



# Multipole connectors



datasheet

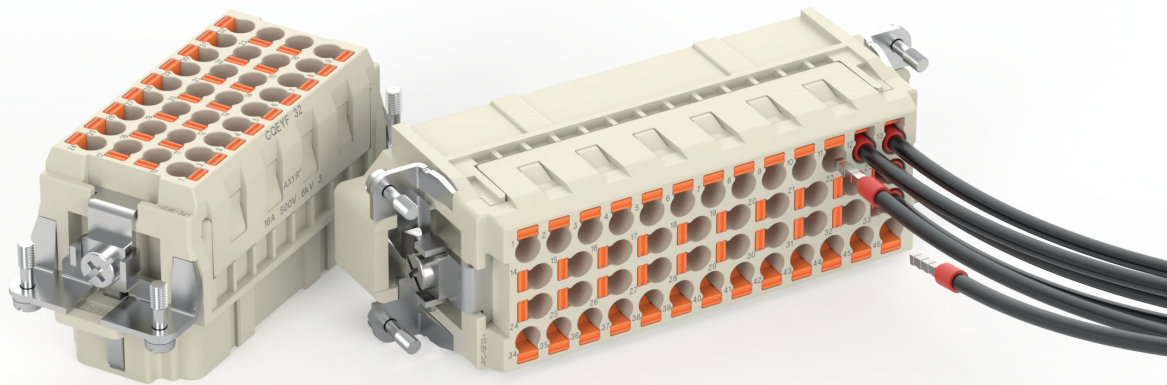
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Newsbook

Extract 6/9



**NEW 16 A INSERTS  
WITH AXYR<sup>®</sup> TECHNOLOGY**

# TECHNICAL FEATURES

The 16 A range of connector inserts using the **AXYR® technology** (spring push-in with actuator button) which can equal the crimp connectors versions in terms of high density without requiring any crimping tool, is furtherly widened by the **new series CQEY**, intermateable with the corresponding available models of series **CQE** (crimp)<sup>(#)</sup>.

The crimp series CQE, born as the high-density version of the historic crimp series **CCE**, is now made available in a tool-less version.

The **AXYR®** 16 A toolless spring push-in contacts cover a wiring range:

- Q **0,25 mm<sup>2</sup> to 2,5 mm<sup>2</sup> (AWG 24-14)** for ferruled (prepared) flexible copper wires;
- Q **0,25 mm<sup>2</sup> to 4 mm<sup>2</sup> (AWG 24-12)** for unferruled (unprepared) solid or flexible copper wires.

NOTE – Crimp contacts series CC for the intermateable series CQE are provided either silver plated or gold plated in sizes ranging from 0.3 through 4.0, covering cross-sectional areas from 0,14 mm<sup>2</sup> / 26 AWG to 4 mm<sup>2</sup> / 12 AWG.

Like for series CQE, the inserts of **AXYR®** series CQEY are available in the *standard sizes* and *double-inserts sizes*.

As improvement over series **CQE**, series **CQEY** connector inserts allow **additional coding of the mating face** by means of **CR Q08E** coding pins, that must be fitted in the dedicated dovetail-shaped seats on the contour of the mating face in specular pattern:

- Q **CQEY 10** and **CQEY 18** are provided with **3 seats** for the optional coding pins **CR Q08E** on each part of the connector. On these sizes is possible to achieve up to 6 different codings: 3 coding pins are required for each connector coupling (two fitted on one connector part, one fitted specularly on the other connector part); it is necessary to install two coding pins on each connector part.
- Q **CQEY 18** and **CQEY 46** are provided with **4 seats** for the optional coding pins **CR Q08E** on each part of the connector. On these sizes is possible to achieve up to 6 different codings: 4 coding pins are required for each connector coupling (two fitted on one connector part, two on the opposite connector part in specular way). It is necessary to install two coding pins on each connector part.

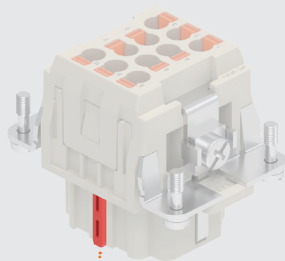
NOTE – Coded connector parts (male or female) of series CQEY cannot be coupled to corresponding connector parts (female or male) of series CQE, only uncoded connector parts of series CQEY can be coupled to corresponding connector parts of series CQE. Performance of a mixed CQEY/CQE coupling is equivalent to that of an equivalent unmixed (CQE/CQE or CQEY/CQEY) coupling where both sides are wired with the lowest of the wire sizes used by the mixed coupling, considering the slightly narrower range covered by **AXYR®** series CQEY when using ferruled (prepared) stranded copper wires (0,25 mm<sup>2</sup> to 2,5mm<sup>2</sup>, AWG 24-14) vs crimp series CQE (0,14 mm<sup>2</sup> to 4 mm<sup>2</sup>, AWG 26-12).

- Q **Current-temperature derating diagrams** (current-carrying capacity curves): like those of the equivalent CQE crimp versions of the same-sized wiring.
- Q **Conductors stripping length**: 9..11 mm.
- Q Silver plated contacts, stainless steel spring and tin plated brass stamped cage terminals (gold plated contact versions are not foreseen).
- Q **Actuator button of line contacts**: orange colour, to be operated by means of a flat-blade screwdriver sized 0,5 × 3 mm.
- Q **PE terminal**: screw-type, on the PE side bracket closer to line contact #1. Suitable for up to two wires (one on each side of the terminal under the pressure plate) sized up to 2,5 mm<sup>2</sup> / 14 AWG.
- Q Max diameter of wire sheathing or ferrule funnel:
  - ∅ 5 mm (unprepared wire size 4 mm<sup>2</sup> / AWG 12 or ferruled wire size 2,5 mm<sup>2</sup> / AWG 14)

## CERTIFICATIONS

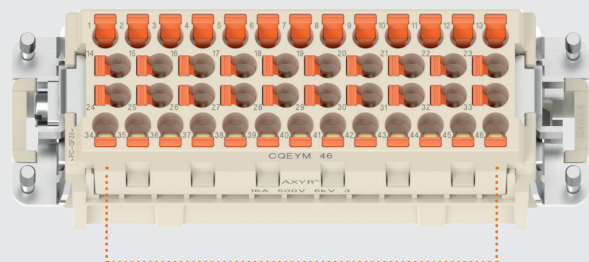
- cURus, CQC, DNV, BV, EAC pending.
- **CE** and **UK CA** markings.
- **RoHS**: compliant with exemption **6(c)**.

<sup>(#)</sup> Intermateability with series CQE (crimp) is ensured within the features of the new **AXYR®** CQEY series, considering the slightly different wiring range between the two series when using stranded ferruled (prepared) copper wires and the added coding feature of the new **AXYR®** CQEY series that series CQE does not yet provide.



- ▶ Required pins to correctly code a coupling:
  - **3 pins** for 10 and 18 poles connectors
  - **4 pins** for 32, 46, 64 and 92 poles connectors

▶ **CR Q08E optional plastic coding pins** for up to 6 configurations



▶ **High contacts density**

# CQEY 10 poles + ⊕ 16 A – 500 V

enclosures:  
size "44.27"

page:

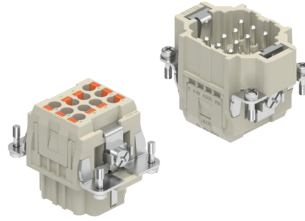
C-TYPE IP65 or IP66/IP69	387 - 392
C7 IP67, single lever	436 - 437
V-TYPE IP65 or IP66/IP69, single lever	444 - 447
BIG hoods	466 - 467
T-TYPE IP65 insulating	480 - 481
T-TYPE/W IP66/IP69 insulating	489
HYGIENIC T-TYPE/H IP66/IP69	501
HYGIENIC T-TYPE/C IP66/IP69, -50 °C	506
W-TYPE for aggressive environments	521
E-Xtreme® corrosion proof	530 - 531, 542, 550 - 551
EMC	578
Central lever	603 - 605
LS-TYPE	618 - 619
IP68	632 - 635

panel supports:  
COB

652 - 653

refer to CN.19 pages

AXYR® inserts,  
push-in spring clamp with actuator button



**Q SILVER PLATED CONTACTS**  
**FROM SEPTEMBER 2023**

coding pins



description

part No.

part No.

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

[CQEYF 10](#)  
[CQEYM 10](#)

plastic coding pin

[CR Q08E](#)

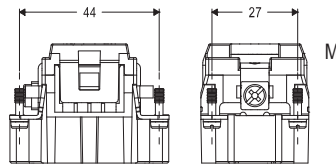
- characteristics according to EN 61984:

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

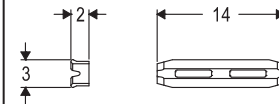
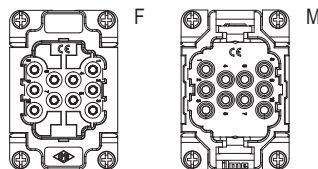
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- max diameter of wire sheathing or ferrule funnel:  $\varnothing 5 \text{ mm}$  (unprepared wire size  $4 \text{ mm}^2$  / AWG 12 or ferruled wire size  $2,5 \text{ mm}^2$  / AWG 14)

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



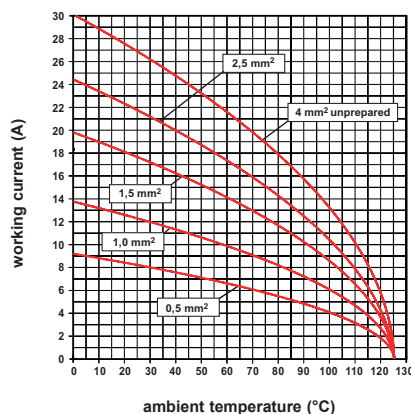
contacts side (front view)



Q Coding pins to be ordered separately.

Q It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 3 coding pins are required for each connector coupling.

## CQEY 10 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

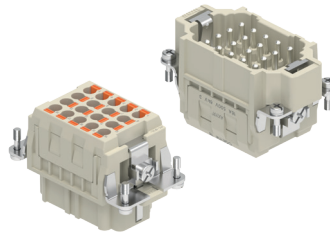
- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm

# CQEY 18 poles + ⊕ 16 A – 500 V

enclosures: size "57.27"	page:
C-TYPE IP65 or IP66/IP69	393 - 401
C7 IP67, two levers	438
V-TYPE IP65 or IP66/IP69, single lever	448 - 453
BIG hoods	468 - 469
T-TYPE IP65 insulating	482 - 483
T-TYPE/W IP66/IP69 insulating	490
HYGIENIC T-TYPE/H IP66/IP69	502
HYGIENIC T-TYPE/C IP66/IP69, -50 °C	507
W-TYPE for aggressive environments	522
E-Xtreme® corrosion proof	532 - 533, 543, 552 - 553
EMC	579
Central lever	606 - 608
LS-TYPE	620 - 621
IP68	636 - 639
panel supports: COB	652 - 653

refer to CN.19 pages

AXYR® inserts,  
push-in spring clamp with actuator button



**Q SILVER PLATED CONTACTS**  
**FROM SEPTEMBER 2023**

coding pins



description	part No.	part No.
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spring/AXYR® push-in connection  
female insert with female contacts  
male insert with male contacts

[CQEYF 18](#)  
[CQEYM 18](#)

plastic coding pin

[CR Q08E](#)

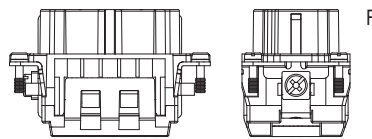
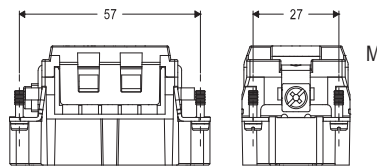
- characteristics according to EN 61984:

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

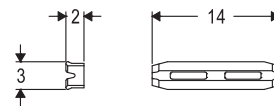
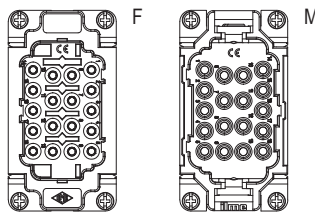
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- max diameter of wire sheathing or ferrule funnel:  $\varnothing 5 \text{ mm}$  (unprepared wire size  $4 \text{ mm}^2$  / AWG 12 or ferruled wire size  $2,5 \text{ mm}^2$  / AWG 14)

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



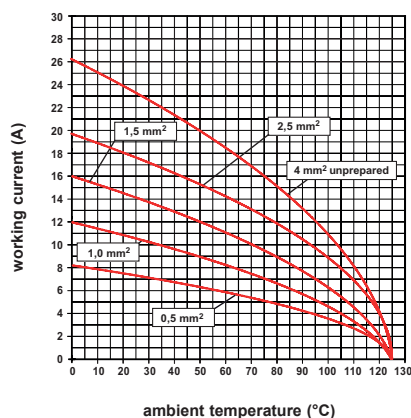
contacts side (front view)



Q Coding pins to be ordered separately.

Q It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 3 coding pins are required for each connector coupling.

## CQEY 18 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm

# CQEY 32 poles + ⊕ 16 A – 500 V

enclosures:  
size "77.27"

page:

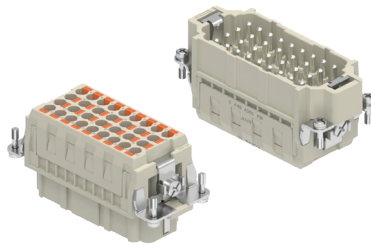
C-TYPE IP65 or IP66/IP69	402 - 411
C7 IP67, two levers	439 - 440
V-TYPE IP65 or IP66/IP69, single lever	454 - 458
BIG hoods	470 - 471
T-TYPE IP65 insulating	484 - 485
T-TYPE/W IP66/IP69 insulating	491
HYGIENIC T-TYPE/H IP66/IP69	503
HYGIENIC T-TYPE/C IP66/IP69, -50 °C	508
W-TYPE for aggressive environments	523
E-Xtreme® corrosion proof	534 - 535, 544, 554 - 555
EMC	580
Central lever	609 - 611
LS-TYPE	622 - 623
IP68	640 - 643

panel supports:  
COB

652 - 653

refer to CN.19 pages

AXYR® inserts,  
push-in spring clamp with actuator button



**Q SILVER PLATED CONTACTS**  
**FROM SEPTEMBER 2023**

coding pins



description

part No.

part No.

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

[CQEYF 32](#)  
[CQEYM 32](#)

plastic coding pin

[CR Q08E](#)

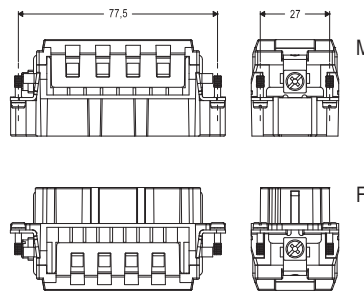
- characteristics according to EN 61984:

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

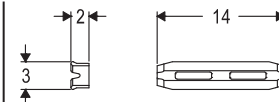
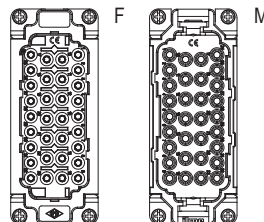
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- max diameter of wire sheathing or ferrule funnel:  $\varnothing 5 \text{ mm}$  (unprepared wire size  $4 \text{ mm}^2$  / AWG 12 or ferruled wire size  $2,5 \text{ mm}^2$  / AWG 14)

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

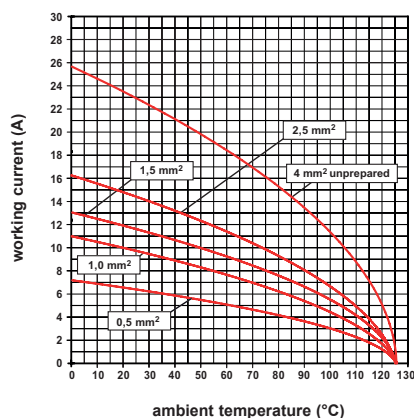


contacts side (front view)



- Q** Coding pins to be ordered separately.
- Q** It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 4 coding pins are required for each connector coupling.
- Q** It is necessary to install **two** coding pins on each connector part.

