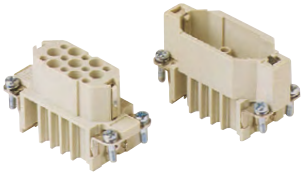
CD 15 poles + ⏚ 10A - 250V

enclosures:
size "49.16" **page:**

IL-BRID	**374 - 377, 382**
CZ7 IP67, single lever	**384**
W-TYPE for aggressive environments	**519**
E-Xtreme® corrosion proof	**540**
EMC	**576**

panel supports: **page:**
COB + adaptor **652 - 654**

inserts, crimp connections

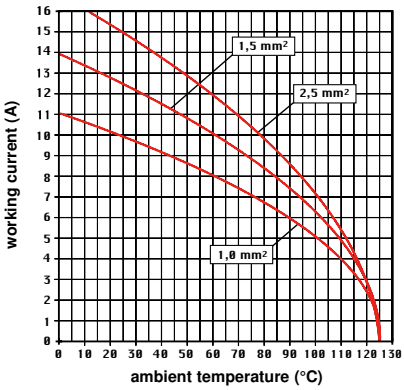


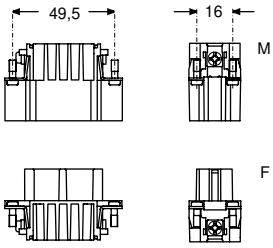
10A crimp contacts
silver and gold plated

description			part No.	part No.		part No.	
without contacts (to be ordered separately)							
female inserts for female contacts			**CDF 15**				
male inserts for male contacts			**CDM 15**				
10A female contacts							
0,14-0,37 mm²	AWG 26-22	identification No. 1		**CDFA 0.3**	silver plated	**CDFD 0.3**	gold plated✢
0,5 mm²	AWG 20	identification No. 2		**CDFA 0.5**		**CDFD 0.5**	
0,75 mm²	AWG 18	identification No. ②		**CDFA 0.7**		**CDFD 0.7**	
1 mm²	AWG 18	identification No. 3		**CDFA 1.0**		**CDFD 1.0**	
1,5 mm²	AWG 16	identification No. 4		**CDFA 1.5**		**CDFD 1.5**	
2,5 mm²	AWG 14	identification No. 5		**CDFA 2.5**		**CDFD 2.5**	
10A male contacts							
0,14-0,37 mm²	AWG 26-22	identification No. 1		**CDMA 0.3**		**CDMD 0.3**	
0,5 mm²	AWG 20	identification No. 2		**CDMA 0.5**		**CDMD 0.5**	
0,75 mm²	AWG 18	identification No. ②		**CDMA 0.7**		**CDMD 0.7**	
1 mm²	AWG 18	identification No. 3		**CDMA 1.0**		**CDMD 1.0**	
1,5 mm²	AWG 16	identification No. 4		**CDMA 1.5**		**CDMD 1.5**	
2,5 mm²	AWG 14	identification No. 5		**CDMA 2.5**		**CDMD 2.5**	

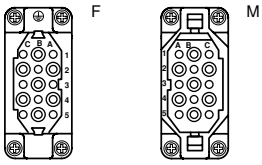
- characteristics according to EN 61984:
  10A 250V 4kV 3
  10A 230/400V 4kV 2
- c UL us (UL for USA and Canada), CSA, cec, DNV·GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 65
- **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

CD 15 poles connector inserts
Maximum current load derating diagram

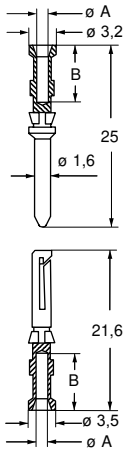




contacts side (front view)



CR CP coding pin
with loss of one contact
(page 689)



CDF and CDM contacts

conductor section mm²	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

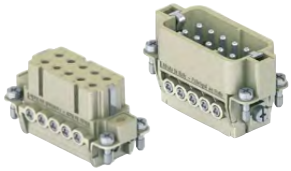
dimensions shown in mm are not binding and may be changed without notice

CDA 10 poles + ⏚ 16A - 250V

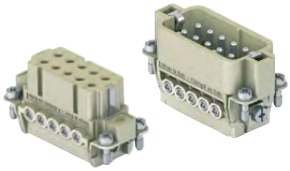
enclosures: size “49.16”	page:
IL-BRID	374 - 377, 382
CZ7 IP67, single lever	384
W-TYPE for aggressive environments	519
E-Xtreme® corrosion proof	540
EMC	576

panel supports:	page:
COB + adaptor	652 - 654

inserts, screw terminal connection

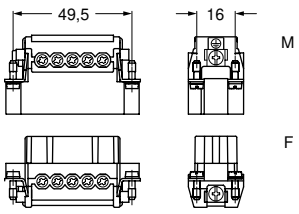


inserts, screw terminal connection

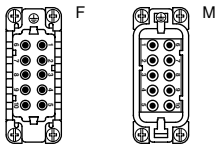


description	part No.	part No.
indirect, with pressure plate [1]		
female inserts with female contacts	**CDAF 10**	
male inserts with male contacts	**CDAM 10**	
direct, without pressure plate [2]		
female inserts with female contacts		**CDAF 10 X**
male inserts with male contacts		**CDAM 10 X**

- characteristics according to EN 61984:
  16A 250V 4kV 3
  16A 230/400V 4kV 2
- c UL us (UL for USA and Canada), CSA, CQC, 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: ≤ 1 mΩ
- according to recommendations EUROMAP N° 16
- for max. current load see the connector inserts derating diagram below; for more information see page 28



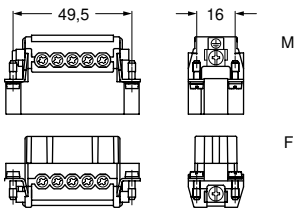
contacts side (front view)



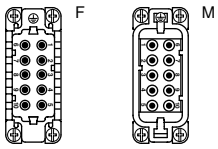
- inserts with pressure plate for conductors cross-sections:
  0,5 - 4 mm² - AWG 20 - 12
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

