

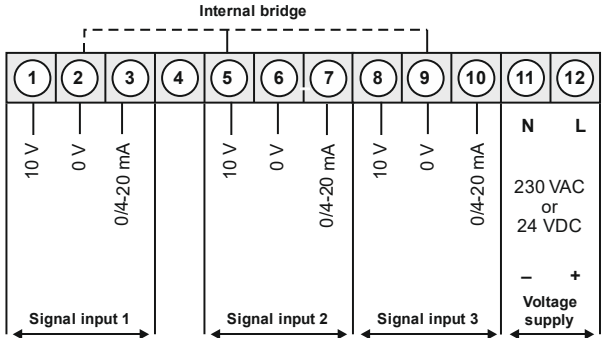
TFT1 – triple indicator for panel-mounting in 96x48 mm (WxH)

Standard signals: 3x 0/4-20 mA, 0-10 VDC (galv. not isolated among each other)

- presentation of metered value of 3x -1999...9999 digits
- digit height approx. 9 mm
- selectable colour for measurand and background: red, green, white, black, orange
- minimal installation depth: 25 mm without plug-in terminal, with transformer 42 mm
- display panel 2,4", 320x240 Pixel
- adjustable signs for physical dimensions
- min/max value recording
- 9 adjustable supporting points
- display flashing at threshold value exceedance/undercut
- Tara function
- programming interlock via access code
- protection class IP65 at the front
- pluggable screw terminal
- option: 2 relay outputs
- accessories: PC-based configuration kit PM-TOOL with USB adapter



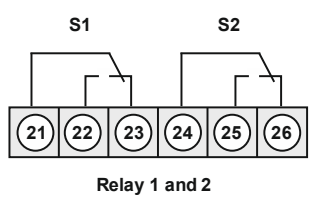
• Multifunctional measuring input



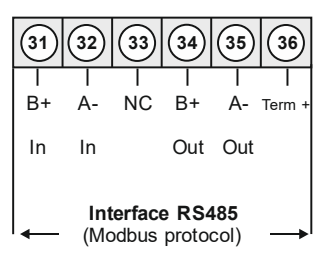
Supply 230 VAC
Supply 24 VDC galv. isolated

ORDER NUMBER	EUR
TFT1-13V.0001.570A	238.30
TFT1-13V.0001.770A	248.90

Options:



alternative to relay 1 and 2



in preparation

• Order key options

T	F	T	1	-	1	3	V.	0	0	0	1.	5	7	0	A	
T	F	T	1	-	1	3	V.	0	0	0	1.	7	7	0	A	
														2	2 relay outputs	35.00
														4	Interface RS485 – with Modbus protocol (in preparation)	58.30

• Parameterisation software

PC-based configuration software PM-TOOL, for a simple adjustment, incl. USB adapter. Programming happens on the rear side via micro USB-plug.

PM-TOOL-USB 30.70

• Technical data

Housing	Dimensions	W96 x H48 x D25 mm, (D = 42 mm with transformer, D = 47 mm, incl. plug-in terminals) 92.0 ^{+0.8} x 45.0 ^{+0.6} mm		
	Panel cut-out	screw elements for a wall thickness of up to 3 mm		
	Fixing	PC Polycarbonate, black, UL94V-0		
	Housing material	EPDM, 65 Shore, black		
	Sealing material	at the front side IP65 standard, at the rear side IP00		
	Protection class	approx. 150 g		
	Weight	plug-in terminal; wire cross section up to 2.5 mm ²		
	Connection	push-in terminal; wire cross section up to 0.75 mm ² for interface RS485		
Display	Display	fullgraphic TFT-display with 320x240 Pixel, font Segoe UI		
	Digit height	9 mm		
	Presentation of metered value	3x -1999 to 9999		
	Measurand background colour	Red, Green, White, Black or Orange (selectable)		
	Limit values	optical display flashing		
Measuring input				
Signal	Measuring range	Measuring range	Resolution	
Voltage	0...10 V Ri > 100 kOhm	0...12 V	≥ 14 bit	
Current	4...20 mA Ri = ~125 Ohm	1...22 mA		
Current	0...20 mA Ri = ~125 Ohm	0...22 mA		
Output	Relay with change-over	30 VDC / 2 A resistive burden		
	Contact			
Interface (in preparation)	RS485	9.600 Baud, no parity, 8 data bit, 1 stop bit, wire length max. 1000 m		
	Protocol	Modbus with ASCII or RTU-protocol		
Measuring error	Standard	0.1% of measuring range ± 1 digit		
Accuracy	Drift of temperature	100 ppm/K		
	Measuring time	0.01 to 2.0 seconds		
	Measuring rate	approx. 100/s		
	Measuring principle	U/F conversion		
	Resolution	approx. 14 bit at 1 sec measuring time		
Power pack	Supply	230 VAC 50/60 Hz, ≤ 3 VA		
		24 VDC ± 10% galvanic isolated, ≤ 1 VA		
Memory	EEPROM	Data preservation ≥ 100 years at 25°C		
Ambient conditions	Working temperature	-20 to + 60°C, without dew		
	Storing temperature	-30 to + 70°C		
	Weathering resistance	relative humidity 0-85% on years average without dew		
	Height	up to 2000 m		
EMV	EN 61326			
CE-identification	Conformity according directive 2014/30/EU			
Safety regulations	According to low voltage directive 2013/35/EU; EN 61010; EN 60664-1			

Housing:

