Weidmüller

TIAL F20

Product image

Similar to illustration

Faster signal wiring with less space

To reduce wiring times, pre-assembled cables are used between the control system and the interface level and are simply connected to the TERMSERIES adapter. This enables throughput times in electrical cabinet building to be significantly reduced. The adapter has a universal fit and offers a genuine space advantage in interaction with the TERMSERIES products with identical contours.

- Reduced wiring time due to plug-and-play concept with pre-assembled cables
- Can be applied to the input and output sides of the TERMSERIES
- Ready for plus and minus switching logic
- High space-saving due to universal fit to other TERMSERIES products

General ordering data

Version	TERMSERIES, Adapter, 20-pole plug according to DIN EN 60603-13, long locking lever, Number of signal paths: 16, Rated voltage : 24 V DC, Rated current (per signal path): 60 mA
Order No.	1463550000
Type	TIAL F20
GTIN (EAN)	4050118331783
Qty.	1 pc(s).

TIAL F20

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

www.weidmueller.com

Technical data

Dimensions and weights

Depth	62 mm	Depth (inches)	2.441 inch
Height	43 mm	Height (inches)	1.693 inch
Width	102 mm	Width (inches)	4.016 inch
Net weight	88.4 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...60 °C
Humidity	5...95% (indoor), T_u = 40°C, without condensation		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Supply

Voltage supply	24 V DC ± 20 %	Status display	Green LED

Signals

Rated voltage	24 V DC	Voltage, max.	30 V DC
Rated current (per signal path)	60 mA	Current (per signal path), max.	1 A
Total current of all signals, max.	1 A	Number of signal paths	16

General data

Colour	black		
UL94 flammability rating component	Component	Housing	
	UL94 flammability rating	V-0	

Insulation coordination

Rated voltage	32 V	Pollution severity	2
Surge voltage category	III	Impulse withstand voltage	1.5 kV
Protection degree	IP20 in installed state		

Further details of approvals / standards

Certificate No. (DNVGL)	TAA00001E5	Certificate no. (cULus)	E141197

Connection data (supply)

Wire connection method	PUSH IN	Number of terminals	4 (+,+,−,−)
Clamping range, rated connection, min.	0.13 mm²	Clamping range, rated connection, max.	1.5 mm²
Blade size (supply)	0.6 x 3.5 mm		

Connection data (signal)

Plug type	20-pole plug according to DIN EN 60603-13, long locking lever

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Catalogue status 14.01.2022 / We reserve the right to make technical changes.

2

TIAL F20

Technical data

Classifications

ETIM 6.0	EC002780	ETIM 7.0	EC002780
ETIM 8.0	EC002780	ECLASS 9.0	27-14-11-52
ECLASS 9.1	27-14-11-52	ECLASS 10.0	27-14-11-52
ECLASS 11.0	27-14-11-52		

Approvals

Approvals	
ROHS	Conform
UL File Number Search	E141197

Downloads

|	
Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert – de/en
	TEMRSERIES Adapter SPS Interface Kabel - Deutsch
	TERMSERIES Adapters PLC interface cables - English
Catalogues	Catalogues in PDF-format
Brochures	

TIAL F20

Drawings

Wiring diagram
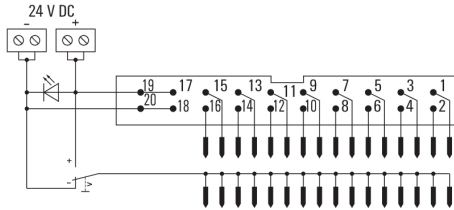
Example of use

Function of potential switch
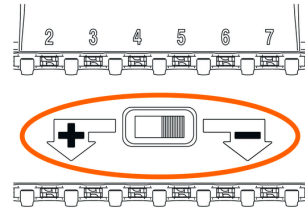
The potential switch, located between contact rows of TERMSERIES adapter, is used to switch the potential of the lower contact row to "+" or "-" potential of supply voltage.

