



# VOLTAGE MONITOR

## High Level Voltage Monitor

- ◆ Output Proportional to RMS or DC Voltage Input
- ◆ Input-Output Isolation to 1kV
- ◆ CE Marked for the EMC Directive
- ◆ Compact and Highly Competitive
- ◆ Zero and Span Adjustments



### Description

This range of isolated signal converters can accept a wide range of AC and DC voltages and provide an isolated 4-20mA output.

The device uses a true RMS input stage which allows accurate measurement of non-perfect AC waveforms.

The inputs of the device are connected directly to the power rail to be measured and the outputs, which are always in the range 4-20mA and proportional to the inputs, are connected to the data acquisition equipment. The input voltage measurements are totally isolated and protected with failsafe resistor networks.

All units offer isolation between input and output, power and input and power and output.

The output is typically a 4-20mA dc signal for connection to data acquisition systems used in railway monitoring.

To cover typical railway power supplies the following devices with the input ranges shown should be used.

### Inputs

The Input types and ranges included below are our standard ones only.

Please contact our Sales Department for details on any application not specified below.

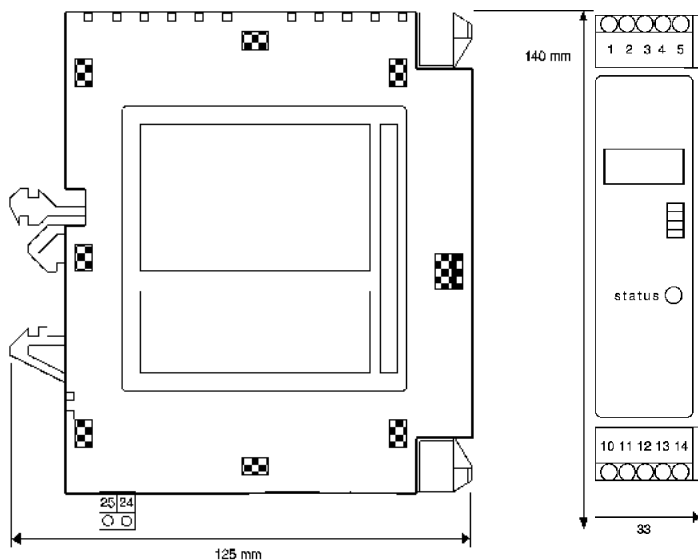
Typical Device Input Range
720 Vrms
720 Vrms
150 Vrms
500 Vdc
150 Vdc
60 Vdc
60 Vdc
60 Vdc

### Output

4-20mA into 1k $\Omega$  maximum

## Performance Characteristics

Parameter	Min	Typ	Max	Comments
Supply Voltage		24V dc		
Supply Current		50mA	100mA	Based on 24V dc supply
Response Time (0-90%)		100mS		
Output Inaccuracy		±0.03%	±0.5%	Smaller signals can be converted with less accuracy and longer response time
Operating Ambient	0°C		55°C	
Storage Temperature	-10°C		70°C	
Relative Humidity	0%		90%	
Notes	<p>Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur.</p> <p>Accuracy figures based on 24Vdc supply, 4-20mA output with 250Ω load and 20°C ambient.</p> <p>Device is protected against reverse polarity connection.</p> <p>The unit does not provide safety isolation when the input is connected to mains voltages.</p>			



## Installation Data

<b>Mounting</b>	DIN Rail TS32/35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	Approx 180g

## Connection Details

### Input

- 10 Input -ve
- 14 Input +ve

Output4 - } 4-20mA Output5 +Power24 - } Power Supply25 +

## Ordering Information

### Please supply:

<b>Part Number:</b>	VOLTCON
<b>Input Range:</b>	e.g. 750Vrms (750AC) or 60Vdc (60DC)
<b>Power Supply:</b>	24Vdc (24) 115Vac (115)

**eg Typical Part Number** VOLTCON-150AC-24  
**With 150Vac rms voltage and 24Vdc supply**

Every effort has been taken to ensure the accuracy of this specification, however we do not accept responsibility for damage, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.

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