

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electrical Equipment

with type designation(s)

1. CK / CKS / CKSH / JK / JKS / JKSH, 2. CDA / JDA / CDC / CSAH / JSAH, 3. CD / RD, 4. CDD / RDD, 5. CDS / CDSH / CDSH ... NC / JDS / JDSH, 6. CNE / JNE / CME / CCE / RCE / CMCE / COE / COEE / ROEE / CSE / JSE / CSS / CSH / JSH / CMSH, 7. CP, 8. CX, 9. MIXO, 10. CTSE / CT / CTS, 11. CJ / CJK / CLK / CX 1/2 BD, 12. CQ, 13. Hoods and housings

Issued to

Industria Lombarda Materiale Elettrico I.L.M.E. S.p.A.
Milano MI, Italy

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Type	Temperature	Humidity	Vibration
1. CK / CKS / CKSH / JK / JKS / JKSH	55°C	100%	4,0g
2. CDA / JDA / CDC / CSAH / JSAH	55°C	100%	4,0g
3. CD / RD	55°C	100%	4,0g
4. CDD / RDD	55°C	100%	4,0g
5. CDS / CDSH / CDSH ... NC / JDS / JDSH	55°C	100%	4,0g
6. CNE / JNE / CME / CCE / RCE / CMCE / COE / COEE / ROEE / CSE / JSE / CSS / CSH / JSH / CMSH	55°C	100%	4,0g
7. CP	55°C	100%	4,0g
8. CX	55°C	100%	4,0g
9. MIXO	55°C	100%	4,0g
10. CTSE / CT / CTS	55°C	100%	4,0g
11. CJ / CJK / CLK / CX 1/2 BD	55°C	100%	4,0g
12. CQ	55°C	100%	4,0g
13. Hoods and housings	55°C	100%	4,0g

Issued at **Hamburg** on **2018-01-08**

for **DNV GL**

This Certificate is valid until **2023-01-07**.

DNV GL local station: **Milan**

Approval Engineer: **Harald Amberger**

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Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: 262.1-022914-2
Certificate No: TAE0000197
Revision No: 2

Product description

Connectors for use in signal, control and power system, with locking device

1. Multipole connectors series CK / CK ... RY / CKS / CKS ... RY / CKSH / JK / JKS / JKSH

CKM/F 03, CKM/F 03 N, CKM/F 04, CKM/F 04 N : I = 10A, U = 230/400V, poles = 3+PE, 4+PE, connection = screw 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

CKM/F 03 RY, CKM/F 04 RY (high temperatures) : I = 10A, U = 230/400V, poles = 3+PE, 4+PE, connection = screw 2,5 mm², housing = die cast aluminium IP44

CKSM/F 03, CKSM/F 03 N, CKSM/F 04, CKS/M 04 N : I = 10A, U = 400V, poles = 3+PE, 4+PE, connection = spring 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

CKSM/F 03 RY, CKSM/F 04 RY (high temperatures) : I = 10A, U = 400V, poles = 3+PE, 4+PE, connection = spring 2,5 mm², housing = die cast aluminium, IP66

CKSHM/F 03, CKSHM/F 04 : I = 10A, U = 400V, poles = 3+PE, 4+PE, connection = spring with actuator 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

JKM/F 03, JKM/F 03 N, JKM/F 04, JKM/F 04 N : I = 10A, U = 230/400V, poles = 3+PE, 4+PE, connection = screw 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

JKSM/F 03, JKSM/F 03 N, JKSM/F 04, JKS/M 04 N : I = 10A, U = 400V, poles = 3+PE, 4+PE, connection = spring 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

JKSHM/F 03, JKSHM/F 04 : I = 10A, U = 400V, poles = 3+PE, 4+PE, connection = spring with actuator 2,5 mm², housing = die cast aluminium or zinc, or plastic, IP44 (IP65/IP67) or IP66/IP68 (series CGK/MGK)

