

## TIAL F20

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

### 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.	<a href="#">1463550000</a>
Type	TIAL F20
GTIN (EAN)	4050118331783
Qty.	1 pc(s).

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## 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 <sub>u</sub> = 40°C, without condensation		

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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## Supply

Voltage supply	24 V DC ± 20 %	Status display	Green LED
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## 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
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## Connection data (supply)

Wire connection method	PUSH IN	Number of terminals	4 (+,+,-,-)
Clamping range, rated connection, min.	0.13 mm <sup>2</sup>	Clamping range, rated connection, max.	1.5 mm <sup>2</sup>
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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## 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	ECLASS 12.0	27-14-11-52

## Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

## Downloads

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

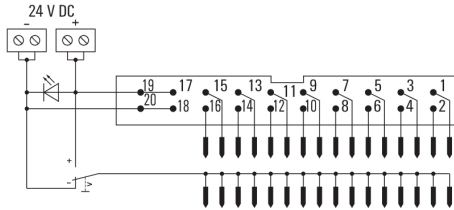
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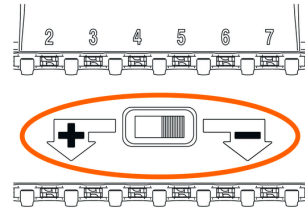
**Drawings**

**Wiring diagram**



**Example of use**

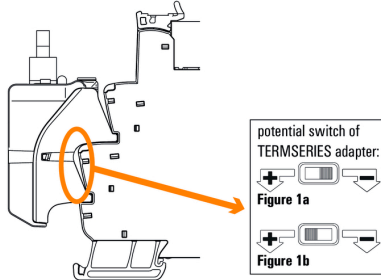
**Function of potential switch**



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**

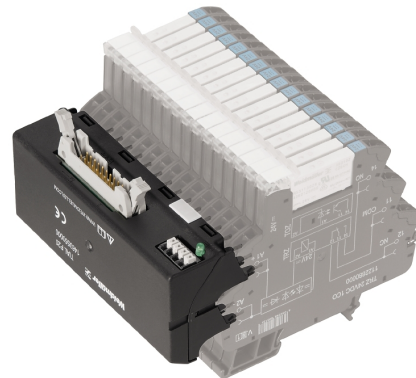
**Installation note for adapter on input**



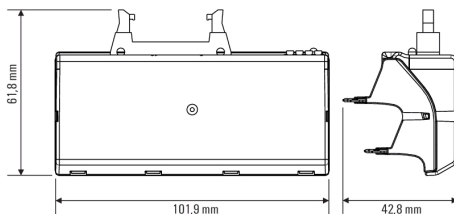
**Figure 1a:** Using adapter with positive-switching logic: switch potential switch at adapter to "-" position, installation recommended on **24 V DC** input (A1/A2).

