

AC Current transducer AP-B420L

Split core transducer for the electronic measurement AC waveforms current, with galvanic isolation between the primary (High power) and the secondary circuits (Electronic circuit). Switch selectable ranges and RMS 4-20mA current output.





ARE	PANT		
Ele	ectrical data		
	Nominal Current (A.t.RMS)	Analogue Output Signal I _{ouт} (mA)	Туре
10,2	25,50	4-20	AP 50 B420L
50,75,100		4-20	AP 100 B420L
100,150,200		4-20	AP 200 B420L
200	,300,400	4-20	AP 400 B420L
R _L	Load resistance (See the graph "Load Resistance vs. Supply Voltage") Supply voltage (loop powered) Limitation of output current		+12 24 V DC < 25 mA
Aco	Overloaded input	performance data	no limitation
X	Accuracy @ I _{DN} , T	= 25°C (without offset)	< ±1 % of I _{PN}
$\mathbf{e}_{_{\perp}}$	Linearity (0 ± I _{PN})		$< \pm 0.5$ % of I_{PN}^{FN}
I _{OE}	Electrical offset cu		4 mÅ
I _{OT}	Thermal drift of I _{OE}		±1 μΑ/Κ
ŤĊΛ		: (0/ -f)	.04 0//1/

General data					
T _△	Ambient operating temperature	-20 +60	°C		
$T_{\rm s}$	Ambient storage temperature	-20 +85	°C		
m	Mass	90	g		
	Protection type	IP20			
dCp	Creepage distance	5.5	m m		
dCl	Clearance distance	5.5	m m		
CTI	Comparative tracking index (Group I)	600	V		
	UL94 classification	V0			

Insulation category

Rated Voltage 300 with IEC 61010-1 standards and following conditions:

- Single insulation
- Over voltage category CAT III

Thermal drift of the gain (% of reading)

Response time @ 90% of Ip

Frequency bandwidth (±1%)

- Pollution degree PD2
- None uniform field

V _d	R.m.s. voltage for AC insulation test, 50Hz, 1mn	5	k۱
V ຼ	R.m.s. voltage for partial discharge extinction @ 10pC	1.5	k٧
V _w	Peak impulse withstand voltage 1.2/50μs	6.1	k۱
	If insulated cable is used for the primary circuit, the volt	age category	

could be improved with the following table:

Cable insulation (primary)

HAR 05

HAR 07

Category

600V CAT III

1000V CAT III

Notes: Installation and maintenance should be done with power supply disconnected. The operator must have accrediation to install this material.

The users must take care of all protection gurantee against electrical shock.

 $I_{PN} = 10 ... 400 A$



Features

- RMS output
- Split core type
- Loop powered 4-20mA current output
- DIN mounting & Panel mounting
- · Eliminates insertion loss
- Switch selectable ranges

Advantages

- Large aperture for cable up to Ø18mm
- High isolation between primary and secondary circuits
- Easy to mount

±0.1

< 150

30 .. 2000

%/K

ms

Hz

Applications

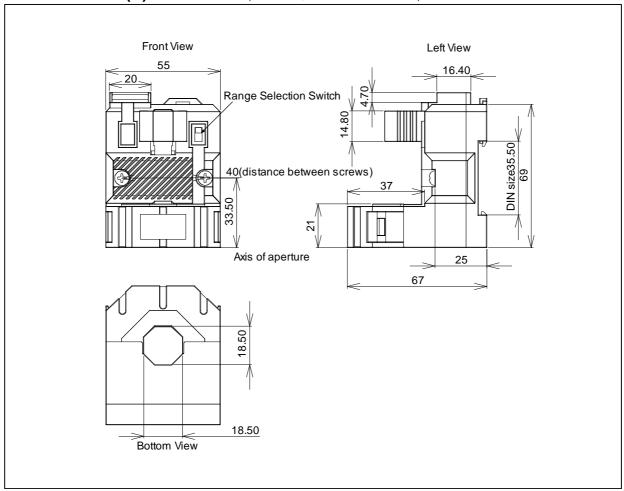
- Automation systems
 Analog current reading for remote monitoring (e.g. motor) and software alarms.
- Panelmeters
 Simple connection displays power consumption.

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Mechanical characteristics

General tolerance ±1 mm
 Primary aperture Ø 18.5 mm
 Panel mounting 2 holes Ø 4.0 mm

• Distance between holes 40.0 mm

For panel mounting, replace M4 screws by new one (not supplied) with appropriate length to panel s thickness.

Connections

Wires up to 2 mm Ø