2. Multipole connector series CDA (screw) / CDC (crimp) / CSAH (spring) / JSAH (spring, tin-plated contacts)

CDAM/F 10, 10 X, 16, 16 X, 16 N, 16 XN : I = 16A, U = 250V, poles = 10, 16, 32 all types +PE, connection = screw 2,5 mm², housing = die cast aluminium, IP66

JDAM/F 10, 10 X, 16, 16 X, 16 N, 16 XN : I = 16A, U = 250V, poles = 10, 16, 32 all types +PE, connection = screw 2,5 mm², housing = die cast aluminium, IP66

CDCM/F 10, 16, 16 N : I = 16A, U = 250V, poles = 10, 16, 32 all types +PE, connection = crimp 4 mm², housing = die cast aluminium, IP66

CSAHM/F 10, 16, 16 N, : I = 16A, U = 250V, poles = 10, 16, 32, all types +PE, connection = spring with actuator 2,5 mm², housing = die cast aluminium, IP66

JSAHM/F 10, 16, 16 N, : I = 16A, U = 250V, poles = 10, 16, 32, all types +PE, connection = spring with actuator 2,5 mm², housing = die cast aluminium, IP66

3. Multipole connectors series CD / RD

CDM/F 07, 07 N, 08 (U = 50V), 15, 25, 25 Z, 40, 64 : I = 10A, U = 250V, poles 7, 8, 15, 25, (50), 40, (80), 64, (128), connection = crimp 2,5 mm², housing = die cast aluminium or zinc, (CDM/F 07 additional thermoplastic), IP66, IP66/IP68 (series CGK/MGK for CDM/F 08, series CG/MG for CDM/F 40, 64), thermoplastic (series T-Type for CDM/F 40, 64) IP65

Series RD (HNM = high number of matings), RDM/F 40, 64 : I = 10A, U = 250V, poles = 40, 64 +PE, connection = crimp 2,5 mm², housings = die cast aluminium, IP66, IP66/IP68 (series CG/MG).

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4. Multipole connectors series CDD / RDD

CDDM/F 24, 38, 42, 72, 72 N, 108, 108 N : I = 10A, U = 250V,
poles = 24, 38, 42, 72, (76), 108, (144), (216) all types +PE, connection = crimp 2,5 mm²,
housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG for all but CDDM/F 38)
thermoplastic (T-Type IP 65)

Series RDD (HNM = high number of matings), RDDM/F 24, 42, 72, 108 : I = 10A, U = 250V,
poles = 24, 42, 72, 108 +PE, connection = crimp 2,5 mm², housings = die cast aluminium,
IP66, IP66/IP68 (series CG/MG).

5. Multipole connectors series CDS (spring) / CDSH (spring with actuator) / CDSH ... NC (AutoShort) / JDS (spring, tin-plated contacts) / JDSH (spring with actuator, tin plated contacts)

CDSM/F 09, 18, 27, 42, 27 N, 42 N : I = 10A, U = 400V, poles = 9, 18, 27, 42, (54), (84) all types +PE,
connection = spring 2,5 mm², housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG), plastic (T-Type) IP65.

CDSHM/F 09, 18, 27, 42, 27 N, 42 N : I = 10A, U = 400V, poles = 9, 18, 27, 42, (54), (84) all types +PE, connection = spring 2,5 mm², housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG), plastic (T-Type) IP65.

CDSHM/F 06 NC AutoShort connector : poles = 6 +PE. Female unmated connector : I = 6A, V = 250 V; mated connectors : I = 10A, V = 250 V, housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG), plastic (T-Type) IP65.

JDSM/F 09, 18, 27, 42, 27 N, 42 N : I = 10A, U = 400V, poles = 9, 18, 27, 42, (54), (84) all types +PE, connection = spring 2,5 mm², housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG), plastic (T-Type) IP65.

JDSHM/F 09, 18, 27, 42, 27 N, 42 N : I = 10A, U = 400V, poles = 9, 18, 27, 42, (54), (84) all types +PE, connection = spring 2,5 mm², housing = die cast aluminium, IP66, IP66/IP68 (series CG/MG), plastic (T-Type) IP65.

