Loop-powered AC current transmitters, up to 60 A

Product features

- 3 versions, 6 measuring ranges:
  0–1 AAC / 0–5 AAC *
  0–10 AAC / 0–20 AAC *
  0–40 AAC / 0–60 AAC *
  * switch selectable
- True RMS converter
- CAT III measurement category
- 4-20 mA passive output
- 0.5% accuracy
- 12-33 VDC, loop-powered
- 17.5 mm wide, TS-35 rail-mountable terminal housing
- complies with EN 60688

Type designation

DT1622 I ☐	MEASURING RANGE		
	1/5	**10/20**	**40/60**
INPUT	0–1 / 0–5 AAC	0–10 / 0–20 AAC	0–40 / 0–60 AAC

The **DT1622 ... AC current transmitters** produce a 4–20 mA output signal proportional to the true effective value (TRMS) of the input signal for the processing unit.
The device is a passive two-wire transmitter, powered by the 4–20 mA current loop.
The supply voltage range: 12-33 VDC.
The transmitter inputs are separated from the network to be measured by a broadband measuring transformer. The inputs comply with the CAT III measurement category requirements.
The devices can be ordered in three versions with 6 measuring ranges, according to the type table above. Within the given type, the measuring range can be selected with the front-panel “Hi-Lo” switch. In the 5/1 AAC input version, the measuring range can be expanded with an external current transformer with a ratio of x/5 or x/1.
The inputs can be permanently overdriven up to twice the nominal measuring range.
For the I5/I1 measuring range version, the current to be measured is connected via terminals; for higher measuring ranges, the current-carrying wire must be feed-through the hole on the side of the box.
A green indicator on the front panel indicates the operating status of the device, a continuous light indicates correct operation, a flashing light indicates an error condition.
The device is designed as a 17.5 mm wide, TS-35 rail-mountable terminal housing.
The transmitters fully comply with the requirements of the EN 60688 standard.

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Technical specifications

Safety data:	
The input and output connection points of the transmitters are separated from each other, the separation complies with the requirements of the EN 61010-1 taking into account the following.	
Pollution degree:	2
Measurement category:	CAT III
Input characteristics:	
Input current:	see table on the first page
Conversion characteristic:	true RMS value
Continuous overcurrent capability:	2 × I
Short-term (1 sec.) overcurrent capability:	20 × I
Input consumption:	0.25 VA (max.)
Frequency range:	40–400 Hz
Output characteristics:	
Output current:	4–20 mA, passive
Terminal resistance:	500 ohm (max.)
Overvoltage protection:	35 V (limitier)
Overcurrent protection:	24 mA (limitier)
Settling time:	500 ms (10–90%)
Output signal error:	0.2% (max.)
Temperature dependence:	25 ppm / °C (0–60 °C)
Frequency dependence:	0.3% max. (40–400 Hz)
Supply voltage dependence	negligible
Load dependence	negligible
Power supply:	
Supply voltage:	12 – 33 VDC
Environmental conditions:	
Operating temperature range:	0–60 °C (-20–60 °C, on special order)
Relative humidity:	90% (max., non condensing)
Installation location:	instrument cabinet
Installation:	vertically (mounted on a horizontal rail)
Electromagnetic compatibility (EMC) According to EN 61326-1:	
Interference emission:	Group 1, Class B
Interference immunity:	industrial environment
General data:	
Design:	TS-35 rail-mounted terminal housing, material: polyamide PA6.6
Electrical connection (output):	screw clamp terminal
Electrical connection (input):	srew clamp terminal up to 5 AAC-ig with feed-through > 5 AAC
Connecting wire cross-section:	0.25–2.5 mm²
With feed-through:	10 mm² (≤ 40 AAC) 16 mm² (> 40 AAC)
Dimensions:	17.5 × 104 × 115 mm (width × height × depth)
Weight:	0.100...0.125 kg
Protection:	IP 20

Further technical data in the operating instructions. The manufacturer reserves the right to change individual technical data!

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