## eco mate<sup>m</sup> Standard | Technical Data

| General Characteristics                         | Standard   | Characteristics                         |  |
|---|--|---|--|
| Number of contacts                              |  | 3 + PE                                  | 6 + PE   |
| Termination technique                           |  | screw type                              | soldertype crimp type  |
| Wire gauge / AWG                                |  | 0.75 - 2.5 mm <sup>2</sup><br>AWG 18-14 | max. 0.75 mm² 0.14 - 1.5 mm²   AWG 18 AWG 26 - 16  |
| Flammability                                    | UL 94  | VO                                      |  |
| Locking system                                  |  | round thread                            |  |
| View on termination side of male contact insert |  |   |  |
| Electrical Characteristics                      |  |   |  |
| Rated voltage                                   | IEC 60664-1 <sup>1)</sup>  | 400 V                                   | 250 V  |
| Pollution degree                                | IEC 60664-1 <sup>1)</sup>  | 3                                       |  |
| Installation category                           | IEC 60664-1 <sup>1)</sup>  | Ш                                       |  |
| Insulation group                                | IEC 60664-1 <sup>1)</sup>  | II                                      |  |
| Rated impulse withstand voltage                 | IEC 60664-1 1)   | 6000 V                                  | 4000 V   |
| Current rating                                  | IEC 60512-5-2  | 16 A / + 55°C                           | 12 A / 13 A /<br>+ 55℃ + 55℃   |
| Contact resistance                              | IEC 60512-2-1  | ≤ 5 m Ω                                 |  |
| Insulation resistance                           | IEC 60512-3-1  | $\geq 10^8  \Omega$                     |  |
| Climatic Characteristics                        |  |   |  |
| Climatic category                               | IEC 60068-1  | 40 / 100 /56                            | 40 / 125 / 56  |
| Operating temperature                           |  | -40°C +100°C                            | -40°C +125°C   |
| Mechanical Characteristics                      |  |   |  |
| IP-degree                                       | IEC 60529  | IP 65 / IP 67                           |  |
| Insertion and withdrawal forces                 | IEC 60512-13-2   | $\leq$ 15 N $\leq$ 30 N                 |  |
| Mechanical operation                            | IEC 60512-9-1  | ≥ 500 mating cycles                     |  |
| Materials                                       |  |   |  |
| Housing material                                |  | PA 6.6 / PA 6                           |  |
| Dielectric material                             |  | PA 6.6 / PA 6                           |  |
| Gasket material                                 |  | Neopren                                 |  |
| ${\it Material lace for protective cover}$      |  | TPE                                     |  |
| Contact plating                                 |  | silver plating / gold plating           |  |
| Derating-Curves <sup>2)</sup>                   |  |   |  |
| 3+  | PE<br>Curve Wire gauge<br>a 1.5 mm <sup>2</sup><br>b 2.5 mm <sup>2</sup> | Current carrying capacity               | 6 + PE<br>Curve Wire gauge<br>a 0.75 mm <sup>2</sup><br>stamped<br>soldercontacts<br>b 1.5 mm <sup>2</sup><br>stamped<br>crimpcontacts |

## Remark

The stated technical values refer to the use as connector without breaking capacity (COC). If these components are used as plug and socket device a reduced current carrying capacity has to be considered. The characteristics have to be requested from the manufacturer.

Ambient temperature

Ambienttemperature

 $^{1)}$  DIN EN 60664-1  $\Delta$  VDE 0110-1  $\Delta$  IEC 60664-1  $^{2)}$  All contacts under load