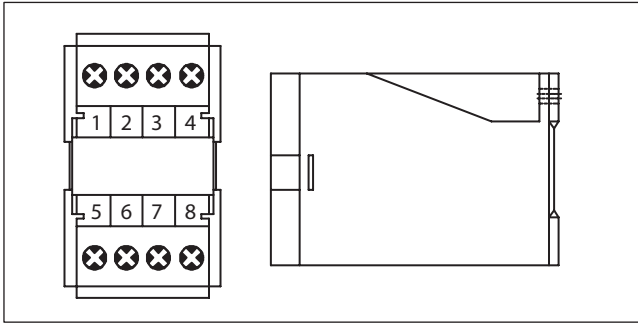


AC CURRENT TRANSDUCER

MODEL : DA - 1 / DA - 1T



FEATURES

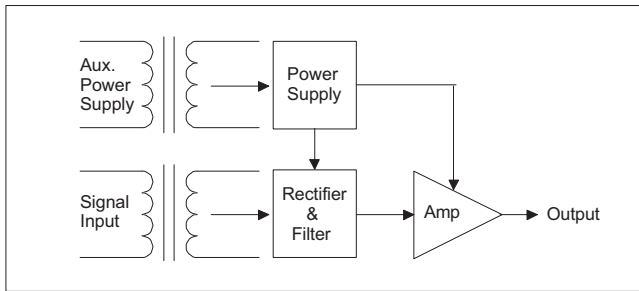
- Accuracy $\pm 0.2\%$ RO.
- Excellent long term stability (4~20mA, 750 Ω)
- Precision measurement even for distorted wave (DA-1T, DV-1T)
- High impulse & surge protection (5KV)
- The case can be mounted on a 35mm rail which complies with DIM 46277

DESCRIPTION

Model DA-1 for current input (AVG.)
DA-1T for current input (TRMS)

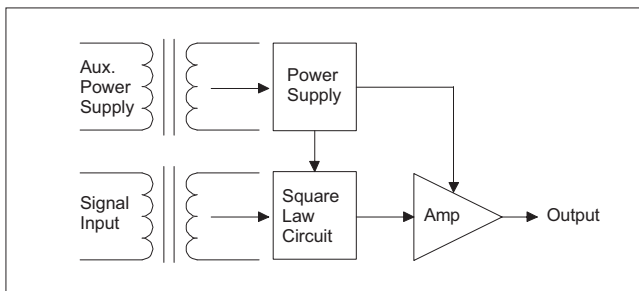
Sinusoidal Waveforms - AVG

DA-1 Transducer converting a sinusoidal alternating current or voltage into a dc output, proportional to the RMS value of input. These units are average sensing, but RMS calibrated for a sine wave with less than 1% distortion. The input signal is converted to a dc voltage which then feeds to a single stage amplifier and a dc output produced.

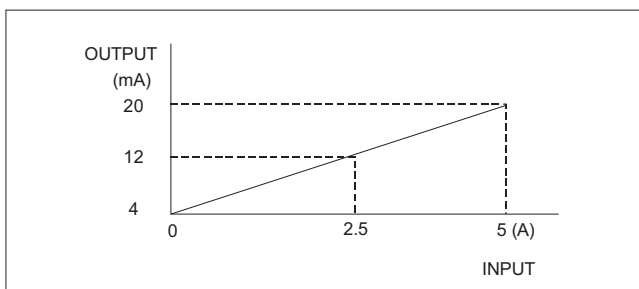


Non-Sinusoidal Waveforms - TRMS

DA-1T Transducer are designed for use on waveforms with up to 30% of 3rd harmonic content. The input signal is fed to an RMS detection circuit and the resultant dc volts produced are a linear function of the RMS value of input waveform. This dc voltage is converted to a milliamp output via an output amplification circuit



INPUT-OUTPUT CURVE



SPECIFICATION

INPUT

Model	Input Range	Input Burden	Input Frequency	Max. Input Over Capability
DA-1 (AVG.)	0~1A	$\leq 0.1VA$	50Hz \pm 3Hz	3 rated continuous
DA-1T (TRMS)	0~5A		or 60Hz \pm 3Hz	10 rated 10sec 50 rated 1sec

OUTPUT

DC output Range	Load Resistance	Output Resistance	Output Ripple	Response Time
0 ~ 1V	$\geq 500\Omega$	$\leq 0.05\Omega$	$\leq 0.5\%$ RO. (peak)	$\leq 400ms$ 0~99%
0 ~ 5V	$\geq 500\Omega$			
1 ~ 5V	$\geq 500\Omega$			
0 ~ 10V	$\geq 500\Omega$			
0 ~ 1mA	0 ~ 15K Ω	$\geq 20M\Omega$		
0 ~ 10mA	0 ~ 1500 Ω	$\geq 5M\Omega$		
0 ~ 20mA	0 ~ 750 Ω			
4 ~ 20mA	0 ~ 750 Ω			

Remark : If DC SOURCE, the output : 0 ~ 1mA (0~10K Ω)
0 ~ 10mA (0~1K Ω)
0 ~ 20mA (0~500 Ω)
4 ~ 20mA (0~500 Ω)

Accuracy :

Aux. Power supply :

Power effect :

Power consumption :

Waveform effect :

Output load effect :

Magnetic field strength :

Span adjustment range :

Zero adjustment range :

Operating temperature range :

Storage temperature range :

Temperature coefficient :

Max. relative humidity :

Isolation :

Insulation resistance :

Dielectric withstand voltage ;

(IEC 414, 688, ANSI, C37)

Impulse withstand test :

(IEC 255-4, ANSI C37 90a)

Performance :

Safety requirements :

$\pm 0.2\%$ Rated of Output

AC 110V $\pm 15\%$, 50/60Hz

AC 220V $\pm 15\%$, 50/60Hz

DC24V, 48V, 110V, +15%, -10%

$\leq 0.1\%$ RO

$\leq 2.5VA$, $\leq DC 3W$

$\leq 0.2\%$ RO, at distortion factor 30% (DA-1T)

current output $\leq 0.1\%$ RO.

voltage output $\leq 0.05\%$ RO.

