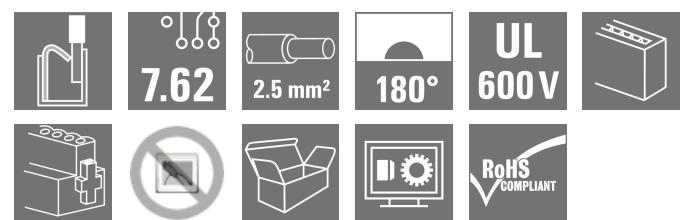
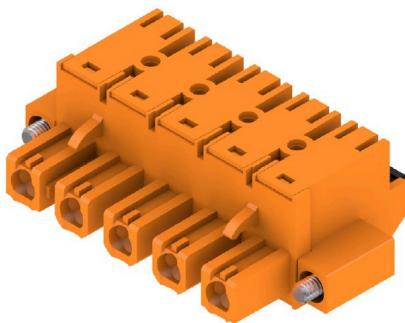


BLF 7.62HP/05/180F SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image



180° female header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1

Variants: without flange, external flange, release latch.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, PUSH IN with actuator, Clamping range, max. : 2.5 mm ² , Box
Order No.	1043900000
Type	BLF 7.62HP/05/180F SN OR BX
GTIN (EAN)	4032248775446
Qty.	36 items
Product data	IEC: 1000 V / 29 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Box

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Dimensions and weights

Depth	28.1 mm	Depth (inches)	1.1063 inch
Height	15.1 mm	Height (inches)	0.5945 inch
Width	47.08 mm	Width (inches)	1.8535 inch
Net weight	12.5 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%
Product Carbon Footprint	Cradle to gate 0,874 kg CO2 eq.

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	5	L1 in mm	30.48 mm
L1 in inches	1.200 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20	Can be coded	Yes
Stripping length	10 mm	Tightening torque for screw flange, min.	0.15 Nm
Tightening torque for screw flange, max.	0.25 Nm	Screwdriver blade	0.6 x 3.5
Plugging cycles	25	Plugging force/pole, max.	8.5 N
Pulling force/pole, max.	6 N		

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation resistance	≥ 108 Ω
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of plug contact	4...8 µm Sn hot-dip tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	2.5 mm ²

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Wire connection cross section AWG, min. AWG 20

Wire connection cross section AWG, max. AWG 12

Solid, min. H05(07) V-U 0.5 mm²

Solid, max. H05(07) V-U 1.5 mm²

Flexible, min. H05(07) V-K 0.5 mm²

Flexible, max. H05(07) V-K 2.5 mm²

w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm² min.

w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm² max.

w. wire end ferrule, DIN 46228 pt 1, 0.5 mm² min.

w. wire end ferrule, DIN 46228 pt 1, 2.5 mm² max.

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.0 mm

Clampable conductor

Cross-section for conductor connection	Type	fine-wired
	nominal	0.5 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H0,5/16 OR
	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H0,5/10
Cross-section for conductor connection	Type	fine-wired
	nominal	0.75 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H0,75/16 W
	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H0,75/10
Cross-section for conductor connection	Type	fine-wired
	nominal	1 mm ²
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H1,0/16D R
	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H1,0/10
Cross-section for conductor connection	Type	fine-wired
	nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H1,5/10
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	H1,5/16 R
Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H2,5/10

Reference text

The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.

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Technical data

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	29 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	23.8 A
Rated current, max. number of poles (Tu=40°C)	23 A	Rated voltage for surge voltage class / pollution degree II/2	1000 V
Rated voltage for surge voltage class / pollution degree III/2	1000 V	Rated voltage for surge voltage class / pollution degree III/3	630 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 180 A
Creepage distance, min.	11.4 mm	Clearance, min.	11.4 mm

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	20 A
Rated current (Use group C / UL 1059)	20 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 20	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	352.00 mm
VPE width	141.00 mm	VPE height	39.00 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96
	Test	mark of origin, type identification, pitch, type of material, date clock
	Evaluation	available
	Test	durability
	Evaluation	passed
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08
	Test	180° turned with coding elements
	Evaluation	passed
	Test	180° turned without coding elements
	Evaluation	passed
Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 04.08

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Test for damage to and accidental loosening of conductors	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
	Conductor type	Type of conductor and conductor cross-section	stranded 0.5 mm ²
	Conductor type	Type of conductor and conductor cross-section	solid 2.5 mm ²
	Conductor type	Type of conductor and conductor cross-section	stranded 2.5 mm ²
	Conductor type	Type of conductor and conductor cross-section	AWG 20/1
	Conductor type	Type of conductor and conductor cross-section	AWG 20/19
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1
	Conductor type	Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.4 / 12.00	
Pull-out test	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
	Conductor type	Type of conductor and conductor cross-section	H05V-K0.5
	Conductor type	Type of conductor and conductor cross-section	AWG 20/1
	Conductor type	Type of conductor and conductor cross-section	AWG 20/19
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
	Conductor type	Type of conductor and conductor cross-section	H07V-K2.5
	Conductor type	Type of conductor and conductor cross-section	AWG 14/1
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.5 / 12.00	
	Requirement	≥20 N	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
	Conductor type	Type of conductor and conductor cross-section	H05V-K0.5

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Technical data

	Type of conductor and conductor cross-section	AWG 20/1
	Type of conductor and conductor cross-section	AWG 20/19
Evaluation	passed	
Requirement	≥50 N	
Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
	Type of conductor and conductor cross-section	H07V-K2.5
	Type of conductor and conductor cross-section	AWG 14/1
Evaluation	passed	
Requirement	≥60 N	
Conductor type	Type of conductor and conductor cross-section	AWG 12/19
Evaluation	passed	

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 IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

- Additional variants on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

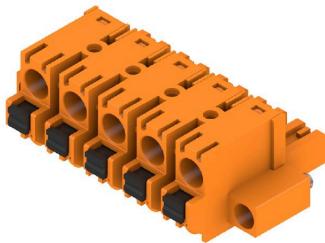
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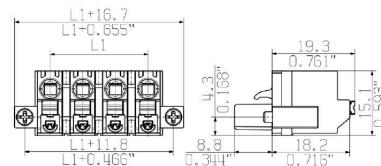
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Drawings

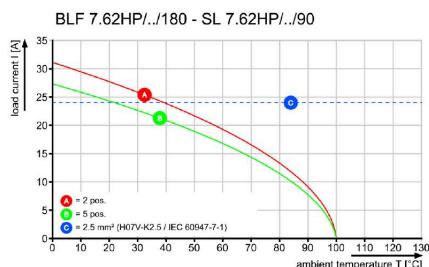
Product image



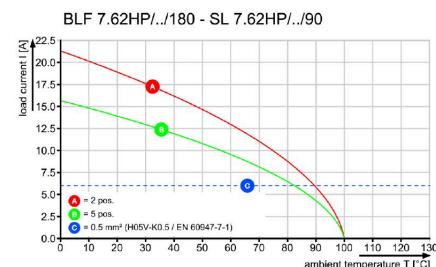
Dimensional drawing



Graph



Graph



Product benefits



Vibration-proof connection