BVFL 7.62HP/05/180 SN BK BX

Product image

7.62

6 mm²

RoHS COMPLIANT

180° female plug with PUSH IN connection system with adjustable actuator (pusher) for field wiring 6 mm² in a 7.62 pitch. Meets the requirements of UL 1059 600 V Class C ad IEC 61800-5-1. Also ideal as a touch-safe solution for the power output. The self-locking middle flange which can optionally also be screwed, reduces the space requirements by one pitch width in comparison with conventional solutions. Variants: without flange, external flange, middle flange with snap-on mechanism and optionally additional screw mount

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. : 6 mm², Box
Order No.	2548890000
Type	BVFL 7.62HP/05/180 SN BK BX
GTIN (EAN)	4050118558562
Qty.	48 items
Product data	IEC: 1000 V / 41 A / 0.5 - 6 mm² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

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BVFL 7.62HP/05/180 SN BK BX

Technical data

Approvals

ROHS	Conform

Dimensions and weights

Depth	52.1 mm	Depth (inches)	2.0512 inch
Height	20.6 mm	Height (inches)	0.811 inch
Net weight	22.18 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 BV/SV 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	6 mm²
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	4.50 mΩ
Can be coded	Yes	Stripping length	12 mm
Screwdriver blade	0.6 x 3.5	Plugging cycles	25

Material data

Insulating material	PA GF	Colour	black
Colour of operational elements	white	Colour chart (similar)	RAL 9011
Insulating material group	II	Comparative Tracking Index (CTI)	≥ 600
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of plug contact	6...8 µm Sn glossy	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	125 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	125 °C		

Conductors suitable for connection

Clamping range, min.	0.5 mm²
Clamping range, max.	6 mm²
Solid, min. H05(07) V-U	0.5 mm²
Solid, max. H05(07) V-U	6 mm²
Flexible, min. H05(07) V-K	0.5 mm²
Flexible, max. H05(07) V-K	6 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	6 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm²

BVFL 7.62HP/05/180 SN BK BX

Technical data

Clampable conductor	Cross-section for conductor connection		Type	fine-wired	
			nominal	0.5 mm²	
	wire end ferrule		Stripping length	nominal	14 mm
			Recommended wire-end ferrule	H0,5/12 OR	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	0.75 mm²	
	wire end ferrule		Stripping length	nominal	14 mm
			Recommended wire-end ferrule	H0,75/18 W	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	1 mm²	
	wire end ferrule		Stripping length	nominal	15 mm
			Recommended wire-end ferrule	H1,0/18 GE	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	1.5 mm²	
	wire end ferrule		Stripping length	nominal	12 mm
			Recommended wire-end ferrule	H1,5/12	
			Stripping length	nominal	15 mm
			Recommended wire-end ferrule	H1,5/18D SW	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	2.5 mm²	
	wire end ferrule		Stripping length	nominal	12 mm
			Recommended wire-end ferrule	H2,5/12	
			Stripping length	nominal	14 mm
			Recommended wire-end ferrule	H2,5/19D BL	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	4 mm²	
	wire end ferrule		Stripping length	nominal	12 mm
			Recommended wire-end ferrule	H4,0/12	
			Stripping length	nominal	14 mm
			Recommended wire-end ferrule	H4,0/20D GR	
	Cross-section for conductor connection		Type	fine-wired	
			nominal	6 mm²	
	wire end ferrule		Stripping length	nominal	12 mm
			Recommended wire-end ferrule	H6,0/12	
			Stripping length	nominal	14 mm
			Recommended wire-end ferrule	H6,0/20 SW	
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.				

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	41 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	38 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	800 V

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Catalogue status / Drawings

BVFL 7.62HP/05/180 SN BK BX

Technical data

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	8 kV	Short-time withstand current resistance	3 x 1s with 420 A
Creepage distance, min.	12.7 mm	Clearance, min.	10.4 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)	33 A
Rated current (Use group C / CSA)	33 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

Rated data acc. to UL 1059

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)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

Packing

Packaging	Box	VPE length	353.00 mm
VPE width	136.00 mm	VPE height	61.00 mm

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 • Wire end ferrule with plastic collar to DIN 46228/4 • Wire end ferrule without plastic collar to DIN 46228/1 • 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. • Additional pole combinations on request • 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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BVFL 7.62HP/05/180 SN BK BX

