

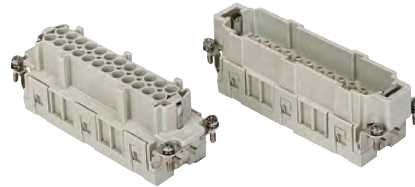
CCE series

TECHNICAL FEATURES

CCE series are the evolution of former CC series for removable crimp contacts CC series, with rated current up to 16A per pole.

It shares the four (six with double inserts) mating interfaces with series: **CNE** (screw-type), **CSH** (spring-type with actuator button, SQUICH® technology), **CSS** (double spring-type), CT (screw-type with 45° terminal block), **CTSE** (spring-type with 45° terminal block).

As for CNE series with former CN series, also CCE series are the result of a complete overhaul of the preceding CC series. Whereas CC series relied upon additional stainless steel spring element to perform contact retention, CCE series applies the modern and equally reliable concept of retention in the insulating body by a resilient element directly obtained in the contact holder. This enhances insulation, simplifies manufacturing and improves reliability.



CCE series, through increase of creepage distances, attains as well the **rated voltage increase to 500V from previous 400V value.**

Solid machined crimp contacts and the relevant connector inserts are the preferred option in fields of application subject to high vibration levels, such as railway rolling stock and everywhere transportation and moving parts are foreseen with e.g. motors as potential source of vibration.

Insert series		CCE
No. of poles ¹⁾	Main contacts + ⊕	6, 10, 16, 24, [32 = 2x16], [48 = 2x24]
	auxiliary contacts	—
Rated current ²⁾		16A
EN IEC 61984	rated voltage	500V
Pollution degree ³⁾	rated impulse voltage	6kV
	pollution degree	3
EN IEC 61984	rated voltage	400/690V
Pollution degree ²⁾	rated impulse voltage	6kV
	pollution degree	2
UL / CSA certification	rated voltage (a.c./d.c.)	600V
Contact resistance		≤ 1 mΩ
Insulation resistance		≥ 10 GΩ
Ambient temperature limit (°C)	min	-40 °C
	max	70 °C
Degree of protection	with enclosures	IP65, IP66/IP69, IP66/IP67/IP69, IP66/IP68/IP69 (according to type and model)
	without enclosures (in mated condition) - termination side on male and female inserts - mating side on female inserts	IP20 (IPXXB)
Conductor connections		crimp
Conductor cross-sectional area	mm ²	0,14 - 4
	AWG	26 - 12
Mechanical endurance (mating cycles)		≥ 500

1) Polarities shown in brackets may be obtained by using two inserts in their own double-sized housings

2) Please check the inserts derating diagrams to establish the actual maximum operating current according to the ambient temperature, the conductor cross-sectional area, the polarity of the connector, and any external constraint may derive e.g. by the continuous operating temperature sustained by the chosen conductor sheathing or by end-product safety standards fixing max allowed temperature rise on terminals (e.g. 30 K, 45 K or 50 K)

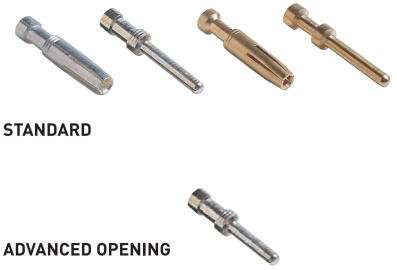
CCE 6 poles + ⊕ 16A - 500V

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:	page:
COB	652 - 653

inserts, crimp connections



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



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

CCEF 06
CCEM 06

16A female contacts

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

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

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

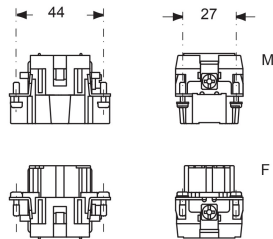
* for basic or high thickness gold plating, please refer to page 675

- characteristics according to EN 61984:

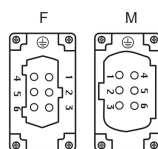
16A 500V 6kV 3
16A 400/690V 6kV 2

- certified

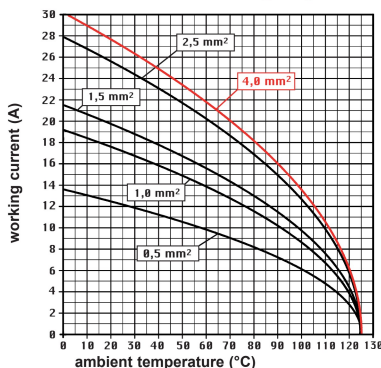
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 1 mΩ
- for max. current load see the connector inserts derating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



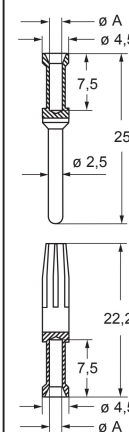
contacts side (front view)



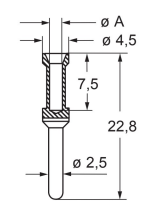
CCE 06 poles connector inserts
Maximum current load derating diagram



CCF and CCM



CC...AN



CCF, CCM and CC...AN contacts

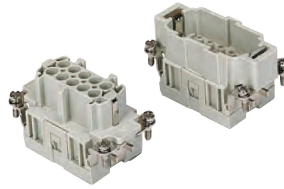
conductor section mm ²	conductor slot ø A (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

- 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)

CCE 10 poles + \oplus 16A - 500V

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:	page:
COB	652 - 653

inserts, crimp connections



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



STANDARD



ADVANCED OPENING

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

CCEF 10
CCEM 10

16A female contacts

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

16A male contacts

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

16A male crimp contacts for advanced opening

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

CCFA 0.3	silver plated	CCFD 0.3	gold plated+
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	

CCMA 0.3	silver plated	CCMD 0.3	gold plated+
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	

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

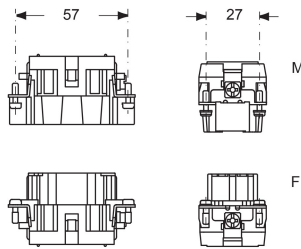
+ for basic or high thickness gold plating, please refer to page 675

- characteristics according to EN 61984:

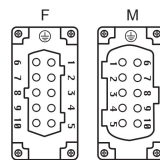
16A 500V 6kV 3
16A 400/690V 6kV 2

- certified

- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28

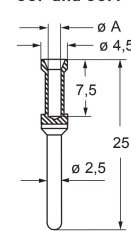


contacts side (front view)

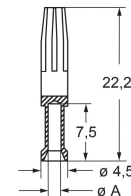
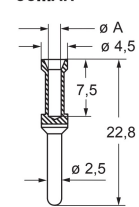


- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series on pages 708 - 741)

CCF and CCM



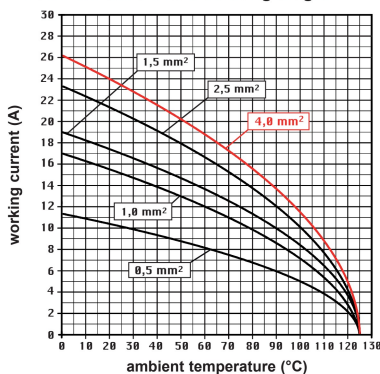
CC...AN



CCF, CCM and CC...AN contacts

conductor section mm ²	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

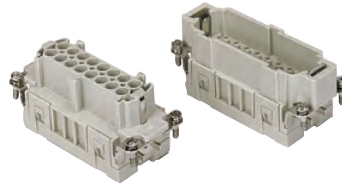
CCE 10 poles connector inserts
Maximum current load derating diagram