**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**

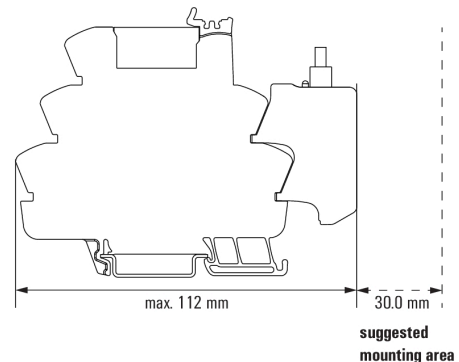


**Dimensional drawing**



**Dimensional drawing**

**Mounting adapter on input of TERMSERIES socket**



Mounting of the adapter on the input side of the TERMSERIES socket

**TIAL F20**

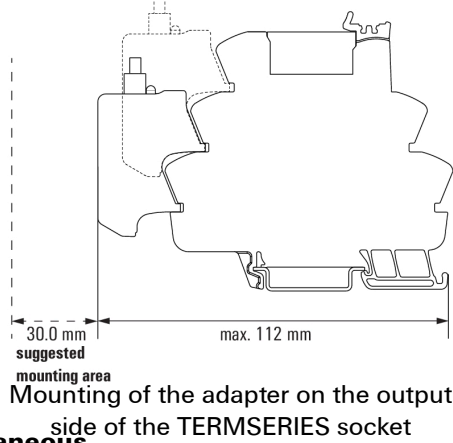
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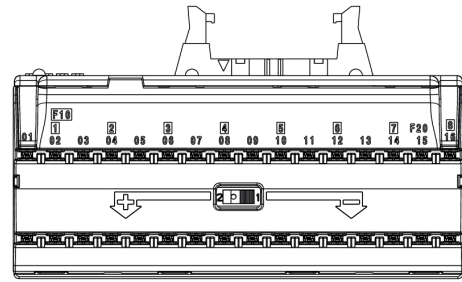
**Drawings**

**Dimensional drawing**

**Mounting adapter on output of TERMSERIES socket**

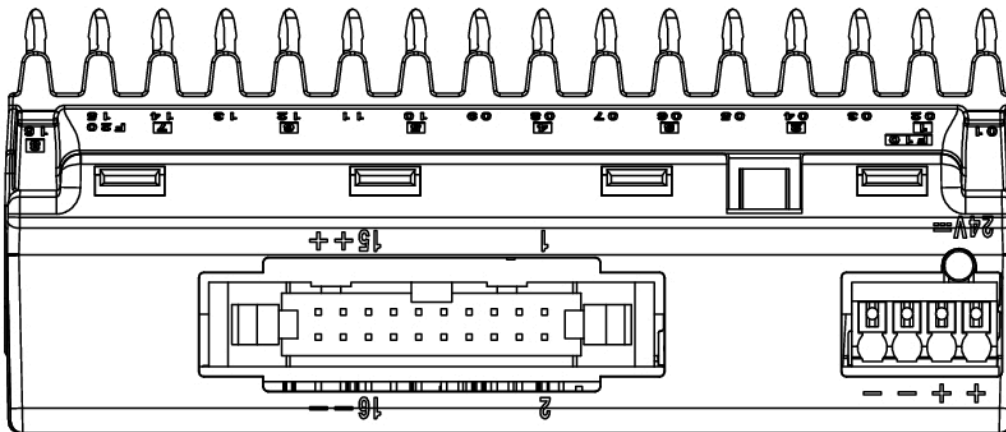


**Miscellaneous**



Front view

**Miscellaneous**



Top view

TIAL F20

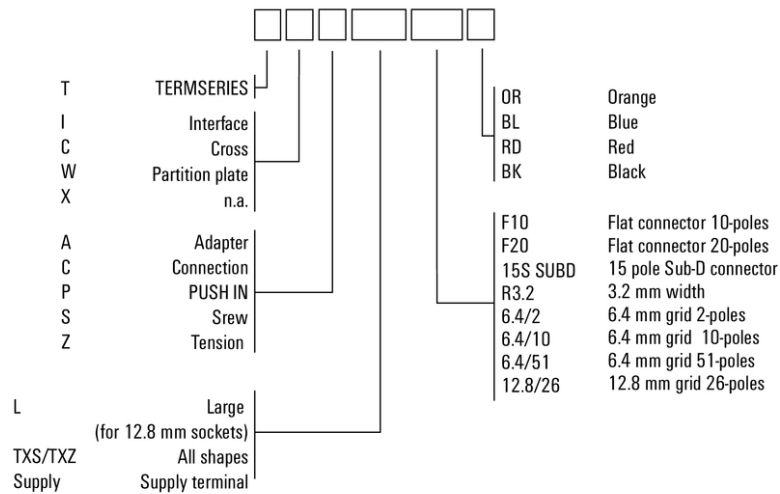
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Drawings

Miscellaneous

Type code TERMSERIES accessories



Type codes