WDU 2.5/TC TYP B

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

www.weidmueller.com

Product image



Thermocouple Terminal blocks are specially designed for the transmission of very small voltages in temperature measuring circuits. Special current bars ensure that no false signals are transmitted within the terminal block when temperature differences between the positive and negative paths exist. This high measuring precision is required, for example, in aircraft engine test rigs, complicated chemical processes and controllers.

General ordering data

Version	W-Series, Feed-through terminal, Thermocouple, Rated cross-section: 2.5 mm², Screw connection
Order No.	1033700000
Type	WDU 2.5/TC TYP B
GTIN (EAN)	4008190160128
Qty.	25 pc(s).

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Technical data

Dimensions and weights

Depth	50 mm	Depth (inches)	1.969 inch
Depth including DIN rail	50.5 mm	Height	60 mm
Height (inches)	2.362 inch	Width	10.2 mm
Width (inches)	0.402 inch	Net weight	15.9 g

Temperatures

Storage temperature	-25 °C...55 °C	Operating temperature range	For operating temperature range see EC Design Test Certificate / IEC Ex-Certificate of Conformity
Continuous operating temp., min.	-60 °C	Continuous operating temp., max.	130 °C

Material data

Material	Wemid	Colour	dark beige
UL 94 flammability rating	V-0		

Rating data IECEx/ATEX

Certificate No. (ATEX)	DEMKO14ATEX1338U	Certificate No. (IECEX)	IECEXULD14.0005U
Max. voltage (ATEX)	55 V	Current (ATEX)	8 A
Wire cross section max. (ATEX)	2.5 mm²	Max. voltage (IECEX)	55 V
Current (IECEX)	8 A	Wire cross section max. (IECEX)	2.5 mm²
Operating temperature range	For operating temperature range see EC Design Test Certificate / IEC Ex-Certificate of Conformity	Marking EN 60079-7	Ex eb II C Gb
Ex 2014/34/EU label	II 2 G D		

System specifications

Version	Screw connection, Thermocouple	End cover plate required	Yes
Number of potentials	1	Number of levels	1
Number of clamping points per level	2	Number of potentials per tier	1
Levels cross-connected internally	No	PE connection	No
Rail	TS 35	N-function	No
PE function	No	PEN function	No

Additional technical data

Explosion-tested version	No	Number of similar terminals	1
Open sides	right	Type of mounting	Snap-on

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Conductors for clamping (rated connection)

Blade size	0.6 x 3.5 mm	Clamping range, max.	2.5 mm²
Clamping range, min.	0.13 mm²	Clamping screw	M 2.5
Connection cross-section, stranded, max.	2.5 mm²	Connection cross-section, stranded, min.	1.5 mm²
Connection direction	on side	Gauge to IEC 60947-1	A2
Number of connections	2	Stripping length	10 mm
Tightening torque, max.	0.6 Nm	Tightening torque, min.	0.4 Nm
Torque level with DMS electric screwdriver	1	Twin wire-end ferrules, max.	1.5 mm²
Twin wire-end ferrules, min.	0.5 mm²	Type of connection	Screw connection
Wire connection cross section AWG, max.	AWG 12	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section, finely stranded, max.	2.5 mm²	Wire connection cross section, finely stranded, min.	0.5 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/1, max.	2.5 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/1, min.	0.5 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm²
Wire connection cross-section, solid core, max.	2.5 mm²	Wire connection cross-section, solid core, min.	0.5 mm²

General

Rail	TS 35	Standards	IEC 60584, IEC 60947-7-1
Wire connection cross section AWG, max.	AWG 12	Wire connection cross section AWG, min.	AWG 26

Rating data

Rated cross-section	2.5 mm²	Rated voltage	55 V
Standards	IEC 60584, IEC 60947-7-1	Volume resistance according to IEC 60947-7-x	1.33 mΩ
Power loss in accordance with IEC 60947-7-x	0.77 W	Pollution severity	3

UL rating data

Certificate No. (UR)	E60693	Voltage size C (UR)	50 V
Wire cross section max. (UR)	12 AWG	Wire cross section min. (UR)	30 AWG

Classifications

ETIM 6.0	EC000904	ETIM 7.0	EC000904
ETIM 8.0	EC000904	ETIM 9.0	EC000904
ECLASS 9.0	27-14-11-42	ECLASS 9.1	27-14-11-42
ECLASS 10.0	27-14-11-42	ECLASS 11.0	27-14-11-42
ECLASS 12.0	27-14-11-42	ECLASS 13.0	27-25-01-15

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Technical data

Approvals

Approvals

ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693
Certificate No. (cURusEX)	E184763

Downloads

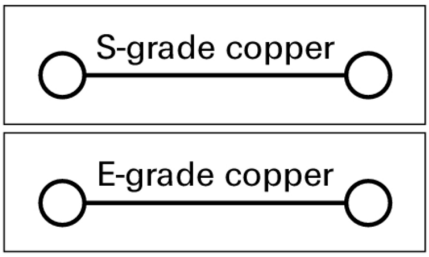
Approval/Certificate/Document of Conformity	Attestation of Conformity IECEx Certificate UKCA Ex Attestation of Conformity UKCA Ex Certificate CE Declaration of Conformity ATEX Certificate UKCA declaration of conformity Confirmation of Standards EN 45545-2_2020-10
Engineering Data	CAD data – STEP
User Documentation	NTI WDU 2.5 TC StorageConditionsTerminalBlocks
Catalogues	Catalogues in PDF-format
Brochures	

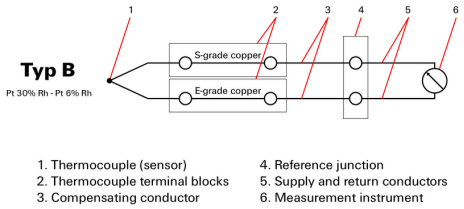
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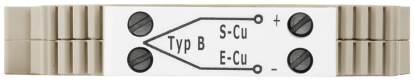
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Drawings





1. Thermocouple (sensor)
2. Thermocouple terminal blocks
3. Compensating conductor
4. Reference junction
5. Supply and return conductors
6. Measurement instrument



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Accessories

W-Series

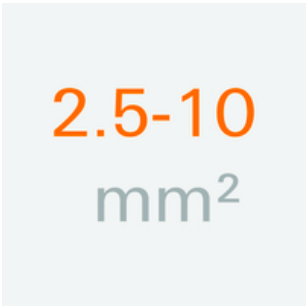


Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

Type	WEW 35/2	Version
Order No.	1061200000	W-Series, End bracket
GTIN (EAN)	4008190030230	
Qty.	50 pc(s).	

2.5-10 mm²



End plates are fitted to the open side of the last modular terminal before the end bracket. The use of an end plate ensures the function of the modular terminal and the specified rated voltage. It guarantees protection against contact with live parts and makes the final terminal finger-proof.

General ordering data

Type	WAP 16+35 WTW 2.5-10	Version
Order No.	1050100000	W-Series, End plate, Partition plate
GTIN (EAN)	4008190079901	
Qty.	20 pc(s).	

Type	WAP 2.5-10	Version
Order No.	1050000000	W-Series, End plate
GTIN (EAN)	4008190103149	
Qty.	50 pc(s).	

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Accessories

Shielding connection



With the LS 2.8 WDU2.5-10, many feed-through modular terminal blocks from the W series can be converted very easily. Inserting the LS 2.8 WDU2.5-10 allows the cable shielding braid to be looped through directly at the terminal block by soldering or using a suitable flat cable lug.

General ordering data

Type	LS 2.8 WDU2.5-10	Version
Order No.	1056400000	W-Series, Shield bus
GTIN (EAN)	4008190036454	
Qty.	100 pc(s).	

Blank



WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text.
WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.
- Can be fitted in strips or individually
- Markers in proven MultiCard format

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	WS 12/5 MC NE WS	Version
Order No.	1609860000	WS, Terminal marker, 12 x 5 mm, Pitch in mm (P): 5.00 Weidmueller,
GTIN (EAN)	4008190203481	Allen-Bradley, white
Qty.	720 pc(s).	

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Accessories

WS 12/5



WS/ DEK
MultiMark terminal markers use an innovative composite material made from two components. The hard base contour of the marker snaps securely into the connector. The elastic surface finish makes the marker easy to mount. This specially punched material enables the strips to be stretched to accommodate the slight variations in spacing that tend to add up, especially with long terminal blocks. Another advantage: the excellent printability of the surface material guarantees durable and wear-resistant labelling. A print resolution of 300 dpi also produces a very legible script.
Your benefits with MultiMark

- Firm hold and durable printing
- Continuous strips save installation time
- Easy mounting thanks to an innovative composite material
- Large label field for optimal legibility
- High flexibility thanks to manufacturer independence

General ordering data

Type	WS 12/5 MM WS	Version
Order No.	2007190000	WS, Terminal marker, 12 x 5 mm, Weidmueller, white
GTIN (EAN)	4050118392036	
Qty.	800 pc(s).	

SchT group marker carrier



The SchT 5 S group tag carriers are clipped directly onto the TS 32 mounting rail (G-rail) or the TS 35 mounting rail (top-hat rail). It is therefore possible to label the terminal strip irrespective of the terminal and the type of terminal. SchT 5 and SchT 5 S are fitted with ESO 5, STR 5 protective strips.
The SchT 7 is a hinged group tag carrier for inlay tags which enables easy access to the clamping screw.
The SchT 7 is fitted with ESO 7, STR 7 protective strips or DEK 5.
Inlay tags and protective strips can be found under "Accessories".

General ordering data

Type	SCHT 7	Version
Order No.	0517960000	SCHT, Terminal marker, 39.3 x 8 mm, Pitch in mm (P): 7.00
GTIN (EAN)	4008190001742	Weidmueller, white
Qty.	20 pc(s).	

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Accessories

ZGB pivotable group tag holder



The ZGB 15 is a hinged group tag carrier. The tag carrier can hold the dekafix 5, WS 12/5 terminal markers or the inlay tag ESO 15.
The ZGB 30 is a hinged group tag carrier. The tag carrier can hold the dekafix 5, WS 12/5 terminal markers or the inlay tag ESO 7.
Inlay tags and protective strips can be found under "Accessories".

General ordering data

Type	ZGB 15	Version
Order No.	1636530000	Terminal markers, Terminal marker, 15 x 7 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190297053	Weidmueller, white
Qty.	20 pc(s).	

Type	ZGB 30	Version
Order No.	1611930000	Terminal markers, Terminal marker, 32 x 7 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190002251	Weidmueller, white
Qty.	20 pc(s).	

Blank



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.
Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/5 MC NE WS	Version
Order No.	1609801044	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1,000 pc(s).	

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Accessories

Marker holder



The marker holder offer the possibility of additional mounting of standard markers with a pitch of 5 or 5.1 mm. The angled holders can be optionally snaped together and could be mounted in all standard marking channels of the Klippon® Connect modular terminal blocks. Fitting marker types could be found under the respective accessories of the designation marking holder.

General ordering data

Type	BZT 1 ZA WS 10/5	Version
Order No.	1805520000	Accessories, Marker holder
GTIN (EAN)	4032248270248	
Qty.	100 pc(s).	

Type	BZT 1 WS 10/5	Version
Order No.	1805490000	Accessories, Marker holder
GTIN (EAN)	4032248270231	
Qty.	100 pc(s).	