400A/M. $\leq 0.2\%$ RO.

$\geq 5\%$ RO

$\geq 1\%$ RO

0 ~ 60 $^{\circ}C$

-10~70 $^{\circ}C$

$\leq 100PPM$ from 0 to 60 $^{\circ}C$

95%

Input/output/power/case

$\leq 100M\Omega$, DC 500V

Between input/output/power/case

AC 3KV, 60Hz, 1min

5KV, 1.2x50 μs

Common mode & differential mode

Designed to comply with IEC688

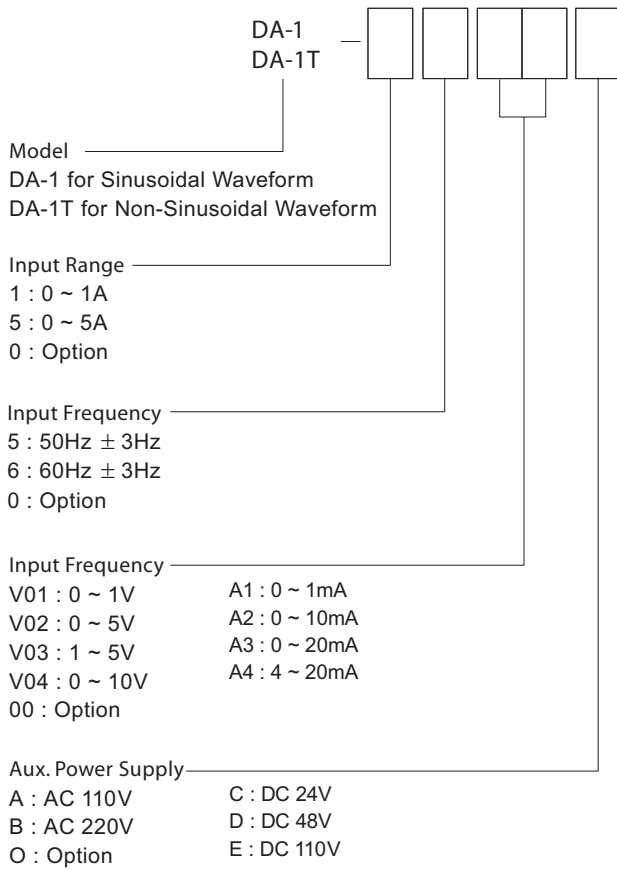
IEC 414, BS5458

AC CURRENT TRANSDUCER

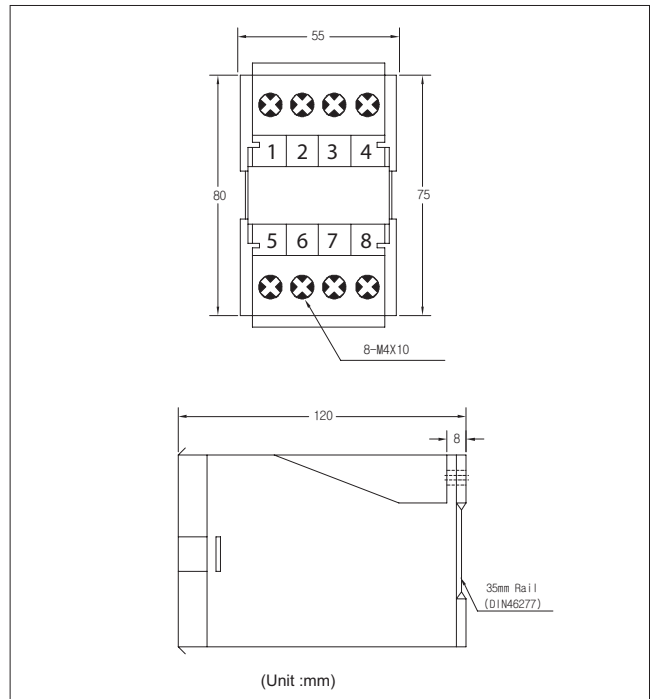
MODEL : DA - 1 / DA - 1T

ORDERING MODEL MAKE UP

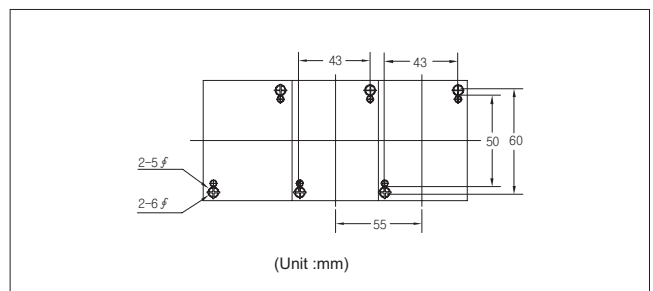
· CURRENT TRANSDUCER



THE OUTSIDE DIMENSION



PANEL MOUNTING HOLES



CONNECTION DIAGRAM

DA-1, DA-1T

