



Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

#### **Product image**















1











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 12kVA.

- 29 A at 630 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 4 mm<sup>2</sup> / AWG 28 12

Assistance with device approval:

- meets the requirements for 600 V in accordance with UL508/UL840
- meets the more stringent touch-safety requirements of IEC68100-5-1

The slimming cure for multiple-stage device series: reduced 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: 11, 180°, Clamping yoke con- nection, Clamping range, max. : 4 mm², Box
Order No.	<u>1164940000</u>
Туре	BLZ 7.62HP/11/180LR SN OR BX
GTIN (EAN)	4032248954933
Qty.	15 items
Product data	IEC: 630 V / 29 A / 0.2 - 4 mm² UL: 600 V / 20 A / AWG 20 - AWG 12
Packaging	Вох



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

Approvals
-----------

Approvals	c <b>FL</b> *us
ROHS	Conform
UL File Number Search	<u>UL Website</u>
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	92.7 mm	Width (inches)	3.6496 inch
Net weight	28 g		

### **Environmental Product Compliance**

RoHS Compliance Status	Compliant without exemption	
REACH SVHC	No SVHC above 0.1 wt%	
Product Carbon Footprint	Cradle to gate	0.438 kg CO2eq.

#### **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	11	L1 in mm	76.20 mm
L1 in inches	3.000 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm <sup>2</sup>
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	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 <sup>2</sup>	
Clamping range, max.	4 mm <sup>2</sup>	

Creation date 27.11.2025 10:07:31 MEZ





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

Wire connection cross section AWG,	AWG 28	
min.		
Wire connection cross section AWG, max.	AWG 12	
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>	
Solid, max. H05(07) V-U	4 mm²	
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>	
Flexible, max. H05(07) V-K	4 mm <sup>2</sup>	
w. plastic collar ferrule, DIN 46228 pt		
min.		
w. plastic collar ferrule, DIN 46228 pt max.	4, 2.5 mm²	
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>	
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>	
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm	
Clampable conductor	Cross-section for conductor connection	Type fine-wired
		nominal 0.25 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 10 mm
		Recommended wire- H0,25/12 HBL end ferrule
	Cross-section for conductor connection	Type fine-wired
	Cross seemen for consumers seemed and	nominal 0.34 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 10 mm
	who one for the	Recommended wire- H0,34/12 TK
		end ferrule
	Cross-section for conductor connection	Type fine-wired
		nominal 0.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 6 mm
		Recommended wire- H0.5/6 end ferrule
	Cross-section for conductor connection	Type fine-wired
		nominal 0.75 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 6 mm
	This one is a	Recommended wire- end ferrule
	Cross-section for conductor connection	Type fine-wired
	Greek seemen for semanation seminosium.	nominal 1 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 6 mm
	Wile sha ishale	Recommended wire- end ferrule
	Cross-section for conductor connection	Type fine-wired
	Closs-section for conductor connection	nominal 1.5 mm <sup>2</sup>
	wire end ferrule	
	wile ellu lellule	Stripping length nominal 7 mm  Recommended wire- H1,5/7
		end ferrule
	Cross-section for conductor connection	Type fine-wired
		nominal 2.5 mm <sup>2</sup>
	wire end ferrule	Stripping length nominal 7 mm
		Recommended wire- H2,5/7 end ferrule
Reference text	The outside diameter of the plastic collar should be chosen depending on the product and	uld not be larger than the pitch (P), Length of ferrules d the rated voltage.

Creation date 27.11.2025 10:07:31 MEZ





#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **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 -		

#### **Packing**

Packaging	Вох	VPE length	347.00 mm
VPE width	135.00 mm	VPE height	32.00 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-	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02
interchangeability)	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 <sup>2</sup> and conductor cross-section

Creation date 27.11.2025 10:07:31 MEZ



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 2.5 mm <sup>2</sup> 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 12/1 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	0.2 kg
	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
ıll-out test	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

Creation date 27.11.2025 10:07:31 MEZ





Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **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

- 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.
- 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
- $\bullet$  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		

Creation date 27.11.2025 10:07:31 MEZ



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

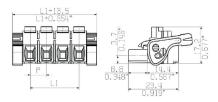
www.weidmueller.com

# **Drawings**

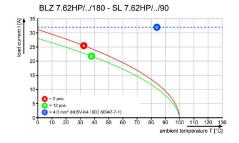
#### **Product image**

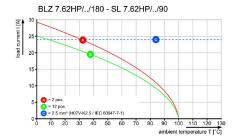


### **Dimensional drawing**



Graph Graph







Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **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**

