AXYR[®] HIGH-DENSITY, FAST & TOOL-LESS CONNECTIONS

PRODUCT RANGE FOR 16 A CONNECTIONS

The research of new termination technologies aims to develop a reliable and qualitatively stable connection between conductor and contact, meeting any possible application requirement in terms of current carrying-capacity and available number of poles, as much as possible independently from the skill of the operator. Crimped connection, with its typical irreversible process, achieves the best performance and the highest possible connection density, but requires specific wiring procedures and special tools, while being also non-rewirable.



- Q ILME AXYR® technology offers an extremely compact spring push-in termination, which equals the crimp connectors in high density, but requires no special crimping tool, yet granting an optimal electrical performance. An easy, tool-less and operator skill independent connection, resistant to mechanical stress and vibrations, suitable for any installation requirement.
- Q AXYR[®] features a harmonic steel spring and a tiny, yet stiff, properly designed actuator button working together to allow a simple push-in action guaranteeing a safe wiring.
- Q Thanks to a **boxed terminal**, the wire contact pressure does not rely upon surronding insulating parts, likely to possibly relax under heating when the connector is under current load.

- Q Solid and ferruled flexible wires, when sufficiently stiff, can be directly inserted into the connection terminal*; unprepared stranded wires require instead the initial opening of the spring by means of a simple flat-blade screwdriver, thanks to the actuator button.
- Q AXYR® technology makes the user free to choose the connector that best suits his needs, naturally reusable and independent of the required wire cross-section, compatible with the crimp connectors of the ILME product portfolio: one size fits the whole range of cross-sectional areas (compared to competing solution with radial spring that require two sizes).

* Cross-sectional area ≥ 0,75 mm² / 18 AWG



AXYR® FROM INSIDE

OR FERRULED WIRE

 $(CSA^* \ge 0.75 \text{ mm}^2 / 18 \text{ AWG})$

THE WIRING

SOLID



(all CSA) SOLID OR FERRULED WIRE (CSA < 0,75 mm² / 18 AWG)



Deeply insert the solid or ferruled wire into the contact hole

2

clamp

The wire is safely secured

by the spring



1

Push down the actuator button by a flat-blade screwdriver 0.5 × 3.5 mm max.

insert the stranded wire into the contact hole



*CSA = Cross-Sectional Area

Re-opening





R



2

The wire is safely secured by the spring clamp

Push down the actuator button by a flat-blade 0,5 × 3,5 mm max. screwdriver to remove the wire

AXYR[®] TECHNOLOGY ZOOM-IN AND BENEFITS

 AXYR[®] connection equals the density of the crimp connection, without need for any crimping tool

Wire release with a simple flat-blade screwdriver.



- Machined brass contacts
- One size fits the whole range of cross-sectional areas
- Suitable for rigid or ferruleprepared stranded wires as well as for unprepared stranded wires



AXYR[®] PRODUCT RANGE FOR 16 A CONNECTIONS



Inserts		EN 61984 Rating	Poles	Series	Size
CX 06 CYF	CX 06 CYM	16 A 500 V 6 kV 3	6	MIXO	1 module
CX 08 CYF	CX 08 CYM	16 A 400 V 6 kV 3	8	MIXO	1 module
CQYF 05	CQYM 05	16 A 230/400 V 4 kV 3	5 + 🖶	CQ	"21.21"
CQYF 08E	CQYM 08E	16 A 500 V 6 kV 3	8 + 🕀	CQ	"32.13"



AXYR[®] Product range for 16 A connections

CQY 05 / CQY 08E inserts MIXO CX 06 CY / CX 08 CY modules



CQY 05 inserts 5 P + ⊕: 16 A 230/400 V 4 kV 3

CQY 08E inserts

8 P + ⊕: 16 A 500 V 6 kV 3 16 A 400/690 V 8 kV 2

MIXO CX 06 CY and CX 08 CY modules

6 P:	16 A	500 V	6 kV	3
8 P:	16 A	400 V	6 kV	3



CQYF /M 05 5 poles + 🕀 16 A - 230/400 V

page:
339 - 348 349 - 363 512 - 518 564 - 572 628 - 631 538 - 539
📕 page:
134

inserts. AXYR® terminal connections

Q SIZE "21.21"

description

refer to CN.19 pages refer to News 2020 pages

part No.

spring/AXYR* push-in connection female inserts with female contacts male inserts with male contacts

- characteristics according to EN 61984: 16 A 230/400 V 4 kV 3

- cURus (ECBT2/8 and PVVA2/8) pending - CQC, EAC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: \geq 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C - made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue

CQY 5 poles connector inserts Maximum current load derating diagram





- conductors stripping length: 9...11 mm



M

AXYR®

CQYF /M 08E 8 poles + 🕀 16 A - 500 V

enclosures: size "32.13"	page:	inserts, AXYR [®] terminal connections
metallic	38	
insulating type EMC (insulating)	365 - 367 573 - 574	
ISO 23570-3 standard and DESINA, specification compliant		

refer to CN.19 pages

description

part No.

Q SILVER PLATED CONTACTS

Μ

F

39.9

39.9

18.5

18,5

13,4

- 21.3 --

Μ

(AWG 24-14)

9...11 mm

CQYF 08E

CQYM 08E

32.2

41.5

contacts side (front view)

്⊗ Ó $\overline{000}$ (23) 0

F

either ferruled or unferruled:

- conductors stripping length:

0,25 mm² - 2,5 mm²

spring/AXYR* push-in connection female insert with female contacts male insert with male contacts

- characteristics according to EN 61984: 16 A 500 V 6 kV 3 16 A 400/690 V 8 kV 2

- cURus (ECBT2/8 and PVVA2/8) pending

- CQC, EAC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: \geq 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C
- made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant - mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- coded for use with "32.13" metallic enclosures (and insulating enclosures)
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue
- Q Please refer to page 34 for the CQ 08 NEW METAL CONCEPT solution

CQY..E 8 poles connector inserts Maximum current load derating diagram



ambient temperature (°C)



- inserts for conductors with the following sections



coding pin	

description

part No.



CR Q08E CODING OPTIONS



AXYR® MIXO CX 06 CYF /CYM 6 poles 16 A - 500 V

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



refer to CN.19 pages

description

spring/AXYR* push-in connection female inserts with female contacts male inserts with male contacts

CX 06 CYF

part No.

modular units.

AXYR® terminal connections

- characteristics according to EN 61984: 16 A 500 V 6 kV 3

- cURus (ECBT2/8 and PVVA2/8) pending - CQC, EAC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 600 V
 insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C - made by UL 94V-0 glass reinforced polycarbonate,
- EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles - contact resistance: $\leq 3 \text{ m}\Omega$
- for max, current load see the connector inserts
- derating diagram under construction; for more information see page 28 of CN.19 catalogue







1 frame slot

MIXO CX 08 CYF /CYM 8 poles 16 A - 400 V

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



refer to CN.19 pages

description

spring/AXYR* push-in connection female inserts with female contacts male inserts with male contacts

CX 08 CYF

part No.

modular units.

AXYR® terminal connections

- characteristics according to EN 61984: 16 A 400 V 6 kV 3

- cURus (ECBT2/8 and PVVA2/8) pending - CQC, EAC, DNV-GL, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: \geq 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C - made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram under construction; for more information see page 28 of CN.19 catalogue







1 frame slot