6. Multipole connector series CNE / JNE / CME / CCE / RCE (High Number of Matings) CMCE / COE / COEE / ROEE (High Number of Matings) / CSE / JSE / CSH / JSH / CMSH

CNEM/F 06, 06 T, 06 X, 06 TX, 10, 10 T, 10 X, 10 TX, 16, 16 T, 16 X, 16 TX, 16 N, 16 TN, 16 XN, 16 TXN, 24, 24 T, 24 X, 24 TX, 24 N, 24 TN, 24 XN, 24 TXN, CNEM/F 06 RY, 06 TRY, 06 RYX, 06 TRYX, 10 RY, 10 TRY, 10 RYX, 10 TRYX, 16 RY, 16 TRY, 16 RYX, 16 TRYX, 16 RYN, 16 TRYN, 16 RYXN, 16 TRYXN, 24, 24 TRY, 24 RYX, 24 TRYX, 24 RYN, 24 TRYN, 24 RYXN, 24 TRYXN : I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = screw 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

JNEM/F 06, 10, 16, 24 : I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, tin-plated contacts, connection = screw 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CMEM/F 03 T/ TX, CMEM/F 06, 10 T/ TN/ TX/ TXN, I = 16A, U = 830V, poles = 3+2(aux), 6+2(aux), 10+2 (aux), 12+4(aux) (combining 06 T/ TX and 06 TN/ TXN), 20+4(aux) (combining 10 T/ TX and 10 TN/ TXN), connection = screw 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CMEM/F 16, 16 N, I = 16A, U = 400/690V, poles = 16+2(aux), 32+4 (combining 16 and 16 N), connection = screw 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CCEM/F 06, 10, 16, 24, 16 N, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

RCEM/F 06, 10, 16, 24, 16 N, 24 N, High Number of Matings (HNM), I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = crimp 4 mm², housing = die cast al., IP66 (versions for HNM).

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CMCEM/F 03, 06, 06 N, 10, 10 N, I = 16A, U = 830V, poles = 3+2(aux), 6+2(aux), 10+2 (aux), 12+4(aux) (combining 06 and 06 N), 20+4(aux) (combining 10 and 10 N), connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CMCEM/F 16, 16 N, I = 16A, U = 400/690V, poles = 16+2(aux), 32+4(aux) (combining 16 and 16 N), connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CQEM/F 10, 18, 32, 32 N, 46, 46 N, I = 16A, U = 500V, poles = 10, 18, 32, 46, (64), (92) all types +PE, connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CQEEM/F 40, 64, 40 N, 64 N, I = 16A, U = 500V, poles = 40, 64, (80), (128) all types +PE, connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

RQEEM/F 40, 64, 40 N, 64 N, High Number of Matings (HNM), I = 16A, U = 500V, poles = 40, 64, (80), (128) all types +PE, connection = crimp 4 mm², housing = die cast al., IP65, IP66, versions for HNM.

CSEM/F 06, 10, 16, 24, 16 N, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = screwless 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

JSEM/F 06, 10, 16, 24, 16 N, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48)all types +PE, tin-plated contacts, connection = screwless 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CSSM/F 06, 10, 16, 16 N, 24, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = screwless 2,5 mm² (two terminals per pole), housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CSHM/F 06, 10, 16, 24, 16 N, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, connection = screwless with actuator 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

JSHM/F 06, 10, 16, 24, 16 N, 24 N, I = 16A, U = 500V, poles = 6, 10, 16, 24, (32), (48) all types +PE, tin-plated contacts, connection = screwless with actuator 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

CMSHM/F 03, 06, 06 N, 10, 10 N, I = 16A, U = 830V, poles = 3+2(aux), 6+2(aux), 12+4(aux), 10+2(aux) (combining 06 + 06 N), 20+4(aux) (combining 10 + 10 N), housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65