[1] for unprepared conductors

CDA ...



contacts side (front view)

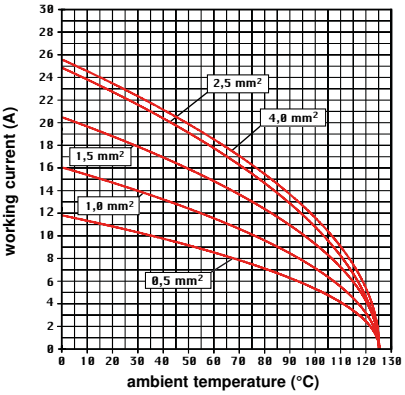


- inserts without pressure plate for prepared conductors with cross-sections:
  0,25 - 2,5 mm² - AWG 24 - 14
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

[2] for conductors with end sleeve ferrule

CDA ... X

CDA 10 poles connector inserts
Maximum current load derating diagram



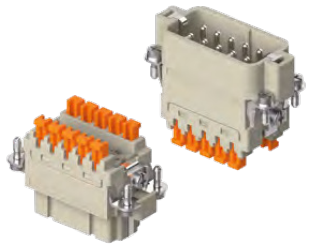
dimensions shown in mm are not binding and may be changed without notice

CSAH-SQUICH® 10 poles + ⏚ 16A - 250V

enclosures: size “49.16”	page:
IL-BRID	374 - 377, 382
CZ7 IP67, single lever	384
W-TYPE for aggressive environments	519
E-Xtreme® corrosion proof	540
EMC	576

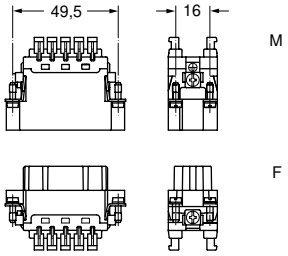
panel supports:	page:
COB + adaptor	652 - 654

inserts, spring terminal connections without tools

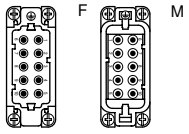


description	part No.
spring terminals with actuator button female inserts with female contacts male inserts with male contacts	**CSAHF 10** **CSAHM 10**

- characteristics according to EN 61984:
  16A 250V 4kV 3
  16A 400V 4kV 2
- cULus (UL for USA and Canada), CSA, 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: ≤ 3 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28

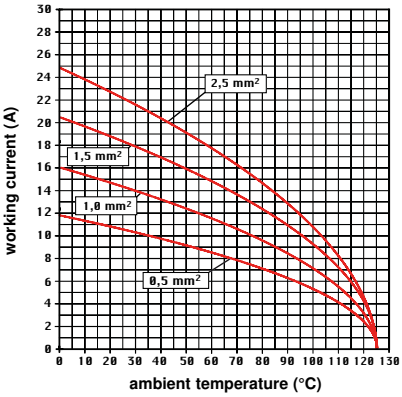


contacts side (front view)



- inserts for connectors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

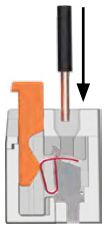
CSAH 10 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING

1



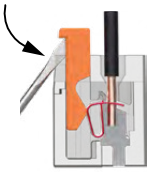
Deeply insert a stripped conductor into a round terminal.

2

Push the actuator button to close the terminal.

RE-OPENING

3



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

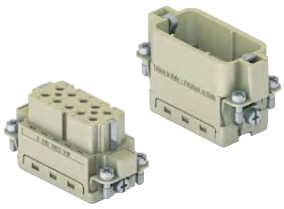
CDC 10 poles + ⏚ 16A - 250V

enclosures:
size "49.16" **page:**

IL-BRID	**374 - 377, 382**
CZ7 IP67, single lever	**384**
W-TYPE for aggressive environments	**519**
E-Xtreme® corrosion proof	**540**
EMC	**576**

panel supports: **page:**
COB + adaptor **652 - 654**

inserts, 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			**CDCF 10**			
male inserts for male contacts			**CDCM 10**			
16A female contacts						
0,14-0,37 mm²	AWG 26-22	one groove		**CCFA 0.3**	**CCFD 0.3**	
0,5 mm²	AWG 20	with no grooves		**CCFA 0.5**	**CCFD 0.5**	
0,75 mm²	AWG 18	one groove (back side)		**CCFA 0.7**	**CCFD 0.7**	
1 mm²	AWG 18	one groove		**CCFA 1.0**	**CCFD 1.0**	
1,5 mm²	AWG 16	two grooves		**CCFA 1.5**	**CCFD 1.5**	
2,5 mm²	AWG 14	three grooves		**CCFA 2.5**	**CCFD 2.5**	
3 mm²	AWG 12	one wide groove		**CCFA 3.0**	**CCFD 3.0**	
4 mm²	AWG 12	with no grooves		**CCFA 4.0**	**CCFD 4.0**	
16A male contacts						
0,14-0,37 mm²	AWG 26-22	one groove		**CCMA 0.3**	**CCMD 0.3**	
0,5 mm²	AWG 20	with no grooves		**CCMA 0.5**	**CCMD 0.5**	
0,75 mm²	AWG 18	one groove (back side)		**CCMA 0.7**	**CCMD 0.7**	
1 mm²	AWG 18	one groove		**CCMA 1.0**	**CCMD 1.0**	
1,5 mm²	AWG 16	two grooves		**CCMA 1.5**	**CCMD 1.5**	
2,5 mm²	AWG 14	three grooves		**CCMA 2.5**	**CCMD 2.5**	
3 mm²	AWG 12	one wide groove		**CCMA 3.0**	**CCMD 3.0**	
4 mm²	AWG 12	with no grooves		**CCMA 4.0**	**CCMD 4.0**	
16A male crimp contacts for advanced opening						
0,5 mm²	AWG 20	with no grooves		**CC 0.5 AN**		
0,75 mm²	AWG 18	one groove (back side)		**CC 0.7 AN**		
1 mm²	AWG 18	one groove		**CC 1.0 AN**		
1,5 mm²	AWG 16	two grooves		**CC 1.5 AN**		
2,5 mm²	AWG 14	three grooves		**CC 2.5 AN**		

