

## DIN-Power F048FW-22,0C1-2

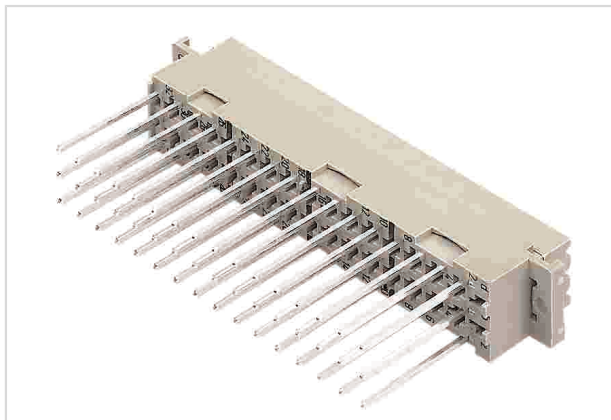


Image is for illustration purposes only. Please refer to product description.

|                    |   |
|--------------------|---|
| Part number        | 09 06 248 6821  |
| Specification      | DIN-Power F048FW-22,0C1-2   |
| HARTING eCatalogue | <a href="https://b2b.harting.com/09062486821">https://b2b.harting.com/09062486821</a> |

### Identification

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

### Version

|                       |   |
|-----------------------|---|
| Termination method    | Wrap termination                              |
| Connection type       | PCB to cable<br>Cable to cable                |
| Number of contacts    | 48  |
| Contact configuration | Rows z, d and b, positions 2, 4, ... , 30, 32 |
| Termination length    | 22 mm   |
| 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 |



Pushing Performance

## Technical characteristics

|                                  |  |
|----------------------------------|--|
| Clearance distance               | ≥1.6 mm  |
| Creepage distance                | ≥3 mm  |
| Insulation resistance            | >10 <sup>12</sup> Ω                                  |
| Contact resistance               | ≤15 mΩ   |
| Limiting temperature             | -55 ... +125 °C                                      |
| Insertion and withdrawal force   | ≤75 N  |
| Performance level                | 2<br>acc. to IEC 60603-2                             |
| Mating cycles                    | ≥400   |
| Test voltage U <sub>r.m.s.</sub> | 1.55 kV (contact-contact)<br>2.5 kV (contact-ground) |
| Isolation group                  | IIIa (175 ≤ 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>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 |



Pushing Performance

## Specifications and approvals

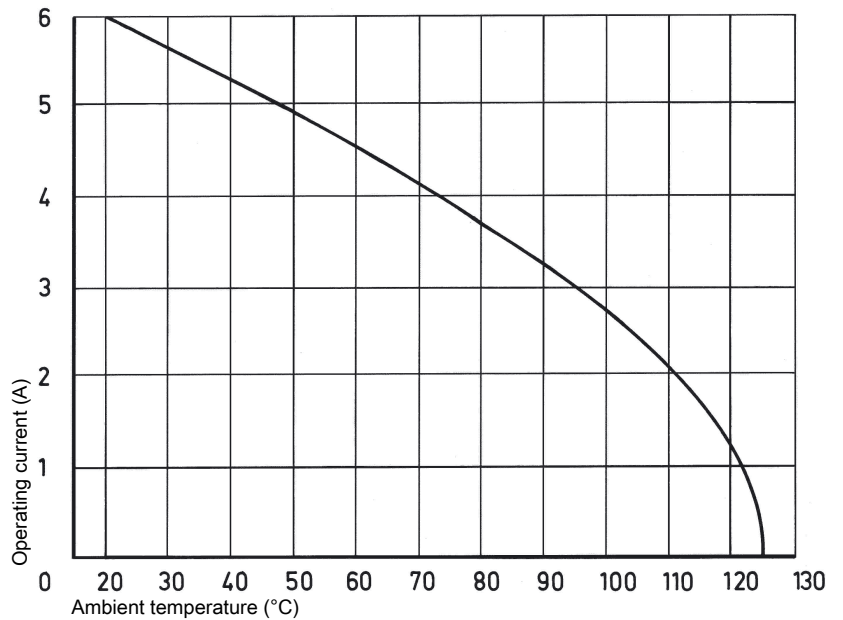
|                        |                              |
|------------------------|------------------------------|
| Railway classification | F4/I3 acc. to NFF 16-101/102 |
|------------------------|------------------------------|

## Commercial data

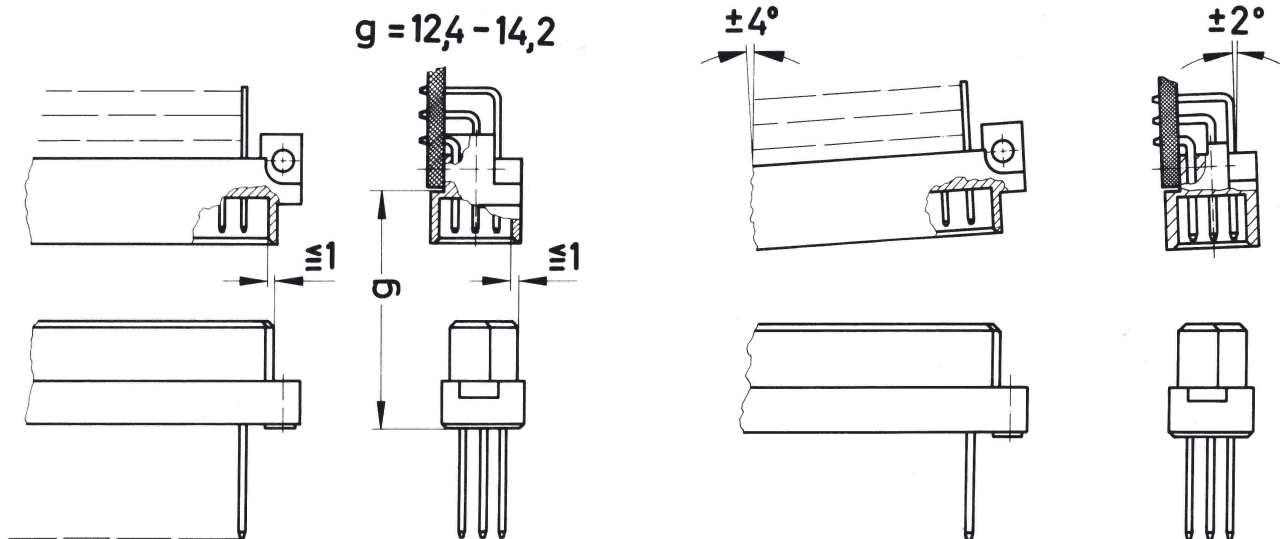
|                                |  |
|--------------------------------|--|
| Packaging size                 | 20                                       |
| Net weight                     | 41.22 g                                  |
| Country of origin              | Germany                                  |
| 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.