Example of use

Installation note for adapter on input

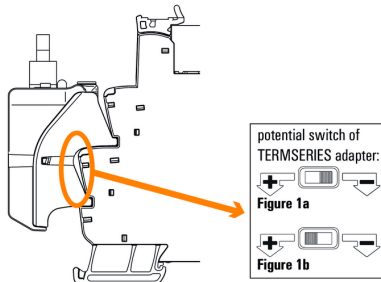potential switch of TERMSERIES adapter:

Figure 1a

Figure 1b

Figure 1a: Using adapter with positive-switching logic: switch potential switch at adapter to "-" position, installation recommended on 24 V DC input (A1/A2).

Figure 1b: Using adapter with negative-switching logic: switch potential switch at adapter to "+" position, **must** be installed on 24 V UC input (A1/A2).

Example of use

Dimensional drawing

61,8 mm

101,9 mm

42,8 mm
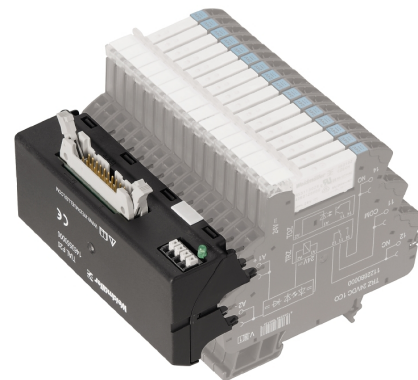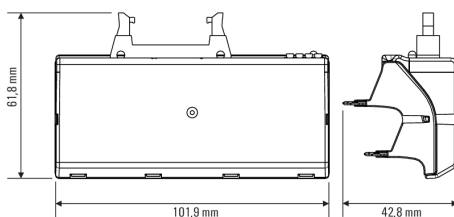
Dimensional drawing

Mounting adapter on input of TERMSERIES socket

max. 112 mm

30.0 mm

suggested mounting area
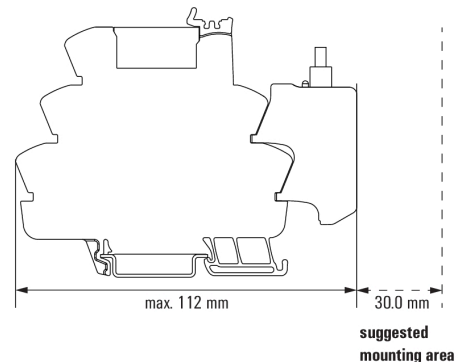
Mounting of the adapter on the input side of the TERMSERIES socket

Creation date January 25, 2022 10:09:30 PM CET

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Accessories

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 12/6 MC NE RT	Version
Order No.	1773551686	WS, Terminal marker, 12 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248141920	Allen-Bradley, red
Qty.	600 pc(s).	
Type	WS 12/6 MC NE GE	Version
Order No.	1773551687	WS, Terminal marker, 12 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248141937	Allen-Bradley, yellow
Qty.	600 pc(s).	
Type	WS 12/6 MC NE WS	Version
Order No.	1609900000	WS, Terminal marker, 12 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4008190203467	Allen-Bradley, white
Qty.	600 pc(s).	
Type	WS 12/6 MC NE BL	Version
Order No.	1773551693	WS, Terminal marker, 12 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248143269	Allen-Bradley, blue
Qty.	600 pc(s).	

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TIAL F20

Accessories

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 10/6 MC M NE GN	Version
Order No.	1917420000	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248551620	Allen-Bradley, green
Qty.	600 pc(s).	
Type	WS 10/6 MC NE WS	Version
Order No.	1828450000	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248350513	Allen-Bradley, white
Qty.	600 pc(s).	
Type	WS 10/6 MC M NE GE	Version
Order No.	1917430000	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248551637	Allen-Bradley, yellow
Qty.	600 pc(s).	
Type	WS 10/6 M MC NE WS	Version
Order No.	1818400000	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248310876	Allen-Bradley, white
Qty.	600 pc(s).	

