



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image























Small, compact PCB terminal or -tier PCB terminal with proven clamping yoke connection and 3.5 mm pitch. Suitable for conductor cross-sections up to 1.5 mm².

General ordering data

Version Printed circuit board terminals, 3.50 mm, ber of poles: 3, 90°, Solder pin length (I): tinned, black, Clamping yoke connection, ing range, max.: 2.08 mm², Box	
ber of poles: 3, 90°, Solder pin length (I): tinned, black, Clamping yoke connection, ing range, max. : 2.08 mm², Box	
	4.5 mm,
Order No. <u>1699680000</u>	
Type LM 3.50/03/90 4.5SN BK BX	
GTIN (EAN) 4008190891169	
Qty. 168 items	
Product data IEC: 320 V / 16 A / 0.5 - 1.5 mm ² UL: 300 V / 10 A / AWG 28 - AWG 14	<u> </u>
Packaging Box	



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	<u>UL Website</u>
Certificate No. (UR)	E60693

Dimensions and weights

Depth	8.3 mm	Depth (inches)	0.3268 inch
Height	17.3 mm	Height (inches)	0.6811 inch
Height of lowest version	12.8 mm	Width	11.1 mm
Width (inches)	0.437 inch	Net weight	1.77 g

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System parameters

Product family	OMNIMATE Signal - series LM	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	3.50 mm	Pitch in inches (P)	0.138 "
Number of poles	3	Pin series quantity	1
Fitted by customer	Yes	Number of rows	1
Max. adjacent poles per row	24	Solder pin length (I)	4.5 mm
Solder pin dimensions	1.0 x 0.6 mm	Solder eyelet hole diameter (D) 1.3 mm	
Solder eyelet hole diameter tolerance (I	O)+ 0,1 mm	Number of solder pins per pole	1
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264
Tightening torque, min.	0.2 Nm	Tightening torque, max.	0.25 Nm
Clamping screw	M 2	Stripping length	5 mm
L1 in mm	7.00 mm	L1 in inches	0.276 "
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Protection degree	IP20	Volume resistance	3.60 mΩ

Material data

Insulating material	PA	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	1
Comparative Tracking Index (CTI)	≥ 600	Moisture Level (MSL)	
UL 94 flammability rating	V-2	Contact material	Cu-alloy
Contact surface	tinned	Coating	1-3 µm Ni, 4-6 µm SN
Tinning type	matt	Layer structure of solder connection	1.53 μm Ni / 46 μm Sn matt
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 rang	ıe. min.	0.08 mm ²
Cidinping rang	jo,	0.00 111111





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

Clamping range, max.	2.08 mm ²		
Wire connection cross section AWG,	AWG 28		
min.			
Wire connection cross section AWG, max.	AWG 14		
Solid, min. H05(07) V-U	0.5 mm ²		
Solid, max. H05(07) V-U	1.5 mm ²		
Flexible, min. H05(07) V-K	0.5 mm ²		
Flexible, max. H05(07) V-K	1.5 mm²		
w. plastic collar ferrule, DIN 46228 pt min.	4, 0.5 mm ²		
w. plastic collar ferrule, DIN 46228 pt max.	4, 0.75 mm²		
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
	wire end ferrule	Stripping length	nominal 8 mm
		Recommended wire- end ferrule	H0,75/12 W
Reference text	Length of ferrules is to be chosen depending of diameter of the plastic collar should not be lar	•	d voltage., The outside

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	16 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	14 A
Rated current, max. number of poles (Tu=40°C)	10 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 72 A

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	154685-1202192
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (UR)	UR	Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

Packing			<u>'</u>
Packaging	Box	VPE length	353.00 mm
VPE width	136.00 mm	VPE height	25.00 mm
Type tests			
. , , , , , , , , , , , , , , , , , , ,			
Test: Durability of markings	Standard		EN 60947-1 section 5.1 / 91
	Test		type identification, mark of origin, type of material
	Evaluation		available
Test: Clampable cross section	Standard	DIN EN 60999 section 6 / 04.94, EN 60 section 8.2.4.5.1 / 03.91	
	Conductor type		Type of conductor solid 0.08 mm ² and conductor cross-section
			Type of conductor stranded 0.08 mm ² and conductor cross-section
			Type of conductor solid 1.5 mm ² and conductor cross-section
			Type of conductor stranded 1.5 mm ² and conductor cross-section
			Type of conductor AWG 28/1 and conductor cross-section
			Type of conductor AWG 28/19 and conductor cross-section
			Type of conductor AWG 16/1 and conductor cross-section
			Type of conductor AWG 16/19 and conductor cross-section
	Evaluation		passed
Test for damage to and accidental	Standard		DIN EN 60999 section 8.4 / 04.94
loosening of conductors	Requirement Conductor type		0.2 kg Type of conductor AWG 28/1 and conductor cross- section
			Type of conductor AWG 28/7 and conductor cross-section
	Evaluation		passed
	Requirement		0.3 kg
	Conductor type		Type of conductor solid 0.5 mm ² and conductor cross-section
			Type of conductor stranded 0.5 mm ² and conductor cross-section
	Evaluation		passed
	Requirement		0.4 kg
	Conductor type		Type of conductor solid 1.5 mm ²

Catalogue status / Drawings 4

and conductor cross-

Type of conductor and conductor cross-

stranded 1.5 mm²

section

section





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

		Type of conductor AWG 16/7 and conductor cross-section	
		Type of conductor AWG 16/19 and conductor cross-section	
	Evaluation	passed	
Pull-out test	Standard	DIN EN 60999 section 8.4 / 04.94	
	Requirement	≥5 N	
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section	
		Type of conductor AWG 28/7 and conductor cross-section	
	Evaluation	passed	
	Requirement	≥30 N	
	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	≥40 N	
	Conductor type	Type of conductor H07V-U1.5 and conductor cross-section	
		Type of conductor H07V-K1.5 and conductor cross-section	
		Type of conductor AWG 16/7 and conductor cross-section	
		Type of conductor AWG 16/19 and conductor cross-section	
	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
- Rated current related to rated cross-section & min. No. of poles.
- Max. outer diameter of the conductor: 2.9 mm
- 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.
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ETIM 9.0	EC002643
ETIM 10.0	EC002643	ECLASS 9.0	27-44-04-01
ECLASS 9.1	27-44-04-01	ECLASS 10.0	27-44-04-01
ECLASS 11.0	27-46-01-01	ECLASS 12.0	27-46-01-01
ECLASS 13.0	27-46-01-01	ECLASS 14.0	27-46-01-01

Creation date 02.12.2025 10:39:05 MEZ





Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Technical data

ECLASS 15.0 27-46-01-01



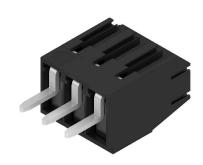
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

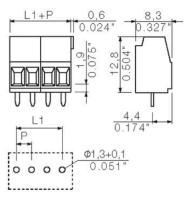
www.weidmueller.com

Drawings

Product image



Dimensional drawing



Graph