## CQEY 32 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm

# CQEY 46 poles + ⊕ 16 A – 500 V

enclosures:  
size "104.27"

page:

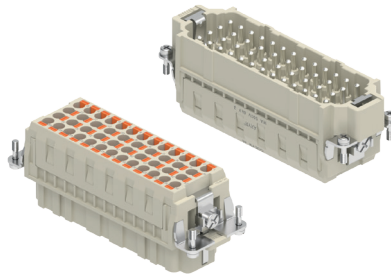
C-TYPE IP65 or IP66/IP69	412 - 423
C7 IP67, two levers	441 - 442
V-TYPE IP65 or IP66/IP69, single lever	459 - 463
BIG hoods	472 - 473
T-TYPE IP65 insulating	486 - 487
T-TYPE/W IP66/IP69 insulating	492
HYGIENIC T-TYPE/H IP66/IP69	504
HYGIENIC T-TYPE/C IP66/IP69, -50 °C	509
W-TYPE for aggressive environments	524
E-Xtreme® corrosion proof	536 - 537, 545, 556 - 557
EMC	581
Central lever	612 - 614
LS-TYPE	624 - 625
IP68	644 - 647

panel supports:  
COB

652 - 653

refer to CN.19 pages

AXYR® inserts,  
push-in spring clamp with actuator button



**Q SILVER PLATED CONTACTS**

**FROM SEPTEMBER 2023**

coding pins



description

part No.

part No.

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

[CQEYF 46](#)  
[CQEYM 46](#)

plastic coding pin

[CR Q08E](#)

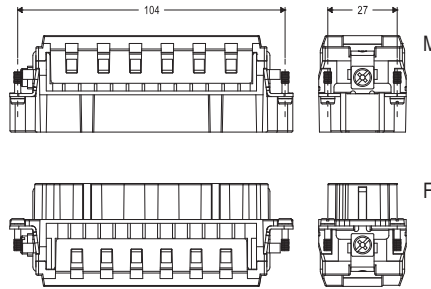
- characteristics according to EN 61984:

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

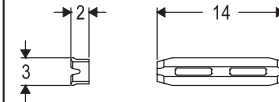
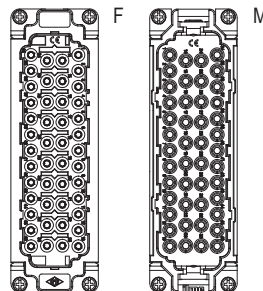
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10$  G $\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3$  m $\Omega$
- max diameter of wire sheathing or ferrule funnel:  $\varnothing$  5 mm (unprepared wire size 4 mm<sup>2</sup> / AWG 12 or ferruled wire size 2,5 mm<sup>2</sup> / AWG 14)

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



contacts side (front view)

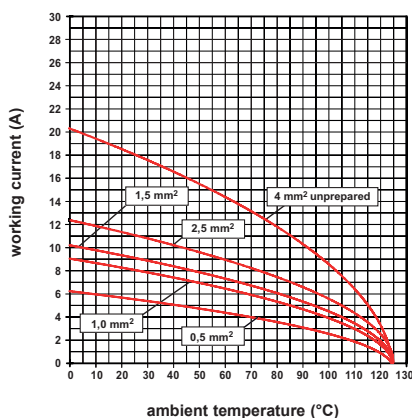


**Q** Coding pins to be ordered separately.

**Q** It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 4 coding pins are required for each connector coupling.

**Q** It is necessary to install **two** coding pins on each connector part.

## CQEY 46 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm

# CQEY 64 poles + ⊕ 16 A – 500 V

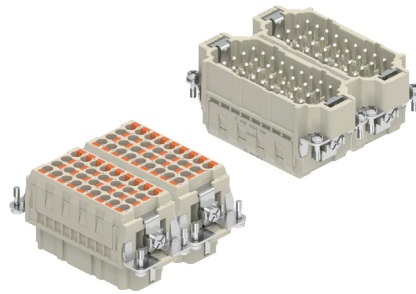
enclosures:  
size "77.62"

page:

C-TYPE IP65 or IP66/IP69  
W-TYPE for aggressive environments  
E-Xtreme® corrosion proof

424 - 429  
525  
546

AXYR® inserts,  
push-in spring clamp with actuator button



coding pins



**Q SILVER PLATED CONTACTS**  
**FROM SEPTEMBER 2023**

refer to CN.19 pages

description	part No.	part No.	part No.
spring/AXYR® push-in connection			
female insert with female contacts, No. (1-32) and (33-64)	<a href="#">CQEYF 32</a>	<a href="#">CQEYF 32 N</a>	
male insert with male contacts, No. (1-32) and (33-64)	<a href="#">CQEYM 32</a>	<a href="#">CQEYM 32 N</a>	
plastic coding pin			<a href="#">CR Q08E</a>

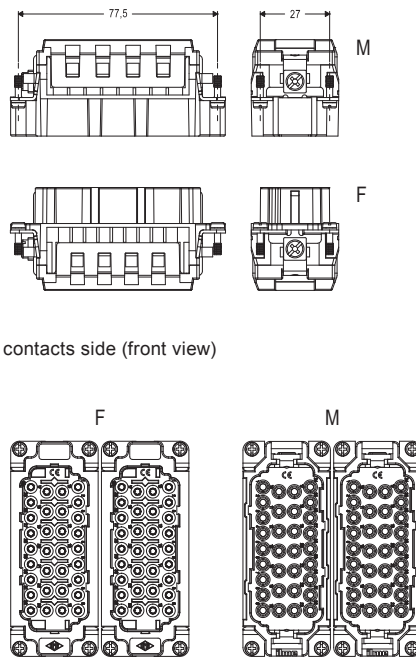
- characteristics according to EN 61984:

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

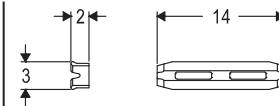
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 500$  cycles
- contact resistance:  $\leq 3 \text{ m}\Omega$
- max diameter of wire sheathing or ferrule funnel:  $\varnothing 5 \text{ mm}$  (unprepared wire size  $4 \text{ mm}^2$  / AWG 12 or ferruled wire size  $2,5 \text{ mm}^2$  / AWG 14)

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

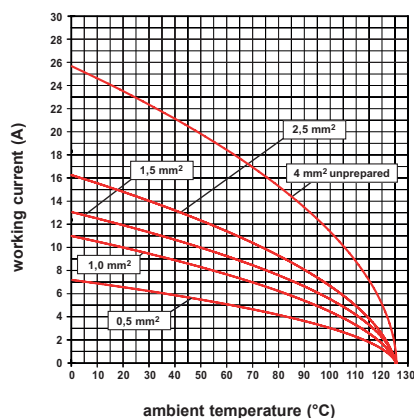


contacts side (front view)



- Q Coding pins to be ordered separately.
- Q It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 4 coding pins are required for each connector coupling.
- Q It is necessary to install **two** coding pins on each connector part.

## CQEY 64 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm



# CQEY 92 poles + ⊕ 16 A – 500 V

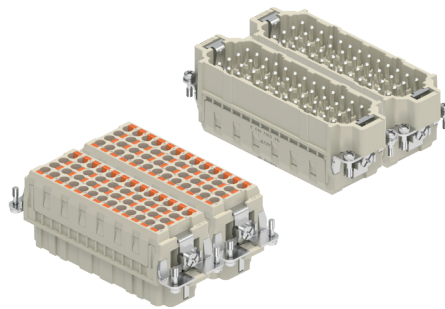
enclosures:  
size "104.62"

page:

C-TYPE IP65 or IP66/IP69  
W-TYPE for aggressive environments  
E-Xtreme® corrosion proof

430  
526  
547

AXYR® inserts,  
push-in spring clamp with actuator button



coding pins



**Q SILVER PLATED CONTACTS**

**FROM SEPTEMBER 2023**

refer to CN.19 pages

description	part No.	part No.	part No.
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spring/AXYR® push-in connection  
female insert with female contacts, No. (1-46) and (47-92)  
male insert with male contacts, No. (1-46) and (47-92)

[CQEYF 46](#)  
[CQEYM 46](#)

[CQEYF 46 N](#)  
[CQEYM 46 N](#)

plastic coding pin

[CR Q08E](#)

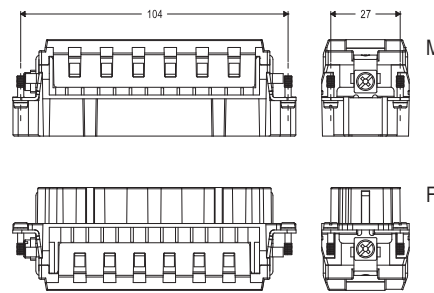
- characteristics according to EN 61984:

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

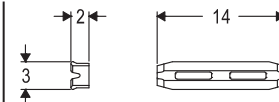
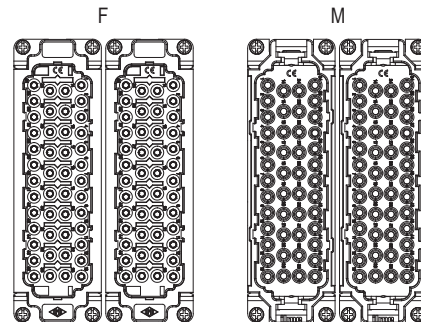
- cURus (ECBT2/8 and PVVA2/8) pending  
- CQC, DNV, BV, EAC pending

- rated voltage according to UL/CSA: 600 V  
- insulation resistance:  $\geq 10 \text{ G}\Omega$   
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$   
- made of self-extinguishing thermoplastic resin UL 94V-0  
- mechanical life:  $\geq 500$  cycles  
- contact resistance:  $\leq 3 \text{ m}\Omega$   
- max diameter of wire sheathing or ferrule funnel:  $\varnothing 5 \text{ mm}$  (unprepared wire size  $4 \text{ mm}^2$  / AWG 12 or ferruled wire size  $2,5 \text{ mm}^2$  / AWG 14)

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

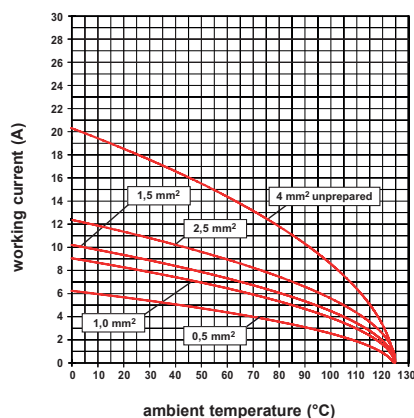


contacts side (front view)



- Q** Coding pins to be ordered separately.
- Q** It is possible to achieve up to **6 different codings** thanks to the use of the optional CR Q08E coding pin: 4 coding pins are required for each connector coupling.
- Q** It is necessary to install **two** coding pins on each connector part.

## CQEY 92 poles connector inserts Maximum current load derating diagram



inserts for conductors with the following cross-sectional areas:

- unprepared conductor  
0,25 mm<sup>2</sup> - 4 mm<sup>2</sup> (AWG 24-12)
- prepared conductor with crimped end-sleeve  
0,25 mm<sup>2</sup> - 2,5 mm<sup>2</sup> (AWG 24-14)
- conductors stripping length: 9..11 mm





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