

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

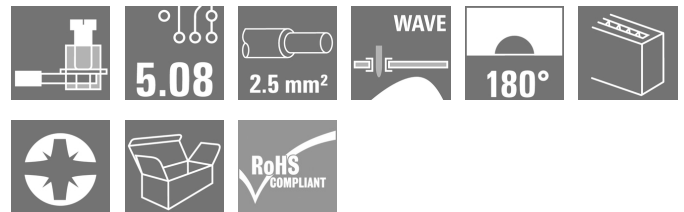
Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Product image



Similar to illustration

PCB terminal with proven clamping yoke connection at 5.00 and 5.08 mm pitch. Conductor outlet direction 90°, 135° and 180°. Suitable for conductor cross-sections up to 2.5 mm².

General ordering data

Version	Printed circuit board terminals, 5.08 mm, Number of poles: 5, 180°, Solder pin length (l): 3.5 mm, tinned, Pale green. Clamping yoke connection, Clamping range, max. : 2.5 mm², Box
Order No.	1550240000
Type	LM 5.08/05/180 3.5SN GN BX
GTIN (EAN)	4050118356939
Qty.	50 Stück
Product data	IEC: 630 V / 17.5 A / 0.2 - 2.5 mm² UL: 300 V / 15 A / AWG 24 - AWG 14
Packaging	Box

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Technische Daten

Dimensions and weights

Depth	14.2 mm	Depth (inches)	0.559 inch
Height	13.5 mm	Height (inches)	0.531 inch
Height of lowest version	10 mm	Width	25.95 mm
Width (inches)	1.022 inch	Net weight	5.988 g

Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
-----------------------------	--------	-----------------------------	--------

System parameters

Product family	OMNIMATE Signal - series LM	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	180°
Pitch in mm (P)	5.08 mm	Pitch in inches (P)	0.2 inch
Number of poles	5	Pin series quantity	1
Fitted by customer	Yes	Number of rows	1
Max. adjacent poles per row	24	Solder pin length (l)	3.5 mm
Solder pin dimensions	0.95 x 0.8 mm	Solder eyelet hole diameter (D)	1.3 mm
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm	Number of solder pins per pole	1
Screwdriver blade	0.6 x 3.5	Screwdriver blade standard	DIN 5264
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
Clamping screw	M 2.5	Stripping length	6 mm
L1 in mm	20.32 mm	L1 in inches	0.8 inch
Touch-safe protection acc. to DIN VDE 0470	IP 10	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Protection degree	IP20	Volume resistance	1.20 mΩ

Material data

Insulating material	Wemid (PA)	Colour	Pale green
Colour chart (similar)	RAL 6021	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Coating	1-3 µm Ni, 4-6 µm SN	Tinning type	matt
Layer structure of solder connection	1...3 µm Ni / 4...6 µm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

Conductors suitable for connection

Clamping range, min.	0.2 mm ²
Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4,	0.25 mm ² min.

Erstellungs-Datum May 25, 2023 12:49:32 PM CEST

Katalogstand 12.05.2023 / Technische Änderungen vorbehalten

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Technische Daten

w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm²
max.

w. wire end ferrule, DIN 46228 pt 1, 0.25 mm²
min.

w. wire end ferrule, DIN 46228 pt 1, 1.5 mm²
max.

Plug gauge in accordance with EN 60999 a x b; ø 2.4 mm x 1.5 mm; 1.9mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
			nominal
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.5/12 OR
		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0.5/6
Cross-section for conductor connection		Type	fine-wired
		nominal	0.75 mm ²
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.75/12 W
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0.75/6
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H1.0/12 GE
Cross-section for conductor connection		Type	fine-wired
		nominal	1 mm ²
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H1.0/6
wire end ferrule		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H1.0/6
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.25/10 HBL
Cross-section for conductor connection		Type	fine-wired
		nominal	0.25 mm ²
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.25/10 HBL
wire end ferrule		Stripping length	nominal 5 mm
		Recommended wire-end ferrule	H0.25/5
		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.34/10 TK
Cross-section for conductor connection		Type	fine-wired
		nominal	0.34 mm ²
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.34/10 TK

Reference text Length of ferrules is to be chosen depending on the product and the rated voltage.. The outside diameter of the plastic collar should not be larger than the pitch (P)

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

Technische Daten

info@weidmueller.com

www.weidmueller.com

17.5 A

17.5 A

630 V

250 V

4 kV

4 kV

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A

3 x 1s with 120 A


Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	16 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	14.2 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 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	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	18 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 14

Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	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)	15 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	0 mm
VPE width	0 mm	VPE height	0 mm

Type tests

Test: Durability of markings	Test	mark of origin, type identification, pitch, type of material, approval marking UL, approval marking CSA, durability
	Evaluation	available

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Technische Daten

Fax. +49 5231 14-2083

Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-2 section 2.4.5	
	Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm ²
		Type of conductor and conductor cross-section	stranded 0.2 mm ²
		Type of conductor and conductor cross-section	stranded 1.5 mm ²
		Type of conductor and conductor cross-section	solid 2.5 mm ²
		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 14/1
		Type of conductor and conductor cross-section	AWG 14/19
Evaluation	passed		
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm ²
		Type of conductor and conductor cross-section	AWG 24/1
		Type of conductor and conductor cross-section	AWG 24/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
	Evaluation	passed	
	Requirement	0.4 kg	
	Conductor type	Type of conductor and conductor cross-section	stranded 1.5 mm ²
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 2.5 mm ²
		Type of conductor and conductor cross-section	AWG 14/1
Type of conductor and conductor cross-section		AWG 14/19	
Evaluation	passed		

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

Technische Daten

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥10 N info@weidmueller.com		
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm ² and conductor cross-section	
		Type of conductor and conductor cross-section	AWG 24/1	
		Type of conductor and conductor cross-section	AWG 24/19	
	Evaluation	passed		
	Requirement	≥20 N		
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5	
		Evaluation	passed	
	Requirement	≥40 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-K1.5	
		Evaluation	passed	
	Requirement	≥50 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5	
		Type of conductor and conductor cross-section	AWG 14/1	
Type of conductor and conductor cross-section		AWG 14/19		
Evaluation	passed			

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	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

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	• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Technische Daten

Downloads

Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN FL DRIVES DE

LM 5.08/05/180 3.5SN GN BX

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

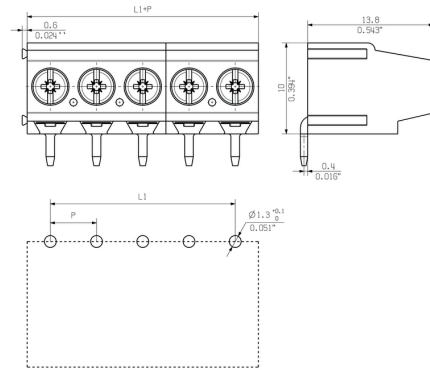
32760 Detmold

Tel. +49 5231 14-0

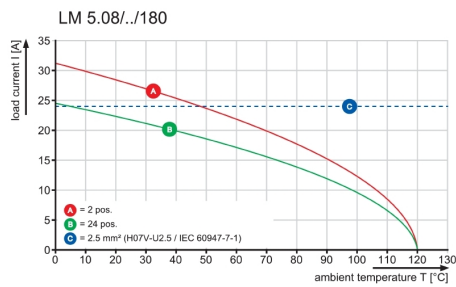
Fax. +49 5231 14-2083

Zeichnungen

Dimensional drawing info@weidmueller.com



Graph



Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
 Klängenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.