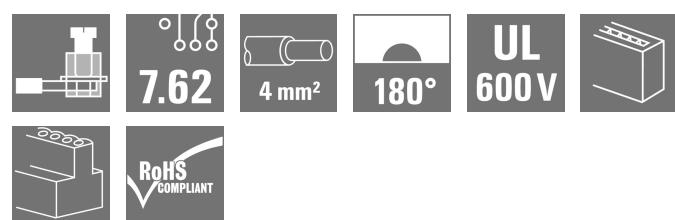


BLZ 7.62HP/03/180 SN BK BX SO

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

www.weidmueller.com

Product image



Similar to illustration

Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range.

High-performance female header for applications up to 12 kVA:

- 29 A with 400 V (IEC)
- 20 A at 600 V (UL)
- 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:

- Meets the requirements of 600 V according to UL 508 / UL 840.
- When plugged, meets the increased requirements on touch safety as per IEC 68100-5-1

The slimming diet for multiple-stage device series:

Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box
Order No.	2460280000
Type	BLZ 7.62HP/03/180 SN BK BX SO
GTIN (EAN)	4050118475753
Qty.	70 ST
Product data	IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Box

BLZ 7.62HP/03/180 SN BK BX SO

Weidmüller Interface GmbH & Co. KG
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Technical data

Approvals

Approvals



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

Dimensions and weights

Depth	23.3 mm	Depth (inches)	0.9173 inch
Height	18.3 mm	Height (inches)	0.7205 inch
Width	22.14 mm	Width (inches)	0.8717 inch
Net weight	5.99 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%
Product Carbon Footprint	Cradle to gate 0.133 kg CO ₂ eq.

System Parameters

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	3	L1 in mm	15.24 mm
L1 in inches	0.600 "	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	Volume resistance	5.00 mΩ
Can be coded	Yes	Stripping length	7 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping screw	M 2.5	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
Plugging force/pole, max.	9.5 N	Pulling force/pole, max.	8.5 N

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 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.	4 mm ²

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Technical data

Wire connection cross section AWG, AWG 28
min.

Wire connection cross section AWG, AWG 12
max.

Solid, min. H05(07) V-U 0.2 mm²

Solid, max. H05(07) V-U 4 mm²

Flexible, min. H05(07) V-K 0.2 mm²

Flexible, max. H05(07) V-K 4 mm²

w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm²
min.

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

w. wire end ferrule, DIN 46228 pt 1, 0.2 mm²
min.

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

Plug gauge in accordance with EN 2.8 mm x 2.4 mm
60999 a x b; ø

Clampable conductor

Cross-section for conductor connection	Type	fine-wired
nominal	0.25 mm ²	
wire end ferrule	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H0.25/12 HBL
Cross-section for conductor connection	Type	fine-wired
nominal	0.34 mm ²	
wire end ferrule	Stripping length	nominal 10 mm
	Recommended wire-end ferrule	H0.34/12 TK
Cross-section for conductor connection	Type	fine-wired
nominal	0.5 mm ²	
wire end ferrule	Stripping length	nominal 6 mm
	Recommended wire-end ferrule	H0.5/6
Cross-section for conductor connection	Type	fine-wired
nominal	0.75 mm ²	
wire end ferrule	Stripping length	nominal 6 mm
	Recommended wire-end ferrule	H0.75/6
Cross-section for conductor connection	Type	fine-wired
nominal	1 mm ²	
wire end ferrule	Stripping length	nominal 6 mm
	Recommended wire-end ferrule	H1.0/6
Cross-section for conductor connection	Type	fine-wired
nominal	1.5 mm ²	
wire end ferrule	Stripping length	nominal 7 mm
	Recommended wire-end ferrule	H1.5/7
Cross-section for conductor connection	Type	fine-wired
nominal	2.5 mm ²	
wire end ferrule	Stripping length	nominal 7 mm
	Recommended wire-end ferrule	H2.5/7

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)	26.5 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number of poles (Tu=40°C)	23 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	500 V	Rated voltage for surge voltage class / pollution degree III/3	400 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	6 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.	11.3 mm	Clearance, min.	9.8 mm

Rated data acc. to CSA

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

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	349.00 mm
VPE width	135.00 mm	VPE height	31.00 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
	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 / 12.02
	Conductor type	Type of conductor solid 0.5 mm ² and conductor cross-section

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Test for damage to and accidental loosening of conductors	Type of conductor and conductor cross-section	stranded 0.5 mm ²
	Type of conductor and conductor cross-section	solid 2.5 mm ²
	Type of conductor and conductor cross-section	stranded 2.5 mm ²
	Type of conductor and conductor cross-section	AWG 20/1
	Type of conductor and conductor cross-section	AWG 20/19
	Type of conductor and conductor cross-section	AWG 12/1
	Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed
	Standard	DIN EN 60999-1 section 9.4 / 12.00
	Requirement	0.2 kg
Pull-out test	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
		Type of conductor AWG 28/19 and conductor cross-section
	Evaluation	passed
	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
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.9 kg
	Conductor type	Type of conductor H07V-U4.0 and conductor cross-section
		Type of conductor H07V-K4.0 and conductor cross-section
	Evaluation	passed
	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥5 N
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
		Type of conductor AWG 28/19 and conductor cross-section

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Technical data

Evaluation	passed	
Requirement	≥ 20 N	
Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
	Type of conductor and conductor cross-section	H05V-K0.5
Evaluation	passed	
Requirement	≥ 50 N	
Conductor type	Type of conductor and conductor cross-section	AWG 14/1
	Type of conductor and conductor cross-section	AWG 14/19
	Type of conductor and conductor cross-section	H07V-K4.0
Evaluation	passed	
Requirement	≥ 60 N	
Conductor type	Type of conductor and conductor cross-section	H07V-U4.0
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

