

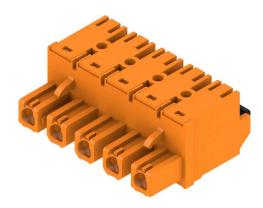


Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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Product image















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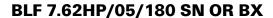
180° female header with PUSH-IN connection technology for field wiring in 2.5 mm² with a 7.62 pitch.

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 mm², Box
Order No.	1043820000
Туре	BLF 7.62HP/05/180 SN OR BX
GTIN (EAN)	4032248774760
Qty.	48 items
Product data	IEC: 1000 V / 29 A / 0.5 - 2.5 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Вох





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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	<u>UL Website</u>
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	37.38 mm	Width (inches)	1.4717 inch
Net weight	12.5 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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	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	Illa
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	48 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
Wire connection cross section AWG,	AWG 20
min.	

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Wire connection cross section AWG, max.	AWG 12		
Solid, min. H05(07) V-U	0.5 mm ²		
Solid, max. H05(07) V-U	1.5 mm ²		
Flexible, min. H05(07) V-K	0.5 mm ²		
lexible, max. H05(07) V-K	2.5 mm ²		
v. plastic collar ferrule, DIN 46228 pt nin.	4, 0.5 mm²		
v. plastic collar ferrule, DIN 46228 pt nax.	4, 2.5 mm ²		
v. wire end ferrule, DIN 46228 pt 1, nin.	0.5 mm ²		
v. wire end ferrule, DIN 46228 pt 1, nax.	2.5 mm ²		
llug gauge in accordance with EN 0999 a x b; ø	2.8 mm x 2.0 mm		
lampable conductor	Cross-section for conductor connection	/1	fine-wired
		nominal	0.5 mm²
	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
			H0,75/16 W
		Stripping length	nominal 10 mm
			H0,75/10
	Cross-section for conductor connection	Туре	fine-wired
			1 mm ²
	wire end ferrule	Stripping length	nominal 12 mm
			H1,0/16D R
		Stripping length	nominal 10 mm
			H1,0/10
	Cross-section for conductor connection		fine-wired
			1.5 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
	wire one fortule		H1,5/10
		Stripping length	nominal 12 mm
			H1,5/16 R
	Cross-section for conductor connection		fine-wired
	G1033-36Ction for conductor confidention		2.5 mm ²
	wire end ferrule		
	wire end letrule	Stripping length Recommended wire- end ferrule	nominal 10 mm H2,5/10
Reference text	The outside diameter of the plastic collar sho		

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Technical data

Rated data acc. to IE	. to IE	acc.	data	ed	Rate
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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	136.00 mm	VPE height	38.00 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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	Conductor type	Type of conductor solid 0.5 mm ² and conductor cross-section
		Type of conductor stranded 0.5 mm ² and conductor cross-section
		Type of conductor solid 2.5 mm ² and conductor cross-section
		Type of conductor stranded 2.5 mm ² and conductor cross-section
		Type of conductor AWG 20/1 and conductor cross-section
		Type of conductor AWG 20/19 and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 12/19 and conductor cross-section
	Evaluation	passed
est for damage to and accidental	Standard	DIN EN 60999-1 section 9.4 / 12.00
osening of conductors	Requirement	0.3 kg
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section
		Type of conductor H05V-K0.5 and conductor cross-section
		Type of conductor AWG 20/1 and conductor cross-section
		Type of conductor AWG 20/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor H07V-U2.5 and conductor cross-section
		Type of conductor H07V-K2.5 and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
	Evaluation	passed
	Requirement	0.9 kg
	Conductor type	Type of conductor AWG 12/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥20 N
	Conductor type	Type of conductor H05V-U0.5 and conductor cross-section
		Type of conductor H05V-K0.5 and conductor cross-section





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	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 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	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	ECLASS 12.0	27-46-02-02
ECLASS 13.0	27-46-02-02	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		



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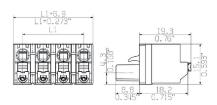
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Drawings

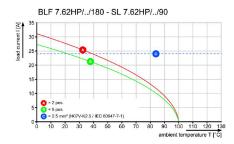
Product image

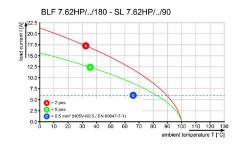


Dimensional drawing



Graph Graph





Product benefits



Vibration-proof connection