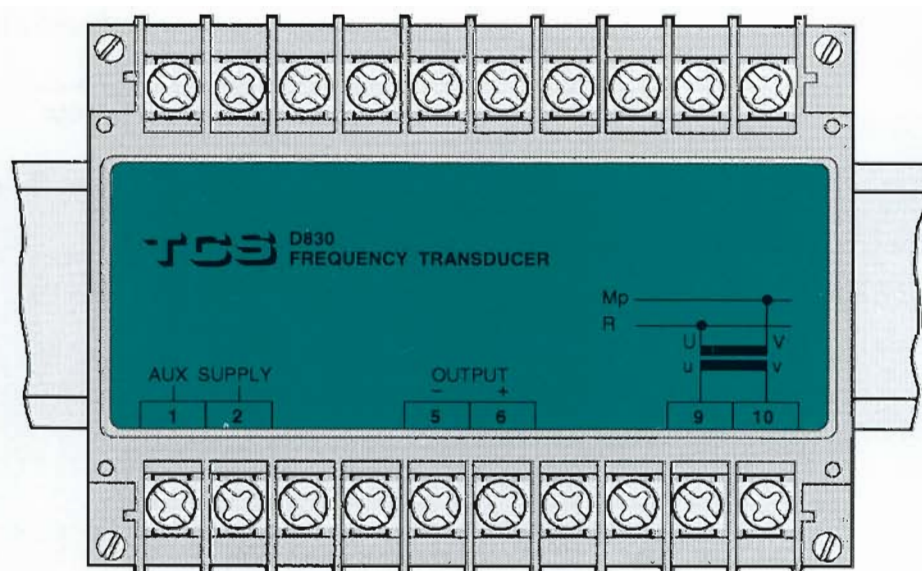


6000

SYSTEM



EUROTHERM
PROCESS
AUTOMATION



D830
AC frequency
transducer

Product
specification

Star Features

- * Fully Isolated
- * High accuracy Class 0.2%
- * Current and voltage output options
- * DIN rail or wall mounting

Introduction

The D830 Frequency Transducer measures the frequency of an AC signal and provides a proportional DC signal output which is completely isolated. Current and voltage output options are available with true and 'live' zeros.

High accuracy and stability with a high level of immunity to spikes and distorted waveforms are features of this unit. The output is suitable for driving meters, digital instruments, computer inputs and process control systems.

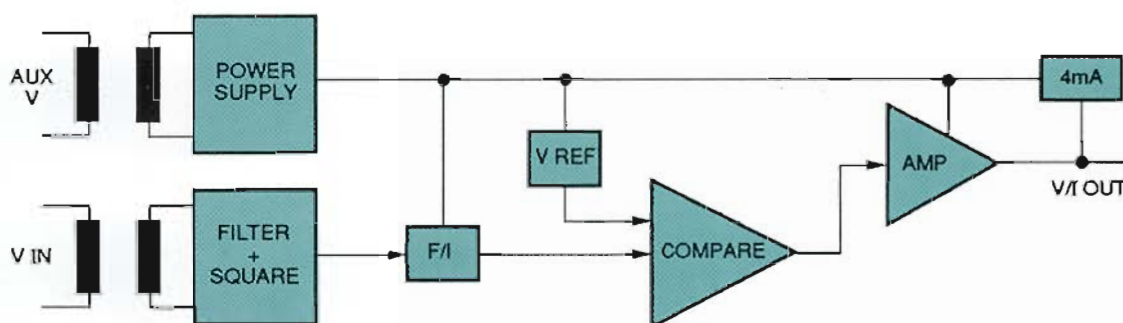
Housed in a flame retardant polycarbonate case (DIN 43604), it can be either DIN rail mounted (DIN 46277) or fixed to a wall or bulkhead using two fixing screws. Isolation to 2kV is built in, providing a very versatile unit.

Functional Description

The measured input is isolated via internal transformers, filtered, squared-up and offered to a precision frequency-to-current converter.

The current is then amplified and compared to an accurate reference. An output amplifier then converts the

resultant signal into the required current or voltage output.



