sup> AWG 18 identification No. ②  
1 mm<sup>2</sup> AWG 18 identification No. 3  
1,5 mm<sup>2</sup> AWG 16 identification No. 4  
2,5 mm<sup>2</sup> AWG 14 identification No. 5

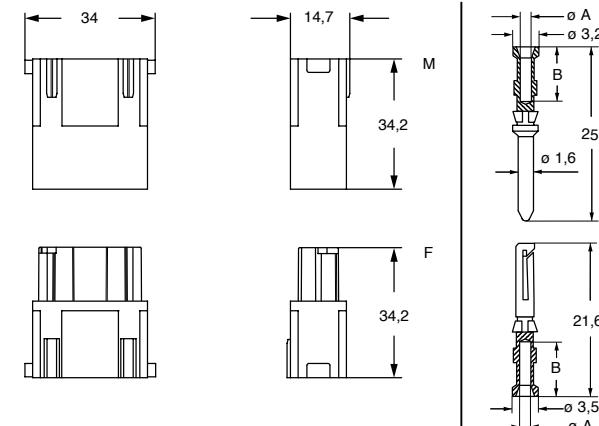
CDFA 0.3 CDFD 0.3  
CDFA 0.5 CDFD 0.5  
CDFA 0.7 CDFD 0.7  
CDFA 1.0 CDFD 1.0  
CDFA 1.5 CDFD 1.5  
CDFA 2.5 CDFD 2.5

10A male crimp contacts  
0,14-0,37 mm<sup>2</sup> AWG 26-22 identification No. 1  
0,5 mm<sup>2</sup> AWG 20 identification No. 2  
0,75 mm<sup>2</sup> AWG 18 identification No. ②  
1 mm<sup>2</sup> AWG 18 identification No. 3  
1,5 mm<sup>2</sup> AWG 16 identification No. 4  
2,5 mm<sup>2</sup> AWG 14 identification No. 5

CDMA 0.3 CDMD 0.3  
CDMA 0.5 CDMD 0.5  
CDMA 0.7 CDMD 0.7  
CDMA 1.0 CDMD 1.0  
CDMA 1.5 CDMD 1.5  
CDMA 2.5 CDMD 2.5

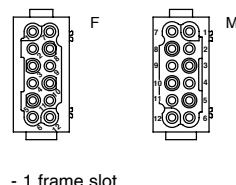
gold plated+

- characteristics according to EN 61984:
- 10A 250V 4kV 3**
- certified
- rated voltage according to UL/CSA: 600V
- 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:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- PCBs interface, refer to article CIF 2.4 on page 670
- it is recommended to **crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, CDF and CDM series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



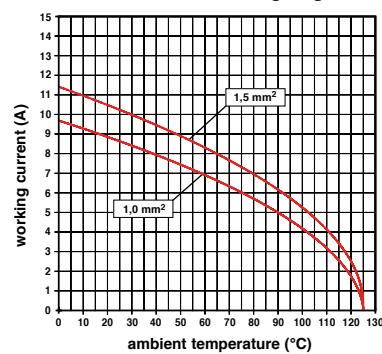
contacts side (front view)

side with reference arrow ▲



## CDF and CDM contacts

conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors 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 12 D, 12 poles connector inserts  
Maximum current load derating diagram

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

## MIXO modular units

### CX 17 DF/DM 17 poles 10A - 160V

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



10A crimp contacts,  
silver and gold plated



description

part No.

part No

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

CX 17 DF  
CX 17 DM

10A female crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

CDFA 0.3	CDFD 0.3
CDFA 0.5	CDFD 0.5
CDFA 0.7	CDFD 0.7
CDFA 1.0	CDFD 1.0
CDFA 1.5	CDFD 1.5
CDFA 2.5	CDFD 2.5

silver plated

gold plated+

10A male crimp contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

CDMA 0.3	CDMD 0.3
CDMA 0.5	CDMD 0.5
CDMA 0.7	CDMD 0.7
CDMA 1.0	CDMD 1.0
CDMA 1.5	CDMD 1.5
CDMA 2.5	CDMD 2.5

- characteristics according to EN 61984:

**10A 160V 2,5kV 3**

**10A 250V 4kV 2**

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

BUREAU VERITAS ETL certified

- rated voltage according to UL/CSA: 250V

- 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

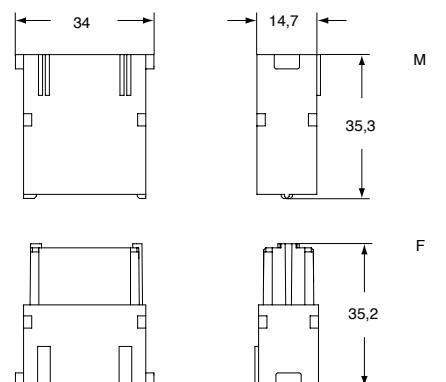
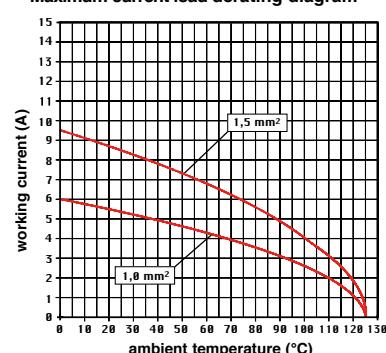
- mechanical life:  $\geq 500$  cycles

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

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

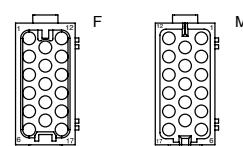
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28

#### CX 17 D, 17 poles connector inserts Maximum current load derating diagram

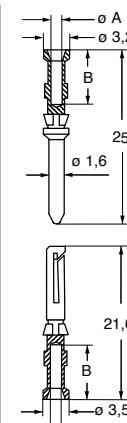


contacts side (front view)

side with reference arrow ▲



- 1 frame slot



CDF and CDM contacts

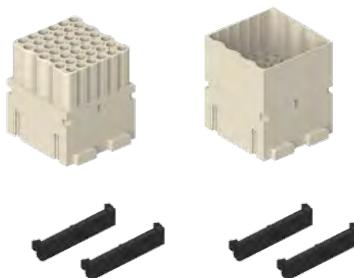
conductor section (mm <sup>2</sup> )	conductor slot ø A (mm)	conductors stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

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

## CX 42 DF/DM 42 poles 10A - 150V

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:  
316modular units,  
crimp connections10A crimp contacts,  
silver and gold plated

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

description

part No.

part No

without contacts (to be ordered separately), supplied  
with 2 dedicated black coloured 2-slot sized lock-in tab  
female inserts for female contacts  
male inserts for male contacts

