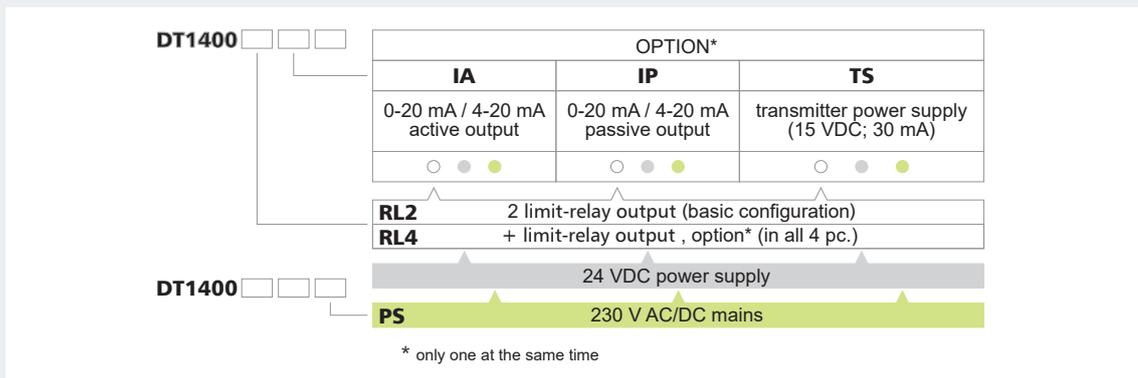


Product features

- 0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V inputs
- 2 / 4 × limit-relay outputs
- Process indicator function
- 5 digit LED display, 7.6 mm character height
- Menu based configuration
- 0-20 mA / 4-20 mA isolated output
- Transmitter supply
- 24 VDC ±10% power supply or 230 V AC/DC ±10% mains
- TS-35 rail mounting, 45 mm width



Type designation



The **DT1400 ... Limit switches** compare the 0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V output signal with the set values. When the output signal exceed one of the set values the instrument activates the corresponding SPDT relay contact. The **DT1400 ... Limit switch** is also a process indicator and enable linear process variable to be displayed in engineering unit on its 5 digit LED display.

The instrument is available with the following output options (2 limit-relays are standard, beyond that only one option at the same time):

- +2 normally open relay contacts (SPST) for limit switching or for simple control tasks. (In this case 4 limit-relay contacts are in the DT1400.)
- 0-20 mA / 4-20 mA galvanic isolated, scalable, active or passive current output.
- 15 VDC, 30 mA, galvanic isolated power supply for two wire 4-20 mA transmitter.

The functional parameters can be set by push-buttons on the front panel of the device, through a simple menu system: input selection, averaging of input signals, scaling, display frequency, limit values, limit operating modes, hysteresis, scaling the analogue output, etc. The settings are protected by a two-level password against unauthorised manipulation.

The **DT1400 ...** has two power supply versions:

- 24 VDC ±10% (**DT1400 ...**)
- 230 V AC/DC ±10% (**DT1400 ... PS**).

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: DC current or DC voltage
 Measurement range: 0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V
 Overrange: ±50 mA (current input), ±200 V (voltage input)
 Sampling: 12 measurement / sec.
 Number of averaged samples: 1 / 2 / 4 / 8 / 16 / 32 / 64 (selectable)
 Error of displayed value : < 0.02% (Ta = 23 °C ±2 °C)
 Temperature coefficient: ±40 ppm / °C (max.)

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:

Outputs: 2 NO SPST relays (standard), + 2 NO SPST relays (optional)
 Contact rating: 30 VDC, 3 ADC / 240 VAC, 3 AAC

Transmitter supply (optional):

Transmitter supply: 15 VDC, 30 mA

Display:

Display: 5 digit (+values), 4 digit (-values), negative sign, decimal point
 4 limit output LED
 Display unit: 5 digit LED, 7.6 mm character height
 Display refresh rate: 0.1 / 0.3 / 0.5 / 1.0 / 1.5 / 2.0 sec. (adjustable)

Manual controls:

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

Power supply:

Power supply: 24 VDC ±10% (DT1400 ...)
 230 V AC/DC ±10% (DT1400 ... 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
 Mounting position: vertical (horizontal rail position)

Electromagnetic compatibility (EMC):

accordance with the standard EN 61326

Immunity: industrial area
 Noise emission: Group 1, Class B

General data:

Housing: terminal assembly box, rail mounting on TS-35 rail,
 material: polyamide PA6.6
 Connection: screw terminal
 Connection cable: 0.25-2.5 mm²
 Dimensions: 45 × 99 × 115 mm (width × height × depth)
 Weight: 0.2 kg
 Protection: IP 20

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