

DIN-Power E048-FC-B

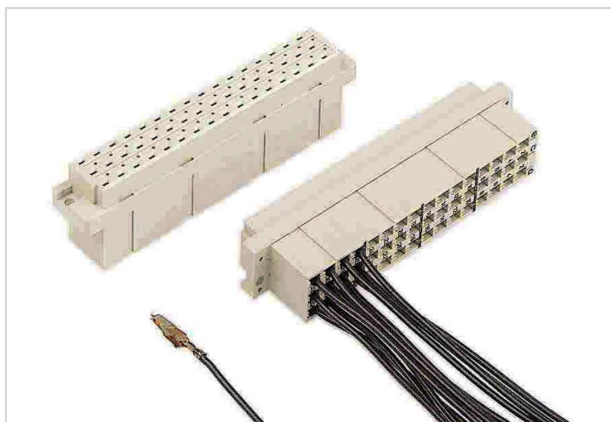


Image is for illustration purposes only. Please refer to product description.

| | |
|--------------------|---|
| Part number | 09 05 048 3202 |
| Specification | DIN-Power E048-FC-B |
| HARTING eCatalogue | https://b2b.harting.com/09050483202 |

Identification

| | |
|----------------|------------------|
| Category | Connectors |
| Series | DIN 41612 |
| Identification | Type E |
| Element | Female connector |
| Features | lead-free |

Version

| | |
|--------------------|---|
| Termination method | Crimp termination |
| Connection type | PCB to cable |
| Number of contacts | 48 |
| Coding | Hole coding Coding with loss of contacts |
| PCB fixing | With fixing flange |
| Details | Please order crimp contacts separately. |

Technical characteristics

| | |
|------------------------------------|---|
| Contact rows | 3 |
| Contact spacing (termination side) | 5.08 mm 5.08 mm |
| Contact spacing (mating side) | 5.08 mm 5.08 mm |
| Rated current | Rated current measured at 20 °C, see derating curve for details |
| Clearance distance | ≥3 mm |
| Creepage distance | ≥3 mm |



Pushing Performance
Since 1945

Technical characteristics

| | |
|--------------------------------|---|
| Insulation resistance | $>10^{12} \Omega$ |
| Contact resistance | $\leq 15 \text{ m}\Omega$ |
| Limiting temperature | -55 ... +125 °C |
| Insertion and withdrawal force | $\leq 75 \text{ N}$ |
| Test voltage $U_{r.m.s.}$ | 1.55 kV (contact-contact) 1.55 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 flammability class acc. to UL 94 | V-0 |
| RoHS | compliant |
| ELV status | compliant |
| China RoHS | e |
| REACH Annex XVII substances | Not contained |
| REACH ANNEX XIV substances | Not contained |
| REACH SVHC substances | Not contained |

Specifications and approvals

| | |
|------------------------|--|
| Specifications | IEC 60603-2 |
| UL / CSA | UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079 |
| Railway classification | F1/I2 acc. to NFF 16-101/102 |

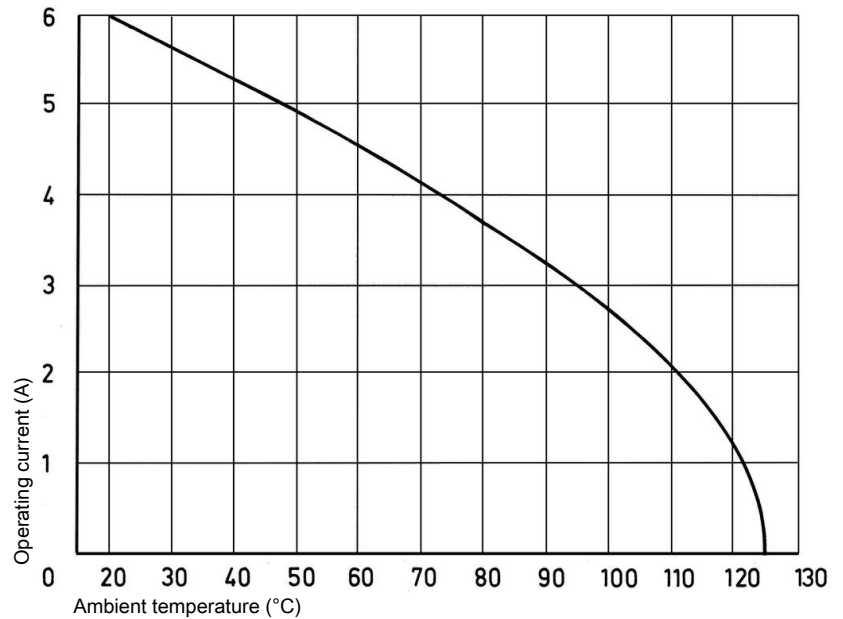
Commercial data

| | |
|--------------------------------|--|
| Packaging size | 80 |
| Net weight | 25 g |
| Country of origin | Germany |
| European customs tariff number | 85366990 |
| GTIN | 5713140008809 |
| eCl@ss | 27460201 PCB connector (board connector) |