CX 42 DF  
CX 42 DM

10A female crimp contacts  
0,14-0,37 mm<sup>2</sup> AWG 26-22 identification No. 1  
0,5 mm<sup>2</sup> AWG 20 identification No. 2  
0,75 mm<sup>2</sup> AWG 18 identification No. ②  
1 mm<sup>2</sup> AWG 18 identification No. 3  
1,5 mm<sup>2</sup> AWG 16 identification No. 4  
2,5 mm<sup>2</sup> AWG 14 identification No. 5

CDF 0.3  
CDF 0.5  
CDF 0.7  
CDF 1.0  
CDF 1.5  
CDF 2.5

**silver plated**

CDFD 0.3  
CDFD 0.5  
CDFD 0.7  
CDFD 1.0  
CDFD 1.5  
CDFD 2.5

**gold plated+**

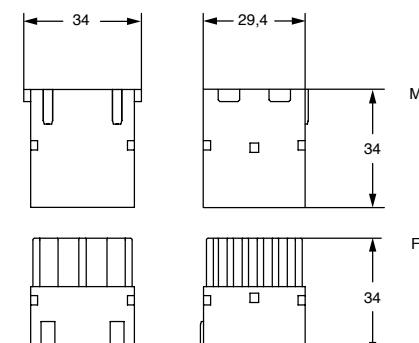
10A male crimp contacts  
0,14-0,37 mm<sup>2</sup> AWG 26-22 identification No. 1  
0,5 mm<sup>2</sup> AWG 20 identification No. 2  
0,75 mm<sup>2</sup> AWG 18 identification No. ②  
1 mm<sup>2</sup> AWG 18 identification No. 3  
1,5 mm<sup>2</sup> AWG 16 identification No. 4  
2,5 mm<sup>2</sup> AWG 14 identification No. 5

CDMA 0.3  
CDMA 0.5  
CDMA 0.7  
CDMA 1.0  
CDMA 1.5  
CDMA 2.5

CDMD 0.3  
CDMD 0.5  
CDMD 0.7  
CDMD 1.0  
CDMD 1.5  
CDMD 2.5

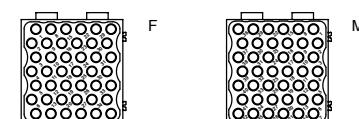
- characteristics according to EN 61984:
- 10A 150V 2,5kV 3**
- CURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 250V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin
- UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, CDF and CDM series) on pages 708 - 741

- supplied with dedicated black coloured 2-slot sized lock-in tab (2, one per each side).
- for spare lock-in tab **CX CFMD** see SPARE SPARTS catalogue

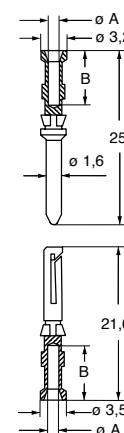


contacts side (front view)

rear view, side with reference arrow ▲



- 2 frame slots

**CDF and CDM contacts**

conductor section (mm <sup>2</sup> )	conductor slot $\phi$ A (mm)	conductors 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

<sup>+</sup> for basic or high thickness gold plating,  
please refer to page 674

## MIXO modular units

### CX 25 IBF/IBM 25 poles 4A - 50V

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

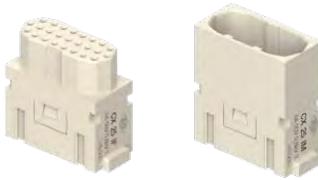
Single-sized modular units may be directly mounted inside MIXO ONE enclosures.

frames for modular units page: 316 - 317

MIXO ONE enclosures 369

- max insulating diameter 2,1 mm
- we recommend the use of CRF / CRM code pins

modular units,  
crimp connections



CI (4A) crimp contacts,  
silver and gold plated



description	part No.	part No
without contacts (to be ordered separately)		
female inserts for female contacts	CX 25 IBF	
male inserts for male contacts	CX 25 IBM	
CI (4A) female crimp contacts		
0,08-0,21 mm <sup>2</sup> AWG 28-24	CIFA 0.2	CIFD 0.2
0,13-0,33 mm <sup>2</sup> AWG 26-22	CIFA 0.3	CIFD 0.3
0,33-0,52 mm <sup>2</sup> AWG 22-20	CIFA 0.5	CIFD 0.5
0,52-0,75 mm <sup>2</sup> AWG 20-18	CIFA 0.7	CIFD 0.7
CI (4A) male crimp contacts		
0,08-0,21 mm <sup>2</sup> AWG 28-24	CIMA 0.2	CIMD 0.2
0,13-0,33 mm <sup>2</sup> AWG 26-22	CIMA 0.3	CIMD 0.3
0,33-0,52 mm <sup>2</sup> AWG 22-20	CIMA 0.5	CIMD 0.5
0,52-0,75 mm <sup>2</sup> AWG 20-18	CIMA 0.7	CIMD 0.7

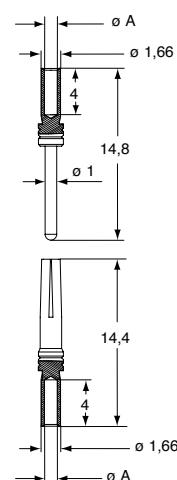
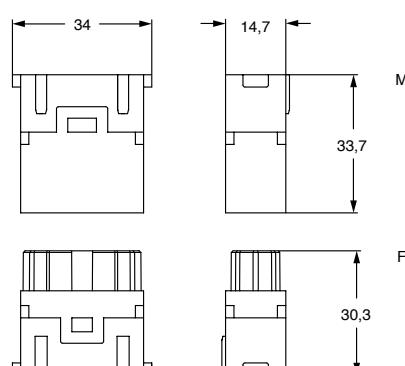
#### MIXO INSERTS

- characteristics according to EN 61984:

**4A 50V 0,8kV 3**  
**4A 160V 2,5kV 2**

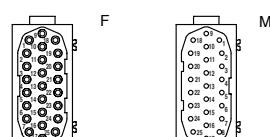
- Bureau VERITAS certified

- rated voltage according to UL/CSA: 600V
- 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:  $\geq 500$  cycles
- contact resistance:  $\leq 4 \text{ m}\Omega$
- for crimp contacts CI series use, on page 716 - 719
- CIPZ D** crimping tool
- CITP D** turret head
- CIES** insertion / removal tool for contacts  $0,2 \text{ - } 0,5 \text{ mm}^2$
- CIES B** insertion / removal tool for contacts  $0,75 \text{ mm}^2$
- 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 ▲