CCE 16 poles + ⊕ 16A - 500V

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	page: 652 - 653

inserts, crimp connections



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



STANDARD

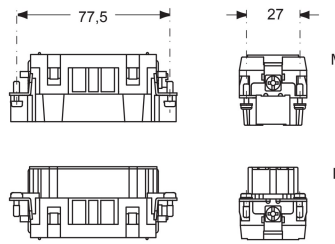
ADVANCED OPENING

description	part No.	part No.	part No.
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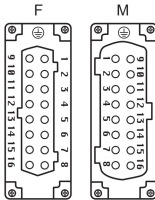
without contacts (to be ordered separately)
female inserts for female contacts **CCEF 16**
male inserts for male contacts **CCEM 16**

16A female contacts				
0,14-0,37 mm ²	AWG 26-22	one groove	CCFA 0.3	CCFD 0.3
0,5 mm ²	AWG 20	with no grooves	CCFA 0.5	CCFD 0.5
0,75 mm ²	AWG 18	one groove (back side)	CCFA 0.7	CCFD 0.7
1 mm ²	AWG 18	one groove	CCFA 1.0	CCFD 1.0
1,5 mm ²	AWG 16	two grooves	CCFA 1.5	CCFD 1.5
2,5 mm ²	AWG 14	three grooves	CCFA 2.5	CCFD 2.5
3 mm ²	AWG 12	one wide groove	CCFA 3.0	CCFD 3.0
4 mm ²	AWG 12	with no grooves	CCFA 4.0	CCFD 4.0
16A male contacts				
0,14-0,37 mm ²	AWG 26-22	one groove	CCMA 0.3	CCMD 0.3
0,5 mm ²	AWG 20	with no grooves	CCMA 0.5	CCMD 0.5
0,75 mm ²	AWG 18	one groove (back side)	CCMA 0.7	CCMD 0.7
1 mm ²	AWG 18	one groove	CCMA 1.0	CCMD 1.0
1,5 mm ²	AWG 16	two grooves	CCMA 1.5	CCMD 1.5
2,5 mm ²	AWG 14	three grooves	CCMA 2.5	CCMD 2.5
3 mm ²	AWG 12	one wide groove	CCMA 3.0	CCMD 3.0
4 mm ²	AWG 12	with no grooves	CCMA 4.0	CCMD 4.0
16A male crimp contacts for advanced opening				
0,5 mm ²	AWG 20	with no grooves	CC 0.5 AN	* for basic or high thickness gold plating, please refer to page 675
0,75 mm ²	AWG 18	one groove (back side)	CC 0.7 AN	
1 mm ²	AWG 18	one groove	CC 1.0 AN	
1,5 mm ²	AWG 16	two grooves	CC 1.5 AN	
2,5 mm ²	AWG 14	three grooves	CC 2.5 AN	

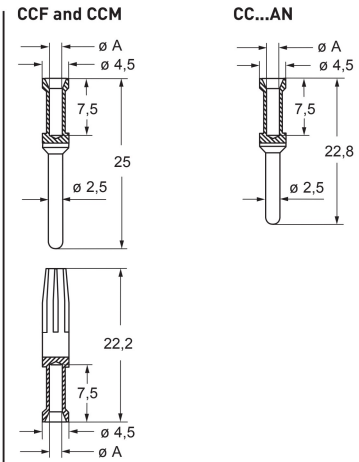
- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
-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



contacts side (front view)

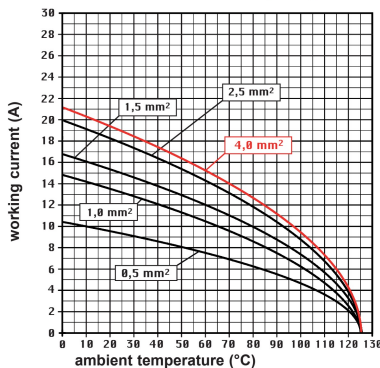


- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series on pages 708 - 741)



CCF, CCM and CC...AN contacts		
conductor section mm ²	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

