

AC Current Input 2 Wire Transmitter APT-35L

Function: The APT-35L will convert a selected AC Signal into a proportional, linear and highly accurate 4 to 20mA current output signal. An internal transformer isolates the input from the output enabling the transmitter to withstand large momentary inputs. The input to output isolation, high surge current capability and high output signal-to-noise ratio makes the transmitter highly immune to ground loop signals and RFI problems. Site calibration is performed by means of Zero and Span multiturn potentiometers for fine tuning. The transmitter is equipped with a test terminal that enables the user to measure the output current without breaking the current loop. The test terminal gives a voltage output (measured across an internal 10 ohm resistor) proportional to the output current. The transmitter is housed in polycarbonate plastic enclosures suitable for mounting on DIN rail.



AlphaPOWER Range

SPECIFICATIONS

INPUTS:

AC Current

0 to 1 Amp AC, and
0 to 5 Amp AC

Customer selects the required range by wiring to different input terminals

Input Burden

0.1VA @ 1 Amp AC input

Frequency Range

40 to 500 Hz

Frequency Variation Effect

< ±0.02% / Hz

Calibration

Coarse: 1 resistor

Fine: 2 multiturn potentiometers

Zero: ±20% of span minimum

Span: ±15% of span minimum

OUTPUTS:

DC Current

4 to 20mA

Test Terminals (7 & 9)

40 to 200mV DC representing
4 to 20mA

Loop Drive Capability

$R_L \text{ max} = (V_{\text{SUPPLY}} - 8) / 0.02$

i.e.	V_{SUPPLY}	$R_L \text{ MAX}$
	12 Volts	200 ohms
	24 Volts	800 ohms
	32 Volts	1200 ohms

Output Ripple

< 0.1% of span RMS

Isolation

2500 Volts RMS / 1 minute

SUPPLY:

Power Supply Voltage

8 to 32 Volt DC
reverse polarity protected

Supply/Load Variation Effect

< ±0.05% of span for 0 to 1K ohm
change at 28 volt supply

GENERAL:

Accuracy (for 2 to 100% of Input)

Better than ±0.1% of span for pure sinusoidal input

Temperature Coefficient

±0.1% of span/Δ10°C

Response Time

200mS time constant

Operating Temperature Range

0 to +50°C

Storage Temperature Range

-20 to +60°C

Operating/Storage Humidity Range

5 to 95% RH non-condensing

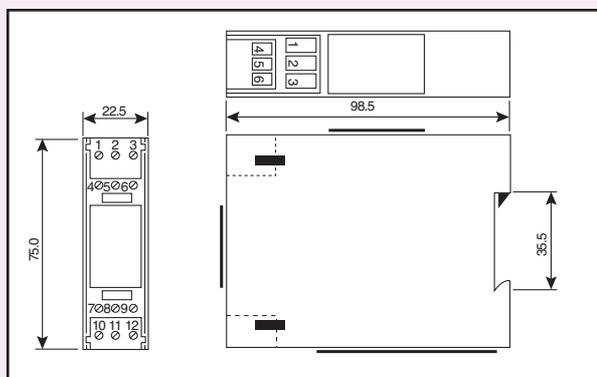
Mounting

Standard 35mm DIN rail

Weight

APT-35L 140 gms

MECHANICAL DETAILS



TERMINATION DETAILS

Terminal

- | | | | |
|---|--------------------------|---|-----------------------------|
| 1 | Unused | 7 | Test Point +ve |
| 2 | Unused | 8 | Output and Supply +ve |
| 3 | Unused | 9 | Output / Supply / Test five |
| 4 | --- 4 to 5 0 to 1 Amp AC | | |
| 5 | --- Current Input | | |
| 6 | --- 5 to 6 0 to 5 Amp AC | | |

ORDERING DETAILS

(a) Give identification code, i.e. APT-35L



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