

AC Current transducer APR-B420L

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





Preliminary

Electr	ical data			
Primary Nominal Current I _{PN} (A.t.RMS)		Analogue Output Signal I _{out} (mA)	Туре	
10,25,50		4-20	APR 50 B420L	
50,75,100		4-20	APR 100 B420L	
100,150,200		4-20	APR 200 B420L	
200,300,400		4-20	APR 400 B420L	
R L Vc V _d	Load resistance Supply voltage (loop powered) R.m.s. voltage for AC isolation test, 50/60Hz, 1 mn Limitation of output current		< 350 +24 5 < 25	Ω V DC kV mA

Accuracy-Dynamic performance data				
x	Accuracy @ I_{PN} , $T_{A} = 25^{\circ}C$ (without offset)	< ±1 % of I _{PN}		
e	Linearity $(0 \pm I_{PN})$	< ±0.5 % of I _{PN}		
	Electrical offset current, $T_A = 25^{\circ}C$	4 mA		
I _{OT}	Thermal drift of I _{OE}	±1 μΑ/Κ		
I _{OE} I _{OT} TC C G	Thermal drift of the gain (% of reading)	±0.1 %/K		
t,	Response time @ 90% of I_{P}	<1000 ms		
f	Frequency bandwidth (-3 dB)	106000 Hz		

General data						
T _A	Ambient operating temperature	-20+60	℃ ℃			
T _s m	Ambient storage temperature Mass	-20 +85 90	g			
	Protection type	IP20	9			
	Reliable isolation according to EN50178, EN61010	300	VAC			
	Creepage distance	>5.5	mm			
	EMC in accordance with EN50082-2					
	Plastic according to UL94V0, CTI 1					

I_{PN} = 10 ... 400 A



Features

- VFD and SCR waveforms current measurement
- True 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

Applications

- VFD Controlled Loads: VFD output indicates how the motor and attached load are operating.
- SCR Controlled Loads: Acurate measurement of phase angle fired or burst fired (time proportioned) SCRs. Current measurement gives faster response than temperature measurement.
- Switching Power Supplies and Electronic Ballasts:

True RMS sensing is the most accurate way to measure power supply or ballast input power.

Notes : Installation and maintenance should be done with power supply disconnected.

Dimensions AP(R)-B420L

(unit : mm, 1mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ±1 mm
- Primary aperture Ø 18.5 mm
- Panel mounting 2 holes \varnothing 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

 \bullet Wires up to 2 mm \varnothing



LEM reserves the right to carry out modifications on its transducers, in order to improve them, without previous notice.