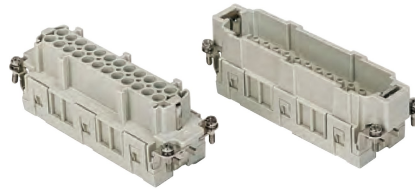
CCE 16 poles connector inserts
Maximum current load derating diagram



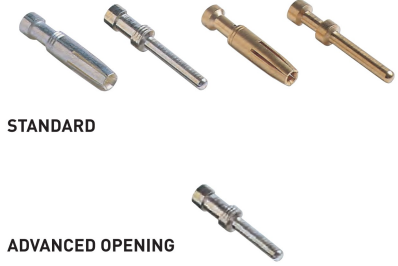
CCE 24 poles + ⊕ 16A - 500V

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	page: 652 - 653

inserts, crimp connections



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



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

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

CCEF 24
CCEM 24

16A female contacts

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

16A male contacts

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

16A male crimp contacts for advanced opening

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

CCFA 0.3	CCFD 0.3
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+

CCMA 0.3	CCMD 0.3
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

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

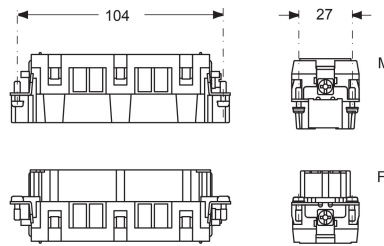
+ for basic or high thickness gold plating, please refer to page 675

- characteristics according to EN 61984:

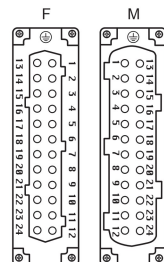
16A 500V 6kV 3
16A 400/690V 6kV 2

- certified

- 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

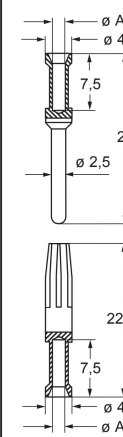


contacts side (front view)

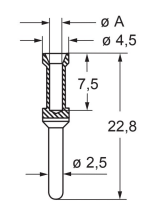


- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, CCF, CCM and CC...AN series on pages 708 - 741)

CCF and CCM



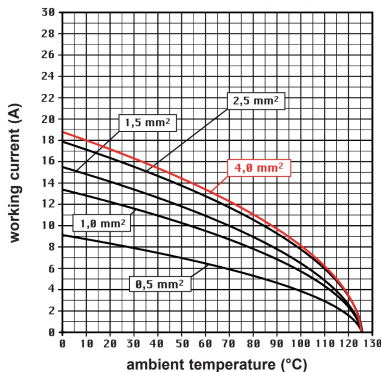
CC...AN



CCF, CCM and CC...AN contacts

conductor section mm ²	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

CCE 24 poles connector inserts
Maximum current load derating diagram



CCE 32 poles + ⊕ 16A - 500V

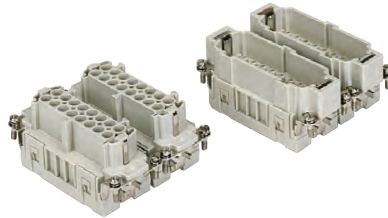
enclosures:
size "77.62"

page:

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

424 - 429
525
546

inserts, crimp connections



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



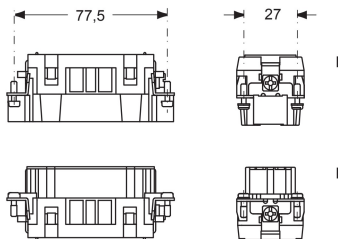
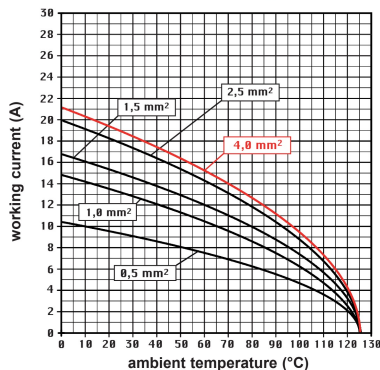
STANDARD