Current carrying capacity

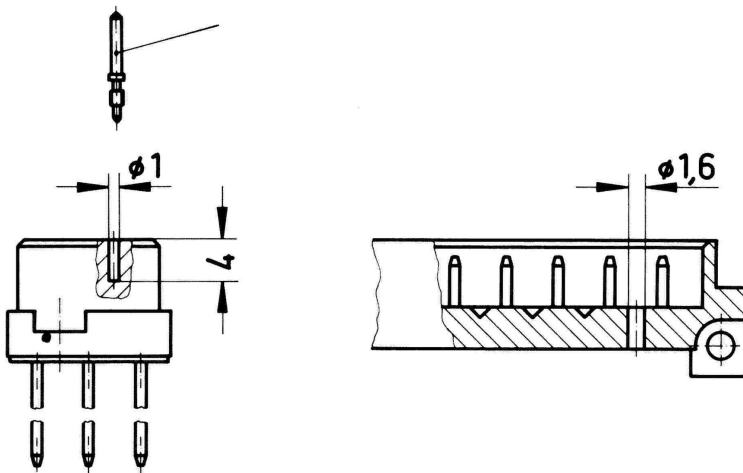
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the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

Measuring and testing techniques acc. to IEC 60512-5-2



Hole coding

(without loss of contact)



To avoid cross-plugging of adjacent connectors a coding system is required.

Drill out the male connector at pre-centered point according to the sketch. Use the setting tool 09 99 000 0103 to insert the coding pin 09 06 000 9950 into the existing hole in the female connector.

Coding with loss of contacts

To avoid cross-plugging of adjacent connectors a coding system is required.

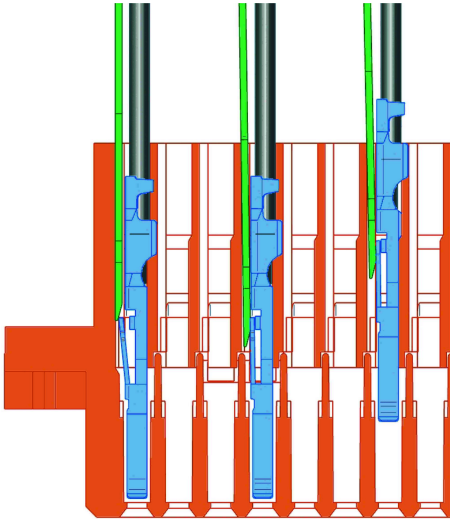
The coding is achieved by means of a code pin which is inserted into the selected chamber of the female connector (the contact cavity must be filled with a female contact!).

The opposite male contact must be removed with the help of the specially designed tool. It's recommended to use at least 3 pins.

Coding pin 09 04 000 9908

Removal tool for male contacts 09 99 000 0038

Installation of crimp contacts



Fitting the crimp contacts:

After crimping the wires onto the contacts with the help of a crimping tool or an automatic crimping machine the contacts should be correctly oriented and inserted into the cavities of the connector moulding in the required configuration. They snap into position and are firmly held in place. A light pull on the wire assures the correct tensile strength of the contact. When using stranded wires with a gauge below 0.37 mm^2 an insertion tool is necessary. Insertion tool part number: 09 99 000 0100

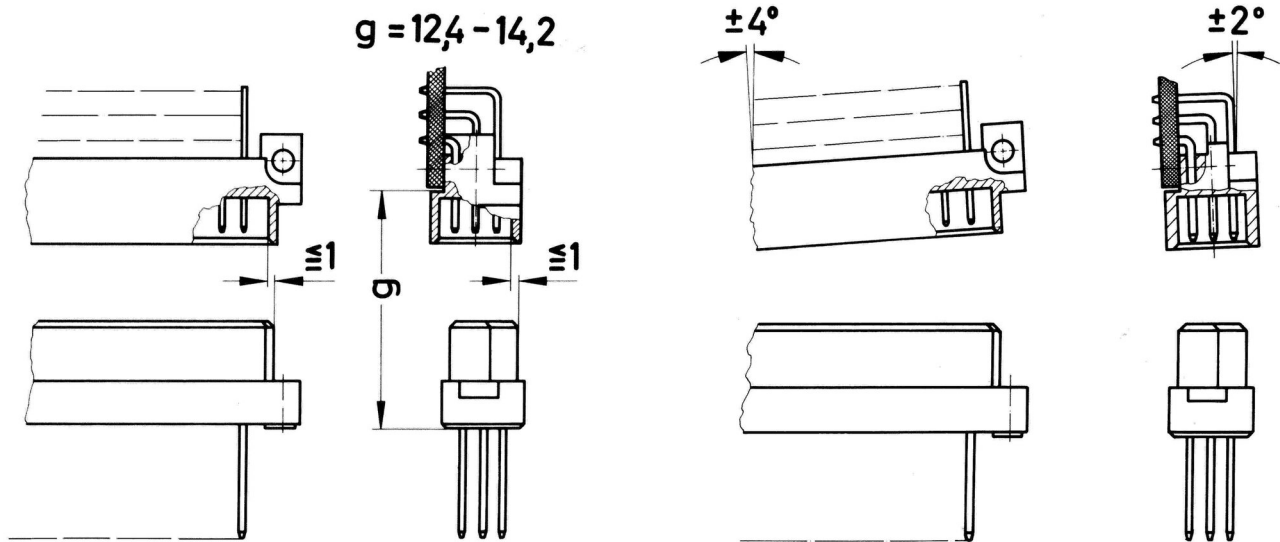
Insertion tool part number: 09 99 000 0088

Removing the crimp contacts:

The removal tool is inserted into a slot on the side of the respective crimp cavity. This action compresses the contact retaining spring therefore the contact can then be easily withdrawn using a light pull on the wire. This action will cause no damage to the contact / wire which can be repositioned / refitted as necessary. The drawing demonstrates the crimp removal procedure (max. 5x).

Removal tool part number: 09 99 000 0087

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.