

AC Current transducer AK-B420L

$I_{PN} = 2 \dots 200A$

A Split Core 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 B420L | JULY 2006 |
| 10,20,50 | 4-20 | AK 50 B420L | MAY 2006 |
| 100,150,200 | 4-20 | AK 200 B420L | planned |
| V_c | Supply voltage (Loop powered) | 24 | V DC |
| R_L | Load resistance | see power supply diagram | |
| V_b | Rated voltage (CAT III, PD2) | 150 | VAC |
| V_d | RMS Isolation voltage test, 50 Hz, 1mn | 3 | kV AC |
| f | Frequency bandwidth | 20-100 | Hz |

Features

- AC sinusoidal measurement
- Average responding
- Split core box
- Current output
- Loop powered transducers
- Panel mounting
- Jumper selectable ranges

Advantages

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

Accuracy - Dynamic performance data

| | | | |
|-------|--|---------|----|
| X | Accuracy @ I_{PN} , $T_A=25^\circ C$ | ± 1 | % |
| t_r | Response time @ 90% of I_{PN} | < 300 | mS |

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.

General data

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

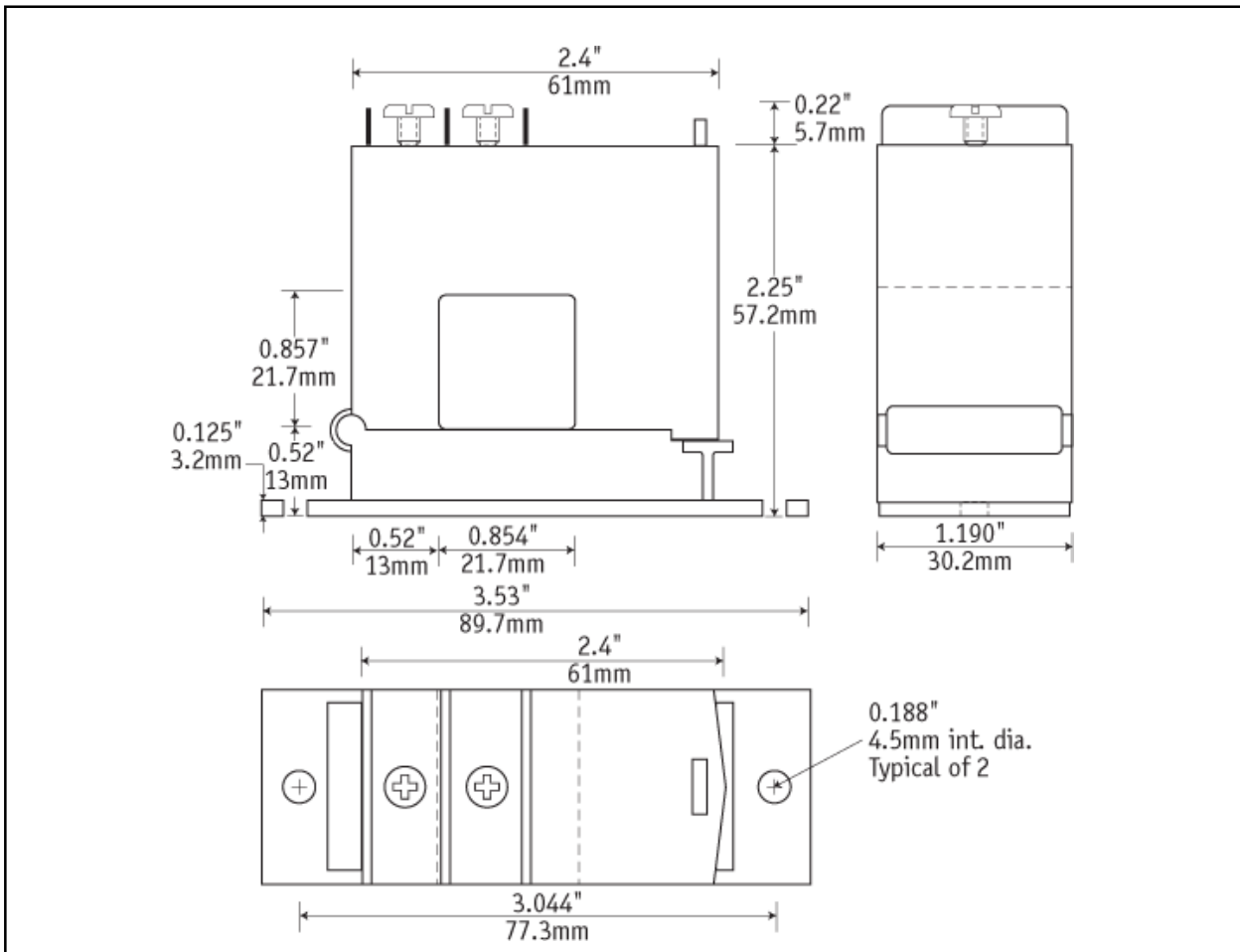
Options on request

- DIN mounting

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

Dimensions AK-B420L

(unit : mm, 1mm = 0.0394 inch)

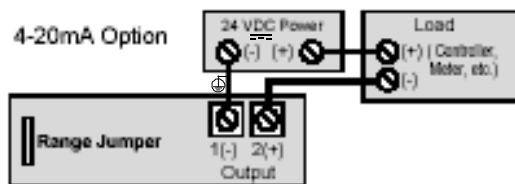


Mechanical characteristics

- General tolerance ± 1 mm
- Primary aperture 21.7 mm sq.
- Panel mounting 2 holes \varnothing 4.5mm
- Distance between holes 77.3 mm

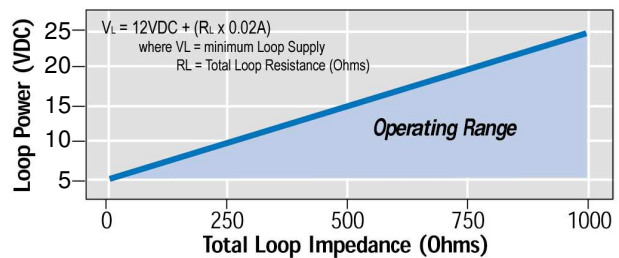
Connections

- 2 x UNC8 Cylindric Head



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

Power Supply diagram



Remark

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