

Multifunction panel meter TS-S 9648

Measuring input for standard signals and potentiometer, integrated transmitter supply
Optionally with alarm outputs (2 or 4 relay changer or transistor outputs)



Description

- Standard signal display for panel mounting
- 3 control buttons, 4-digit LED display, optical switching status indication of any optional outputs
- Input for standard signals (0 ... 20 mA, 4 ... 20 mA and 0 ... 10 V DC) and potentiometer (0 ... 1 kΩ / 100 kΩ)
- Optional alarm outputs (2 or 4 relay changer or transistor outputs) or one analog output (0/4 ... 20 mA, 0/2 ... 10 V)
- Integrated, galvanic isolated transmitter supply
- Power supply of TS-S 9648 multifunction panel meter with 24 V DC or 24, 115 or 230 V AC
- Optionally with minimum and maximum value memory or the display of difference, average value, larger or smaller measured value, when TS-S 9648 is ordered with the optional second measuring input
- Easy operation and installation

The multifunction panel meter **TS-S 9648** is intended for panel mounting. One or optionally two sensors with standard signal output (0 ... 20 mA, 4 ... 20 mA and 0 ... 10 V DC) or potentiometer can be connected. A 24 V transmitter supply is integrated into the multi-function panel meter **TS-S 9648**. The device can also be equipped with alarm outputs (2 or 4 relay changers or transistor outputs) and / or an analog output (0/4 ... 20 mA, 0/2 ... 10 V).

A minimum and maximum value memory can be ordered as an additional option. If the TS-S 9648 multifunction panel meter is ordered with the optional second measuring input the display of the difference value, the average value, or the larger or smaller measured value is a further available additional option.

Technical Data	TS-S 9648	
Supply voltage (Please specify when ordering)	230 V AC ± 10 % 50/60 Hz (standard) 115 V AC ± 10 %; 24 V AC ± 10 %; 24 V DC ± 15 %	
Power consumption	max. 3,5 VA, with analog output 5 VA	
Working temperature	-10 ... +55 °C	
Input signals*		
Voltage signals	0 ... 10 V DC	R _i = > 100 kΩ
Current signals	0 ... 20 mA 4 ... 20 mA	R _i = 10 Ω R _i = 10 Ω
Potentiometer	0 ... 1 kΩ / 100 kΩ	
Measurement error input signal	< 0,1 % ± 2 Digit	
Transmitter supply	24 V DC ± 5 %, R _i ~ 150 Ω, max. 50 mA, (max. 25 mA with 4 relay changer alarm outputs)	
Outputs (optional)**		
Relay changer outputs	Changeover contact < 250 V AC < 250 VA < 2 A, < 300 V DC < 50 W < 2 A	
Transistor outputs	max. 35 V AC / DC max. 100 mA, with short circuit protection	
Analog output	0/4 ... 20 mA burden ≤ 500 Ω; 0/2 ... 10 V DC, burden > 500 Ω, galvanic isolated, automatically output changing	
Measurement error output signal	0,1 %; TK 0,01 %/K	