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

#### **Slotted screwdriver**

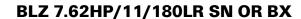


Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

#### **General ordering data**

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

Creation date 27.11.2025 10:07:31 MEZ





Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **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**

<b></b>	oraoring aata	
Туре	PZ 6/5	Version
Order No.	9011460000	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm², 6mm²,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 ST	



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# Counterpart

#### **SL 7.62HP/180F**



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, with screw flanges

#### **General ordering data**

Туре	SL 7.62HP/11/180F 3.2 S	Version
Order No.	1140960000	PCB plug-in connector, male header, Flange, THT solder connection,
GTIN (EAN)	4032248923724	7.62 mm, Number of poles: 11, 180°, Solder pin length (I): 3.2 mm,
Qty.	18 ST	tinned, black, Box
Туре	SL 7.62HP/11/180F 3.2 S	Version
Type Order No.	SL 7.62HP/11/180F 3.2 S 1141070000	Version PCB plug-in connector, male header, Flange, THT solder connection,
	, ,	

#### SL 7.62HP/180LF



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, with solder flanges

Creation date 27.11.2025 10:07:31 MEZ



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# Counterpart

#### **General ordering data**

Type	SL 7.62HP/11/180LF 3.2	Version
Order No.	1141180000	PCB plug-in connector, male header, Solder flange, THT solder
GTIN (EAN)	4032248924127	connection, 7.62 mm, Number of poles: 11, 180°, Solder pin length
Qty.	18 ST	(I): 3.2 mm, tinned, black, Box
Туре	SL 7.62HP/11/180LF 3.2	Version
Type Order No.	SL 7.62HP/11/180LF 3.2 1141290000	Version PCB plug-in connector, male header, Solder flange, THT solder

#### SL 7.62HP/270LF



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 mm<sup>2</sup> / 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, 270° outlet angle with solder flanges

#### **General ordering data**

Туре	SL 7.62HP/11/270LF 3.2S	Version
Order No.	<u>1472460000</u>	PCB plug-in connector, male header, Solder flange, THT solder
GTIN (EAN)	4050118317602	connection, 7.62 mm, Number of poles: 11, 270°, Solder pin length
Qty.	50 ST	(I): 3.2 mm, tinned, black, Box
Туре	SL 7.62HP/11/270LF 3.2S	Version
Order No.	<u>1472700000</u>	PCB plug-in connector, male header, Solder flange, THT solder
Order No. GTIN (EAN)	<u>1472700000</u> 4050118317824	PCB plug-in connector, male header, Solder flange, THT solder connection, 7.62 mm, Number of poles: 11, 270°, Solder pin length

Creation date 27.11.2025 10:07:31 MEZ



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## Counterpart

#### **SL 7.62HP/90F**



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 mm<sup>2</sup> / 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 with screw flanges

#### **General ordering data**

Туре	SL 7.62HP/11/90F 3.2 SN	Version
Order No.	1124310000	PCB plug-in connector, male header, Flange, THT solder connection,
GTIN (EAN)	4032248906413	7.62 mm, Number of poles: 11, 90°, Solder pin length (I): 3.2 mm,
Qty.	18 ST	tinned, black, Box
Туре	SL 7.62HP/11/90F 3.2 SN	Version
Type Order No.	SL 7.62HP/11/90F 3.2 SN 1124390000	Version PCB plug-in connector, male header, Flange, THT solder connection,
	, ,	

#### SL 7.62HP/90LF



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 mm<sup>2</sup> / 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 with solder flanges

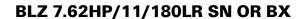
#### **General ordering data**

Туре	SL 7.62HP/11/90LF 3.2 S	Version
Order No.	1096010000	PCB plug-in connector, male header, Solder flange, THT solder
GTIN (EAN)	4032248960194	connection, 7.62 mm, Number of poles: 11, 90°, Solder pin length (I):
Qty.	18 ST	3.2 mm, tinned, black, Box

Catalogue status / Drawings

Creation date 27.11.2025 10:07:31 MEZ







Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# Counterpart

Туре	SL 7.62HP/11/90LF 3.2 S	Version
Order No.	1096120000	PCB plug-in connector, male header, Solder flange, THT solder
GTIN (EAN)	4032248959884	connection, 7.62 mm, Number of poles: 11, 90°, Solder pin length (I):
Qty.	18 ST	3.2 mm, tinned, orange, Box