

AC Current transducer AK-C-

$I_{PN} = 10 \dots 200 \text{ A}$

Transducer for the electronic measurement of AC sinusoidal waveforms, with galvanic isolation between the primary (High power) and the secondary circuits (Electronic circuit). Jumper selectable ranges and self powered transducers.



Electrical data

Primary Nominal Current	Analogue Output Signal ¹⁾	Type	RoHS Date code
I_{PN} (A.t.RMS) 10,20,50	V_{OUT} (V DC) 5	AK 50 C5	planned
10,20,50	10	AK 50 C10	MAY 2006
100,150,200	5	AK 200 C5	planned
100,150,200	10	AK 200 C10	JUNE 2006

Parameter	Value	Unit
V_C Supply voltage	Self Powered	
R_L Load resistance	1	MΩ
V_b Rated voltage (CAT III, PD2)	150	V AC
V_d RMS Isolation voltage test, 50 Hz, 1mn	3	kV AC
f Frequency bandwidth	50-60	Hz

Features

- AC sinusoidal measurement
- Average responding
- Self powered transducers
- Panel mounting
- Voltage output
- Jumper selectable ranges

Advantages

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

Accuracy - Dynamic performance data

Parameter	Value	Unit
X Accuracy @ $I_{PN}, T_A=25^\circ\text{C}$	± 1	%
t_r Response time @ 90% of I_{PN}	< 100	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

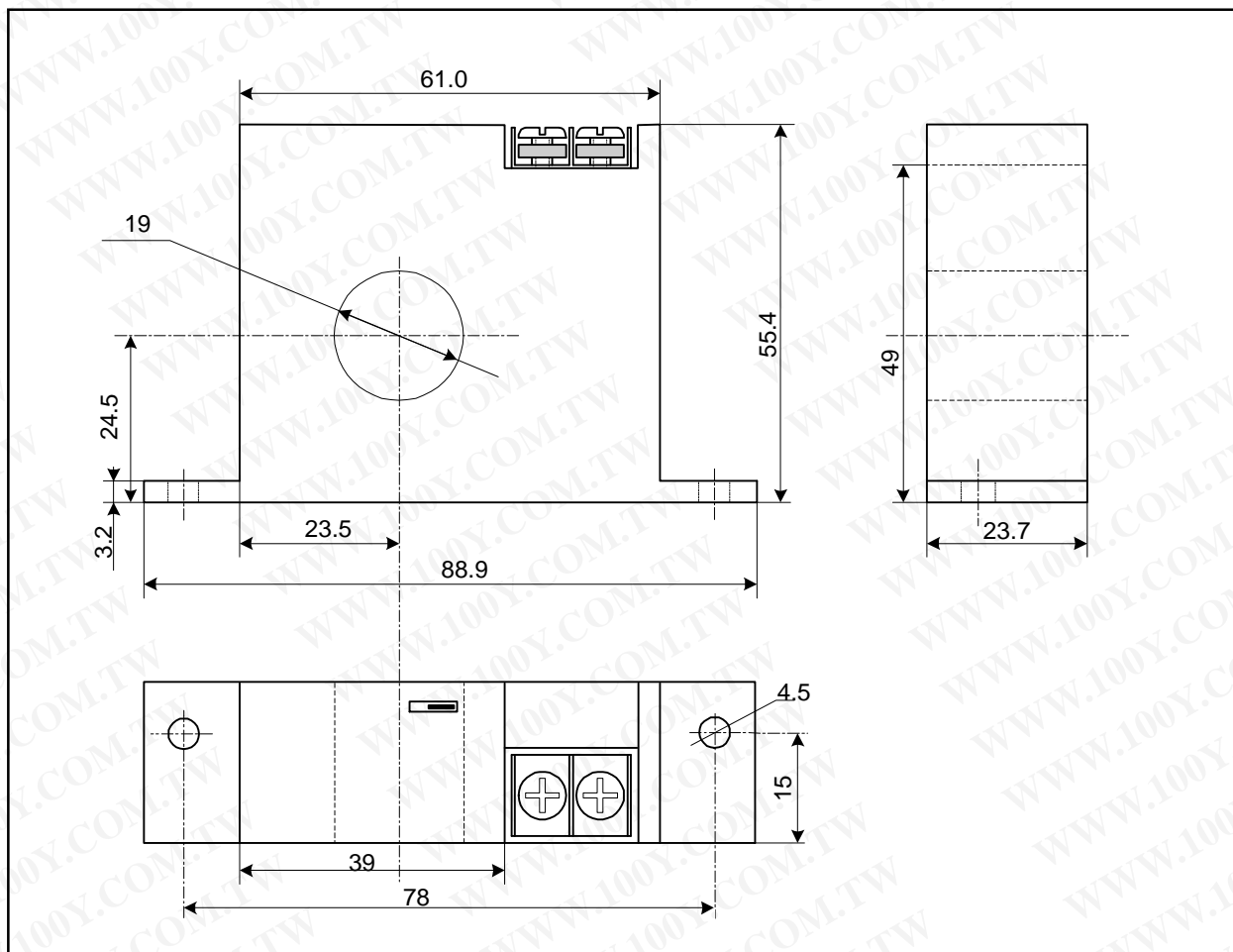
Parameter	Value	Unit
T_A Ambient operating temperature (0-95% RH)	- 20 ..+ 50	°C
T_S Ambient storage temperature	- 20 ..+ 85	°C
m Mass	120	g
Safety	IEC 61010-1	
EMC	EN 61326	

Options on request

- DIN mounting

Note : ¹⁾ For 0-5 V output model, no saturation output up to 8.2 V and for 0-10 V output model, no saturation output up to 15 V.

Dimensions AK-C- (unit : mm, 1mm = 0.0394 inch)



Mechanical characteristics

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

Remark

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

Connections

- 2 x UNC8 Cylindric Head

