

TYPE APPROVAL CERTIFICATE

Certificate No:
TAE0000197
 Revision No:
3

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 / RDSH / JDS / JDSH, 6. CNE / JNE / CME / CCE / RCE / CMCE / CQE / CQEE / RQEE / CSE / JSE / CSS / CSH / JSH / CMSH / RSH, 7. CP, 8. CX, 9. MIXO, 10. CTSE / CT / CTS, 11. CJ / CJK / CLK / CX 1/2 BD, 12. CQ / RQ / CQ4 / CQY, 13. CIF, 14. 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 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.

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 / RDSH / JDS / JDSH	55°C	100%	4,0g
6. CNE / JNE / CME / CCE / RCE / CMCE / CQE / CQEE / RQEE / CSE / JSE / CSS / CSH / JSH / CMSH / RSH	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 / RQ / CQ4 / CQY	55°C	100%	4,0g
13. CIF	55°C	100%	4,0g
14. Hoods and housings	55°C	100%	4,0g

Issued at **Høvik** on **2023-01-10**

for **DNV**

This Certificate is valid until **2028-01-07**.

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Harald Amberger**

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Marta Alonso Pontes
 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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

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

1. Multipole connectors series CK / JK /CK ... RY (screw) / CKS / JKS / CKS ... RY (spring) / CKSH / JKSH (spring with actuator)

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 die cast zinc 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 die cast zinc 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, IP44

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 die cast zinc 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 die cast zinc 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 die cast zinc 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 die cast zinc IP66/IP68 (series CGK/MGK)

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

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 (HNM)

4. Multipole connectors series CDD (crimp) / RDD (HNM, crimp)

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 (HNM).

**5. Multipole connectors series CDS (spring) / CDSH (spring with actuator)
 RDSH (HNM, 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.

RDSHM/F 09, 18, 27, 42, HNM (High Number of Matings): I = 10A, U = 400V, poles = 9, 18, 27, 42, (54), (84) all types +PE, connection = spring 2,5 mm², housing = die cast aluminium, IP66 (HNM).

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 (screw) / CCE (crimp) / RCE (HNM, crimp) / CMCE / CQE / CQEE (crimp) / RQEE (High Number of Matings, crimp) / CSE / JSE (spring) / CSH / JSH / CMSH (spring with actuator) / RSH (HNM, spring)

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).

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.

RSHM/F 06, 10, 16, 24, HNM (High Number of Matings), I = 16A, U = 500V, poles = 6, 10, 16, 24, all types +PE, connection = screwless with actuator 2,5 mm², housing = die cast al., IP66 (HNM).

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 (screw)

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.

CXCM/F 4/2: poles = 4 +PE, I = 80A, U = 830V, connection = crimp (series CX7 contacts) 25 mm², and 2 poles, I = 16A, U = 400V, connection = crimp (series CC contacts) 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

RXCM/F 4/2 (HNM, High Number of Matings): poles = 4 +PE, I = 80A, U = 830V, connection = crimp (series RX7 HNM contacts) 25 mm², and 2 poles, I = 16A, U = 400V, connection = crimp (series RC HNM contacts) 2,5 mm², housing = die cast al., IP66 (HNM).

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.

CXCM/F 4/8: poles = 4 +PE, I = 80A, U = 400V, connection = crimp (series CX7 contacts) 25 mm², and 8 poles, I = 16A, U = 400V, connection = crimp (series CC contacts) 2,5 mm², housing = die cast al., IP66, IP66/IP68 (series CG/MG), plastic (series T-Type) IP65.

RXCM/F 4/8 (HNM, High Number of Matings): poles = 4 +PE, I = 80A, U = 400V, connection = crimp (series RX7 HNM contacts) 25 mm², and 8 poles, I = 16A, U = 400V, connection = crimp (series RC HNM contacts) 2,5 mm², housing = die cast al., IP66 (HNM).

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 9/42 /-K: poles = 9+PE, I = 40A, U = 690V, connection = crimp 6 mm², and 42 poles, I = 10A, U = 250V, 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.

CXM/F 12/2 /-K /-HK: 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.

RXM/F 12/2 /-K (HNM, High Number of Matings): poles = 12 +PE, I = 40A, U = 690V, connection = crimp (HNM contacts series RX) 6 mm², and 2 poles, I = 10A, U = 250V, connection = crimp (HNM contacts series RD) 2,5 mm², housings = die cast al., IP66 (HNM).