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6

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Accessories

WS 12/6

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 12/6 MM WS	Version	
Order No.	2007200000	WS, Terminal marker, 12 x 6 mm, Weidmueller, white	
GTIN (EAN)	4050118391886		
Qty.	600 pc(s).		

Creation date January 25, 2022 10:09:30 PM CET

TIAL F20

Drawings

Dimensional drawing

**Mounting adapter on output
of TERMSERIES socket**

30.0 mm
**suggested
mounting area**

max. 112 mm

Mounting of the adapter on the output
side of the TERMSERIES socket
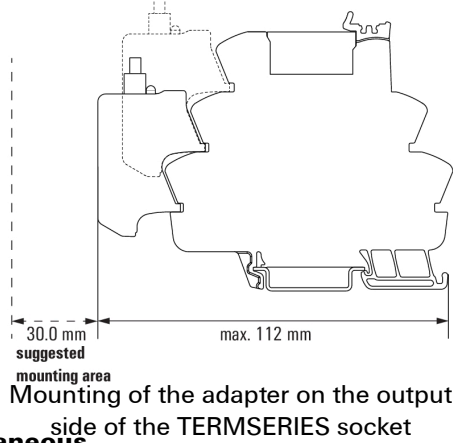
Miscellaneous
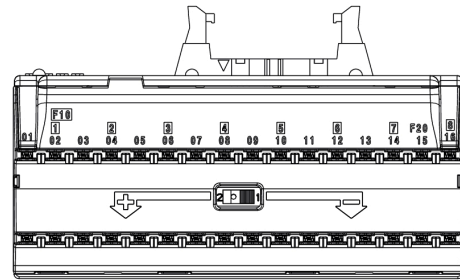
Front view

Miscellaneous
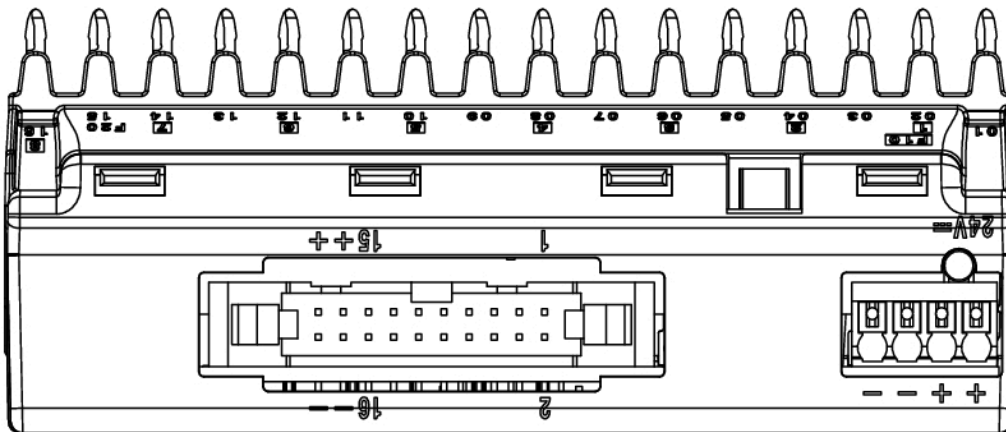
Top view

TIAL F20

Drawings

Miscellaneous

Type code TERMSERIES accessories

T	TERMSERIES	
I	Interface	
C	Cross	
W	Partition plate	
X	n.a.	
A	Adapter	
C	Connection	
P	PUSH IN	
S	Srew	
Z	Tension	
L	Large (for 12.8 mm sockets)	
TXS/TXZ	All shapes	
Supply	Supply terminal	

OR	Orange
BL	Blue
RD	Red
BK	Black
F10	Flat connector 10-poles
F20	Flat connector 20-poles
15S SUBD	15 pole Sub-D connector
R3.2	3.2 mm width
6.4/2	6.4 mm grid 2-poles
6.4/10	6.4 mm grid 10-poles
6.4/51	6.4 mm grid 51-poles
12.8/26	12.8 mm grid 26-poles

Type codes

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Mouser Electronics

Authorized Distributor

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  [1463550000](#)