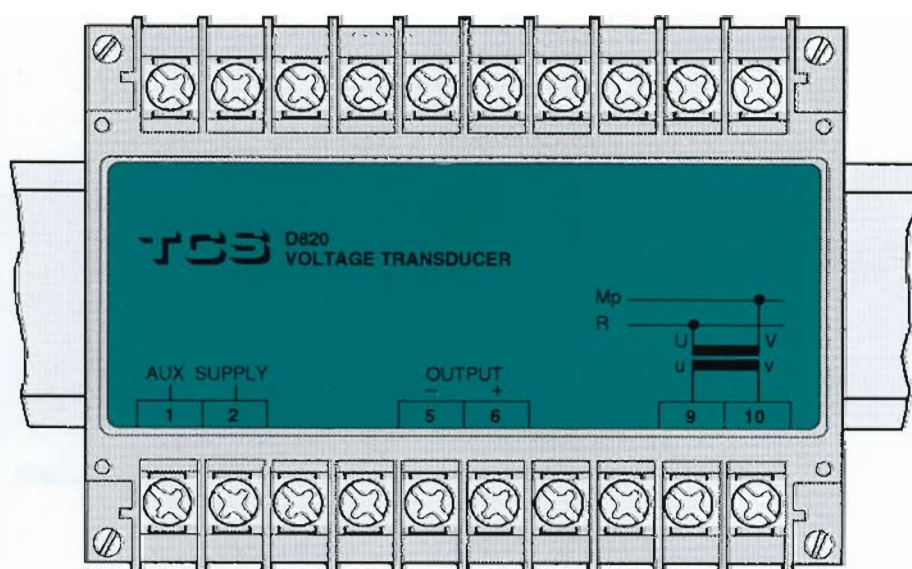


6000

SYSTEM



EUROTHERM
PROCESS
AUTOMATION



D820
AC voltage
transducer
Product
specification

Star Features

- * Fully isolated
- * Wide auxiliary power supply range
- * Choice of average or true RMS sensing
- * Current and voltage outputs with true and 'live' zero

Introduction

The D820 Voltage Transducers convert an AC voltage into a standard DC signal. This output can be proportional to either the average value of the AC signal or to the true rms value. These units are powered by a separate

auxiliary supply and thus both current and voltage outputs are available.

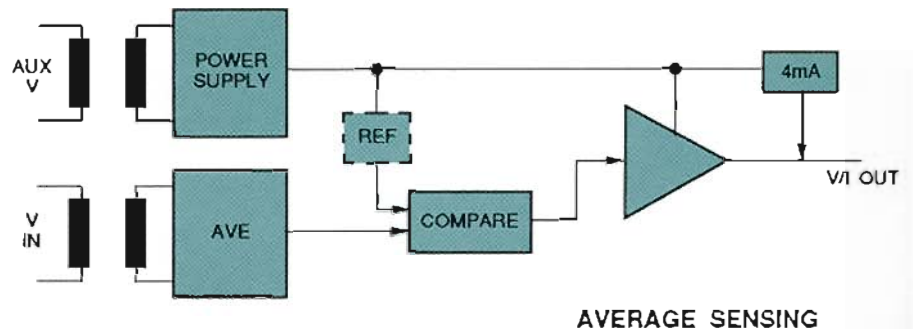
Housed in a flame retardant polycarbonate case (DIN 43604), they can be either DIN rail mounted (DIN 46277) or

fixed to a wall or bulkhead using two fixing screws. Isolation to 2kV is built in providing a very versatile unit.

Functional Description

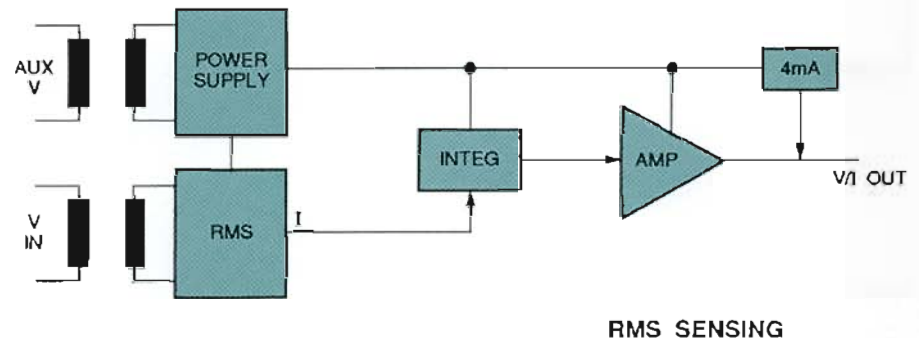
Average Sensing

The measured input is isolated and rectified to produce a proportional DC voltage. This voltage is then processed by the output amplifier to produce the required output