FREQUENCY TRANSDUCER

Specification

INPUTS:

Frequency Ranges: 45-55Hz
45-65Hz
55-65Hz
360-440Hz

Voltage: 100-480V

Burden: 1.3VA

OUTPUTS:

0-1mA
0-5mA
0-10mA
0-20mA
4-20mA
0-10V

DRIVE CAPABILITY:

Current outputs 10V
Voltage outputs 20mA

ACCURACY:

Class 0.2% of mid-frequency

TEMPERATURE RANGE:

-10 to +60°C

TEMPERATURE DRIFT:

0.03%/°C

ISOLATION:

2kV

BURDEN :

1.8VA

AUXILIARY SUPPLY:

110, 240V $\pm 20\%$ 415V $+15\%$ -20%

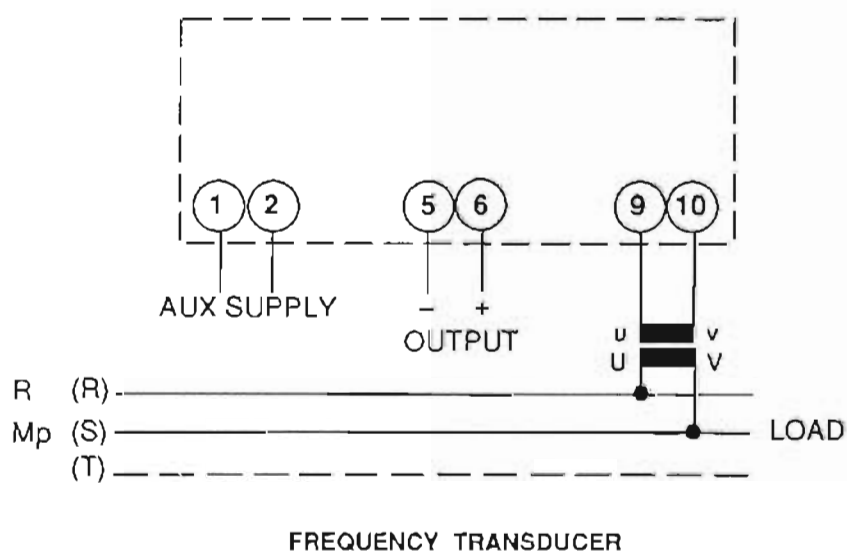
HOUSING:

100mm DIN

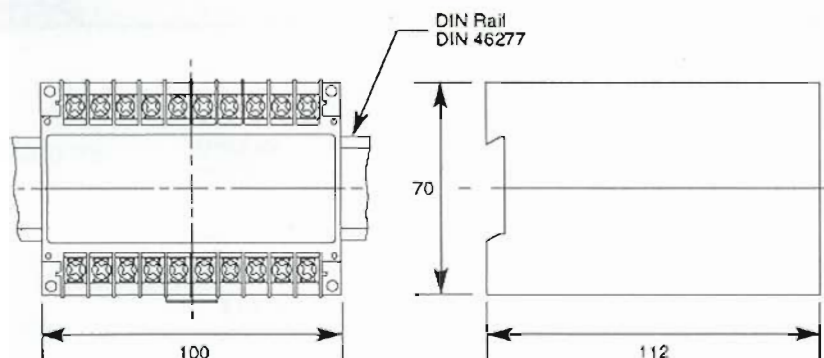
WEIGHT:

430gm approx

Connection & Installation



Housing Details



Dimensions in mm

Ordering Information

Description		Order Code
AC Frequency Transducer		D830
Input Type		FREQ
Input Range:	(a) 45-55 Hz (b) 45-65 Hz (c) 55-65 Hz (d) 360-440Hz	45-55Hz 45-65Hz 55-65Hz 360-440Hz
Voltage Input:	100-480V specify voltage e.g. 240V	240V
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:	(a) Blank (b) Tagging	— T

Example: D830/FREQ/45-55Hz/240V/AUX/240V/OP/4-20mA/T

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