Drawings

Product image

Dimensional drawing
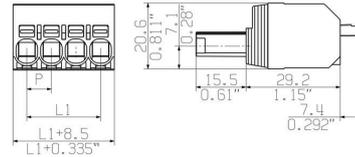
Graph

BVF 7.62HP/../180 - SV 7.62HP/../90

A = 2 pos.
B = 5 pos.
C = 6.0 mm² (H07V-K6 / IEC 60947-7-1)

Graph

BVF 7.62HP/../180 - SV 7.62HP/../270

A = 2 pos.
B = 5 pos.
C = 6.0 mm² (H07V-K6 / IEC 60947-7-1)

BVFL 7.62HP/05/180 SN BK BX

Drawings

Graph

BVF 7.62HP/../180 - SVF 7.62HP/../180

A = 2 pos.
B = 5 pos.
C = 6.0 mm² (H07V-K6 / IEC 60947-7-1)
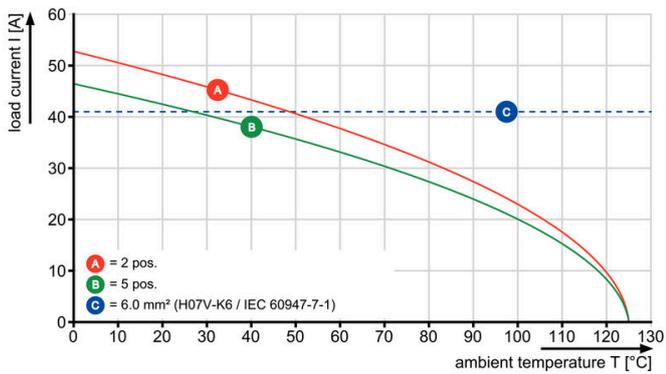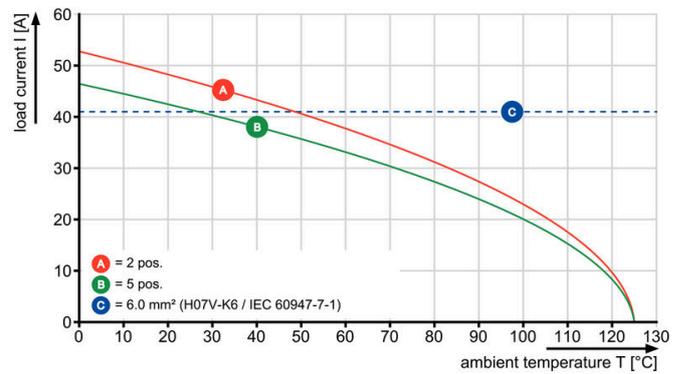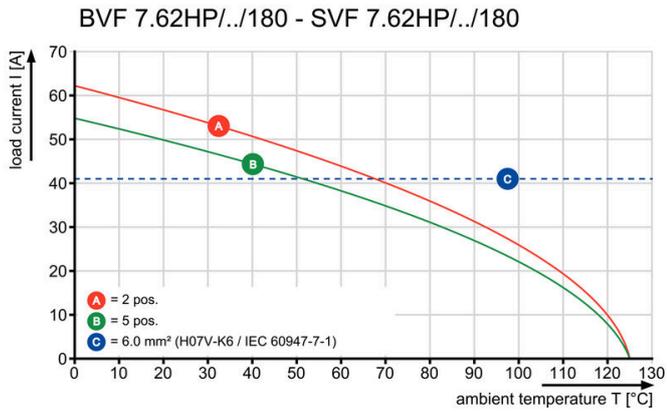
Product benefits

Secure connection of small conductorsPUSH IN WIRE READY

Product benefits

Installation without toolsOutlet direction: 90° und 180°

BVFL 7.62HP/05/180 SN BK BX

Accessories

Coding elements

The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:
• Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
• Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
• A variety of application optimised mounting options
Our service:
Design your individual connectors simply by using the product configurator.