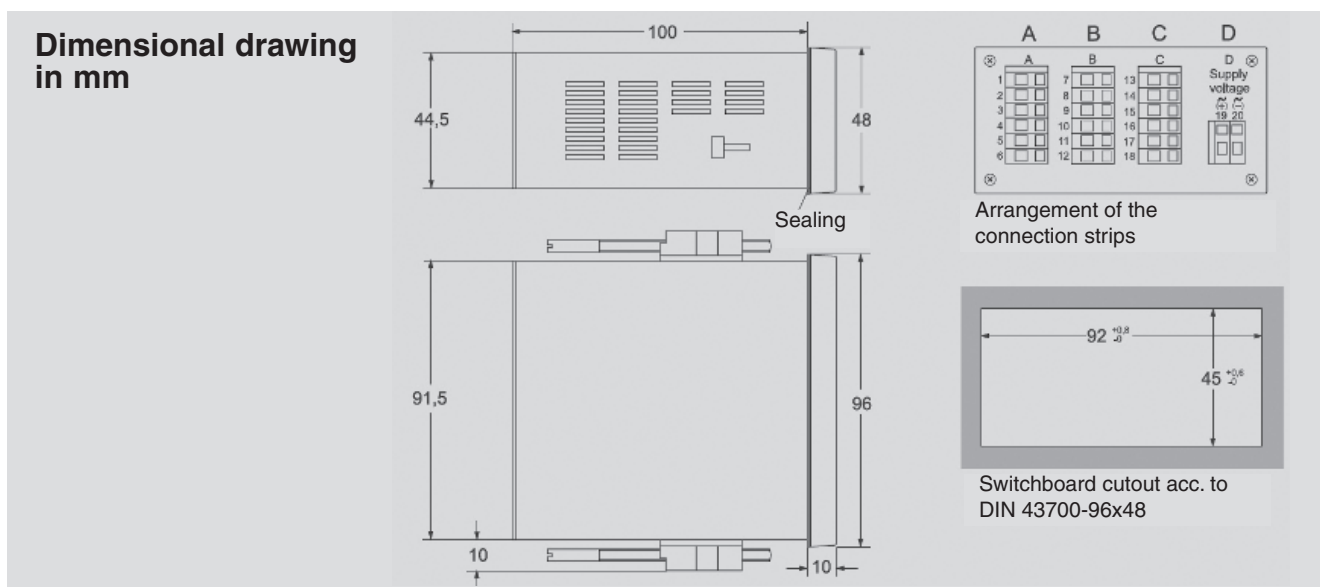
* Standard version with one measuring input, second measuring input for standard signals incl. transmitter supply optionally available

** Optionally available with 2 or 4 relay or transistor outputs. Alternatively, one analog output and / or a second measuring input for standard signals available. These options replace and exclude two of the other output types.

Multifunction panel meter TS-S 9648

Measuring input for standard signals and potentiometer, integrated transmitter supply
Optionally with alarm outputs (2 or 4 relay changer or transistor outputs)

Technical data	TS-S 9648
Display	LED-display, height 14,2 mm,
Display range	±9999(0) digit with leading zero suppression
Optical switching status indicator	LED 2-digit, red, 7 mm
Operation	3 control buttons in the front panel
Housing	panel mounting acc. to DIN 96x48 mm, material PA6-GF; UL94V-0
Housing dimensions	front 96x48 mm, mounting depth 100 mm
Weight	max. 390 g
Electric connection	clamp terminals, 0.08 ... 1.5 mm ² , AWG28 ... AWG14
Protection class	Front IP65, terminals IP20, acc. to BGV A3
Housing dimensions	48 x 96 mm (H x W)
Mounting depth	115 mm (incl. screw / clamp terminals)
Panel mounting	by fixing clamps
Panel cutout	43,0 x 90,5 [±0,5 mm] (H x W)
Safety and electromagnetic compatibility:	
Tested electrical safety and CE conformity acc. EN 55022, EN 60555, IEC 61000-4-3/4/5/11/13.	



Type designation codes

Type TS-S 9648 - 1 - **00** - **2R** - **0** - **05**

TS-S 9648 - 1, one measuring input for standard signals with integrated 24 V transmitter supply

1. Optional inputs and outputs

- **00** = not equipped
- **2R** = 2 relay changer outputs
- **2T** = 2 transistor outputs
- **S1**** = second input for standard signals with integrated 24 V transmitter supply

2. Additional optional outputs

- **00** = not equipped
- **2R** = relay changer outputs
- **2T** = 2 transistor outputs
- **AO** = analog output 0/4 ... 20 mA, 0/2 ... 10 V

3. Supply voltage

- **0** = 230 V AC ± 10 % 50-60 Hz (Standard)
- **1** = 115 V AC ± 10 % 50-60 Hz
- **4** = 24 V AC ± 10 % 50-60 Hz
- **5** = 24 V DC ± 15 %

4. Additional options

- **05** = without option
- **01** = min-max-value memory
- **02** = difference-, mean, larger or smaller value
- **08** = analog output separately programmable

**no galvanic isolation to the primary input, only when additional option 02 is ordered