

## DIN-Power F048FL-9,0C1-3



Image is for illustration purposes only. Please refer to product description.

|                    |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|
| Part number        | 09 06 248 7823                                                                        |
| Specification      | DIN-Power F048FL-9,0C1-3                                                              |
| HARTING eCatalogue | <a href="https://b2b.harting.com/09062487823">https://b2b.harting.com/09062487823</a> |

### Identification

|                            |                  |
|----------------------------|------------------|
| Category                   | Connectors       |
| Series                     | DIN 41612        |
| Identification             | Type F           |
| Element                    | Female connector |
| Description of the contact | Straight         |
| Features                   | lead-free        |

### Version

|                       |                                               |
|-----------------------|-----------------------------------------------|
| Termination method    | Solder lug termination                        |
| Connection type       | PCB to cable                                  |
| Number of contacts    | 48                                            |
| Contact configuration | Rows z, d and b, positions 2, 4, ... , 30, 32 |
| Coding                | Hole coding<br>Coding with loss of contacts   |
| PCB fixing            | With fixing flange                            |

### Technical characteristics

|                               |                                                                 |
|-------------------------------|-----------------------------------------------------------------|
| Contact rows                  | 3                                                               |
| Contact spacing (mating side) | 3.81 mm<br>5.08 mm                                              |
| Rated current                 | 6 A                                                             |
| Rated current                 | Rated current measured at 20 °C, see derating curve for details |
| Clearance distance            | ≥1.6 mm                                                         |
| Creepage distance             | ≥3 mm                                                           |



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## Technical characteristics

|                                |                                                      |
|--------------------------------|------------------------------------------------------|
| Insulation resistance          | $>10^{12} \Omega$                                    |
| Contact resistance             | $\leq 15 \text{ m}\Omega$                            |
| Limiting temperature           | -55 ... +125 °C                                      |
| Insertion and withdrawal force | $\leq 75 \text{ N}$                                  |
| Performance level              | 3<br>acc. to IEC 60603-2                             |
| Mating cycles                  | $\geq 50$                                            |
| Test voltage $U_{r.m.s.}$      | 1.55 kV (contact-contact)<br>2.5 kV (contact-ground) |
| Isolation group                | IIIa ( $175 \leq \text{CTI} < 400$ )                 |
| Hot plugging                   | No                                                   |

## Material properties

|                                           |                                                                |
|-------------------------------------------|----------------------------------------------------------------|
| Material (insert)                         | Thermoplastic resin, glass-fibre filled                        |
| Colour (insert)                           | RAL 7032 (pebble grey)                                         |
| Material (contacts)                       | Copper alloy                                                   |
| Surface (contacts)                        | Noble metal over Ni Mating side<br>Sn over Ni Termination side |
| Material flammability class acc. to UL 94 | V-0                                                            |
| RoHS                                      | compliant                                                      |
| ELV status                                | compliant                                                      |
| China RoHS                                | e                                                              |
| REACH Annex XVII substances               | No                                                             |
| REACH ANNEX XIV substances                | No                                                             |
| REACH SVHC substances                     | No                                                             |
| California Proposition 65 substances      | Yes                                                            |
| California Proposition 65 substances      | Nickel<br>Antimony trioxide                                    |

## Specifications and approvals

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Specifications         | IEC 60603-2                                                |
| UL / CSA               | UL 1977 ECBT2.E102079<br>CSA-C22.2 No. 182.3 ECBT8.E102079 |
| Railway classification | F4/I3 acc. to NFF 16-101/102                               |



