AKS - C SDT -
Ground Fault Sensors

I_{PN} = 5 .. 950 mA

Combine a current transformer, signal conditioner and a mechanical relay into a single package. The AKS series has an extended current input range, universal solid-state outputs and a wide frequency response. The output state is Normally Open.

Electrical data

I_P	Primary current		5 .. 950	mA AC
S	Output signal	Relay :	1 A @ 125 V AC, 2 A @ 30 V DC[1)]	
f	Frequency range		50-400	Hz
V_C	Supply voltage (Operates 55-110% of V_C)			
	AKS - C SDT 120 FS		120	V AC
	AKS - C SDT 120 NF		120	V AC
	Supply voltage (Operates +/-10% of V_C) :			
	AKS - C SDT 24U FS		24	V AC/DC
	AKS - C SDT 24U NF		24	V AC/DC
V_b	Rated voltage (CAT III, PD2)		150	V AC
V_d	R.m.s. voltage for AC isolation test, 50 Hz, 1 mn		3	kV

Accuracy - Dynamic performance data

t_r	Response time @ 105 % of $I_{P\ adj}$	200	ms
	@ 150 % of $I_{P\ adj}$	60	ms
	@ 600 % of $I_{P\ adj}$	15	ms

General data

T_A	Ambient operating temperature	- 15..+ 70	°C
m	Mass	140	g
	Safety	IEC 61010-1	
	EMC	EN 61326	

Options

FS Normally Energized: Protection from faults and loss of control power.
NF Normally Deenergized: Protection from faults only when control power is applied

		Control power applied	
	No Power	No fault	Fault
FS	Open	Closed	Open
NF	Open	Open	Closed

Notes : $I_{p\ adj}$: Setpoint current adjusted by the user
[1)] Low level considered < 12 V DC.

Features

- Auto reset operation outputs.
- SPDT relay
- Factory adjusted setpoint.
- Compatible with Standard Equipment
  Works on 1 phase or 3 phase power. Controls standard shunt trip breakers or contactors. Tie into Emergency Circuits (EMO/EPO).
- Isolated
  Magnetically isolated from the monitored circuit and control power.

Applications

Regulatory Approval
Meet requirements by industry groups and governments for Ground Fault Protection.

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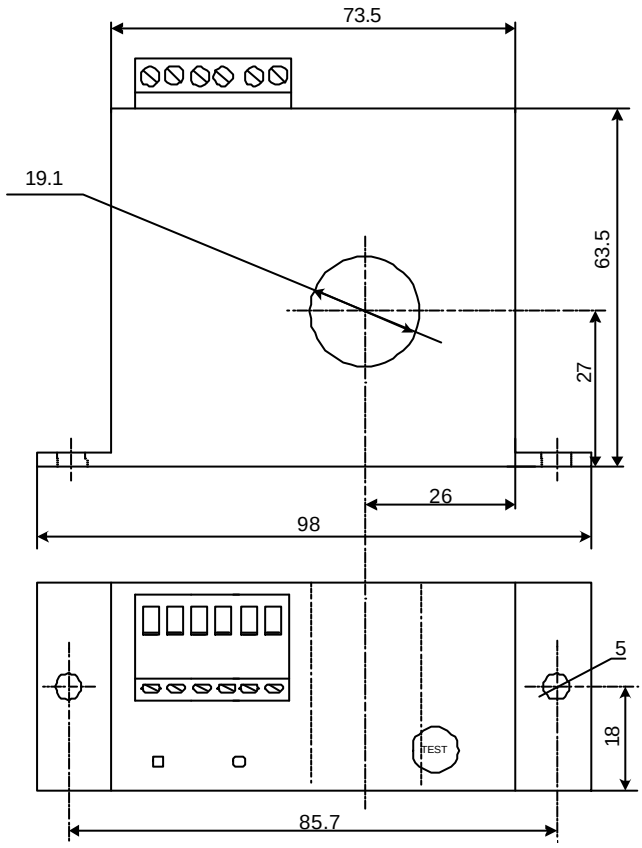
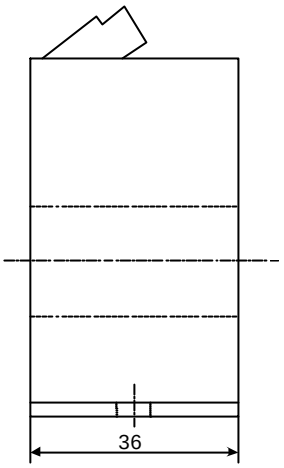
Dimensions AKS - C SDT - (in mm. 1 mm = 0.0394 inch)

Front view



Left view



Top view

Connection

• Connection of secondary	2 x UNC8 Cylindric Heads

Mechanical characteristics

• General tolerance	± 1 mm
• Fastening	2 holes ∅ 4.5mm
• Primary through-hole	∅ 19 mm

Remarks

- Temperature of the primary conductor should not exceed 60°C.
- Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.