RMS Sensing

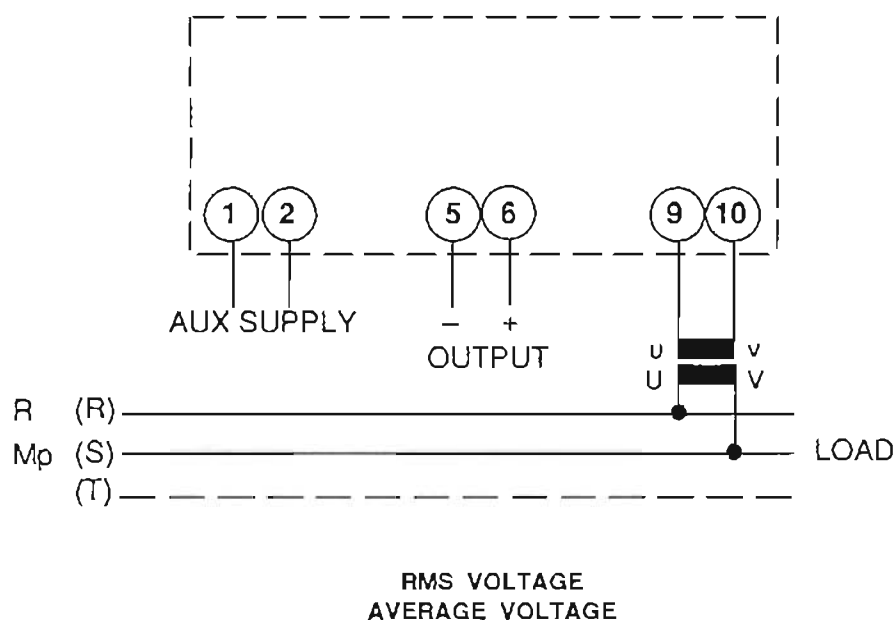
The measured input is isolated using internal transformers and directly applied to the rms section which produces a DC current output. This is actively integrated and a precision DC amplifier converts it to the required current or voltage output. Owing to this true rms capability, badly distorted waveforms and those with harmonic and noise content may be measured.



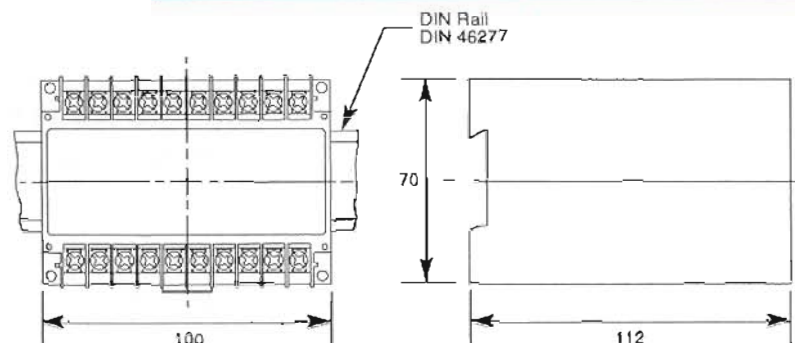
Specification

INPUTS:	0-150V 0-300V 0-500V
OVERLOAD:	0-120% continuous
BURDEN:	1.3VA approx
OUTPUTS:	0-1mA 0-5mA 0-10mA 0-20mA 4-20mA 0-10V
DRIVE CAPABILITY:	
Current	10V
Voltage	20mA
ACCURACY:	Class 1.0%
TEMPERATURE RANGE:	-10 to +60°C
TEMPERATURE DRIFT:	0.02%/°C
ISOLATION:	2kV
AUXILIARY SUPPLY:	110, 240, 415V
SUPPLY TOLERANCE:	±20%
HOUSING:	100mm DIN
WEIGHT:	455gm

Connection & Installation



Housing Details



Dimensions in mm

Ordering Information

Description		Order Code
AC Voltage Transducer		D820
Measurement Type:	(a) RMS (b) Average	RMS AVE
Input Range:	(a) 60V (b) 150V (c) 300V (d) 500V	60V 150V 300V 500V
Auxiliary Supply		AUX
Range:	(a) 110V (b) 240V (c) 415V	110V 240V 415V
Output Type		OP
Output Range and Units:	(a) 0-1mA into 10K (b) 0-5mA into 2K (c) 0-10mA into 1K (d) 0-20mA into 500R (e) 4-20mA into 500R (f) 0-10V into 2K minimum	0-1mA 0-5mA 0-10mA 0-20mA 4-20mA 0-10V
Labelling:	Blank Tagging	— T

Example: D820/RMS/300V/AUX/415V/OP/0-10mA

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