ADVANCED OPENING

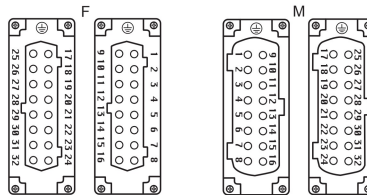
description	part No.	part No.	part No.	part No.
without contacts (to be ordered separately)				
female inserts for female contacts, No. (1-16) and (17-32)	CCEF 16	CCEF 16 N		
male inserts for male contacts, No. (1-16) and (17-32)	CCEM 16	CCEM 16 N		
16A female contacts				
0,14-0,37 mm ² AWG 26-22 one groove			CCFA 0.3	CCFD 0.3
0,5 mm ² AWG 20 with no grooves			CCFA 0.5	CCFD 0.5
0,75 mm ² AWG 18 one groove (back side)			CCFA 0.7	CCFD 0.7
1 mm ² AWG 18 one groove			CCFA 1.0	CCFD 1.0
1,5 mm ² AWG 16 two grooves			CCFA 1.5	CCFD 1.5
2,5 mm ² AWG 14 three grooves			CCFA 2.5	CCFD 2.5
3 mm ² AWG 12 one wide groove			CCFA 3.0	CCFD 3.0
4 mm ² AWG 12 with no grooves			CCFA 4.0	CCFD 4.0
16A male contacts				
0,14-0,37 mm ² AWG 26-22 one groove			CCMA 0.3	CCMD 0.3
0,5 mm ² AWG 20 with no grooves			CCMA 0.5	CCMD 0.5
0,75 mm ² AWG 18 one groove (back side)			CCMA 0.7	CCMD 0.7
1 mm ² AWG 18 one groove			CCMA 1.0	CCMD 1.0
1,5 mm ² AWG 16 two grooves			CCMA 1.5	CCMD 1.5
2,5 mm ² AWG 14 three grooves			CCMA 2.5	CCMD 2.5
3 mm ² AWG 12 one wide groove			CCMA 3.0	CCMD 3.0
4 mm ² AWG 12 with no grooves			CCMA 4.0	CCMD 4.0
16A male crimp contacts for advanced opening				
0,5 mm ² AWG 20 with no grooves			CC 0.5 AN	* for basic or high thickness gold plating, please refer to page 675
0,75 mm ² AWG 18 one groove (back side)			CC 0.7 AN	
1 mm ² AWG 18 one groove			CC 1.0 AN	
1,5 mm ² AWG 16 two grooves			CC 1.5 AN	
2,5 mm ² AWG 14 three grooves			CC 2.5 AN	

- 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

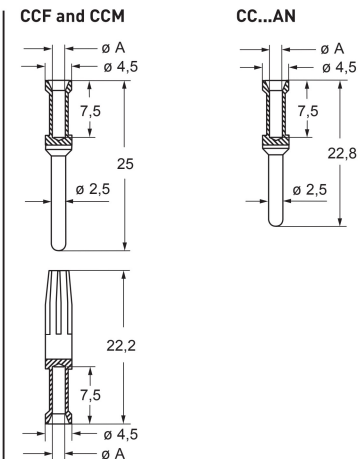
CCE 32 poles connector inserts
Maximum current load derating diagram



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, CCM and CC...AN contacts

conductor section mm ²	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

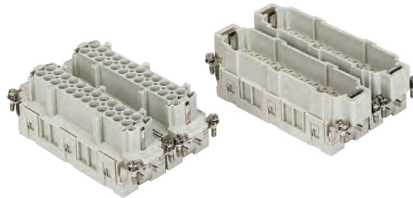
CCE 48 poles + ⊕ 16A - 500V

enclosures:
size "104.62"

page:

C-TYPE IP65 or IP66/IP69	430
W-TYPE for aggressive environments	526
E-Xtreme® corrosion proof	547

inserts, crimp connections



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

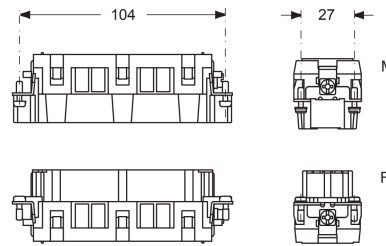


STANDARD

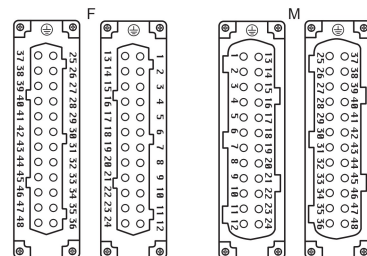
ADVANCED OPENING

description	part No.	part No.	part No.	part No.
without contacts (to be ordered separately)				
female inserts for female contacts, No. (1-24) and (25-48)	CCEF 24	CCEF 24 N		
male inserts for male contacts, No. (1-24) and (25-48)	CCEM 24	CCEM 24 N		
16A female contacts				
0,14-0,37 mm ² AWG 26-22 one groove			CCFA 0.3	CCFD 0.3
0,5 mm ² AWG 20 with no grooves			CCFA 0.5	CCFD 0.5
0,75 mm ² AWG 18 one groove (back side)			CCFA 0.7	CCFD 0.7
1 mm ² AWG 18 one groove			CCFA 1.0	CCFD 1.0
1,5 mm ² AWG 16 two grooves			CCFA 1.5	CCFD 1.5
2,5 mm ² AWG 14 three grooves			CCFA 2.5	CCFD 2.5
3 mm ² AWG 12 one wide groove			CCFA 3.0	CCFD 3.0
4 mm ² AWG 12 with no grooves			CCFA 4.0	CCFD 4.0
16A male contacts				
0,14-0,37 mm ² AWG 26-22 one groove			CCMA 0.3	CCMD 0.3
0,5 mm ² AWG 20 with no grooves			CCMA 0.5	CCMD 0.5
0,75 mm ² AWG 18 one groove (back side)			CCMA 0.7	CCMD 0.7
1 mm ² AWG 18 one groove			CCMA 1.0	CCMD 1.0
1,5 mm ² AWG 16 two grooves			CCMA 1.5	CCMD 1.5
2,5 mm ² AWG 14 three grooves			CCMA 2.5	CCMD 2.5
3 mm ² AWG 12 one wide groove			CCMA 3.0	CCMD 3.0
4 mm ² AWG 12 with no grooves			CCMA 4.0	CCMD 4.0
16A male crimp contacts for advanced opening				
0,5 mm ² AWG 20 with no grooves			CC 0.5 AN	* for basic or high thickness gold plating, please refer to page 675
0,75 mm ² AWG 18 one groove (back side)			CC 0.7 AN	
1 mm ² AWG 18 one groove			CC 1.0 AN	
1,5 mm ² AWG 16 two grooves			CC 1.5 AN	
2,5 mm ² AWG 14 three grooves			CC 2.5 AN	

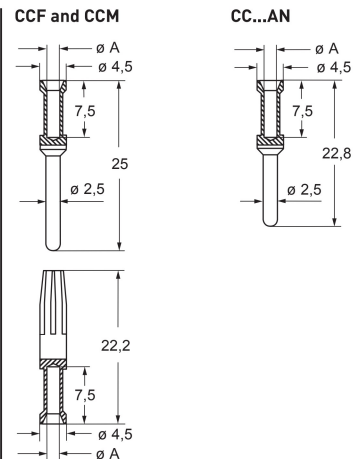
- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 500 cycles
-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



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, CCM and CC...AN contacts		
conductor section mm ²	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

CCE 48 poles connector inserts
Maximum current load derating diagram