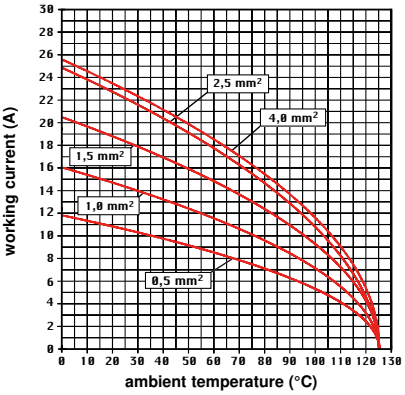
silver plated

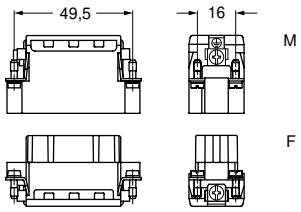
gold plated+

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

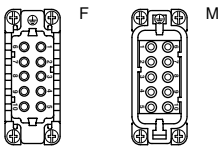
- characteristics according to EN 61984:
  16A 250V 4kV 3
  16A 230/400V 4kV 2
- c UL us (UL for USA and Canada), CSA, cec, DNV·GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ
- according to recommendations EUROMAP N° 16
- for max. current load see the connector inserts derating diagram below; for more information see page 28

CDC 10 poles connector inserts
Maximum current load derating diagram



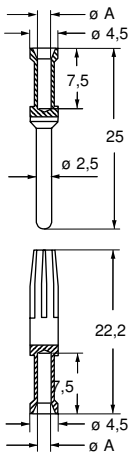


contacts side (front view)

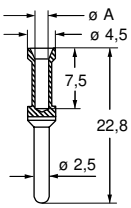


- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series on pages 708 - 741)

CCF and CCM



CC...AN



CCF, CCM and CC..AN contacts

conductor section mm²	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

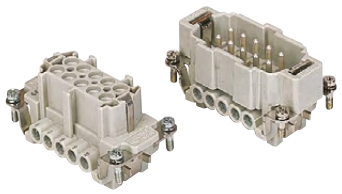
dimensions shown in mm are not binding and may be changed without notice

CNE CSH-SQUICH® 10 poles + ⏚ 16A - 500V

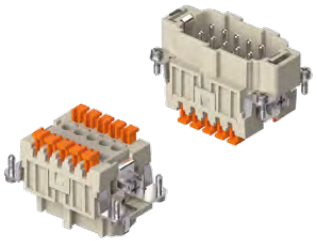
enclosures: size “57.27”	page:
C-TYPE IP65/IP66	393 - 401
C7 IP67, two levers	438
V-TYPE IP65/IP66, single lever	448 - 453
BIG hoods	468 - 469
T-TYPE IP65 insulating	482 - 483
T-TYPE / W IP66/IP69 insulating	490
HYGIENIC T-TYPE / H IP66/IP69	502
HYGIENIC T-TYPE / C IP66/IP69, -50 °C	507
W-TYPE for aggressive 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:	page:
COB	652 - 653

inserts, screw terminal connections



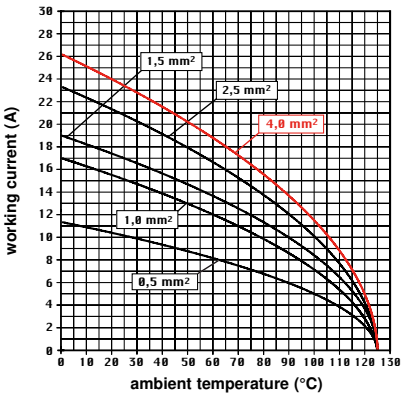
inserts, spring terminal connections without tools



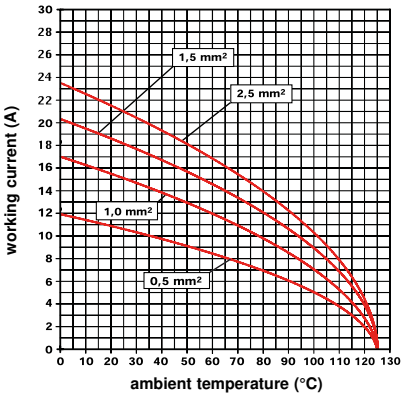
description	part No.	part No.
indirect, with plate [1]		
female inserts with female contacts	**CNEF 10 T**	
male inserts with male contacts	**CNEM 10 T**	
direct, without plate [2]		
female inserts with female contacts	**CNEF 10 TX**	
male inserts with male contacts	**CNEM 10 TX**	
spring terminals with actuator button		
female inserts with female contacts		**CSHF 10**
male inserts with male contacts		**CSHM 10**

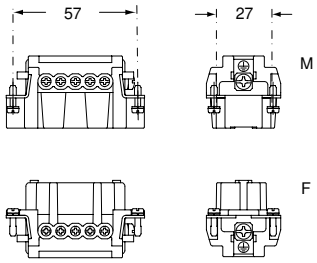
- characteristics according to EN 61984:
  16A 500V 6kV 3
  16A 400/690V 6kV 2
- c UL us (UL for USA and Canada), CSA, cec, DNV·GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ (CNE) - ≤ 3 mΩ (CSH)
- for max. current load see the connector inserts derating diagrams below; for more information see page 28

CNE 10 poles connector inserts
Maximum current load derating diagram

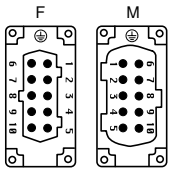


CSH 10 poles connector inserts
Maximum current load derating diagram





contacts side (front view)



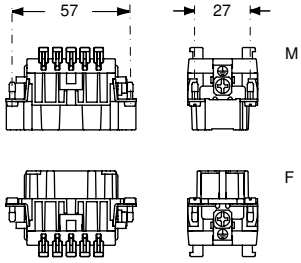
- inserts with plate for section conductors: 0,5 - 4 mm² - AWG 20 - 12
- inserts without plate for section conductors: 0,25 - 2,5 mm² - AWG 24 - 14
- conductors stripping length: 7 mm
- terminal screw torque: 0,5 Nm (4.4 lb.in), for more information see page 20 and 21

[1] for unprepared conductors

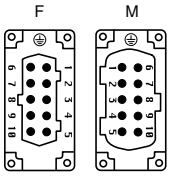
CNE ...