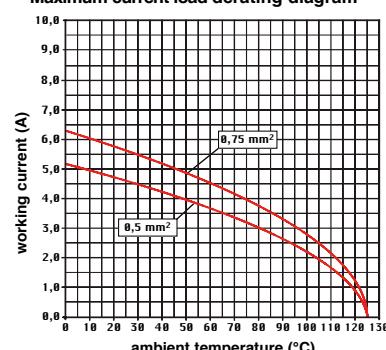


- 1 frame slot

#### CIF and CIM contacts

conductor section	conductor slot (mm <sup>2</sup> )	conductors stripping length (mm)
0,08-0,21	0,64	4
0,13-0,33	0,90	4
0,33-0,52	1,12	4
0,52-0,75	1,12	4

#### CX 25 IB, 25 poles connector inserts Maximum current load derating diagram



dimensions shown in mm are not binding and may be changed without notice

# MODULES FOR HIGH NUMBER OF MATINGS

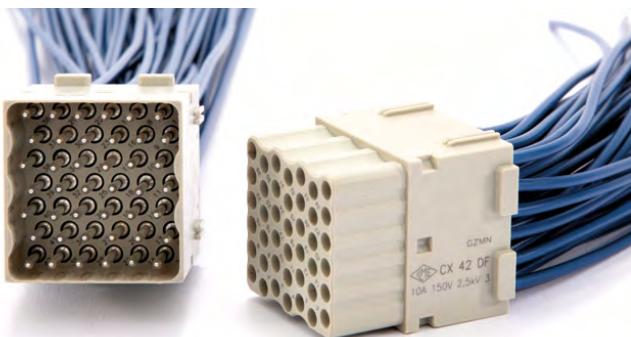
Within the range of **series HNM**, for High Number of Matings, all MIXO modules for crimp contacts 40A, 16A and/or 10A, combined with the use of especially high thickness gold-plated/lubricated crimp contacts of:

- series **RX** (40A HNM variant of series CX),
- series **RC** (16A HNM variant of series CC), and
- series **RD** (10A HNM variant of series CD)

mounted in the dedicated **MIXO HNM frames** cat. nos. **RX 02 /03 /04 /06 TF /TM**, also employing especially gold-plated PE contacts, allow the creation of **HNM** modular connector inserts.

The connector modules of series MIXO that by using HNM 40A contacts series **RX**, HNM 16A contacts series **RC** and/or HNM 10A contacts series **RD** together with **MIXO HNM frames** RX 02...06 TF/M can create MIXO HNM modular connector inserts are:

- **CX 02 4F/M, CX 03 4F/M, CX 03 4BF/M** and **CX 04 XF/XM** (with **RX** HNM contacts)
- **CX 3/4 XDF/M** (with **RX** and **RD** HNM contacts)
- **CX 06 CF/M, CX 06P CF/M, CX 08 CF/M** and **CX 20 CF/M** (with **RC** HNM contacts)
- **CX 12 DF/M, CX 17 DF/M** and **CX 42 DF/M** (with **RD** HNM contacts)



## SUM UP

- ☒ Up to 10.000 matings in combination with HNM enclosures
- ☒ Up to 5.000 matings with standard hoods with single lever

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:  
333

modular units, crimp connections

40A crimp contacts  
gold plated

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

Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

description

part No.

part No

without contacts (to be ordered separately)

female inserts for female contacts<sup>1)</sup>

CX 02 4F

male inserts for male contacts<sup>1)</sup>

CX 02 4M

40A female crimp contacts

1,5 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10
10 mm <sup>2</sup>	AWG 8

40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10
10 mm <sup>2</sup>	AWG 8

<sup>1)</sup> cable diameter up to 7,5 mm  
contact size up to 10 mm<sup>2</sup>

- 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: ≥ 10.000 cycles

- contact resistance: ≤ 0,3 mΩ

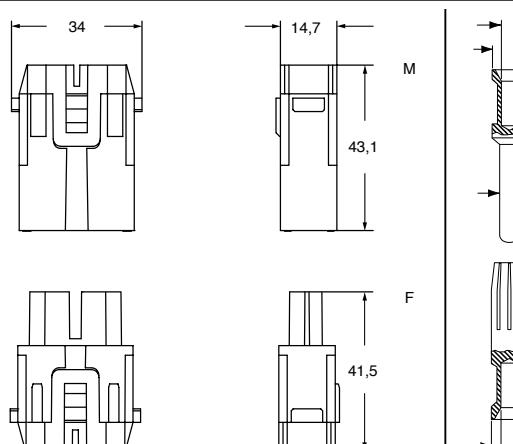
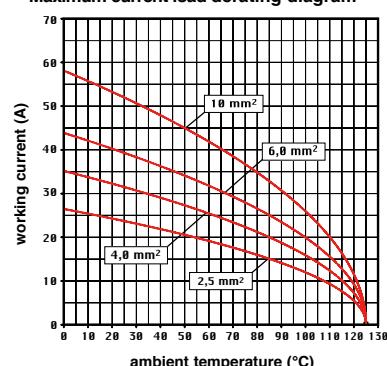
- can be mated with CX 02 A/B modules

- it is recommended to crimp the contacts

(1,5 - 10 mm<sup>2</sup>), with crimping tools homologated  
by ILME (please see the crimping tool section 40A  
contacts, RXF2D and RXM2D series) on pages  
708 - 741

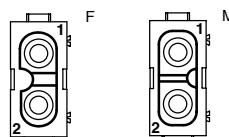
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28

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



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

#### RXF2D and RXM2D contacts

conductor section (mm <sup>2</sup> )	conductor slot ø A (mm)	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

## MIXO HNM modular units

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

**HNM (High Number of Matings)**

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:  
333

modular units, crimp connections



40A crimp contacts  
gold plated



Q **10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES**

Q **5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER**

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

without contacts (to be ordered separately)

female inserts for female contacts <sup>1)</sup>

**CX 03 4F**

male inserts for male contacts <sup>1)</sup>

**CX 03 4M**

40A female crimp contacts

1,5 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10

RXF2D 1.5  
RXF2D 2.5  
RXF2D 4.0  
RXF2D 6.0

**gold plated**

40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16
2,5 mm <sup>2</sup>	AWG 14
4 mm <sup>2</sup>	AWG 12
6 mm <sup>2</sup>	AWG 10

RXM2D 1.5  
RXM2D 2.5  
RXM2D 4.0  
RXM2D 6.0

**1) cable diameter up to 5 mm**

- characteristics according to EN 61984:

**40A 400/690V 6kV 3**

- c<sup>UR</sup>us (UL for USA and Canada), c<sup>UR</sup> cec DNV-GL

BUREAU VERITAS ERL certified

- rated voltage according to UL/CSA: 600V

- 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

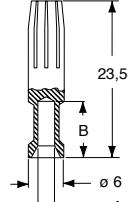
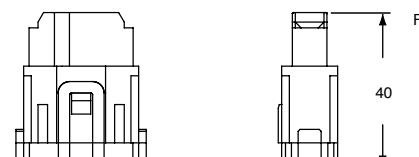
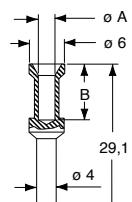
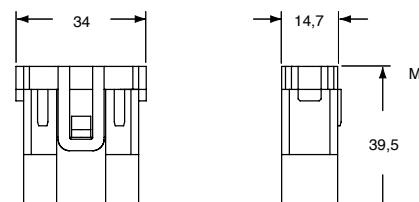
- mechanical life:  $\geq 10.000$  cycles

