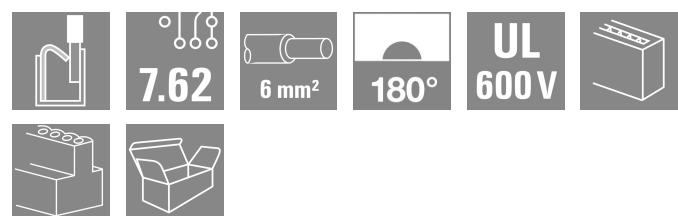


BVDF 7.62HP/05/180 SN BK BX

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

www.weidmueller.com

Product image

Bus connector with two connections per pole with the time-saving 6mm² PUSH IN connection system.

- The extremely short cross-connection allows you to safely loop through bus currents.
- PUSH IN connection: Solid wires and stranded wires with ferrules need only to be inserted and they are ready.
- The self-locking middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

General ordering data

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 10 mm ² , Box
Order No.	2720450000
Type	BVDF 7.62HP/05/180 SN BK BX
GTIN (EAN)	4050118780963
Qty.	24 items
Product data	IEC: 600 V / 46 A / 0.5 - 10 mm ² UL: 600 V / 35 A / AWG 24 - AWG 8
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	42.55 mm	Depth (inches)	1.6752 inch
Height	35.05 mm	Height (inches)	1.3799 inch
Width	49.26 mm	Width (inches)	1.9394 inch
Net weight	42.64 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, Tension-clamp connection				
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	2				
Pin series quantity	1				
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				
Stripping length tolerance	min.	-1 mm			
	max.	1 mm			
Screwdriver blade	0.6 x 3.5				
Plugging cycles	25				
Plugging force/pole, max.	12 N				
Pulling force/pole, max.	12 N				

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	1...3 µm Ni / 4...10 µm Sn
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C

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Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
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Conductors suitable for connection

Clamping range, min.	0.5 mm ²
Clamping range, max.	10 mm ²
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 8
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, min. H07V-R	1.5 mm ²
Stranded, max. H07V-R	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	10 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm ²

Clampable conductor	Cross-section for conductor connection	nominal	0.5 mm ²
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H0.5/12 OR
	Cross-section for conductor connection	nominal	0.75 mm ²
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H0.75/18 W
	Cross-section for conductor connection	nominal	1 mm ²
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire-end ferrule	H1.0/18 GE
	Cross-section for conductor connection	nominal	1.5 mm ²
	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	nominal	2.5 mm ²
	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	nominal	4 mm ²
	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	nominal	6 mm ²
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H6.0/12
		Stripping length	nominal 14 mm

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Technical data

		Recommended wire-end ferrule H6,0/20 SW
	Cross-section for conductor connection	nominal 10 mm ²

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)	46 A
Rated current, max. number of poles (Tu=20°C)	42 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	37.5 A	Rated voltage for surge voltage class / pollution degree II/2	600 V
Rated voltage for surge voltage class / pollution degree III/2	600 V	Rated voltage for surge voltage class / pollution degree III/3	600 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 400 A
Creepage distance, min.	11.03 mm	Clearance, min.	10.36 mm

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)	35 A
Rated current (Use group C / UL 1059)	35 A	Rated current (Use group D / UL 1059)	35 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	355.00 mm
VPE width	143.00 mm	VPE height	60.00 mm

Type tests

Test: Durability of markings	Standard	IEC 61984 section 7.3.2 / 10.08 Taking pattern from IEC 60068-2-70 / 12.95
	Test	mark of origin, type identification, pitch, durability
	Evaluation	available
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
	Conductor type	Type of conductor and conductor cross-section H05V-U0.5
		Type of conductor and conductor cross-section H05V-K0.5
		Type of conductor and conductor cross-section H07V-K6
		Type of conductor and conductor cross-section H07V-K10

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Test for damage to and accidental loosening of conductors	Type of conductor and conductor cross-section	AWG 24/1
	Type of conductor and conductor cross-section	AWG 24/19
	Type of conductor and conductor cross-section	AWG 8/19
	Evaluation	passed
	Standard	IEC 60999-1 section 9.4 / 11.99
	Requirement	0.2 kg
	Conductor type	Type of conductor and conductor cross-section
		AWG 24/1
		Type of conductor and conductor cross-section
	Evaluation	passed
Pull-out test	Requirement	0.3 kg
	Conductor type	Type of conductor and conductor cross-section
		H05V-U0.5
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	1.4 kg
	Conductor type	Type of conductor and conductor cross-section
		H07V-K6
	Evaluation	passed
	Requirement	2.0 kg
	Conductor type	Type of conductor and conductor cross-section
		H07V-U10
		Type of conductor and conductor cross-section
	Evaluation	passed
	Standard	IEC 60999-1 section 9.5 / 11.99
	Requirement	≥10 N
	Conductor type	Type of conductor and conductor cross-section
		AWG 24/1
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor and conductor cross-section
		H05V-U0.5
		Type of conductor and conductor cross-section
	Evaluation	passed
	Requirement	≥80 N
	Conductor type	Type of conductor and conductor cross-section
		H07V-K6
	Evaluation	passed
	Requirement	≥ 90N

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Technical data

Conductor type	Type of conductor and conductor cross-section	H07V-K10
	Type of conductor and conductor cross-section	AWG 8/19
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
- 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.
- 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		

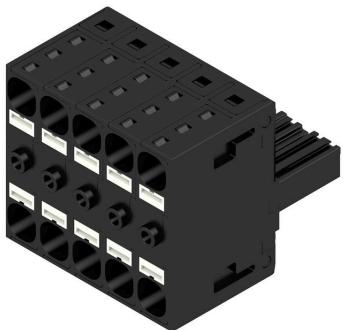
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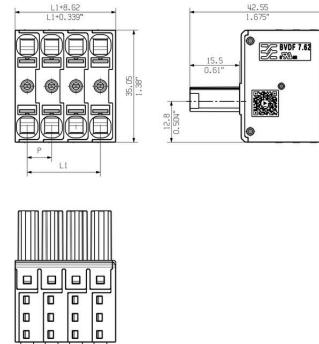
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Drawings

Product image

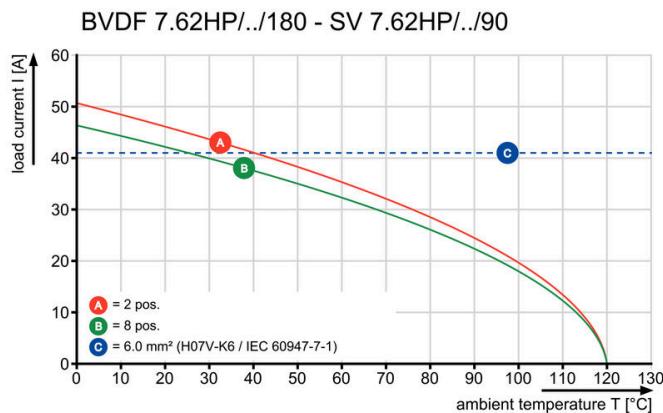


Dimensional drawing

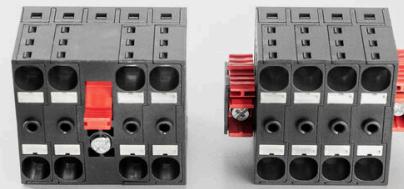


Similar to illustration

Derating curve



Product benefits



Product benefits



Product benefits



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Counterpart

SV 7.62HP 180G SN

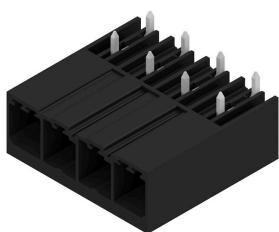


Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional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

BVDF 7.62HP/05/180 SN BK BX

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Counterpart

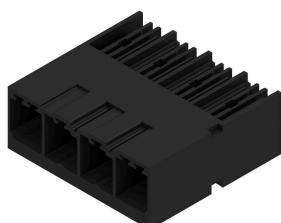
Type	SV 7.62HP/05/90G 3.5SN ...	Version
Order No.	2465330000	PCB plug-in connector, male header, closed side, THT solder
GTIN (EAN)	4050118479775	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	48 ST	3.5 mm, tinned, black, Box

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

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

BVDF 7.62HP/05/180 SN BK BX

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Counterpart

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 mm ² , Box

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 mm ² , Box
Qty.	50 ST	