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 8/0: poles = 8 +PE, I = 100A, U = 690V, connection = crimp 35 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 70mm ²
CX 01 YAM/F	poles = 1	I = 200A	U = 1000V, connection = screw 70 mm ²
CX 01 YPEM/F	poles = 1	I = 200A	U = 1000V, connection = crimp 70mm ²
CX 01 YPEAM/F	poles = 1	I = 200A	U = 1000V, connection = screw 70 mm ²
CX 01 GM/F	poles = 1	I = 100A	U = 830V, connection = crimp 70 mm ²
CX 02 GM/F	poles = 2	I = 100A	U = 1000V, connection = crimp 35 mm ²
CX 02 7M/F	poles = 2	I = 70A	U = 1000V, connection = crimp 25 mm ²
CX 02 4M/F	poles = 2	I = 40A	U = 1000V, connection = crimp 10 mm ²
CX 02 4AM/F	poles = 2	I = 40A	U = 1000V, connection = axial screw 8 mm ²
CX 02 4BM/F	poles = 2	I = 40A	U = 1000V, connection = axial screw 10 mm ²
CX 02 HM/F	poles = 2	I = 16A	U = 2900/5000V, connection = crimp 4 mm ²
CX 02 CHM/F	poles = 2	I = 16A	U = 2500V, connection = crimp 4 mm ²
CX 02 4HM/F	poles = 2	I = 40A	U = 2900/5000V, connection = crimp 10 mm ²
CX 3/4 XDM/F	poles = 3	I = 40A	U = 830V, connection = crimp 6 mm ²
	poles = 4	I = 10A	U = 830V, connection = crimp 2,5 mm ²
CX 6/8 XDM/F	poles = 6	I = 40A	U = 830V, connection = crimp 6 mm ²
	poles = 8	I = 10A	U = 830V, connection = crimp 2,5 mm ²
CX 03 4M/F	poles = 3	I = 40A	U = 400/690V, connection = crimp 6 mm ²
CX 03 4BM/F	poles = 3	I = 40A	U = 500V, connection = crimp 10 mm ²
CX 04 XM/F	poles = 4	I = 40A	U = 830V, connection = crimp 6 mm ²
CX 05 SM/F	poles = 5	I = 16A	U = 400V, connection = screwless 2,5 mm ²
CX 05 SHM/F	poles = 5	I = 16A	U = 400V, connection = screwless SQUICH® 2,5 mm ²
CX 06 CM/F	poles = 6	I = 16A	U = 500V, connection = crimp 4 mm ²
CX 06 CYM/F	poles = 6	I = 16A	U = 500V, connection = spring/AXYR® push-in 2,5 mm ²
CX 06P CM/F	poles = 6	I = 16A	U = 830V, connection = crimp 4 mm ²
CX 08 CM/F	poles = 8	I = 16A	U = 400V, connection = crimp 4 mm ²
CX 08 CYM/F	poles = 8	I = 16A	U = 400V, connection = spring/AXYR® push-in 2,5 mm ²
CX 08 D5M/F	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 1-cable outlet
CX 08 D5M2/F2	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 2-cable outlet
CX 08 D5GM/F	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 1-cable outlet
CX 08 D5GM2/F2	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 2-cable outlet
RX 08 D5M/F	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 1-cable outlet, HNM (RI contacts)
RX 08 D5M2/F2	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 2-cable outlet, HNM (RI contacts)
RX 08 D5GM/F	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 1-cable outlet, HNM (RI contacts)
RX 08 D5GM2/F2	poles = 8+shield	I = 10A	U = 50V, connection = crimp 2,5 mm ² 2-cable outlet, HNM (RI contacts)
CX 08 I6M/F	poles = 8+shield	I = 5A	U = 50V, connection = crimp 0,5 mm ²
CX 08 I6GM/F	poles = 8+shield	I = 5A	U = 50V, connection = crimp 0,5 mm ²
RX 08 I6M/F	poles = 8+shield	I = 5A	U = 50V, connection = crimp 0,5 mm ² , HNM (RI contacts)
RX 08 I6GM/F	poles = 8+shield	I = 5A	U = 50V, connection = crimp 0,5 mm ² , HNM (RI contacts)
CX 17 DM/F	poles = 17	I = 10A	U = 160V, connection = crimp 2,5 mm ²
CX 20 CM/F	poles = 20	I = 16A	U = 500V, connection = crimp 4 mm ²
CX 60 CM/F	poles = 60	I = 16A	U = 500V, connection = crimp 4 mm ²
CX 20S IM/F	poles = 20+shield	I = 4A	U = 32V, connection = crimp 0,5 mm ²
CX 20S IGM/F	poles = 20+shield	I = 4A	U = 32V, connection = crimp 0,5 mm ²
RX 20S IM/F	poles = 20+shield	I = 4A	U = 32V, connection = crimp 0,5 mm ² , HNM with RI contacts
RX 20S IGM/F	poles = 20+shield	I = 4A	U = 32V, connection = crimp 0,5 mm ² , HNM with RI contacts
CX 25 IM/F	poles = 25	I = 4A	U = 50Vac/120Vdc, connection = crimp 0,5 mm ²
CX 25 IBM/F	poles = 25	I = 4A	U = 50Vac/120Vdc, connection = crimp 0,75 mm ²
CX 36 IM/F	poles = 36	I = 4A	U = 32V, connection = crimp 0,5 mm ²
CX 42 DF/M	poles = 25	I = 10A	U = 150V, connection = crimp 2,5 mm ²