7. Connectors series CP

CPM/F 06, 06 N, 06 RY, 06 RYN : poles = 6 +PE (12+PE), I = 35A, U = 400/690 V, connection = screw 6 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

8. Combined connectors series CX

CXM/F 4/0 : poles = 4 +PE, I = 80A, U = 830V, connection = screw 16 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 4/2 : poles = 4 +PE, I = 80A, U = 830V, connection = screw 16 mm², and 2 poles, I = 16A, U = 400V, connection = screw 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 4/8 : poles = 4 +PE, I = 80A, U = 400V, connection = screw 16 mm², and 8 poles, I = 16A, U = 400V, connection = screw 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 6/36 : poles = 6 +PE, I = 40A, U = 690V, connection = crimp 6 mm², and 36 poles, I = 10A, U = 160V, connection = crimp 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 8/24 : poles = 8 +PE, I = 16A, U = 230/400V, connection = crimp 4 mm², and 24 poles, I = 10A, U = 160V, connection = crimp 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

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CXM/F 12/2 : poles = 12 +PE, I = 40A, U = 690V, connection = crimp 6 mm², and 2 poles, I = 10A, U = 250V, connection = crimp 2,5 mm², housings = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 6/6 : poles = 6 +PE, I = 100A, U = 690V, connection = crimp 35 mm², and 6 poles, I = 16A, U = 400V, connection = crimp 4 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG) , plastic (series T-Type) IP65.

CXM/F 6/12 : poles = 6 +PE, I = 40A, U = 690V, connection = crimp 10 mm², and 12 poles, I = 16A, U = 230/400V, connection = crimp 4 mm², housings = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

9. Modular connectors series MIXO

CX 01 YM/F poles = 1 I = 200A U = 1000V, connection = crimp 70mm²
CX 01 YPEM/F poles = 1 I = 200A U = 1000V, connection = crimp 70mm²
CX 02 GM/F poles = 2 I = 100A U = 1000V, connection = crimp 35 mm²
CX 02 7M/F poles = 2 I = 70A U = 1000V, connection = crimp 25 mm²
CX 02 4M/F poles = 2 I = 40A U = 1000V, connection = crimp 10 mm²
CX 02 4AM/F poles = 2 I = 40A U = 1000V, connection = axial screw 8 mm²
CX 02 4BM/F poles = 2 I = 40A U = 1000V, connection = axial screw 10 mm²
CX 3/4 XDM/F poles = 3 I = 40A U = 830V

+poles = 4 I = 10A U = 830V, connection = crimp 6 mm² / 2,5 mm²

CX 03 4M/F poles = 3 I = 40A U = 400/690V, connection = crimp 6 mm²
CX 03 4BM/F poles = 3 I = 40A U = 500V, connection = crimp 10 mm²
CX 04 XM/F poles = 4 I = 40A U = 830V, connection = crimp 6 mm²
CX 05 SM/F poles = 5 I = 16A U = 400V, connection = screwless 2,5 mm²
CX 06 CM/F poles = 6 I = 16A U = 500V, connection = crimp 4 mm²
CX 08 CM/F poles = 8 I = 16A U = 400V, connection = crimp 4 mm²
CX 12 DM/F poles = 12 I = 10A U = 250V, connection = crimp 2,5 mm²
CX 17 DM/F poles = 17 I = 10A U = 160V, connection = crimp 2,5 mm²
CX 20 CM/F poles = 20 I = 16A U = 500V, connection = crimp 4 mm²
CX 25 IM/F poles = 25 I = 4A U = 50Vac/120Vdc, connection = crimp 0,5 mm²
CX 25 IBM/F poles = 25 I = 4A U = 50Vac/120Vdc, connection = crimp 0,75 mm²

CX 02 P, for 2 quick couplings Ø 6 mm, CX 03 P : for 3 quick couplings Ø 1,6 – 3 – 4 mm (pneumatic)

MIXO BUS holder module CX 02 BM/F: seats 2, for up to 2 connectors CX 01 BM/F (1P + shield, coaxial 75Ω), I = 10A, U = 50Vac/120Vdc, connection = crimp 2,5 mm²; CX 01 BCM/F (1P + screen, coaxial 50Ω) I = 16A, U = 50Vac/120Vdc, connection = crimp 4 mm²; CX 04 BM/F (4P + screen, multi-axial) I = 10A, U = 50Vac/120Vdc, connection = crimp 2,5 mm²; CX 08 BM/F (8P + screen) I = 5A, U = 50Vac/120Vdc, connection = crimp 0,5 mm².