General ordering data

Type	BV/SV 7.62HP KO	Version
Order No.	1937590000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4032248608881	of poles: 1
Qty.	50 ST	

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, 0.25mm², 6mm²,
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp
Qty.	1 ST	

Coupling set

With the aid of the SVF/BVF 7.62HP COUPLE SET the two plug-in elements can be connected back-to-back to form a 2-row connector with a maximum of 2 x 4 poles.
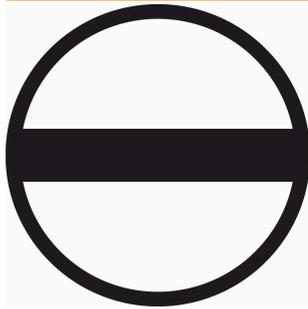
BVFL 7.62HP/05/180 SN BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Accessories

General ordering data

Type	SVF/BVF 7.62HP COUPLE S...	Version
Order No.	1440850000	PCB plug-in connector, Accessories, Mounting block, black
GTIN (EAN)	4050118247060	
Qty.	20 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	

Counterpart

SV 7.62HP 180G SN

Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for lead-free wave soldering.

General ordering data

Type	SV 7.62HP/05/180G 3.5SN...	Version
Order No.	1930630000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580606	connection, 7.62 mm, Number of poles: 5, 180°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

SV 7.62HP 270G SN
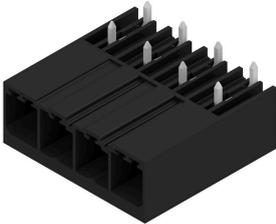
Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

Type	SV 7.62HP/05/270G 3.5SN...	Version
Order No.	1931290000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248581320	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

SV 7.62HP 90G SN

Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

Type	SV 7.62HP/05/90G 3.5SN ...	Version
Order No.	1930300000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4032248580170	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

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Counterpart

Type	SV 7.62HP/05/90G 3.5SN ...	Version
Order No.	2465330000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118479775	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

SVD 7.62HP 270G SN

Double-row high-current, high-performance pin headers, with or without flange, for fast, tool-free locking. Optimised for "book-size modules" measuring 50mm wide and above. With integrated mounting option for mounting to the housing wall.Exceptional reliability and operational safety thanks to 100% failsafe mating profile, unique coding and optional additional screw mounting in the flange.

General ordering data

Type	SVD 7.62HP/10/270G 3.2S...	Version
Order No.	1543330000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118348163	connection, 7.62 mm, Number of poles: 10, 270°, Solder pin length
Qty.	24 ST	(l): 3.2 mm, tinned, black, Box

SV-SMT 7.62HP 270G BX

OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class
Tailor-made solutions for high performers
More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

General ordering data

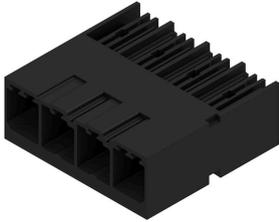| Type	SV-SMT 7.62HP/05/270G 2...	Version
Order No.	2499360000	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118512601	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	48 ST	2.6 mm, tinned, black, Box
Type	SV-SMT 7.62HP/05/270G 3...	Version
Order No.	2498420000	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118511642	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	50 ST	3.5 mm, tinned, black, Box

BVFL 7.62HP/05/180 SN BK BX

Counterpart

SV-SMT 7.62HP 90G BX

OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class
Tailor-made solutions for high performers
More power reserves for higher load bearing capacity:
The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

General ordering data

Type	SV-SMT 7.62HP/05/90G 2....	Version
Order No.	2499560000	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118512861	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	2.6 mm, tinned, black, Box
Type	SV-SMT 7.62HP/05/90G 3....	Version
Order No.	2498370000	PCB plug-in connector, male header, closed side, THT/THR solder
GTIN (EAN)	4050118511604	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	50 ST	3.5 mm, tinned, black, Box

SVF 7.62HP/180G

180° inverted pin header with PUSH IN connection technology for field wiring in 6mm² in a 7.62 pitch, as a "three-flange variant" for enclosure feed-through. Suitable for enclosures with a max. wall thickness of 2mm. Also perfect as a touch-safe solution for reverse voltages. Meets the requirements of UL1059 600 V Class C and IEC 61800-5-1.

General ordering data

Type	SVF 7.62HP/05/180G SN B....	Version
Order No.	1060870000	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4032248810840	5, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	40 ST	Clamping range, max. : 10 mm², Box

BVFL 7.62HP/05/180 SN BK BX

Counterpart

SVZ 7.62HP 180 SN

High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

Type	SVZ 7.62HP/05/180G SN B...	Version
Order No.	1931660000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5,
GTIN (EAN)	4032248581658	180°, Clamping yoke connection, Clamping range, max. : 6 mm², Box
Qty.	50 ST	

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