[2] for conductors with end sleeve ferrule

CNE ... X



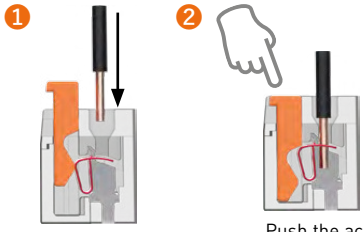
contacts side (front view)



- inserts for connectors with the following sections: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 9...11 mm

SQUICH®-spring connection technology

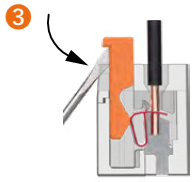
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



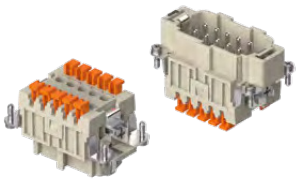
Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

CSHF/M 10 S 10 poles + ⏚ 16A - 500V SQUICH®

enclosures: size “57.27”	page:
C-TYPE IP65/IP66	393 - 401
C7 IP67, two levers	438
V-TYPE IP65/IP66, 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:	page:
COB	652 - 653

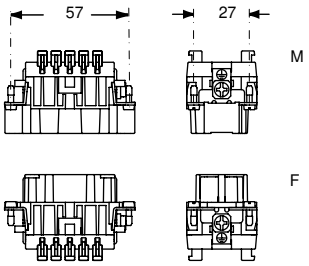
inserts, spring terminal connections



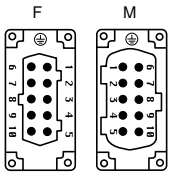
STAMPED CONTACTS, SILVER PLATED

description	part No.
spring terminals with actuator button female inserts with female contacts male inserts with male contacts	**CSHF 10 S** **CSHM 10 S**

- characteristics according to EN 61984:
  16A 500V 6kV 3
  16A 400/690V 6kV 2
- c UL us (UL for USA and Canada) certified CSA, CQC, DNV-GL, BV, EAC pending
- 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: ≤ 3 mΩ

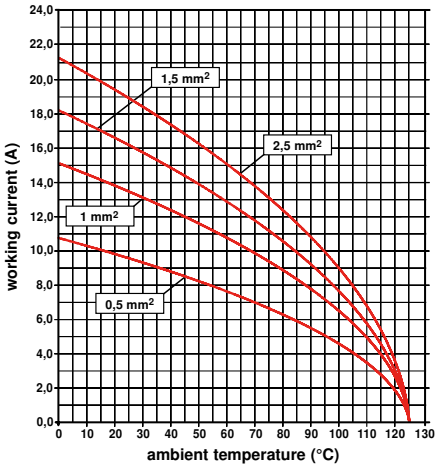


contacts side (front view)



- inserts for connectors with the following conductor cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping lenght: 9...11 mm

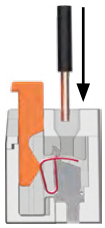
CSH S 10 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

WIRING

1



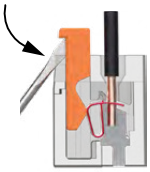
Deeply insert a stripped conductor into a round terminal.

2

Push the actuator button to close the terminal.

RE-OPENING

3



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

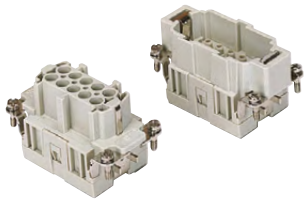
CCE 10 poles + ⏚ 16A - 500V

enclosures:
size "57.27"

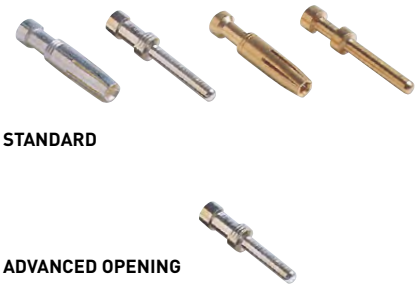
	page:
C-TYPE IP65/IP66	393 - 401
C7 IP67, two levers	438
V-TYPE IP65/IP66, single lever	448 - 453
BIG hoods	468 - 469
T-TYPE IP65 insulating	482 - 483
T-TYPE / W IP66/IP69 insulating	490
HYGIENIC T-TYPE / H IP66/IP69	502
HYGIENIC T-TYPE / C IP66/IP69, -50 °C	507
W-TYPE for aggressive environments	522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

