

AKS 0.03 C SDT - Groud Fault Sensors

$I_{PN} = 5, 10, 30 \text{ mA}$

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 (with manual jumper)	5, 10, 30 ¹⁾	mA AC
S	Output signal	Relay: 0.5 A @ 125 VAC, 2 A @ 30 ²⁾	VDC
f	Frequency range	50-400	Hz
V_c	Supply voltage (Operates 55-110% of V_c)		
	AKS 0.03 C SDT 120 FS	120	V AC
	AKS 0.03 C SDT 120 NF	120	V AC
	Supply voltage (Operates +/-10% of V_c):		
	AKS 0.03 C SDT 24U FS	24	V AC/DC
	AKS 0.03 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 $I_{p \text{ adj}}$	200	ms
	@ 150 % of $I_{p \text{ adj}}$	60	ms
	@ 600 % of $I_{p \text{ adj}}$	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

Features

- Operation to Match Your Application: Auto-Reset—For controlling shunt trip breakers.
- SPDT relay
- Tri-Set—Field select 5, 10 or 30mA. Fast and convenient.
- 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

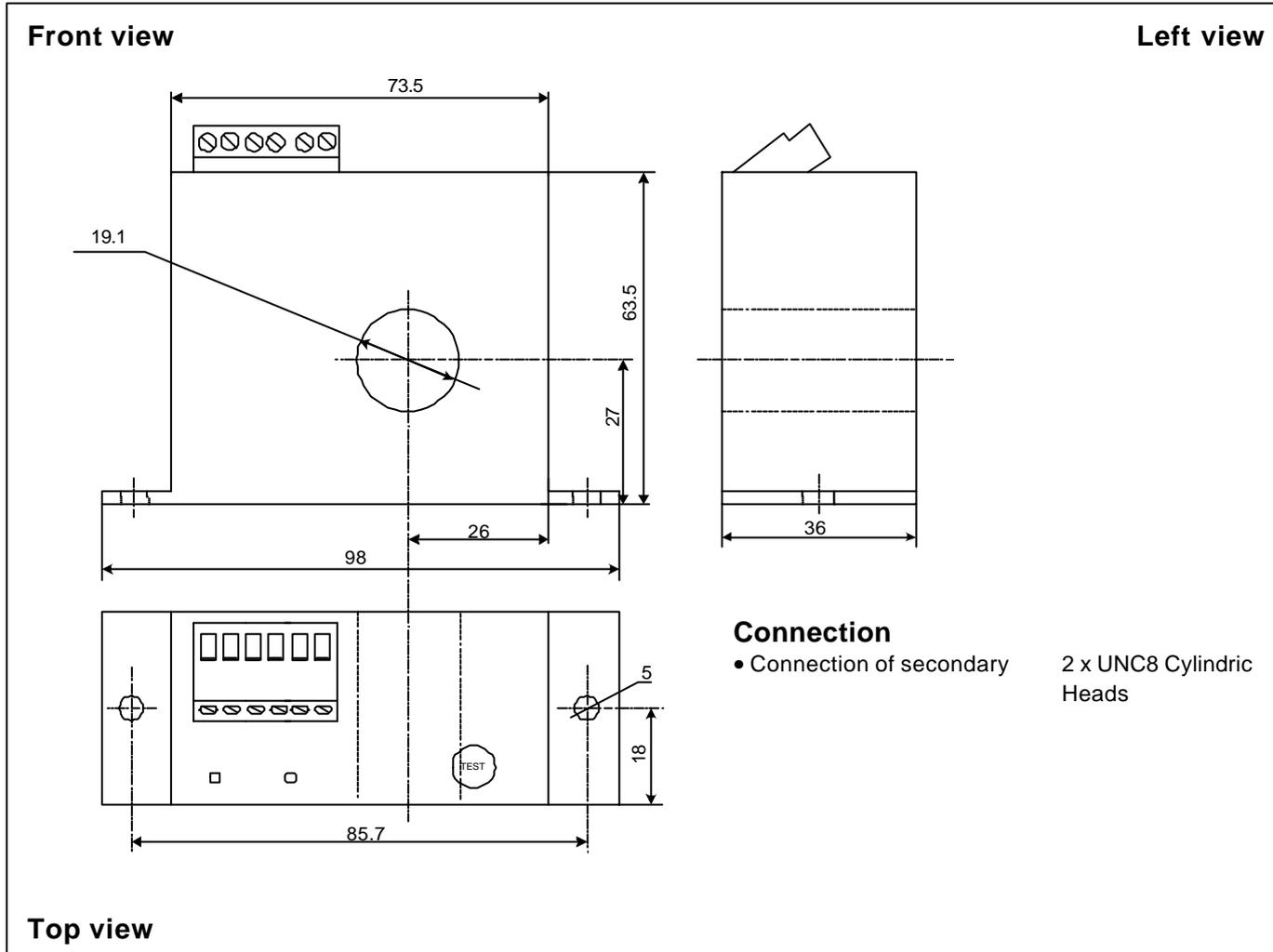
- Personnel Protection (typically 5mA) Senses low fault currents and alarms to shut power off before injury occurs.
- Equipment Protection (typically 30mA) When personal protection is not an issue, select a higher set point to protect equipment.

Notes : ¹⁾ $I_{p \text{ adj}}$: Setpoint current adjusted by the user

²⁾ Low level considered < 12 V DC.

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Dimensions AKS 0.03 C SDT - (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 1 mm
- Fastening 2 holes $\varnothing 4.5$ mm
- Primary through-hole $\varnothing 19$ 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.