

# **OMNIMATE Housing - series CH20M BHZ 5.00/04/90LH BK/BL**

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com















# Naturally, the CH20M system also shows its perfection in the peripheral interface.

When considering design options, processing, usability, reliability and security, the PCB terminals or pin headers and connectors are just as important in the practice as the entire system.

In every sector, the connection technology is at the top of its class.

- 100% non-interchangeable Together with the captive, unique "Auto-Set" encoding, the uniquely detectable markers on the plug connection and in the front ensure misconnection-proof assignment of the connections. Both markers can be printed as cards in a PrintJet and then permanently snapped on.
- 100% intuitive Quick and easy operation by means of an integrated colour-coded release lever with grip tab and including a screwdriver pocket.
- 100% safe Touch protection for the male and female header on both sides
- 100% efficient All PCB connection elements are reflow compatible
- 100% time and cost savings During the installation: the quick all-purpose "Multi-Tool" screw head ensures a secure contact, user-friendly operation and less complexity. Additional features, such as the "Wire ready" technology, enable you to minimize wiring costs and increase customer satisfaction.

Simple, component-friendly unplugging of the female plug using the integrated release lever.

### General ordering data

| Туре         | BHZ 5.00/04/90LH BK/BL  |
|--------------|---|
| Order No.    | <u>1069380000</u>   |
| Version      | PCB plug-in connector Blue release lever BHZ 5.00/04/90LH SN BK/BL BX               |
| GTIN (EAN)   | 4032248825028   |
| Qty.         | 78 pc(s).   |
| Product data | IEC: 400 V / 10 A / 0.2 - 2.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 26 - AWG 12 |
| Packaging    | Вох   |



# OMNIMATE Housing - series CH20M BHZ 5.00/04/90LH BK/BL

### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

# **Technical data**

## **Dimensions and weights**

| Length     | 14.6 mm | Length (inches) | 0.575 inch |
|------------|---------|-----------------|------------|
| Width      | 22.4 mm | Width (inches)  | 0.882 inch |
| Height     | 29 mm   | Height (inches) | 1.142 inch |
| Net weight | 9.308 g |                 |            |

## **System specifications**

| Product family                                  | OMNIMATE Housing -<br>series CH20M | Type of connection                              | Clamping yoke connection |
|---|------------------------------------|---|--------------------------|
| Pitch in mm (P)                                 | 5 mm                               | Pitch in inches (P)                             | 0.197 inch               |
| No. of poles                                    | 4                                  | L1 in mm  | 15 mm                    |
| L1 in inches                                    | 0.591 inch                         | Number of rows                                  | 1                        |
| Pin series quantity                             | 1                                  | Can be coded                                    | Yes                      |
| Tightening torque for screw flange, min. 0.4 Nm |                                    | Tightening torque for screw flange, max. 0.6 Nm |                          |
| Plugging cycles                                 | 25                                 | Packaging                                       | Box                      |

#### **Material data**

| Insulating material                   | PA 66 GV30 | Colour                                | Black               |
|---------------------------------------|------------|---------------------------------------|---------------------|
| Colour chart (similar)                | RAL 9011   | Insulating material group             | II                  |
| CTI                                   | ≥ 400      | Insulation resistance                 | ≥ 10 <sup>8</sup> Ω |
| UL 94 flammability rating             | V-0        | Contact surface                       | tinned              |
| Storage temperature, min.             | -40 °C     | Storage temperature, max.             | 85 °C               |
| Max. relative humidity during storage | 80 %       | Operating temperature, min.           | 0 °C                |
| Operating temperature, max.           | 120 °C     | Temperature range, installation, min. | -25 °C              |
| Temperature range, installation, max. | 120 °C     |                                       |                     |

#### Rated data acc. to IEC

| tested acc. to standard   | 150 00004 4 150 04004  | Rated current, min. no. of poles                                      | 10.4  |
|---|------------------------|---|-------|
|   | IEC 60664-1, IEC 61984 | (Tu=20°C)   | 10 A  |
| Rated current, min. no. of poles (Tu=40°C)                                | 9 A                    | Rated voltage for surge voltage class / pollution degree II/2         | 400 V |
| Rated voltage for surge voltage class / pollution degree III/2            | 320 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 250 V |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV  |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV                   | Clearance, min.   | 3 mm  |
| Creepage distance, min.   | 3.2 mm                 |   |       |

## Rated data acc. to CSA

| Rated voltage (Use group B)   | 300 V  | Rated voltage (Use group C)   | 50 V   |  |
|-------------------------------|--------|-------------------------------|--------|--|
| Rated voltage (use group D)   | 300 V  | Rated current (use group B)   | 10 A   |  |
| Rated current (use group C)   | 10 A   | Rated current (use group D)   | 10 A   |  |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 12 |  |



# OMNIMATE Housing - series CH20M BHZ 5.00/04/90LH BK/BL

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

# **Technical data**

#### Rated data acc. to UL 1059

| Rated data acc. to UL 1055   | 1  |   |                                |
|--|--|---|--------------------------------|
|  |  |   |                                |
| Institute (cURus)  | . <b>91</b> 1  | Certificate No. (cURus)                   | 500000                         |
| Detection to the section of the sect | 200 1/   | Detector (construction C)                 | E60693                         |
| Rated voltage (use group B)  | 300 V  | Rated voltage (use group C)               | 50 V                           |
| Rated voltage (use group D)  | 300 V  | Rated current (use group B)               | 10 A                           |
| Rated current (use group C)  | 10 A   | Rated current (use group D)               | 10 A                           |
| Wire cross-section, AWG, min.  | AWG 26   | Wire cross-section, AWG, max.             | AWG 12                         |
| Reference to approval values   | Specifications are<br>maximum values, details -<br>see approval certificate. |   |                                |
| Classifications  |  |   |                                |
| ETIM 4.0   | EC002637   | ETIM 5.0                                  | EC002637                       |
| ETIM 6.0   | EC002637   | eClass 6.2                                | 27-26-07-04                    |
| eClass 7.1   | 27-44-04-02  | eClass 8.1                                | 27-44-04-02                    |
| eClass 9.0   | 27-44-04-02  | eClass 9.1                                | 27-44-04-02                    |
| Notes  |  |   |                                |
| Notes  |  |   |                                |
| IPC conformity   | Conformity: The products are de  | eveloped, manufactured and delivered acco | rding international recognized |

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

#### **Approvals**

Approvals



ROHS Conform

# **Downloads**

Brochure/Catalogue

FL ANALO.SIGN.CONV. EN

MB DEVICE MANUF. EN

CAT 2 PORTFOLIOGUIDE EN

FL MACHINE SAFETY EN

FL 72H SAMPLE SER EN

PO OMNIMATE EN

Engineering Data

STEP



# OMNIMATE Housing - series CH20M BHZ 5.00/04/90LH BK/BL

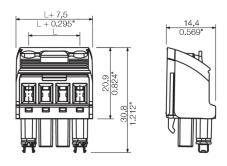
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

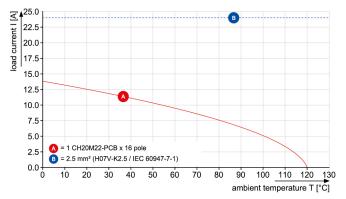
Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

# **Drawings**







### BHZ 5.00/../90 - SHL-SMT 5.00/..G