panel supports:	page:
COB	652 - 653

inserts, crimp connections



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



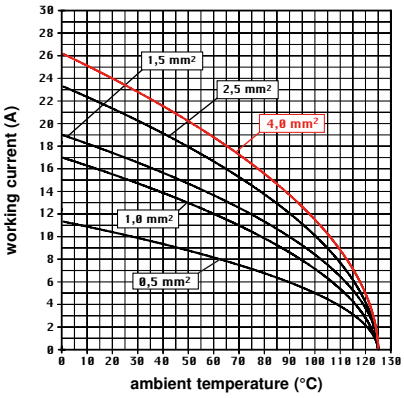
CCE

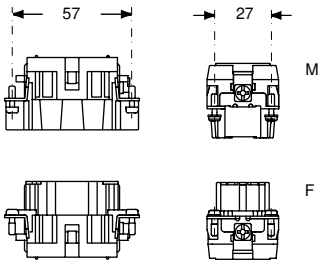
description			part No.	part No. silver plated	part No. gold plated+
without contacts (to be ordered separately)					
female inserts for female contacts			CCEF 10		
male inserts for male contacts			CCEM 10		
16A female contacts					
0,14-0,37 mm²	AWG 26-22	one groove		CCFA 0.3	CCFD 0.3
0,5 mm²	AWG 20	with no grooves		CCFA 0.5	CCFD 0.5
0,75 mm²	AWG 18	one groove (back side)		CCFA 0.7	CCFD 0.7
1 mm²	AWG 18	one groove		CCFA 1.0	CCFD 1.0
1,5 mm²	AWG 16	two grooves		CCFA 1.5	CCFD 1.5
2,5 mm²	AWG 14	three grooves		CCFA 2.5	CCFD 2.5
3 mm²	AWG 12	one wide groove		CCFA 3.0	CCFD 3.0
4 mm²	AWG 12	with no grooves		CCFA 4.0	CCFD 4.0
16A male contacts					
0,14-0,37 mm²	AWG 26-22	one groove		CCMA 0.3	CCMD 0.3
0,5 mm²	AWG 20	with no grooves		CCMA 0.5	CCMD 0.5
0,75 mm²	AWG 18	one groove (back side)		CCMA 0.7	CCMD 0.7
1 mm²	AWG 18	one groove		CCMA 1.0	CCMD 1.0
1,5 mm²	AWG 16	two grooves		CCMA 1.5	CCMD 1.5
2,5 mm²	AWG 14	three grooves		CCMA 2.5	CCMD 2.5
3 mm²	AWG 12	one wide groove		CCMA 3.0	CCMD 3.0
4 mm²	AWG 12	with no grooves		CCMA 4.0	CCMD 4.0
16A male crimp contacts for advanced opening					
0,5 mm²	AWG 20	with no grooves		CC 0.5 AN	
0,75 mm²	AWG 18	one groove (back side)		CC 0.7 AN	
1 mm²	AWG 18	one groove		CC 1.0 AN	
1,5 mm²	AWG 16	two grooves		CC 1.5 AN	
2,5 mm²	AWG 14	three grooves		CC 2.5 AN	

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

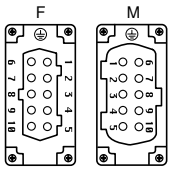
- characteristics according to EN 61984:
  16A 500V 6kV 3
  16A 400/690V 6kV 2
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28

CCE 10 poles connector inserts
Maximum current load derating diagram



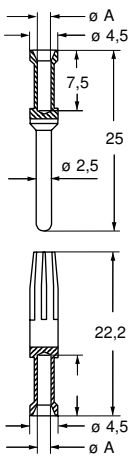


contacts side (front view)

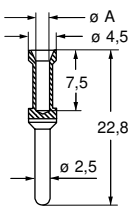


- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series on pages 708 - 741)

CCF and CCM



CC...AN



CCF, CCM and CC..AN contacts

conductor section mm²	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

CQE 10 poles + ⏚ 16A - 500V

enclosures:
size "44.27" **page:**

C-TYPE IP65/IP66	**387 - 392**
C7 IP67, single lever	**436 - 437**
V-TYPE IP65/IP66, 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: **page:**

COB	**652 - 653**

- for applications requiring higher voltages, please see the special voltage application section on page 167

inserts, crimp connections

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

STANDARD

ADVANCED OPENING

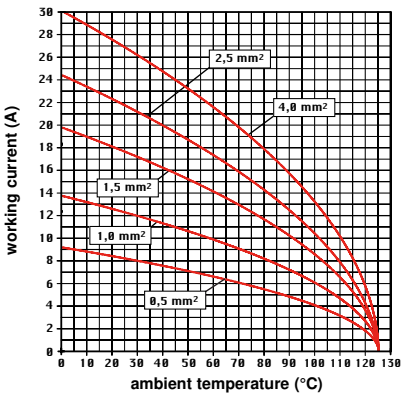
description	part No.	part No.
without contacts (to be ordered separately)		
female inserts for female contacts	**CQEF 10**	
male inserts for male contacts	**CQEM 10**	

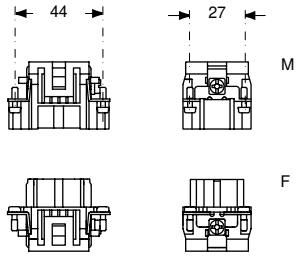
16A female contacts			silver plated	gold plated+
0,14-0,37 mm²	AWG 26-22	one groove	**CCFA 0.3**	**CCFD 0.3**
0,5 mm²	AWG 20	with no grooves	**CCFA 0.5**	**CCFD 0.5**
0,75 mm²	AWG 18	one groove (back side)	**CCFA 0.7**	**CCFD 0.7**
1 mm²	AWG 18	one groove	**CCFA 1.0**	**CCFD 1.0**
1,5 mm²	AWG 16	two grooves	**CCFA 1.5**	**CCFD 1.5**
2,5 mm²	AWG 14	three grooves	**CCFA 2.5**	**CCFD 2.5**
3 mm²	AWG 12	one wide groove	**CCFA 3.0**	**CCFD 3.0**
4 mm²	AWG 12	with no grooves	**CCFA 4.0**	**CCFD 4.0**
16A male contacts				
0,14-0,37 mm²	AWG 26-22	one groove	**CCMA 0.3**	**CCMD 0.3**
0,5 mm²	AWG 20	with no grooves	**CCMA 0.5**	**CCMD 0.5**
0,75 mm²	AWG 18	one groove (back side)	**CCMA 0.7**	**CCMD 0.7**
1 mm²	AWG 18	one groove	**CCMA 1.0**	**CCMD 1.0**
1,5 mm²	AWG 16	two grooves	**CCMA 1.5**	**CCMD 1.5**
2,5 mm²	AWG 14	three grooves	**CCMA 2.5**	**CCMD 2.5**
3 mm²	AWG 12	one wide groove	**CCMA 3.0**	**CCMD 3.0**
4 mm²	AWG 12	with no grooves	**CCMA 4.0**	**CCMD 4.0**
16A male crimp contacts for advanced opening				
0,5 mm²	AWG 20	with no grooves	**CC 0.5 AN**	
0,75 mm²	AWG 18	one groove (back side)	**CC 0.7 AN**	
1 mm²	AWG 18	one groove	**CC 1.0 AN**	
1,5 mm²	AWG 16	two grooves	**CC 1.5 AN**	
2,5 mm²	AWG 14	three grooves	**CC 2.5 AN**	

