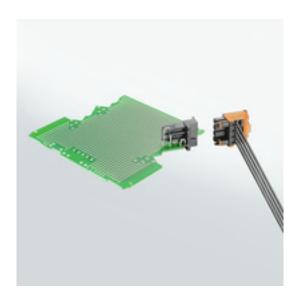


#### Weidmüller Interface GmbH & Co. KG

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## 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

Version	PCB plug-in connector Orange release lever BHZ 5.00/04/90LH SN BK/OR BX
Order No.	1063280000
Туре	BHZ 5.00/04/90LH BK/OR
GTIN (EAN)	4032248814947
Qty.	78 pc(s).
Product data	IEC: 400 V / 10 A / 0.2 - 2.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 26 - AWG 12
Packaging	Box
5 5	



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# **Technical data**

## **Dimensions and weights**

Height	29 mm	Height (inches)	1.142 inch
Length	14.6 mm	Length (inches)	0.575 inch
Net weight	9.29 g	Width	22.4 mm
Width (inches)	0.882 inch		

### **System Parameters**

Product family	OMNIMATE Housing - series CH20M	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	Conductor outlet direction	90°
Number of poles	4	L1 in mm	15 mm
L1 in inches	0.591 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm <sup>2</sup>
Can be coded	Yes	Stripping length	8 mm
Tightening torque for screw flang	je, min. 0.4 Nm	Tightening torque for screw flang	e, max. 0.6 Nm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.6 Nm
Clamping screw	M 2.5	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25

#### **Material data**

Insulating material	PA 66 GV30	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 400	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

#### **Conductors suitable for connection**

Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, max.	3.31 mm <sup>2</sup>
Wire connection cross section AWG,		Wire connection cross section AWG,	
min.	AWG 26	max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>	Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Stranded, max. H07V-R	2 mm <sup>2</sup>	Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt	: 4,	w. plastic collar ferrule, DIN 46228 pt 4	<b>l</b> ,
min.	0.25 mm <sup>2</sup>	max.	2.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1,		w. wire end ferrule, DIN 46228 pt 1,	
min.	0.25 mm <sup>2</sup>	max.	2.5 mm <sup>2</sup>
Plug gauge in accordance with EN		Reference text	The outside diameter of
60999 a x b; ø			the plastic collar should
			not be larger than the pitch
			(P), Length of ferrules is to
			be chosen depending on
	0.0		the product and the rated
	2.8 mm x 2.4 mm; 3.0 mm		voltage.



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E60693

50 V

10 A

10 A AWG 12

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# **Technical data**

#### Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	10 A
Rated current, min. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	9 A	pollution degree II/2	400 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	320 V	pollution degree III/3	250 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	4 kV	class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage			
class/ contamination degree III/3	4 kV		

#### Rated data acc. to CSA

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

#### Rated data acc. to UL 1059

Institute (cURus)	Certificate No. (cURus)	

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)
Rated current (Use group C / UL 1059)	10 A	Rated current (Use group D / UL 1059)
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.
Reference to approval values	Specifications are maximum values, details -	

see approval certificate.

### **General data**

Colour	black	Colour chart (similar)	RAL 9011
Protection degree	IP20		_

#### **Material data**

Comparative Tracking Index (CTI)	≥ 400	Insulating material	PA 66 GV30
Insulating material group	II	UL 94 flammability rating	V-0

## Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ECLASS 9.0	27-44-03-09	ECLASS 9.1	27-44-03-09
ECLASS 10.0	27-44-03-09	ECLASS 11.0	27-46-02-02

### Important note

IPC conformity	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 IPO	in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.



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# **Technical data**

### **Approvals**

Approvals C S US III

ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Engineering Data	<u>STEP</u>	
Engineering Data	EPLAN, WSCAD	



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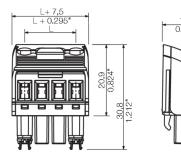
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# **Drawings**

7.5

5.0

2.5



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

= 1 CH20M22-PCB x 16 pole

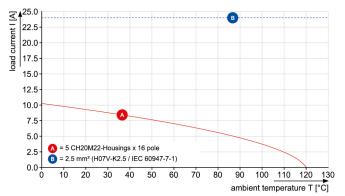
A = 1 CH20M22-PCB x 16 pole
B = 2.5 mm<sup>2</sup> (H07V-K2.5 / IEC 60947-7-1)

30 40 50 60 70



80 90

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



100 110 120 130

ambient temperature T [°C]