MIXO module for RJ-45 Cat 6 Class EA CX 01 J8M/F, CX 01 J8IM, CX 8 J6M, CX 08 J6IM, MIXO module for 1 RJ-45 connector + 4P CX 01 JM/F I = 10A, U = 250V, connection = crimp 2,5 mm²; MIXO module for 2 RJ-45 connectors + 8P CX 02 JM/F, I = 10A, U = 250V, connection = crimp 2,5 mm²;

MIXO adapter module for USB connector CX 01 UM/F, MIXO module adapter for DSub 9P connector CX 01 9VM/F, I = 5A, U = 50 Vac/120Vdc, connection = crimp 0,5 mm²;

MIXO module CX 04 LM/F for POF (CX PLM/F) and MOST© (CX MLM/F) fibre optic contacts, or for coaxial contacts 50Ω CX 50 M/F or 75Ω CX 75 M/F

MIXO module CX 04 RM/F for coaxial contacts 50Ω CX 50 RM/F or 75Ω CX 75 RM/F

MIXO fibre optic SC module CX 04 SCM/ SCF /SCF-H for 4 SC connectors

Accessories : fixed assembly frames for 1, 2, 3, 4 or 6 modules with PE connection, material = die cast zinc. Housing = die cast al., IP66, IP68 (series CG/MG), thermoplastic (series T-Type) IP65.

10. Terminal block connectors series CTSE / CT/CTS

CTM/F 06 L/R, 10 L/R, 16 L/R, 24 L/R : I = 16A, U = 500V, poles = 6, 10, 16, 24 (32), (48) all types +PE, connection = screw 2,5 mm²

CTM/F 40 L/R, 64 L/R : I = 10A, U = 250V, poles = 40 +PE, 64 +PE, connection = screw 2,5 mm²

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CTSEM/F 06 L/R, 10 L/R, 16 L/R, 24 L/R : I = 16A, U = 500V , poles = 6, 10, 16, 24 (32), (48) all types +PE, connection = screwless 2,5 mm²

CTSM/F 40 L/R, 64 L/R : I = 10A, U = 250V, poles = 40 +PE, 64 +PE, connection = screwless 2,5 mm²

11. Connector adapters series CJ / CJK / CLK / CX 1/2 BD

CJ KF/M female and male adapter size "21.21". The female adapter is for RJ-45 cat. 5 female/female data connector (for bulkhead-mount fixed housing series CK (plastic, IP44 or IP65/IP67), CKA (aluminium or zinc alloy, IP44 or IP65/IP67) or CGK (zinc alloy, IP66/IP68). Male adapter for male RJ-45 cat. 5 data connector or patch cord, for free cable connector housings series CK/MK (plastic, IP44 or IP65/IP67), CKA/MKA (aluminium or zinc alloy, IP44 or IP65/IP67) or CGK/MGK (zinc alloy, IP66/IP68); CJK 8FT/ 8MT / 8IMT female and male adapters size "21.21". Female adapter for female/female RJ-45 cat. 6A data connector for bulkhead-mount fixed housing series CK (plastic, IP44 or IP65/IP67), CKA (aluminium or zinc alloy, IP44 or IP65/IP67) or CGK (zinc alloy, IP66/IP68). Male adapter for male RJ-45 cat. 6A data connector or patch cord, for free cable connector housings series CK/MK (plastic, IP44 or IP65/IP67), CKA/MKA (aluminium or zinc alloy, IP44 or IP65/IP67) or CGK/MGK (zinc alloy, IP66/IP68); CLK 04 SCF/ F-H/ M adapters size "21.21" for 4 type SC fibre optic connectors, for housings series CK/MK (plastic, IP65/IP67), CKA/MKA (aluminium or zinc alloy, IP65/IP67) or CGK/MGK (zinc alloy, IP66/IP68).