CX 02 P, for 2 quick couplings Ø 6 mm (pneumatic, plastic: CX 6.0 PM/PF/VC),

CX 03 P: for 3 quick couplings Ø 1,6 – 3 – 4 mm (pneumatic, plastic: CX 1.6 /3.0 /4.0 PM/PF/VC)

CX 03 MP, for 3 quick couplings Ø 3 - 4 - Ø 6 mm (pneumatic, metal: CX 3.0 /4.0 /6.0 MPM/F/V /MPQM/F/V, MPAM/F/V)

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 RJ-45 jack, shielded, Cat. 6A, Class EA, 8-way, connection = IDC, solid 0,40-0,64 mm² (AWG 26/1 – AWG 22/1), stranded 0,48–0,76 mm² (AWG 26/7 – AWG 22/7), CX 01 J8AIF (T568A pin assignment), CX 01 J8BIF (T568B pin assignment), CX 01 J8PIF (Profinet pin assignment). I = 1 A, U = 50V

MIXO module, male RJ-45 patch cord universal adapter, CX 01 J8UM

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 D-Sub 9P connector CX 01 9VM/F, I = 5A, U = 50 Vac/120Vdc, connection = crimp 0,5 mm²;

MIXO module CX 01 MIM/F for HDMI connectors, I = 0,5 A, U = 40V: MIF = female/female module, MIM = adapter module for male HDMI Type A patch cord;

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: CX 01 T (genderless), CX 02 /03 /04 /06 TM/F standard fixed assembly frames for 1, 2, 3, 4 or 6 single-sized modules with PE connections and contacts (nickel plated), material = die cast zinc. Housing = die cast al., IP66, IP68 (series CG/MG), thermoplastic (series T-Type) IP65;

Accessories: RX 01 T (genderless), RX 02 /03 /04 /06 TM/F HNM (High Number of Matings) fixed assembly frames for 1, 2, 3, 4, or 6 single-sized modules, with PE connections and contacts (gold plated, lubricated), material = die cast zinc. Housing = die cast aluminium, IP66 (HNM).

10. Terminal block connectors series CT (screw)/CTSE (spring)/ CTS (spring)

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

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 / CUK /CJZ / CJZA

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 / 8IFT / 8B IFT / 8P IFT/ 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);

CJK 8M universal patch cord adapter size “21.21”

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).

CUK 2FT female insert size “21.21” with USB 2.0 female-female connector, CUK 3FT female insert size “21.21” with USB 3.0 female-female connector

CJZA 8 I RJ-45 female-female connector in bulkhead metal enclosure size “21.21”; CJZ 8 IN RJ-45 female-female connector in bulkhead insulating enclosure size “21.21”

12. Multipole connectors series CQ (crimp) / RQ (HNM, crimp) / CQY (spring) / CQ4 (crimp)

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 02: I = 40A, U = 400V, poles 2 +PE, connection = crimp 10 mm², housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP66/IP68 (series CGK/MGK)

Connectors CQ4M/F 02 H: I = 40A, U = 830V, poles 2 +PE, connection = crimp 10 mm², housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or IP66/IP68 (series CGK/MGK)

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 die cast zinc IP66/IP68 (series CGK/MGK)

Connectors CQ4M/F 03/2: I = 40A/10A, U = 400V/250V, poles 3 +PE (power) + 2 (auxiliaries), connection = crimp 6 mm² (power), 2,5 mm² (auxiliaries), housing = plastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or die cast zinc IP66/IP68 (series CGK/MGK)

Connectors CQM/F 05: I = 16A, U = 230/400V, poles = 5 + PE, connection = crimp 2,5 mm², housing thermoplastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or die cast zinc IP66/IP68 (series CGK/MGK)

