

Voltage Transducer

For the electrical measurement of Voltages: DC, AC, Pulsed ... with galvanic separation between the primary circuit and the secondary circuit.

Electrical data

I_{PN}	Primary nominal rms current	10	mA
R_{in}	Primary input resistance	1	MΩ
K_N	Conversion ratio	@ DC > 60 V	250:1
		@ AC > 100 V	270:1
U_C	Supply voltage	3...30	V

Accuracy – Dynamic performance data

t_r	Step response time	40	μs
ε_L	Linearity error	@ DC > 60 V	<0.2%
		@ AC > 100 V	<0.2%

General data

T_A	Ambient operating temperature	-25 ... 125	°C
m	Mass	50	g

Insulation coordination

U_d	Rms voltage for AC insulating test, 50Hz, 1 min	2.5	kV
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Safety

- This transducer is a build-in device, whose conducting parts must be inaccessible after installation.
- A protective housing or additional shield could be used.
- Main supply must be able to be disconnected.

Features

- Closed loop (compensated) voltage transducer
- Insulated plastic case

Principle of use

- For changing voltage gain of device, one pair of resistance must be series with high-voltage pins.

Advantages

- Excellent accuracy
- Very good linearity for voltages upper than 60 DC and 100 AC
- Low thermal drift
- Low response time
- High bandwidth

Applications

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptable power supplies (UPS)

Application domain

- Industrial

Standards

Parameter	Symbol	Unit	Value
Primary involved potential		V AC/DC	700/1000
Max surrounding air temperature	T_A	°C	90
Primary current	I_P	mA	0 to 10
Secondary Supply Voltage	U_C	V DC	3 to 30

