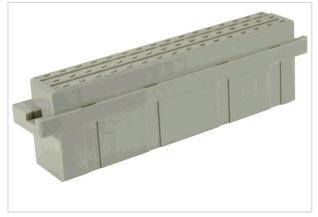


# DIN-Power E048-FC-B-modul



Part number	09 05 048 3204
Specification	DIN-Power E048-FC-B-modul
HARTING eCatalogue	https://b2b.harting.com/09050483204

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

### Identification

Category	Connectors
Series	DIN 41612
Identification	Туре Е
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	≥1.6 mm
Creepage distance	≥3 mm

Page 1 / 5 | Creation date 2023-03-23 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com Product data sheet 09 05 048 3204 DIN-Power E048-FC-B-modul



### Technical characteristics

Contact resistance   ≤2     Limiting temperature   -5     Insertion and withdrawal force   ≤7     Test voltage U <sub>r.m.s.</sub> 1.4	$10^{12} Ω$ 20 mΩ 55 + 125 °C 75 N .55 kV (contact-contact) .55 kV (contact-ground) la (175 ≤ CTI < 400)
Limiting temperature-5Insertion and withdrawal force≤7Test voltage U <sub>r.m.s.</sub> 1.3Isolation groupIII	55 +125 °C 75 N .55 kV (contact-contact) .55 kV (contact-ground)
Insertion and withdrawal force≤7Test voltage U r.m.s.1.1Isolation groupIII	75 N .55 kV (contact-contact) .55 kV (contact-ground)
Test voltage U <sub>r.m.s.</sub> 1.3   Isolation group IIIa	.55 kV (contact-contact) .55 kV (contact-ground)
Isolation group	.55 kV (contact-ground)
	la (175 < CTI < 400)
Hot plugging No	
	0
Material properties	
Material (insert) Th	hermoplastic resin, glass-fibre filled
Colour (insert) RA	AL 7032 (pebble grey)
Material flammability class acc. to UL 94 V-	-0
RoHS co	ompliant
ELV status co	ompliant
China RoHS e	
REACH Annex XVII substances No	lot contained
REACH ANNEX XIV substances No	lot contained
REACH SVHC substances No	lot contained
Specifications and approvals	
Specifications IE	EC 60603-2
	L 1977 ECBT2.E102079 SA-C22.2 No. 182.3 ECBT8.E102079
Railway classification F1	1/I2 acc. to NFF 16-101/102
Commercial data	
Packaging size 80	0
	4.76 g
	Germany
European customs tariff number 85	5366990
	713140008823
eCl@ss 27	7460201 PCB connector (board connector)

Page 2 / 5 | Creation date 2023-03-23 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com Product data sheet 09 05 048 3204 DIN-Power E048-FC-B-modul

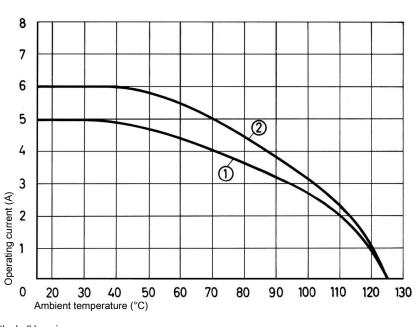


Since 1945

#### Current carrying capacity

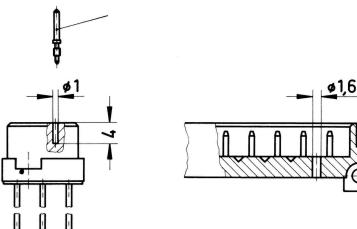
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (nonintermittent) through each contact element of the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

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



① with shell housing 2 without shell housing

## 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

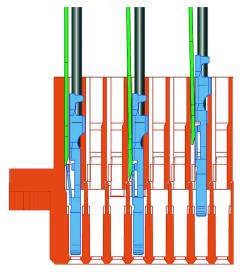
Removal tool for male contacts 09 99 000 0038

Page 3 / 5 | Creation date 2023-03-23 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany

Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com



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<sup>2</sup> 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:

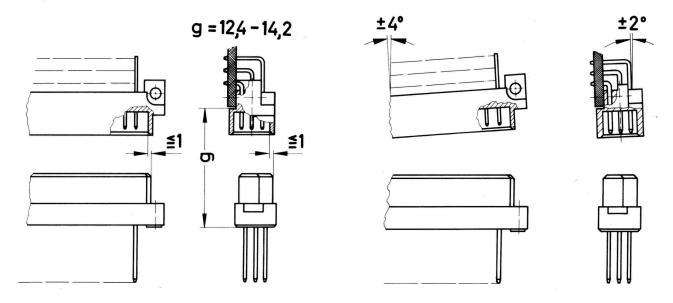
The removal tool is inserted into a slot on the side of the respective crimp cavity. This action compresses the contact retaining spring therefore the contact can then be easily withdrawn using a light pull on the wire. This action will cause no damange to the contact / wire which can be repositioned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

Removal tool part number: 09 99 000 0087

Page 4 / 5 | Creation date 2023-03-23 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com Product data sheet 09 05 048 3204 DIN-Power E048-FC-B-modul



#### 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.

Page 5 / 5 | Creation date 2023-03-23 | Please note that the data specified here were taken as extracts from the online catalogue. Please refer to the user documentation for the complete and up-to-date information and data. Please also note that the user is responsible for validating functionality, conformity with applicable laws and directives, as well as for the electrical safety in the particular application. HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com