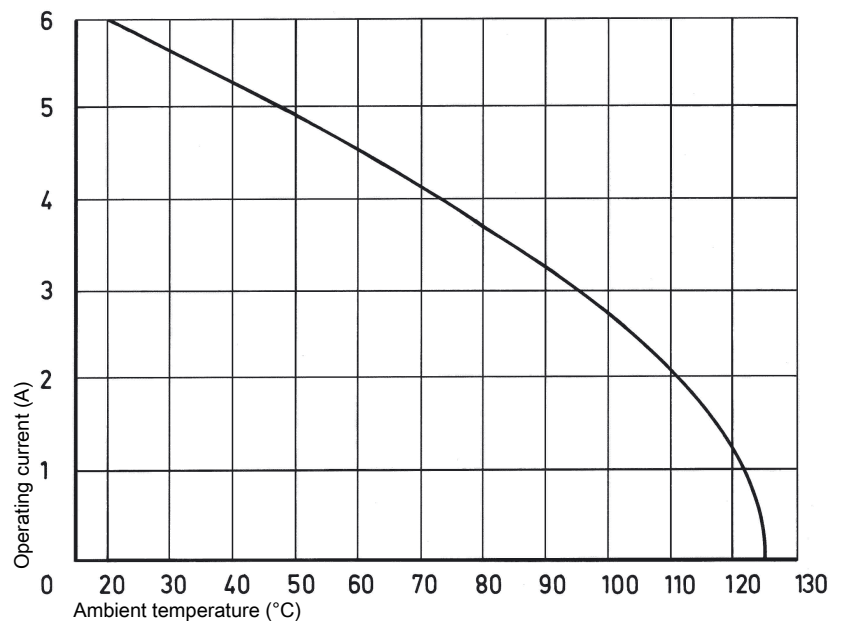
Pushing Performance

## Commercial data

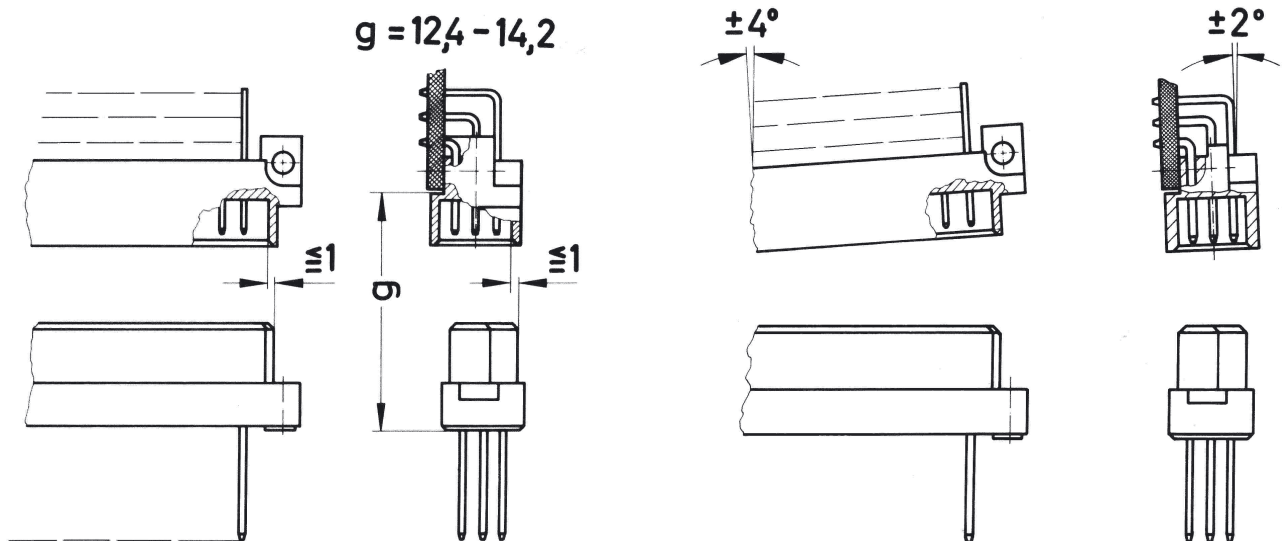
|                                |                                          |
|--------------------------------|------------------------------------------|
| Packaging size                 | 20                                       |
| Net weight                     | 39 g                                     |
| Country of origin              | Germany                                  |
| European customs tariff number | 85366990                                 |
| eCl@ss                         | 27460201 PCB connector (board connector) |

## Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.  
Measuring and testing techniques acc. to IEC 60512-5-2



## Mating conditions



To ensure reliable connections and prevent unnecessary damage, please refer to the application data diagrams. These recommendations are set out in IEC 60603-2. The connectors should not be coupled and decoupled under electrical load.