



Assembly instruction see N 22 091 0023

|                                 |                                |  |          |        |       |      |      |                               |          |      |      |      |      |  |
|---------------------------------|--------------------------------|--|----------|--------|-------|------|------|-------------------------------|----------|------|------|------|------|--|
| Number of contacts              | Standard                       | 3  | 4        | 5      | 5     | 6    | 7    | 7                             | 8        | 12   | 14   | 14   | 19   |  |
| Contact arrangement             | IEC 61076-2-106                | 03-a   | 04-a     | 05-a   | 05-b  | 06-a | 07-a | 07-b                          | 08-a     | 12-a | 14-a | 14-b | 19-a |  |
| Rated voltage                   | IEC 60664-1                    | 150 V  | 100 V    | 32 V   | 100 V | 32 V |      |                               |          |      |      |      |      |  |
| Rated impulse withstand voltage | IEC 60664-1                    | 1500 V   | 800 V    | 1500 V | 800 V |      |      |                               |          |      |      |      |      |  |
| Pollution degree                | IEC 60664-1                    | 3 <sup>1)</sup>                                      |          |        |       |      |      |                               |          |      |      |      |      |  |
| Installation category           | IEC 60664-1                    | I  |          |        |       |      |      |                               |          |      |      |      |      |  |
| Insulation group                | IEC 60664-1                    | II, 400 ≤ CTI < 600                                  |          |        |       |      |      |                               |          |      |      |      |      |  |
| Current rating                  | IEC 60512-5-2<br>UL 1977       | 10A/+40°C  | 7A/+40°C |        |       |      |      |                               | 3A/+40°C |      |      |      |      |  |
| Insulation resistance           | IEC 60512-3-1                  | >10 <sup>10</sup> Ohm <sup>2)</sup>                  |          |        |       |      |      |                               |          |      |      |      |      |  |
| Contact resistance              | IEC 60512-2-1                  | <5mOhm   |          |        |       |      |      |                               |          |      |      |      |      |  |
| Climatic category               | IEC 60668-1                    | 40 / 100 / 21  |          |        |       |      |      |                               |          |      |      |      |      |  |
| Temperatur range                | IEC 60668-1                    | -40°C...+100°C / -40°F...+212°F                      |          |        |       |      |      |                               |          |      |      |      |      |  |
| Salt spray resistance           | DIN IEC<br>60068-2-11, test Ka | 720h   |          |        |       |      |      |                               |          |      |      |      |      |  |
| IP degree                       | IEC 60529                      | IP69K / IP 68 (in mated condition)                   |          |        |       |      |      |                               |          |      |      |      |      |  |
| Insertion and withdrawal force  | IEC 60512-13-2                 | 25N  | 30N      | 35N    | 35N   | 50N  | 55N  | 55N                           | 60N      | 50N  | 50N  | 50N  | 60N  |  |
| mechanical operation            | IEC 60512-9-1                  | Silver ≥500 mating cycles / Gold ≥1000 mating cycles |          |        |       |      |      |                               |          |      |      |      |      |  |
| housing material                |                                | brass and / or zinc die cast, nickel plated          |          |        |       |      |      |                               |          |      |      |      |      |  |
| dielectric material             |                                | thermoplastic  |          |        |       |      |      |                               |          |      |      |      |      |  |
| sealing material                |                                | Chloroprene  |          |        |       |      |      |                               |          |      |      |      |      |  |
| contacts                        |                                | silver or gold plated                                |          |        |       |      |      |                               |          |      |      |      |      |  |
| termination technique           |                                | solder   |          |        |       |      |      |                               |          |      |      |      |      |  |
| wire gauge                      |                                | ≤0,5mm <sup>2</sup> / 20 AWG                         |          |        |       |      |      | ≤0,35mm <sup>2</sup> / 22 AWG |          |      |      |      |      |  |
| flamability                     |                                | UL 94 V0   |          |        |       |      |      |                               |          |      |      |      |      |  |
| locking system                  | DIN EN 61076-2-106             | metal screw coupling, tightening torque 0,7 - 1,5 Nm |          |        |       |      |      |                               |          |      |      |      |      |  |

<sup>1)</sup> designed according pollution degree 2, can be used under pollution degree 3 if the rules according IEC 60664-1 are fulfilled  
<sup>2)</sup> under operating conditions >10<sup>8</sup> Ohm  
 Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.  
 Remark for gold plated contacts:  
 In order to avoid brittle inter-metallic connections, gold plated terminals have to be tin-plated in the solder area.  
 All technical data have been measured in a laboratory environment and can be different during practical usage of the product. Any product information is for descriptive usage only and not legally binding; particularly the information does not constitute or provide any legal guaranties ("Beschaffungsgarantie" or "Haltbarkeitsgarantie").

|  |               |                     |                     |
|--|---------------|---------------------|---------------------|
|  | 149<br>(19-a) | C091 31H019 102 4 U | C091 31H019 202 4 U |
|  | 14<br>(14-b)  | C091 31H114 102 4 U | C091 31H114 202 4 U |
|  | 14<br>(14-a)  | C091 31H014 102 4 U | C091 31H014 202 4 U |
|  | 12<br>(12-a)  | C091 31H012 102 4 U | C091 31H012 202 4 U |
|  | 8<br>(08-a)   | C091 31H008 102 4 U | C091 31H008 202 4 U |
|  | 7<br>(07-b)   | C091 31H107 102 4 U | C091 31H107 202 4 U |
|  | 7<br>(07-a)   | C091 31H007 102 4 U | C091 31H007 202 4 U |
|  | 6<br>(06-a)   | C091 31H006 102 4 U | C091 31H006 202 4 U |
|  | 5<br>(05-b)   | C091 31H105 102 4 U | C091 31H105 202 4 U |
|  | 5<br>(05-a)   | C091 31H005 102 4 U | C091 31H005 202 4 U |
|  | 4<br>(04-a)   | C091 31H004 102 4 U | C091 31H004 202 4 U |
|  | 3<br>(03-a)   | C091 31H003 102 4 U | C091 31H003 202 4 U |

|  |   |   |   |
|--|---|---|---|
| Contact arrangement<br>View on mating side | Number of contacts<br>(Contact arrangement<br>acc. IEC 61076-2-106) | Part number<br>with silver plated<br>contacts | Part number<br>with gold plated<br>contacts |
|--|---|---|---|

|  |  |   |    |
|--|--|---|----|
| Gewicht (errechnet) / Calc WT: 0,05 kg | Zul. Abw./Tolerances:  | Maßstab / Scale: 2:1                                    | A3 |
| Prüfmaß / Testdimension                | ISO 2768-c   | CUSTOMER DRAWING  |    |
| Teileindex / Partindexnumber:          | DIN / ISO 13715  | Male cable connector<br>for cable diameter 8-10,5 mm    |    |
| Bagatelle change:                      | Gez. 26.05.2020<br>Drawn MCARLE<br>Status Released<br>Gepr. 11.01.2021<br>Checked MBERTSCH | Blatt / Sheet<br>1 Bl.                                  |    |
| 03 202000083                           | 26.10.2020 MCARLE  | M C091 31HXXX X02 4 U                                   |    |
| Index Änderung / Description           | Datum / Date Name  | Ers. f. / Replacement for: M-C0901 31HXXX X02 4 U Rev02 |    |

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