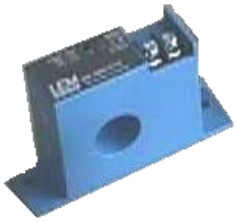
AC Current transducer AK-C420L

I_{PN} = 2 .. 200 A

Transducer for the electronic measurement AC sinusoidal waveforms current, with galvanic isolation between the primary (High power) and the secondary circuits (Electronic circuit). Jumper selectable ranges and 4-20mA current output.



Electrical data

Primary Nominal Current I_{PN} (A.t.RMS)	Analogue Output Signal[1] I_{OUT} (mA)	Type	RoHS Date Code
2, 5	4-20	**AK 5 C420L**	MAY 2006
10, 20, 50	4-20	**AK 50 C420L**	MAY 2006
100, 150, 200	4-20	**AK 200 C420L**	planned

Vc	Supply voltage (Loop powered)	24	V DC
R_L	Load resistance	see power supply diagram	
V_b	Rated voltage (CAT III, PD2)	150	V AC
V_d	RMS Isolation voltage test, 50 Hz, 1mn	3	kV AC
f	Frequency bandwith	20-100	Hz

Accuracy - Dynamic performance data

X	Accuracy @ I_{PN}, T_A=25°C	± 1	%
t_r	Response time @ 90% of I_{PN}	< 300	ms

General data

T_A	Ambient operating temperature (0-95% RH)	-20..+50	°C
T_S	Ambient storage temperature	-20..+85	°C
m	Mass	120	g
	Safety	IEC 61010-1	
	EMC	EN 61326	

Note: [1] For 4-20mA output model, no saturation output up to 25 mA.

Features

- AC sinusoïdal Measurement
- Average responding
- Current output
- Loop powered transducers
- Panel mounting
- Accurate
- Jumper selectable ranges

Advantages

- Large aperture
- High isolation between primary and secondary circuits
- Easy to mount

Applications

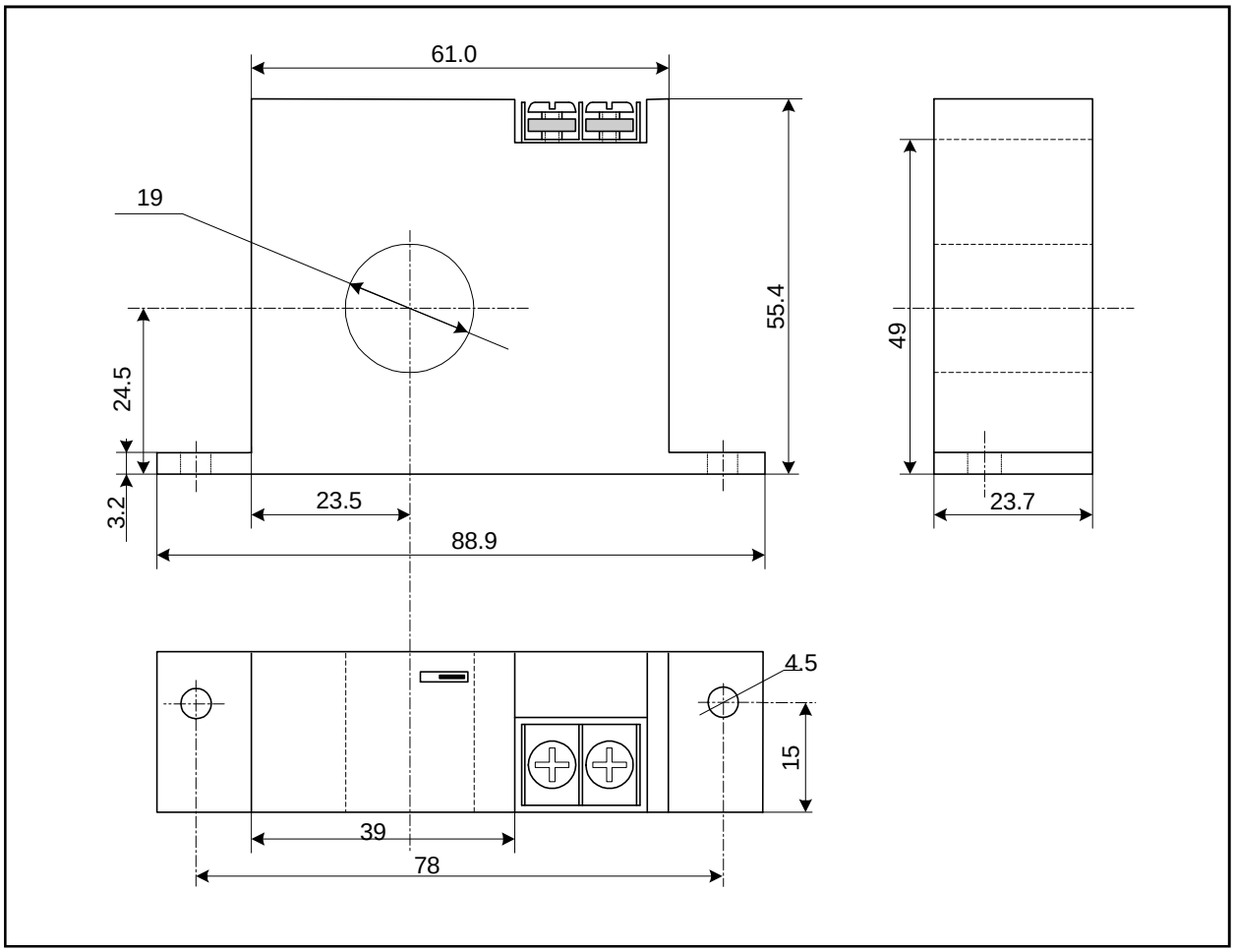
- Automation systems
  Analog current reading for remote monitoring (e.g. motor).
- Data loggers
  Self-powered transducer does not drain data logger batteries.
- Panel meters
  Simple connection displays power consumption.

Options on request

- DIN mounting

Dimensions AK-C420L

(unit : mm, 1mm = 0.0394 inch)



Mechanical characteristics

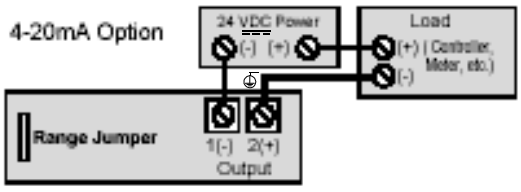
- General tolerance ± 1 mm
- Primary aperture 19 mm
- Panel mounting 2 holes ∅ 4.5mm
  Distance between holes 78 mm

Remark

- Temperature of the primary conductor should not exceed 60°C.

Connections

- 2 x UNC8 Cylindric Head



Notes: - Captive screw terminals.
- 12-22 AWG solid or stranded.
- Observe polarity.

Power Supply diagram