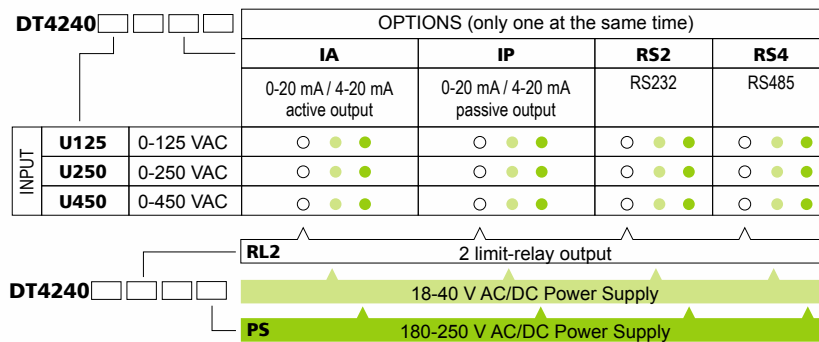


Product features

- 0-125 VAC / 0-250 VAC / 0-450 VAC (rms max.) VAC inputs
- 5 digit LED display, 14,2 mm character height
- 0,03% accuracy
- 0-20 mA / 4-20 mA, galvanic isolated output
- Min / max values detection
- 2 limit-relay outputs
- RS232 / RS485 communication, MODBUS RTU protocol
- 96 x 48 mm panel instrument
- 18-40 V AC/DC
- 180-250 V AC/DC power supply
- IP65 front side protection



Type Designation



The **DT4240 ... AC Voltage Meter** enable 0-125 VAC / 0-250 VAC/ 0-450 VAC (rms max.) voltage ranges to be displayed on the control panel. Large 5 digit, 14,2 mm height LED display make process value easily visible at a distance.

The displayed value is proportional to the True RMS value of the input voltage.

The instrument is available with the following output options:

- 2 normally open relay contacts (SPST) for limit switching or for simple control tasks
 - 0-20 mA / 4-20 mA galvanic isolated scalable current output *
 - RS232 / RS485 galvanic isolated communication output with MODBUS RTU slave protocol *
- (* either analogue or communication option can be implemented at the same time)

Easy on-site configuration through the front panel membrane keypad is a major advantage of the microcontroller-based technology. The configuration parameters: input range, voltage transformer ratio, signal filtering, output scaling, display refresh rate, limit modes, limit values, etc. are stored in EEPROM. The settings are protected by a two-level password against unauthorised manipulation.

The instruments has two power supply versions: 18-40 V AC/DC (DT4240 ...) or 180-250 V AC/DC (DT4240 ...PS).

The **DT4240 ...** is housed in a DIN standard 96 x 48 mm ABS case with IP 65 protection from the front and IP 30 protection from the back side, for installation on the control panel.

Safety data:

The connection terminals of the supply voltages are isolated from each other, the isolation is in compliance with the standard EN 61010-1, taking into consideration the following:

Pollution level: 2
 Measurement category: II

Input parameters:

Input signal: AC voltage, non isolated
 Rectification: True RMS
 Measurement range: 0-125 VAC / 0-250 VAC / 0-450 VAC (rms max.) voltage
 Sampling: 12 measurement / sec
 Number of averaged samples: 1 / 2 / 4 / 8 / 16 / 32 (selectable)
 Error of displayed value: < 0,2% @ Ta = 23°C ± 2°C

Output parameters:

Analogue output (optional):

Output type: 1 active or passive DC current (scalable)
 Range: 0-20 mA / 4-20 mA
 Burden: 500 ohm (max.)
 Error: < 0,03% @ Ta = 23°C ± 2°C

Limit outputs (optional):

Outputs: 2 NO SPST relays
 Contact rating: 30 VDC, 3 ADC / 240 VAC, 3 AAC

Communication interface (optional):

Type: RS232 or RS485 (isolated)
 Protocol: MODBUS RTU slave
 Baud rate: 300 / 600 / 1200 / 2400 / 4800 / 9600 Baud

Display:

Display: 5 digit, decimal point
 Display unit: 5 digit LED, 14,2 mm character height
 Displayed value: voltage, multiplied by voltage transformer ratio

Manual controls:

Manual controls: 3 membrane push-buttons on the front cover

Power supply:

Power supply: 18–40 V AC/DC (DT4240 ...)
 180–250 V AC/DC (DT4240 ...PS)
 Consumption: 3,5 W / 3 VA

Ambient conditions:

Operating temperature range: 0–60°C (-20–60°C for customer request)
 Relative humidity: 90% (max., non-condensing)
 Place of installation: cabinet

Electromagnetic compatibility (EMC) accordance with the standard EN 61326:2000:

Immunity: -B- criterion
 Noise emission: -A- class

General data:

Housing: panel instrument
 Connection: plug-in screw terminal / push-in direct connection
 Connection cable: 0,25–1,5 mm²
 Dimensions / weight: 96 x 48 x 50 mm (width x height x depth) / 0,15 kg
 Protection: IP 65 (front), IP 30 (rear)

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!