12. Multipole connectors series CQ

Connectors CQM/F 04/2 : I = 40A, U = 400/690V, poles 4 + PE, connection = crimp 6 mm² and I = 10A, U = 250V, poles = 2, connection = crimp 2,5 mm², housing = plastic IP65/IP67

Connectors CQ4M/F 03 : I = 40A, U = 400V, poles 3 +PE, connection = crimp 10 mm², housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP66/IP68 (series CGK/MGK)

Connectors CQM/F 05 : I = 16A, U = 230/400V (05), poles = 5 + PE, connection = crimp 2,5 m², housing thermoplastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP68 (series CGK/MGK)

Connectors CQM/F 07 : I = 10A, U = 400V, poles = 7 + PE, connection = crimp 2,5 mm², housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP66/IP68 (series CGK/MGK)

Connectors CQM/F 08 : I = 16A, U = 500V, poles 8 + PE, connection = crimp 4 mm², housing = plastic IP65/IP67

Connectors CQM/F 12: I = 16A, U = 400V(12), poles = 12 + PE, connection = crimp 2,5mm², housing thermoplastic IP65/IP67 or die cast aluminium IP 44 (IP65/IP67) or IP68 (series CGK/MGK)

Connectors CQM/F 17 : I = 10A, U = 160V, poles 17, connection = crimp 2,5 mm², housing = plastic IP65/IP67

Connectors CQM/F 21 : I = 6,5A, U = 50V ac / 120 V dc, poles = 21, connection = crimp 0,5 mm², housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP66/IP68 (series CGK/MGK)

13. Connector hoods and housings:

Type: Standard (c/ Class lever or w/ V-Type lever), W-Type, SType (EMC), R-Type (high temperatures), CG/MG – CGK-MGK (IP66/IP68), CQ/MQ (insulating material), E-Xtreme®, T-Type (insulating material), T-Type Hygienic (/H, / C), TType /W (aggressive environment), COB supports

Series standard (w/ Class locking lever)

Series JEI®-P and JEI®-V Series BIG Series 830V Series S-Type (EMC)

Series Simplex (w/ self-closing cover)

Series LS-Type (black for entertainment installations)

Series W-Type for aggressive environment

Series CG/MG – CGK-MGK (IP66/IP68)

Series CQ 08/ MQ 08 (insulating material)

Series R-Type (high temperatures)

Series C7-M7 (IP66/IP67) w/ V-Type lever

Series T-Type (insulating material enclosures)

Series T-Type Hygienic (/H = hygienic, /C = hygienic cold)

Series T-Type /W (aggressive environments)

Series E-Xtreme® (either w/ Class lever or V-Type lever or IP66/IP68)

Series COB System

Job Id: 262.1-022914-2
Certificate No: TAE0000197
Revision No: 2

Application/Limitation

Operating instruction of the manufacturer to be observed

Type Approval documentation

EU Declarations of Conformity, UL Reports No. E115072 (Certificates ECBT2.E115072),
ILME Catalogue CN.16 (XDG CN 915), ILME Catalogue News 2016 (XDG NEW 516),
ILME Catalogue News 2017 (XDG NEW 517), ILME Test Reports as per separate list

Tests carried out

Environmental test specification for electrical, electronic and programmable equipment and system
DNVGL-CG-0339:2016
EN 61984:2009 (DIN VDE 0627/09) + EN 61984/C1:2012,
EN 175301-801:2006 for series CD except CDF/M 07 and 08, and to all our range of hoods/housings as
far as applicable
EN 61076-7-100:2006 for cable metric outlets of connector hoods and housings

Marking of product

Manufacturers label containing data and manufacturers' type number.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE