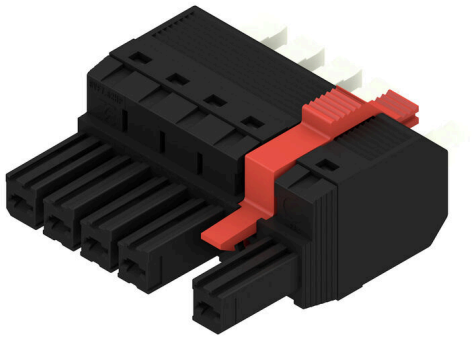
Data sheet

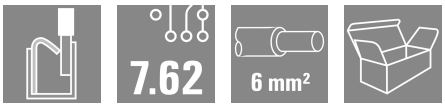
BVFL 7.62HP/05/180MF2 SN BK BX

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

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Product image





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.	2630710000
Type	BVFL 7.62HP/05/180MF2 SN BK BX
GTIN (EAN)	4050118634358
Qty.	42 items
Product data	IEC: 1000 V / 41 A / 0.5 - 6 mm² UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box
Delivery status	Discontinued

Data sheet

BVFL 7.62HP/05/180MF2 SN BK BX

Weidmüller Interface GmbH & Co. KG
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Germany

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Technical data

Dimensions and weights

Depth	52.1 mm	Depth (inches)	2.0512 inch
Height	20.6 mm	Height (inches)	0.811 inch
Net weight	30.4 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	38.10 mm
L1 in inches	1.500 "	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

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm²	
	wire end ferrule	Stripping length	nominal	14 mm

BVFL 7.62HP/05/180MF2 SN BK BX

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Technical data

	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
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

BVFL 7.62HP/05/180MF2 SN BK BX

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Technical data

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	338.00 mm
VPE width	130.00 mm	VPE height	54.00 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		

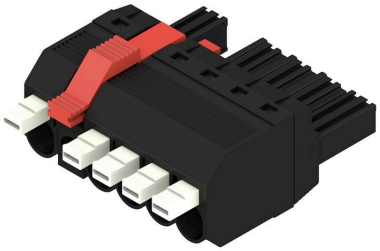
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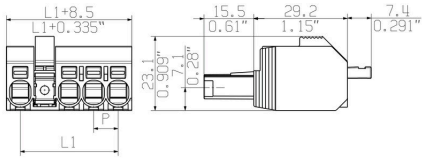
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Drawings

Product image



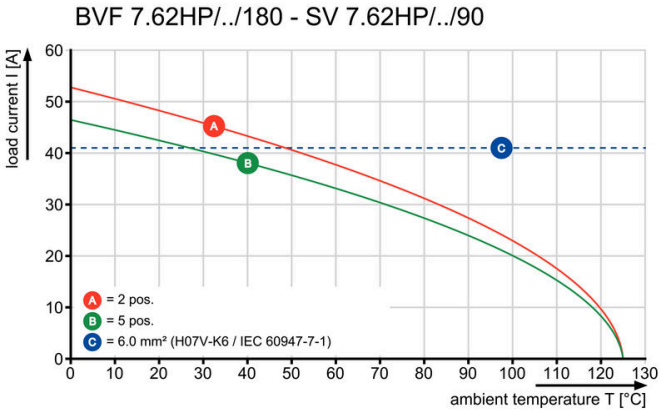
Dimensional drawing



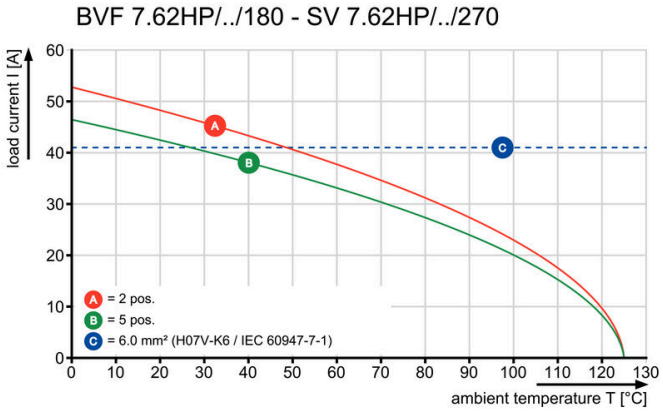
Connection diagram

6	M(S)F6	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	
5	M(S)F4	o	o	o	X	o	o	
5	M(S)F3	o	o	X	o	o	o	
5	M(S)F2	o	X	o	o	o	o	
4	M(S)F4	o	o	o	X	o		
4	M(S)F3	o	o	X	o	o		
4	M(S)F2	o	X	o	o	o		
3	M(S)F3	o	o	X	o			
3	M(S)F2	o	X	o	o			
2	M(S)F2	o	X	o				
		1	2	3	4	5	6	7
NO OF POLES	X = MIDDLE FLANGE POSITION	POS. 1 2 3 4 5						

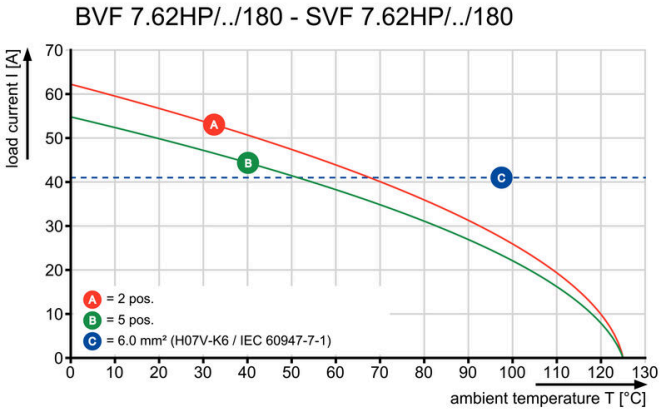
Graph



Graph



Graph



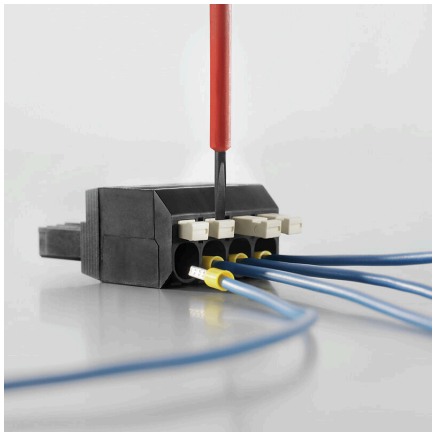
BVFL 7.62HP/05/180MF2 SN BK BX

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Drawings

Product benefits



Secure connection of small conductorsPUSH IN WIRE READY

Product benefits



Installation without toolsOutlet direction: 90° und 180°

BVFL 7.62HP/05/180MF2 SN BK BX

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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/05/180MF2 SN BK BX

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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	

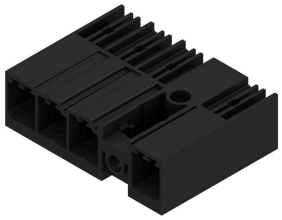
BVFL 7.62HP/05/180MF2 SN BK BX

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Counterpart

SV-SMT 7.62IT 90MSF SN BX

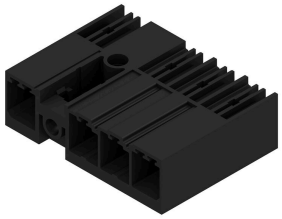


OMNIMATE Power for IT networks – scalable to 50 kVA
Tailor-made solutions for special requirements
More standard-compliance means fewer compromises: OMNIMATE Power for IT networks has integrated features incorporated as standard across the range. This makes the design-in and approvals process simpler and makes them safer and more reliable in operation.
Results for the application and advantages for the user: unlimited use in 400-V IT systems and touch safety according to IEC 61800-5-1 (+ 5.5 mm). The self-snapping one-handed safety flange enables intuitive and safe usage. Operational reliability is guaranteed by the automatic interlock feature during the plug-in process.
In conclusion: You need no additional device covering. The application-oriented design means that no compromises are necessary during the approval process.

General ordering data

Type	SV-SMT 7.62IT/05/90MSF5...	Version
Order No.	2499890000	PCB plug-in connector, male header, Middle screw flange, THT/THR
GTIN (EAN)	4050118513318	solder connection, 7.62 mm, Number of poles: 5, 90°, Solder pin
Qty.	36 ST	length (l): 2.6 mm, tinned, black, Box
Type	SV-SMT 7.62IT/05/90MSF5...	Version
Order No.	2498770000	PCB plug-in connector, male header, Middle screw flange, THT/THR
GTIN (EAN)	4050118511970	solder connection, 7.62 mm, Number of poles: 5, 90°, Solder pin
Qty.	50 ST	length (l): 3.5 mm, tinned, black, Box

SV 7.62HP 90MF SN



90° male header with middle flange with a 7.62 pitch.
Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V.
Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.
The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.
On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/05/90MF2 3.5S...	Version
Order No.	1464280000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4050118270990	solder connection, 7.62 mm, Number of poles: 5, 90°, Solder pin
Qty.	36 ST	length (l): 3.5 mm, tinned, black, Box

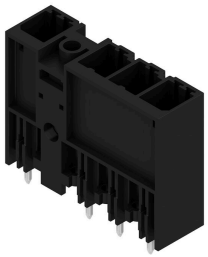
BVFL 7.62HP/05/180MF2 SN BK BX

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Counterpart

SV 7.62HP 180MF SN

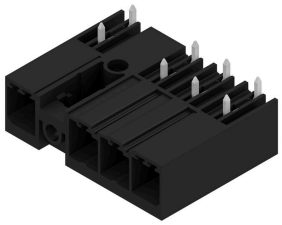


180° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V.
Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.
The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.
On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/05/180MF2 3.5...	Version
Order No.	1464320000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4050118270952	solder connection, 7.62 mm, Number of poles: 5, 180°, Solder pin
Qty.	36 ST	length (l): 3.5 mm, tinned, black, Box

SV 7.62HP 270MF SN

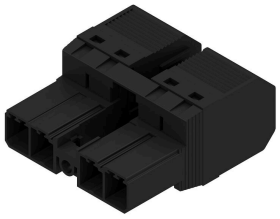


270° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V. Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.
The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.
On request: available with screw flange or without flange.

General ordering data

Type	SV 7.62HP/05/270MF2 3.5...	Version
Order No.	1464350000	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4050118270860	solder connection, 7.62 mm, Number of poles: 5, 270°, Solder pin
Qty.	36 ST	length (l): 3.5 mm, tinned, black, Box

SVF 7.62HP/180MF



180° inverted inverse voltage-safe male header with PUSH IN connection technology for field wiring.
With automatically locking middle flange for field wiring in 6 mm² with 7.62 pitch.
Also ideal as a touch-safe solution for inverse voltages.
Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.
On request, also available without middle flange.

BVFL 7.62HP/05/180MF2 SN BK BX

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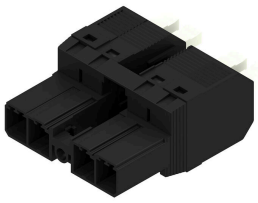
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Counterpart

General ordering data

Type	SVF 7.62HP/05/180MF2 SN...	Version
Order No.	1430020000	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4050118234992	5, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	30 ST	Clamping range, max. : 10 mm², Box

SVFL 7.62HP/180MF

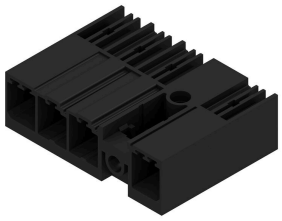


180° inverted pin header with PUSH IN connection technology and adjustable actuator (pusher) for field wiring 6 mm² in a 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V Class C and IEC 61800-5-1. Variants: without flange, external flange, middle flange with snap-on mechanism and optional additional screw mount.

General ordering data

Type	SVFL 7.62HP/05/180MF2 S...	Version
Order No.	2630440000	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5,
GTIN (EAN)	4050118634082	180°, PUSH IN with actuator, Clamping range, max. : 6 mm², Box
Qty.	42 ST	

SV-SMT 7.62IT 90MF SN BX



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Results for the application and advantages for the user: unlimited use in 400-V IT systems and touch safety according to IEC 61800-5-1 (+ 5.5 mm). The self-snapping one-handed safety flange enables intuitive and safe usage. Operational reliability is guaranteed by the automatic interlock feature during the plug-in process.
In conclusion: You need no additional device covering. The application-oriented design means that no compromises are necessary during the approval process.

General ordering data

Type	SV-SMT 7.62IT/05/90MF2 ...	Version
Order No.	2499760000	PCB plug-in connector, male header, Middle flange, THT/THR solder
GTIN (EAN)	4050118513189	connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l):
Qty.	50 ST	2.6 mm, tinned, black, Box

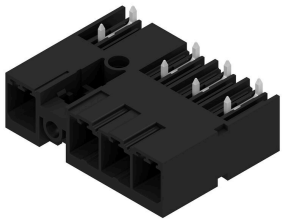
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Counterpart

SV-SMT 7.62IT 270MF SN BX



OMNIMATE Power for IT networks – scalable to 50 kVA
Tailor-made solutions for special requirements
More standard-compliance means fewer compromises: OMNIMATE Power for IT networks has integrated features incorporated as standard across the range. This makes the design-in and approvals process simpler and makes them safer and more reliable in operation.
Results for the application and advantages for the user: unlimited use in 400-V IT systems and touch safety according to IEC 61800-5-1 (+ 5.5 mm). The self-snapping one-handed safety flange enables intuitive and safe usage. Operational reliability is guaranteed by the automatic interlock feature during the plug-in process.
In conclusion: You need no additional device covering. The application-oriented design means that no compromises are necessary during the approval process.

General ordering data

Type	SV-SMT 7.62IT/05/270MF2...	Version
Order No.	2500270000	PCB plug-in connector, male header, Middle flange, THT/THR solder
GTIN (EAN)	4050118512977	connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l):
Qty.	50 ST	2.6 mm, tinned, black, Box