Connectors RQM/F 05 (HNM): I = 16A, U = 230/400V, poles = 5 + PE, connection = crimp 2,5 mm², housing = die cast aluminium IP44 (IP65/IP67) (HNM)

Connectors CQYM/F 05: I = 16A, U = 230/400V, poles = 5 + PE, connection = spring/AXYR® push-in 2,5 mm², housing = thermoplastic IP65/IP67 or die cast aluminium IP44 (IP65/IP67), or die cast zinc 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 08E: I = 16A, U = 500V, poles 8 + PE, connection = crimp 4 mm², housing = plastic IP65/IP67, or die cast zinc alloy IP66/IP67/IP69 (CQA-MQA)

Connectors CQYM/F 08E: I = 16A, U = 500V, poles 8 + PE, connection = spring/AXYR® push-in 2,5 mm², housing = plastic IP65/IP67 or die cast zinc alloy IP66/IP67/IP69 (series CQA-MQA)

Connectors CQM/F 12: I = 16A, U = 400V, 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 12 CIF: I = 16A, U = 250V, poles = 12 + PE, connection = plug-in on the rear to the PCB interface connector CIF Q12 2.4

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 die cast zinc IP66/IP68 (series CGK/MGK)

13. PCB interface connectors: series CIF

CIF 2.4 (gold plated contacts), CIF 2.4 A (silver plated contacts) module adapter for series CDD 24 (4 modules), CDD 42 (7 modules), CDD 72 (12 modules), CDD 108 (18 modules), CX 8/24 (4 modules), CX 6/36 (6 modules), MIXO CX 12 D (2 modules), I = 7,5A, U = 250V, poles = 6, connection = solder;

CIF Q05 2.4 (silver plated contacts), adapter for CQM/F 05, I = 10A, U = 250V, poles = 5 (pass-through PE), connection = solder;

CIF Q07 2.4 (gold plated contacts), adapter for CQM/F 07, I = 7,5A, U = 250V, poles = 7 (pass-through PE), connection = solder;

CIF Q12 2.4 (gold plated contacts), adapter for CQM/F 12 CIF, I = 7,5A, U = 250V, poles = 12 + PE, connection = solder;

CIF Q08 1.6 (silver plated contacts), adapter for CQM/F 08, I = 16A, U=230/400V, poles = 8, connection = solder;

CIF Q4/2 2.4 (silver plated power contacts, gold plated auxiliary contacts), adapter for CQM/F 04/2, I = 30A (power contacts), I = 7,5A (auxiliary contacts), U = 400/690V (power), U = 250V (auxiliaries), poles = 4 (power) + 2 (auxiliaries), connection = solder;

CIF X17 DM/F (gold plated contacts), adapter for MIXO CX 17 DM/F, I = 7,5A, U = 160V, poles = 17, connection = solder;

CIF 5 2.4 (gold plated contacts), module adapter for CX 17 DM/F (in combination with 2× CIF 2.4), I = 7,5A, U = 160V, poles = 5, connection = solder;

Accessories: Interface contacts for PCB interface connectors series CIF: CDMA/FA 6A, CDFA 6A28, CDMA 6A32, CDMD/FD 6A, CCFFA, CCMFA, CXFFA, CXMFA.

14. Connector hoods and housings:

Type: Standard (w/ Class lever or w/ V-Type lever or w/IL-BRID lever), W-Type, S-Type (EMC), R-Type (high temperatures), CG-MG (die cast aluminium, IP66/IP68), CGK-MGK (die cast zinc IP66/IP68), CQ-MQ (insulating material), CQA-MQA (die cast zinc), MIXO ONE (die cast aluminium), E-Xtreme®, T-Type (insulating material), T-Type Hygienic (/H, /C), T-Type /W (aggressive environment), COB supports
Series standard (w/ Class locking lever)
Series standard (w/ IL-BRID 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 CG-MG (die cast aluminium IP66/IP68)
Series CGK-MGK (die cast zinc, IP66/IP68)
Series CQ 08/ MQ 08 (insulating material)
Series CQA 08/MQA 08 (die cast zinc, IP66/IP67/IP69)
Series MIXO ONE (CXA-MXA single module enclosures, die cast aluminium, IP65)
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

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.19 Issue 8, December 2020 (XDG CN 1220), ILME Catalogue News 2020 Issue 10, April 2021 (XDGPDT20 421), ILME Catalogue News 2021 Issue 4, June 2021 (XDGPDT21 621), ILME Catalogue News 2022 Issue 6, April 2022 (XDGPDT22 422), ILME Test Reports as per separate list

Tests carried out

Environmental test specification for electrical, electronic and programmable equipment and system DNV-CG-0339:2021 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