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

- it is recommended to crimp the contacts with

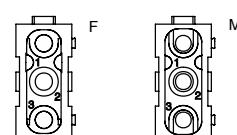
crimping tools homologated by ILME (please see the crimping tool section 40A contacts, RXF2D and RXM2D series) on pages 708 - 741

- 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 ▲

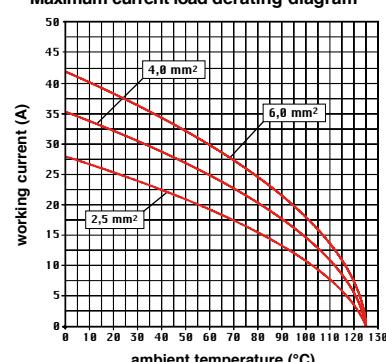


- 1 frame slot

**RXF2D and RXM2D contacts**

conductor section	conductor slot $\phi$ 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 poles connector inserts**  
**Maximum current load derating diagram**



dimensions shown in mm are not binding and may be changed without notice

## MIXO HNM modular units

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

**HNM (High Number of Matings)**



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:  
333

modular units, crimp connections



40A crimp contacts  
gold plated



Q 10.000 MATINGS WITH HNM FRAMES  
AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM FRAMES AND  
STANDARD ENCLOSURES, SINGLE LEVER

\* 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<sup>1)</sup>

**CX 03 4BF**

male inserts for male contacts<sup>1)</sup>

**CX 03 4BM**

40A female crimp contacts

1,5 mm <sup>2</sup>	AWG 16	gold plated	RXF2D 1.5
2,5 mm <sup>2</sup>	AWG 14		RXF2D 2.5
4 mm <sup>2</sup>	AWG 12		RXF2D 4.0
6 mm <sup>2</sup>	AWG 10		RXF2D 6.0
10 mm <sup>2</sup>	AWG 8		RXF2D 10

40A male crimp contacts

1,5 mm <sup>2</sup>	AWG 16	gold plated	RXM2D 1.5
2,5 mm <sup>2</sup>	AWG 14		RXM2D 2.5
4 mm <sup>2</sup>	AWG 12		RXM2D 4.0
6 mm <sup>2</sup>	AWG 10		RXM2D 6.0
10 mm <sup>2</sup>	AWG 8		RXM2D 10

**1) cable diameter up to 7,5 mm  
contact size up to 10 mm<sup>2</sup>**

- characteristics according to EN 61984:

**40A 500V 6kV 3**

- cUL<sup>®</sup> (UL for USA and Canada), CSA<sup>®</sup> cec DNV-GL

BUREAU VERITAS EAC 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:  $\geq 10.000$  cycles

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

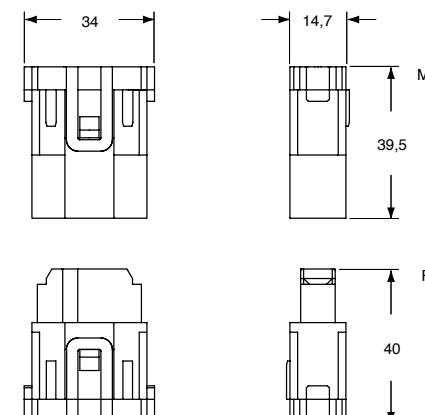
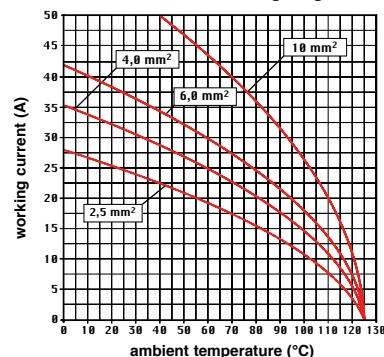
- can be mated with CX 02 A/B modules

- it is recommended to crimp the contacts

(1,5 - 10 mm<sup>2</sup>), with crimping tools homologated by  
ILME (please see the crimping tool section 40A contacts,  
RXF2D and RXM2D series) on pages 708 - 741

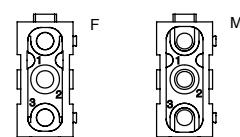
- for max. current load see the connector inserts derating  
diagram below; for more information see page 28

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



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

### RXF2D and RXM2D contacts

conductor section (mm <sup>2</sup> )	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

## MIXO HNM modular units

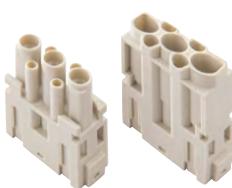
### CX 3/4 XDF/M 3 p (40A - 830V) + 4 p (10A - 830V) HNM (High Number of Matings)

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: 333

- 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 gold plated



Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

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 <sup>2</sup> AWG 16	RXF2D 1.5	
2,5 mm <sup>2</sup> AWG 14	RXF2D 2.5	
4 mm <sup>2</sup> AWG 12	RXF2D 4.0	
6 mm <sup>2</sup> AWG 10	RXF2D 6.0	gold plated
40A male crimp contacts		
1,5 mm <sup>2</sup> AWG 16	RXM2D 1.5	
2,5 mm <sup>2</sup> AWG 14	RXM2D 2.5	
4 mm <sup>2</sup> AWG 12	RXM2D 4.0	
6 mm <sup>2</sup> AWG 10	RXM2D 6.0	
10A female crimp contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	RDF2D 0.3	
0,5 mm <sup>2</sup> AWG 20	RDF2D 0.5	
0,75 mm <sup>2</sup> AWG 18	RDF2D 0.7	
1 mm <sup>2</sup> AWG 18	RDF2D 1.0	
1,5 mm <sup>2</sup> AWG 16	RDF2D 1.5	
2,5 mm <sup>2</sup> AWG 14	RDF2D 2.5	
10A male crimp contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22	RDM2D 0.3	
0,5 mm <sup>2</sup> AWG 20	RDM2D 0.5	
0,75 mm <sup>2</sup> AWG 18	RDM2D 0.7	
1 mm <sup>2</sup> AWG 18	RDM2D 1.0	
1,5 mm <sup>2</sup> AWG 16	RDM2D 1.5	
2,5 mm <sup>2</sup> AWG 14	RDM2D 2.5	

- characteristics according to EN 61984:

3 poles 40A 830V 8kV 3

4 poles 10A 830V 8kV 3

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

BUREAU VERITAS EAC certified

- rated voltage according to UL/CSA: 600V

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

- ambient temperature limit:  $-40^{\circ}\text{C} \dots +125^{\circ}\text{C}$

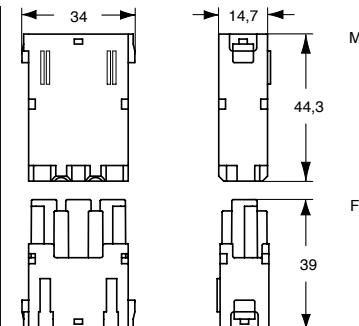
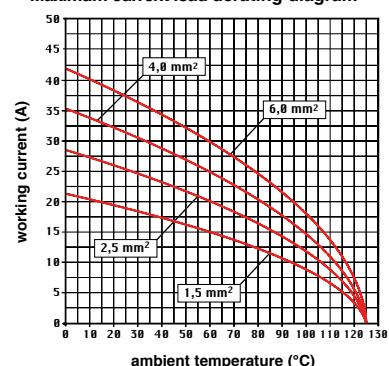
- made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life:  $\geq 10.000$  cycles

- contact resistance:  $\leq 0,3 \text{ m}\Omega$  (3 poles),  $\leq 3 \text{ m}\Omega$  (4 poles)

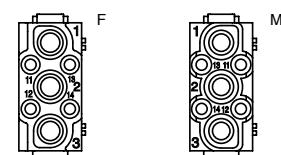
- for max. current load see the connector inserts derating diagram below; for more information see page 28

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



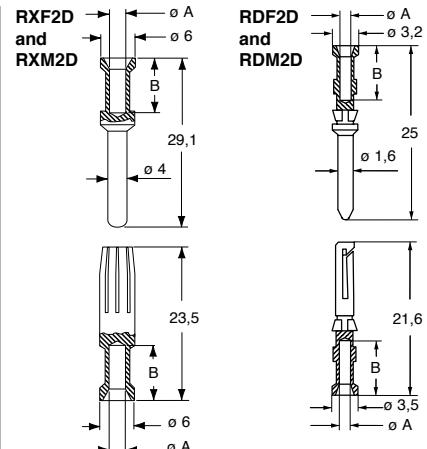
contacts side (front view)

side with reference arrow ▲



- 1 frame slot

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, RXF2D, RXM2D series and 10A contacts RDF2D, RDM2D series) on pages 708 - 741



#### RXF2D and RXM2D contacts

conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

#### RDF2D and RDM2D contacts

conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors 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

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:  
333

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



40A crimp contacts gold plated



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

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

RXF2D 1.5  
RXF2D 2.5  
RXF2D 4.0  
RXF2D 6.0

gold plated

RXM2D 1.5  
RXM2D 2.5  
RXM2D 4.0  
RXM2D 6.0

40A female crimp contacts

1,5 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> AWG 10

40A male crimp contacts

1,5 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> AWG 10

- characteristics according to EN 61984:

40A 830V 8kV 3  
40A 1000V 8kV 2

- cULus (UL for USA and Canada), CE, DNV-GL  
BUREAU VERITAS 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

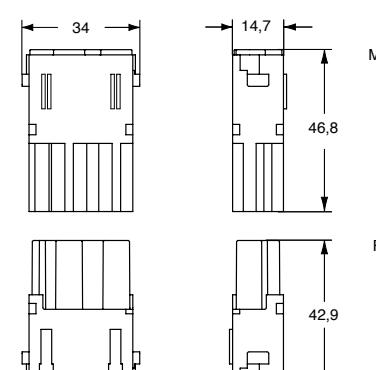
- mechanical life: ≥ 10.000 cycles

- contact resistance: ≤ 0,3 mΩ

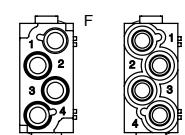
- for spare lock-in tab CX CFMX see SPARE SPARTS catalogue

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, RXF2D and RXM2D series) on pages 708 - 741

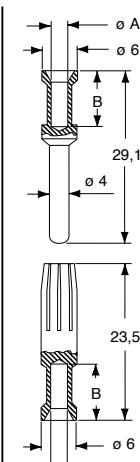
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)  
side with reference arrow ▲

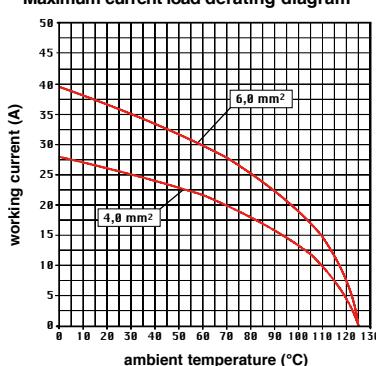


- 1 frame slot

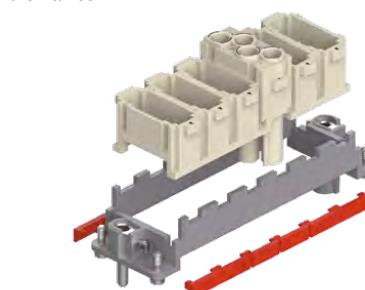
**RXF2D and RXM2D contacts**

conductor section (mm <sup>2</sup> )	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

- 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 poles connector inserts  
Maximum current load derating diagram**

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



## MIXO HNM modular units

### CX 06P CF/CM 6 poles protected 16A - 830V HNM (High Number of Matings)

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:  
333

- we recommend the use of CRF / CRM code pins

modular units, crimp connections



#### RATING 830V

10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

16A crimp contacts  
gold plated



description

part No.

part No.

without contacts (to be ordered separately)

female inserts for female contacts

CX 06P CF  
CX 06P CM

male inserts for male contacts

16A female contacts		
0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCF2D 0.3  
RCF2D 0.5  
RCF2D 0.7  
RCF2D 1.0  
RCF2D 1.5  
RCF2D 2.5  
RCF2D 3.0  
RCF2D 4.0

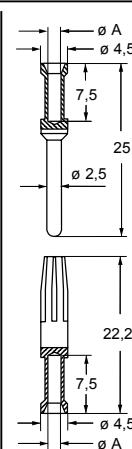
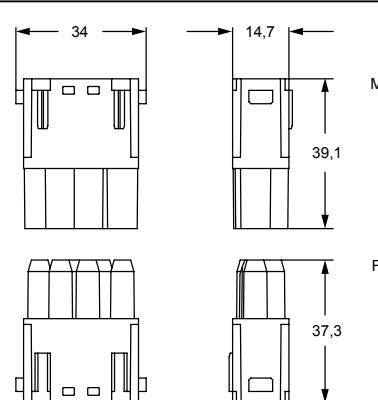
gold plated

16A male contacts

16A male contacts		
0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

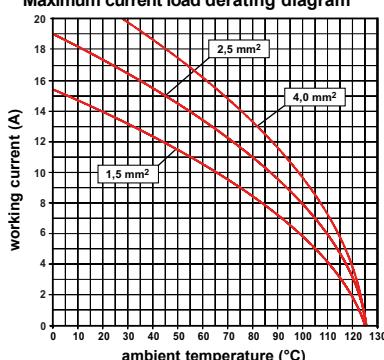
RCM2D 0.3  
RCM2D 0.5  
RCM2D 0.7  
RCM2D 1.0  
RCM2D 1.5  
RCM2D 2.5  
RCM2D 3.0  
RCM2D 4.0

- characteristics according to EN 61984:
- 16A 830V 8kV 3**
- certified
- rated voltage according to UL/CSA: 600V
- 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:  $\geq 10.000$  cycles
- contact resistance:  $\leq 1 \text{ m}\Omega$
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



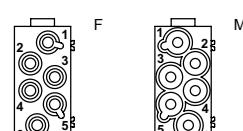
#### CX 06 poles connector inserts

##### Maximum current load derating diagram



contacts side (front view)

side with reference arrow ▲



- 1 frame slot

##### RCF2D and RCM2D contacts

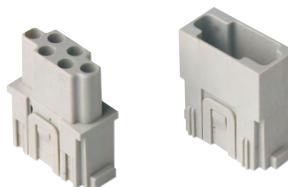
conductor section (mm <sup>2</sup> )	conductor slot Ø A (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

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:  
333

modular units, crimp connections

16A crimp contacts  
gold plated

- Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES
- Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

description

part No.

part No

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

CX 06 CF  
CX 06 CM

## 16A female contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCF2D 0.3  
RCF2D 0.5  
RCF2D 0.7  
RCF2D 1.0  
RCF2D 1.5  
RCF2D 2.5  
RCF2D 3.0  
RCF2D 4.0

gold plated

## 16A male contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCM2D 0.3  
RCM2D 0.5  
RCM2D 0.7  
RCM2D 1.0  
RCM2D 1.5  
RCM2D 2.5  
RCM2D 3.0  
RCM2D 4.0

- characteristics according to EN 61984:

16A 500V 6kV 3  
16A 400/690V 6kV 2

certified

- rated voltage according to UL/CSA: 600V

- insulation resistance:  $\geq 10 \text{ G}\Omega$ - ambient temperature limit:  $-40^\circ\text{C} \dots +125^\circ\text{C}$ 

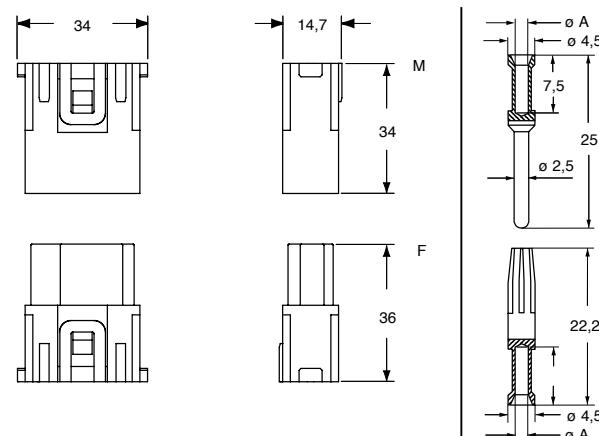
- made of self-extinguishing thermoplastic resin

UL 94V-0

- mechanical life:  $\geq 10.000$  cycles- contact resistance:  $\leq 1 \text{ m}\Omega$ 

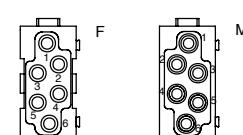
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741

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



contacts side (front view)

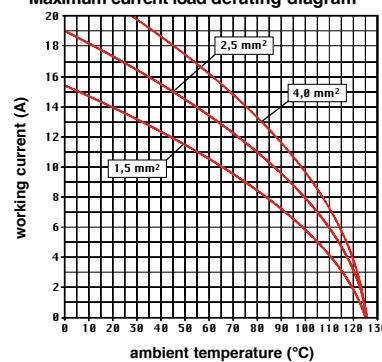
side with reference arrow ▲



- 1 frame slot

## RCF2D and RCM2D contacts

conductor section	conductor slot $\phi A$ (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

CX 06 poles connector inserts  
Maximum current load derating diagram

dimensions shown in mm are not binding and may be changed without notice

## MIXO HNM modular units

**CX 08 CF/CM 8 poles 16A - 400V**

**HNM (High Number of Matings)**

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:  
333



16A crimp contacts  
gold plated



- Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES
- Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

description

part No.

part No

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

**CX 08 CF**  
**CX 08 CM**

16A female contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCF2D 0.3  
RCF2D 0.5  
RCF2D 0.7  
RCF2D 1.0  
RCF2D 1.5  
RCF2D 2.5  
RCF2D 3.0  
RCF2D 4.0

gold plated

16A male contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCM2D 0.3  
RCM2D 0.5  
RCM2D 0.7  
RCM2D 1.0  
RCM2D 1.5  
RCM2D 2.5  
RCM2D 3.0  
RCM2D 4.0

- characteristics according to EN 61984:

**16A 500V 6kV 3**

**16A 400/690V 6kV 2**

- certified

- rated voltage according to UL/CSA: 600V

- 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

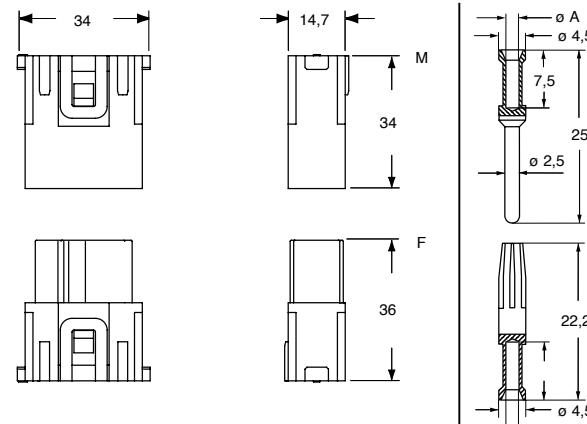
- mechanical life:  $\geq 10.000$  cycles

- contact resistance:  $\leq 1 \text{ m}\Omega$

- it is recommended to crimp the contacts with

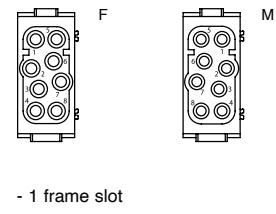
crimping tools homologated by ILME (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741

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



contacts side (front view)

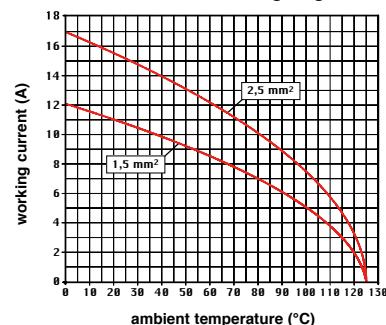
side with reference arrow ▲



**RCF2D and RCM2D contacts**

conductor section	conductor slot $\text{o A (mm)}$	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

**CX 08 poles connector inserts**  
**Maximum current load derating diagram**



dimensions shown in mm are not binding and may be changed without notice



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:  
333

modular units, crimp connections



- Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES
- Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

16A crimp contacts  
gold plated

description

part No.

part No.

without contacts (to be ordered separately)

female inserts for female contacts<sup>1)</sup>male inserts for male contacts<sup>1)</sup>CX 20 CF  
CX 20 CM

16A female contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCF2D 0.3  
RCF2D 0.5  
RCF2D 0.7  
RCF2D 1.0  
RCF2D 1.5  
RCF2D 2.5  
RCF2D 3.0  
RCF2D 4.0

gold plated

16A male contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm <sup>2</sup>	AWG 12	with no grooves

RCM2D 0.3  
RCM2D 0.5  
RCM2D 0.7  
RCM2D 1.0  
RCM2D 1.5  
RCM2D 2.5  
RCM2D 3.0  
RCM2D 4.0

<sup>1)</sup> on request, version with 3 fastened CX 20 CF/CM inserts with poles numbered from 1 – 60  
references: CX 60 CF, CX 60 CM

- characteristics according to EN 61984:

16A 500V 6kV 3  
16A 830V 8kV 2

- cULus (UL for USA and Canada), UL VERITAS 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: ≥ 10.000 cycles

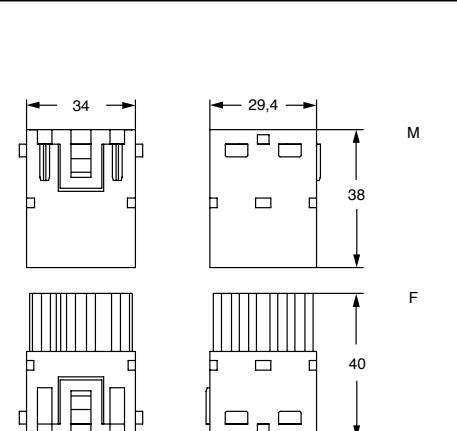
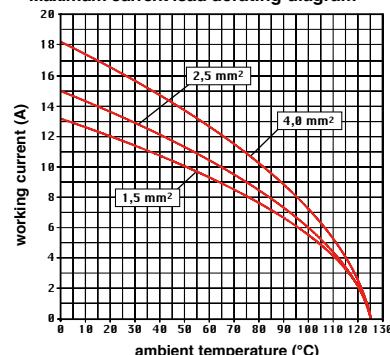
- contact resistance: ≤ 1 mΩ

- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741

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

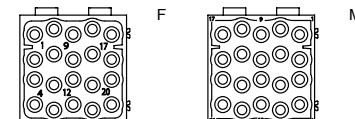
## CX20 poles connector inserts

## Maximum current load derating diagram



## contacts side (front view)

side with reference arrow ▲



- 2 frame slots

## RCF2D and RCM2D contacts

conductor section	conductor slot	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

dimensions shown in mm are not binding and may be changed without notice

## MIXO HNM modular units

**CX 12 DF/DM 12 poles 10A - 250V**

**HNM (High Number of Matings)**

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:  
333

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

modular units, crimp connections



10A crimp contacts  
gold plated



### RATING 250V

Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

description	part No.	part No
without contacts (to be ordered separately)		
female inserts for female contacts	CX 12 DF	
male inserts for male contacts	CX 12 DM	
10A female contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22 identification No. 1	RDF2D 0.3	
0,5 mm <sup>2</sup> AWG 20 identification No. 2	RDF2D 0.5	
0,75 mm <sup>2</sup> AWG 18 identification No. ②	RDF2D 0.7	
1 mm <sup>2</sup> AWG 18 identification No. 3	RDF2D 1.0	
1,5 mm <sup>2</sup> AWG 16 identification No. 4	RDF2D 1.5	
2,5 mm <sup>2</sup> AWG 14 identification No. 5	RDF2D 2.5	gold plated
10A male contacts		
0,14-0,37 mm <sup>2</sup> AWG 26-22 identification No. 1	RDM2D 0.3	
0,5 mm <sup>2</sup> AWG 20 identification No. 2	RDM2D 0.5	
0,75 mm <sup>2</sup> AWG 18 identification No. ②	RDM2D 0.7	
1 mm <sup>2</sup> AWG 18 identification No. 3	RDM2D 1.0	
1,5 mm <sup>2</sup> AWG 16 identification No. 4	RDM2D 1.5	
2,5 mm <sup>2</sup> AWG 14 identification No. 5	RDM2D 2.5	

- characteristics according to EN 61984:

10A 250V 4kV 3

- certified

- rated voltage according to UL/CSA: 600V

- 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

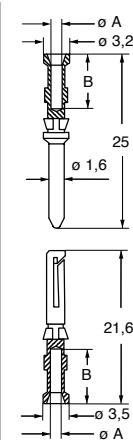
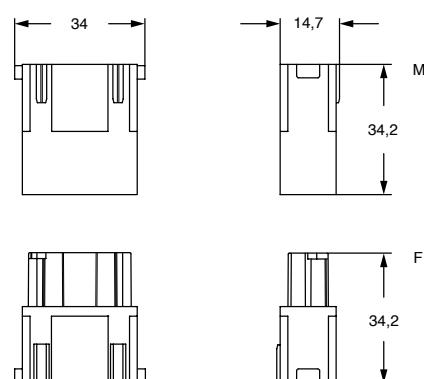
- mechanical life:  $\geq 10.000$  cycles

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

- PCBs interface, refer to article CIF 2.4 on page 670

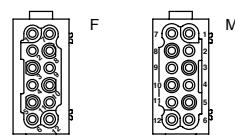
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741

- 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 ▲

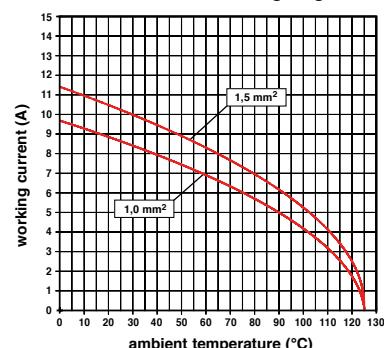


- 1 frame slot

### RDF2D and RDM2D contacts

conductor section	conductor slot	conductors stripping length
mm <sup>2</sup>	ø A (mm)	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 12 poles connector inserts Maximum current load derating diagram



dimensions shown in mm are not binding and may be changed without notice

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:  
333

modular units, crimp connections

10A crimp contacts,  
gold plated

- Q 10.000 MATINGS WITH HNM FRAMES AND HNM ENCLOSURES
- Q 5.000 MATINGS WITH HNM FRAMES AND STANDARD ENCLOSURES, SINGLE LEVER

description

part No.

part No

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

CX 17 DF  
CX 17 DM

10A female contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

RDF2D 0.3  
RDF2D 0.5  
RDF2D 0.7  
RDF2D 1.0  
RDF2D 1.5  
RDF2D 2.5

gold plated

10A male contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

RDM2D 0.3  
RDM2D 0.5  
RDM2D 0.7  
RDM2D 1.0  
RDM2D 1.5  
RDM2D 2.5

- characteristics according to EN 61984:

10A 160V 2,5kW 3

10A 250V 4kV 2

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

BUREAU VERITAS EAC certified

- rated voltage according to UL/CSA: 250V

- insulation resistance: ≥ 10 GΩ

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

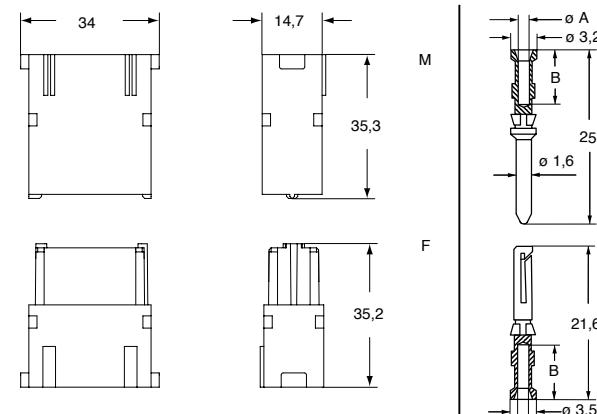
- made of self-extinguishing thermoplastic resin  
UL 94V-0

- mechanical life: ≥ 10.000 cycles

- contact resistance: ≤ 3 mΩ

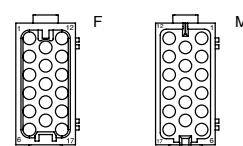
- it is recommended to crimp the contacts with  
crimping tools homologated by ILME (please see the  
crimping tool section 10A contacts, RDF2D and  
RDM2D series) on pages 708 - 741

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



contacts side (front view)

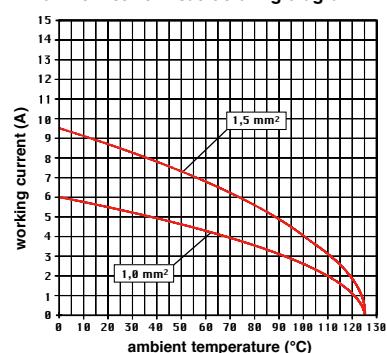
side with reference arrow ▲



- 1 frame slot

## RDF2D and RDM2D contacts

conductor section	conductor slot	conductors stripping length
mm <sup>2</sup>	ø A (mm)	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 17 poles connector inserts  
Maximum current load derating diagram

dimensions shown in mm are not binding and may be changed without notice

## MIXO HNM modular units

**CX 42 DF/DM 42 poles 10A - 150V**

**HNM (High Number of Matings)**

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

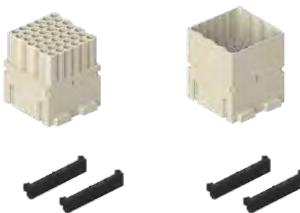
frames for modular units\*

page:  
333

10A crimp contacts  
gold plated



modular units,  
crimp connections



Q 10.000 MATINGS WITH HNM FRAMES  
AND HNM ENCLOSURES

Q 5.000 MATINGS WITH HNM FRAMES AND  
STANDARD ENCLOSURES, SINGLE LEVER

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

description

part No.

part No.

without contacts (to be ordered separately), supplied  
with 2 dedicated black coloured 2-slot sized lock-in tab  
female inserts for female contacts  
male inserts for male contacts

**CX 42 DF**  
**CX 42 DM**

10A female contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

RDF2D 0.3  
RDF2D 0.5  
RDF2D 0.7  
RDF2D 1.0  
RDF2D 1.5  
RDF2D 2.5

gold plated

10A male contacts

0,14-0,37 mm <sup>2</sup>	AWG 26-22	identification No. 1
0,5 mm <sup>2</sup>	AWG 20	identification No. 2
0,75 mm <sup>2</sup>	AWG 18	identification No. ②
1 mm <sup>2</sup>	AWG 18	identification No. 3
1,5 mm <sup>2</sup>	AWG 16	identification No. 4
2,5 mm <sup>2</sup>	AWG 14	identification No. 5

RDM2D 0.3  
RDM2D 0.5  
RDM2D 0.7  
RDM2D 1.0  
RDM2D 1.5  
RDM2D 2.5

- characteristics according to EN 61984:

**10A 150V 2,5kV 3**

- cURus, CSA, CQC, DNV-GL, BV, EAC pending  
- rated voltage according to UL/CSA: 250V

- 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

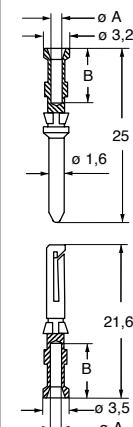
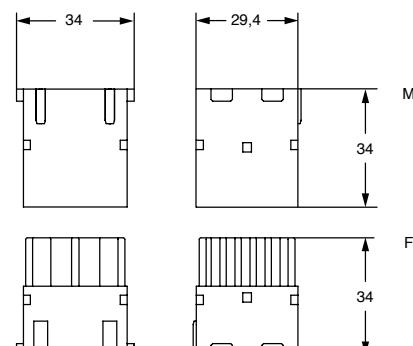
- mechanical life:  $\geq 10.000$  cycles

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

- it is recommended to crimp the contacts with  
crimping tools homologated by ILME (please see  
the crimping tool section 10A contacts, RDF2D and  
RDM2D series) on pages 708 - 741

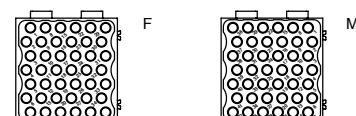
- supplied with dedicated black coloured 2-slot sized  
lock-in tab (2, one per each side).

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



contacts side (front view)

rear view, side with reference arrow ▲



- 2 frame slots

### RDF2D and RDM2D contacts

conductor cross-sectional area mm <sup>2</sup>	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