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

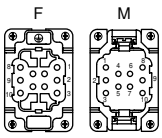
- characteristics according to EN 61984:
  16A 500V 6kV 3
  16A 830V 8kV 2
- c UL us (UL for USA and Canada), CSA, CQC, DNV·GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ
- for max. current load see the connector inserts derating diagram below; for more information see page 28

CQE 10 poles connector inserts
Maximum current load derating diagram



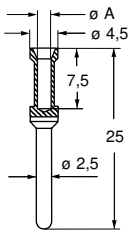


contacts side (front view)

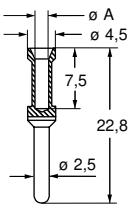


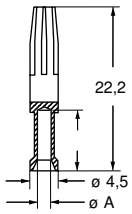
CR CPQ coding pins
(page 689)

CCF and CCM



CC...AN





- **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)

CCF, CCM and CC..AN contacts

conductor section mm²	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

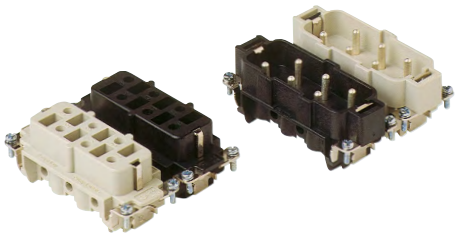
dimensions shown in mm are not binding and may be changed without notice

CP 12 poles + ⏚ 35A - 400/690V

enclosures:
size "77.62" **page:**

C-TYPE IP65/IP66	**424 - 429**
W-TYPE for aggressive environments	**525**
E-Xtreme® corrosion proof	**546**

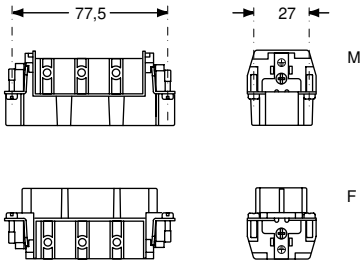
inserts, screw terminal connection



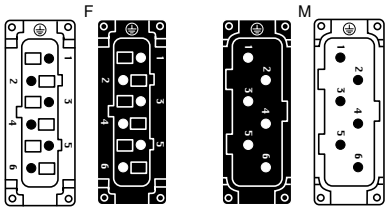
SILVER PLATED CONTACTS

description	part No.	part No.
indirect, with plate		
female inserts No. (1-6), white and black	**CPF 06**	**CPF 06 N**
male inserts No. (1-6), white and black	**CPM 06**	**CPM 06 N**

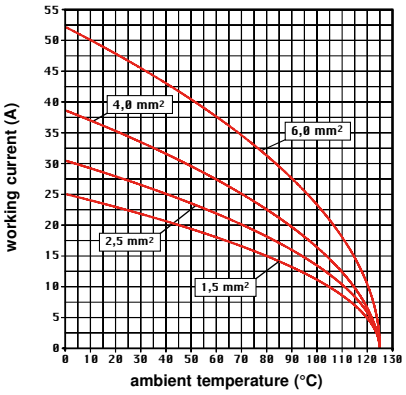
- characteristics according to EN 61984:
  35A 400/690V 6kV 3
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
  (CP RY version up to 180 °C)
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,5 mΩ
- for max. current load see the connector inserts derating diagrams below; for more information see page 28



contacts side (front view)



CP 12 poles connector inserts
Maximum current load derating diagram



- inserts with plate, for section conductors:
  0,75 - 6 mm² - AWG 18 - 10
- conductors stripping length: 10,5 mm
- terminal screw torque: 1,2 Nm (10,7 lb.in),
  information see page 20 and 21

CQ

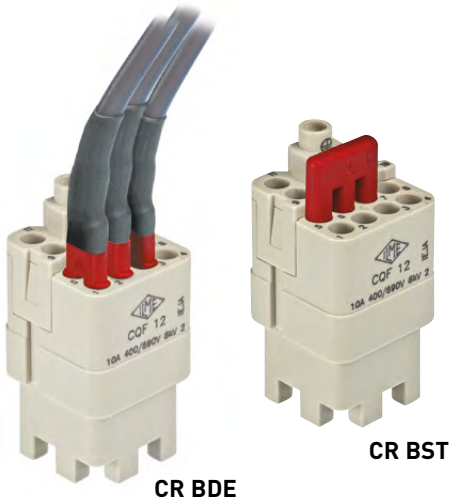
CQ 12 poles + ⏚ series

TECHNICAL FEATURES

Compactness meets performance

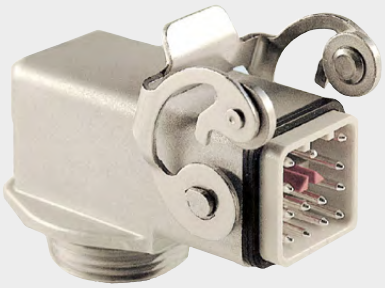
Compact solution for high density needs.

Reliable, 16 coding possibilities, perfect for small motors with bridges for star/delta configuration.



Bridges for delta or star connection from page 694, 695

Coding positions for CQ 12 connector
See diagram to the right

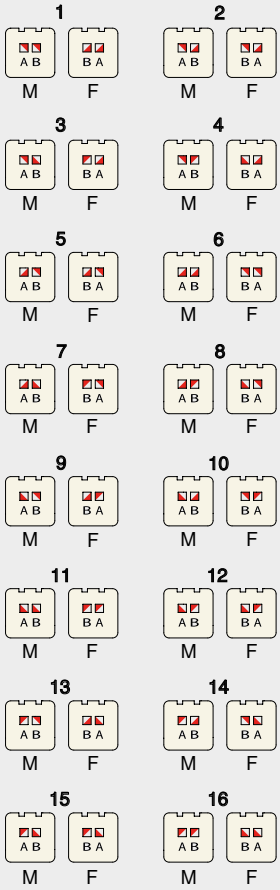


Legend:

(A B) CQ 12 coding pin

M = male insert

F = female insert



CQ 12 poles + ⏚ 10A - 400V

enclosures:
size "21.21"

	page:
Insulating type	**339 - 348**
Metallic type	**349 - 363**
W-TYPE for aggressive environments	**512 - 518**
EMC	**564 - 572**
IP68	**628 - 631**
E-Xtreme® corrosion proof	**538 - 539**

ISO 23570-3 standard and DESINA® specification compliant

inserts, crimp connections

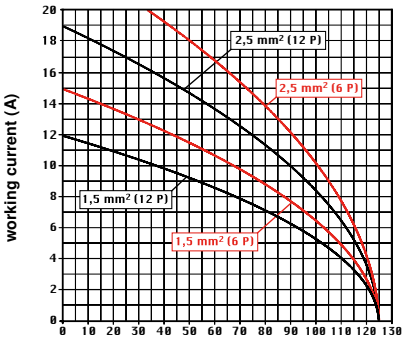
10A crimp contacts silver and gold plated

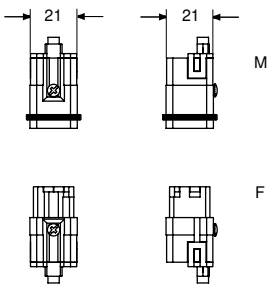
CQ

description			part No.	part No silver plated	part No gold plated✢
without contacts (to be ordered separately)					
female inserts for female contacts			**CQF 12**		
male inserts for male contacts			**CQM 12**		
10A female contacts					
0,14-0,37 mm²	AWG 26-22	identification No. 1		**CDFA 0.3**	**CDFD 0.3**
0,5 mm²	AWG 20	identification No. 2		**CDFA 0.5**	**CDFD 0.5**
0,75 mm²	AWG 18	identification No. ②		**CDFA 0.7**	**CDFD 0.7**
1 mm²	AWG 18	identification No. 3		**CDFA 1.0**	**CDFD 1.0**
1,5 mm²	AWG 16	identification No. 4		**CDFA 1.5**	**CDFD 1.5**
2,5 mm²	AWG 14	identification No. 5		**CDFA 2.5**	**CDFD 2.5**
10A male contacts					
0,14-0,37 mm²	AWG 26-22	identification No. 1		**CDMA 0.3**	**CDMD 0.3**
0,5 mm²	AWG 20	identification No. 2		**CDMA 0.5**	**CDMD 0.5**
0,75 mm²	AWG 18	identification No. ②		**CDMA 0.7**	**CDMD 0.7**
1 mm²	AWG 18	identification No. 3		**CDMA 1.0**	**CDMD 1.0**
1,5 mm²	AWG 16	identification No. 4		**CDMA 1.5**	**CDMD 1.5**
2,5 mm²	AWG 14	identification No. 5		**CDMA 2.5**	**CDMD 2.5**

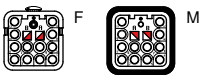
- characteristics according to EN 61984:
  10A 400V 6kV 3
  10A 400/690V 6kV 2
- cULus (UL for USA and Canada), CSA, CQC, DNV·GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 3 mΩ
- inserts already supplied with stainless steel fixing screw with gasket, which ensures IP66/IP67/IP69 degree of protection
- **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

CQ 12 poles connector inserts
Maximum current load derating diagram



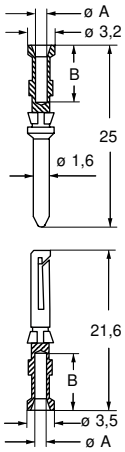


contacts side (front view)



Note:
PE screw connection for unprepared wires only

The **CR Q12** coding pins (to be ordered separately), allow the user to create 16 different combinations, according to the diagram shown on **page 689**



CDF and CDM contacts

conductor section mm²	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

CR bridges for delta connection

inserts

CQF *	12 poles + ⏚
CDDF	24, 42, 72 (144), 108 (216) poles + ⏚
CX 17 DF (MIXO)	1 module

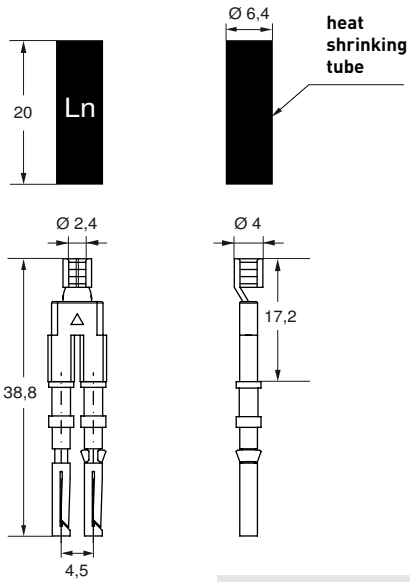
* for enclosures C-TYPE series (CKA/MKA ..I/VS) only

bridges for delta connection

description	part No.
bridge with 2 female 10A contacts, silver plated and open type crimp barrel	**CR BDE**

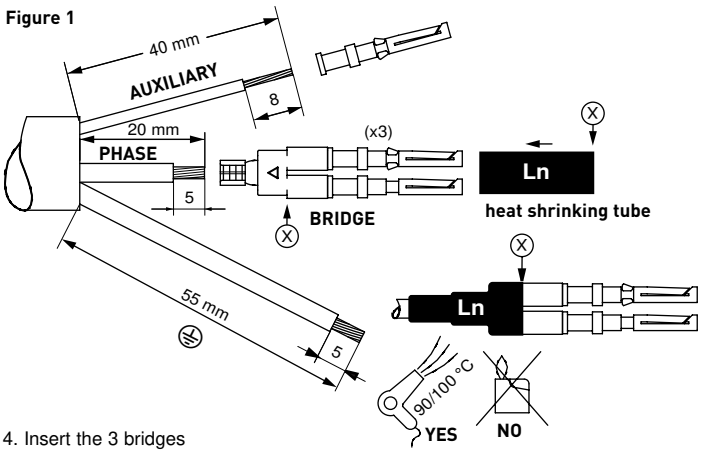
NOTE:
The typical use of the product requires three bridges each with its shrinking tube with L1 / L2 / L3 marking to identify the phases in the wiring.

1. Cut and strip the wires as shown in **Figure 1.**
2. Crimp the contacts on the auxiliary wires and the bridge end to the phase wires (3 units) using CRPZ pliers and CRD matrix (position 2,5).
3. Insert the insulating heat shrinking tubes on the bridges, their end must be aligned with the position ⓧ. Then heat them at 90/100 °C till they shrink over the wires.



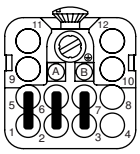
For wires with cross-section ranging from 1,5 to 2,5 mm² (16-14 AWG), crimp connection with **CRPZ** pliers (model CEMBRE IDT) and **CRD** matrix.

Figure 1



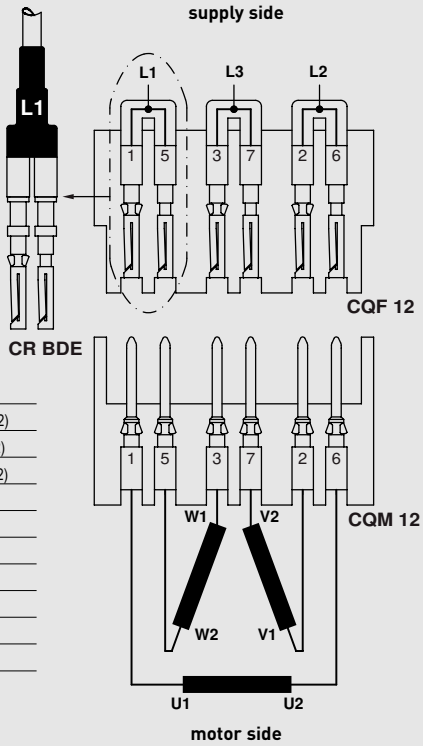
4. Insert the 3 bridges according to the **Figure 2.**

Figure 2



CQF 12
termination side

Example of DELTA connection using inserts CQ 12



1-5	BRIDGE L1 (winding U1/W2)
2-6	BRIDGE L2 (winding V1/U2)
3-7	BRIDGE L3 (winding W1/V2)
4	auxiliary circuit
8	auxiliary circuit
9	auxiliary circuit
10	auxiliary circuit
11	auxiliary circuit
12	auxiliary circuit
⏚	protective earth

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

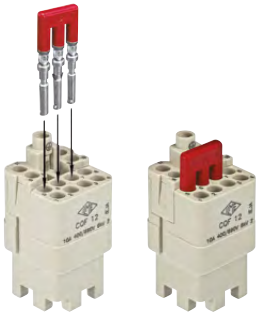
CR bridges for star connection

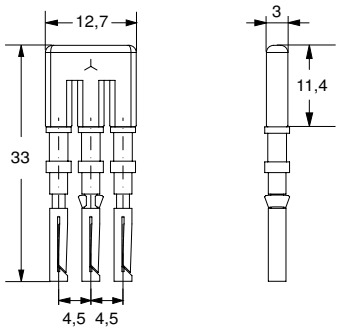
inserts

CQF	12 poles + ⏚
CDDF	24, 42, 72 (144), 108 (216) poles + ⏚
CX 17 DF (MIXO)	1 module

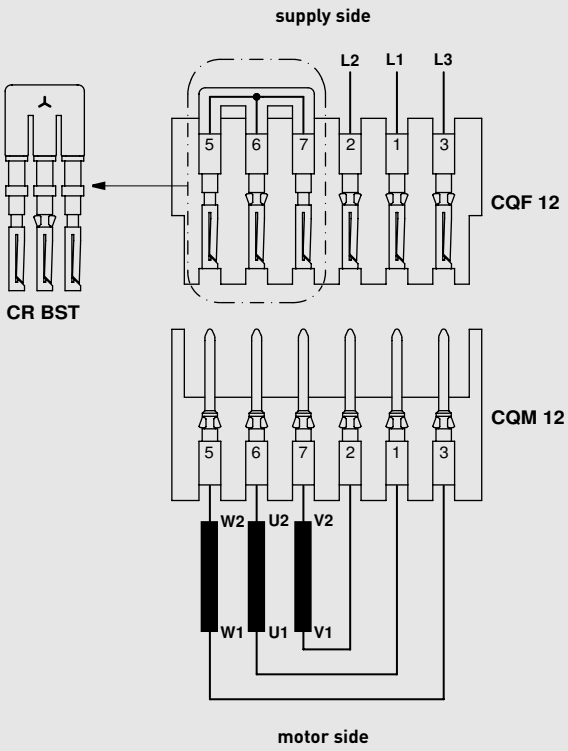
bridges for star connection

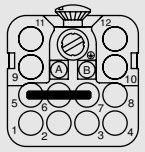
description	part No.
bridge with 3 female 10A contacts, silver plated	**CR BST**





Example of STAR connection using inserts CQ 12





5-6-7	BRIDGE W2-U2-V2
1	L1
2	L2
3	L3
4	auxiliary circuit
8	auxiliary circuit
9	auxiliary circuit
10	auxiliary circuit
11	auxiliary circuit
12	auxiliary circuit
⏚	protective earth