- 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

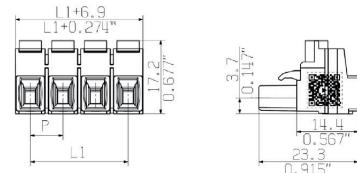
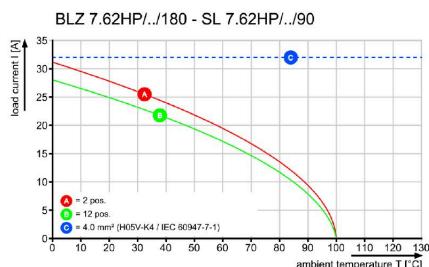
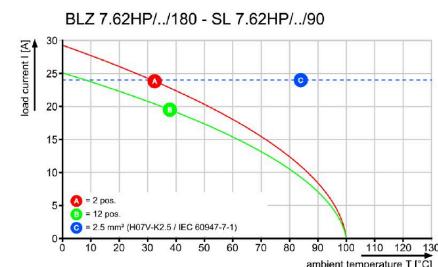
ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 9.0	27-44-03-09
ECLASS 9.1	27-44-03-09	ECLASS 10.0	27-44-03-09
ECLASS 11.0	27-46-02-02	ECLASS 12.0	27-46-02-02
ECLASS 13.0	27-46-02-02	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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Drawings

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Dimensional drawing**Graph****Graph**

Accessories

Coding elements



Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

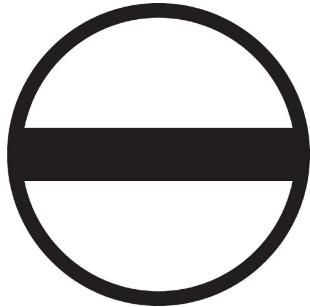
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	BLZ/SL KO OR BX	Version
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number
GTIN (EAN)	4008190048396	of poles: 1
Qty.	100 ST	
Type	BLZ/SL KO BK BX	Version
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4008190087142	of poles: 1
Qty.	50 ST	

Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.6X3.5X100	Version
Order No.	9008330000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056286	
Qty.	1 ST	
Type	SDIS 0.6X3.5X100	Version
Order No.	9008390000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 ST	

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Accessories

Crimping tools



Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

General ordering data

Type	PZ 6/5	Version
Order No.	9011460000	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm ² , 6mm ² ,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 ST	

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Counterpart

SL 7.62HP/180G



Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range.

High-performance male header for applications up to 12 kVA:

- 29 A at 400 V (IEC)
- 20 A at 600 V (UL)

• Single compartment mating profile

Assisting in device approval:

- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1 when combined with female header BLZ 7.62 HP

The slimming diet for multiple-stage device series:

Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

Male header, 180° outlet direction, without flange

General ordering data

Type	SL 7.62HP/03/180G 3.2SN...	Version
Order No.	1122570000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248904570	connection, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, black, Box
Type	SL 7.62HP/03/180G 3.2SN...	Version
Order No.	1048880000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248786855	connection, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, orange, Box

SL 7.62HP/270G



Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range up to 12 kVA

- 29 A at 400 V (IEC)
- 20 A at 300 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:

- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1

The slimming diet for multiple-stage device series:

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Male header, 270° outlet angle

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Counterpart

General ordering data

Type	SL 7.62HP/03/270G 3.2SN...	Version
Order No.	1472250000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118317411	connection, 7.62 mm, Number of poles: 3, 270°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, black, Box
Type	SL 7.62HP/03/270G 3.2SN...	Version
Order No.	1472490000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118317633	connection, 7.62 mm, Number of poles: 3, 270°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, orange, Box

SL 7.62HP/90G



Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range up to 12 kVA

- 29 A at 400 V (IEC)
- 20 A at 300 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 - 4 mm² / AWG 28 - 12

Assisting in device approval:

- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1

The slimming diet for multiple-stage device series:
Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

Male header, 90° outlet angle

General ordering data

Type	SL 7.62HP/03/90G 3.2SN ...	Version
Order No.	1026770000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248752171	connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, black, Box
Type	SL 7.62HP/03/90G 3.2SN ...	Version
Order No.	1980380000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248707409	connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l):
Qty.	100 ST	3.2 mm, tinned, orange, Box

SL-SMT 7.62HP/180G SN Box

BLZ 7.62HP/03/180 SN BK BX SO

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Counterpart

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General ordering data

Type	SL-SMT 7.62HP/03/180G 2...	Version
Order No.	3114270000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4099987204071	connection, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l):
Qty.	ST	2.1 mm, tinned, black, Box

SL-SMT 7.62HP/180G SN Tape**General ordering data**

Type	SL-SMT 7.62HP/03/180G 2...	Version
Order No.	3114320000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4099987204125	connection, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l):
Qty.	ST	2.1 mm, tinned, black, Reel

SL-SMT 7.62HP/90G SN Box**General ordering data**

Type	SL-SMT 7.62HP/03/90G 2...	Version
Order No.	3040760000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4099987011396	connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l):
Qty.	ST	2.1 mm, tinned, black, Box

BLZ 7.62HP/03/180 SN BK BX SO

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Counterpart

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SL-SMT 7.62HP/90G Tape**General ordering data**

Type	SL-SMT 7.62HP/03/90G 2....	Version
Order No.	3114110000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4099987203913	connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l):
Qty.	ST	2.1 mm, tinned, black, Reel