

DKS 100 C - Current Operated Switches

Combine a current transformer, signal conditioner and limit alarm into a single package. The DKS series has an extended current input range, universal solid-state outputs and a wide frequency response.



$I_{PN} = 4 \dots 100 \text{ A}$



Electrical data

I_p Primary current (with manual jumper) 4 - 20, 10 - 50, 20 - 100 A

DKS 100 C SDT Output State Relay SPDT Output 5A @ 240V AC¹⁾ or 5A @ 30V DC

DKS 100 C NOU Normally Open 0.15 A @ 240 V AC/DC

I_{oc}	Overload capability @	Continuous	5sec	
	For 4-20 A	40	200	A
	For 10-50 A	100	500	A
	For 15-100 A	200	1000	A

f	Frequency range	DC to 400 Hz	
V_c	Supply voltage	20-28	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
I_c	Current consumption	< 0.5	A

Accuracy - Dynamic performance data

e_H	Hysteresis (of setpoint)	± 5	%
t_r	Response time @ 110 % of $I_{p \text{ adj}}$	100	ms
t_r	Response time @ 200 % of $I_{p \text{ adj}}$	20	ms
	Off State Leakage	< 10	µA

General data

T_A	Ambient operating temperature	- 20 + 50	°C
T_S	Ambient storage temperature	- 50 + 70	°C
m	Mass	140	g
	Protection type	IP20	
	Safety	IEC 61010-1	
	EMC	EN 61326	

Features

- Compact, One-piece Design
Fits in crowded motor starters, power supplies and control panels.
- Input Isolation
Much safer than shunt/relay combinations.
- Output Installation
Isolated output greatly simplifies wiring.
- Tough
Designed to handle harsh industrial environments.
- Adaptive Hysteresis
- Hysteresis is 5% of setpoint.
- Allows closer control than fixed hysteresis.
- Reliable Solid state design.

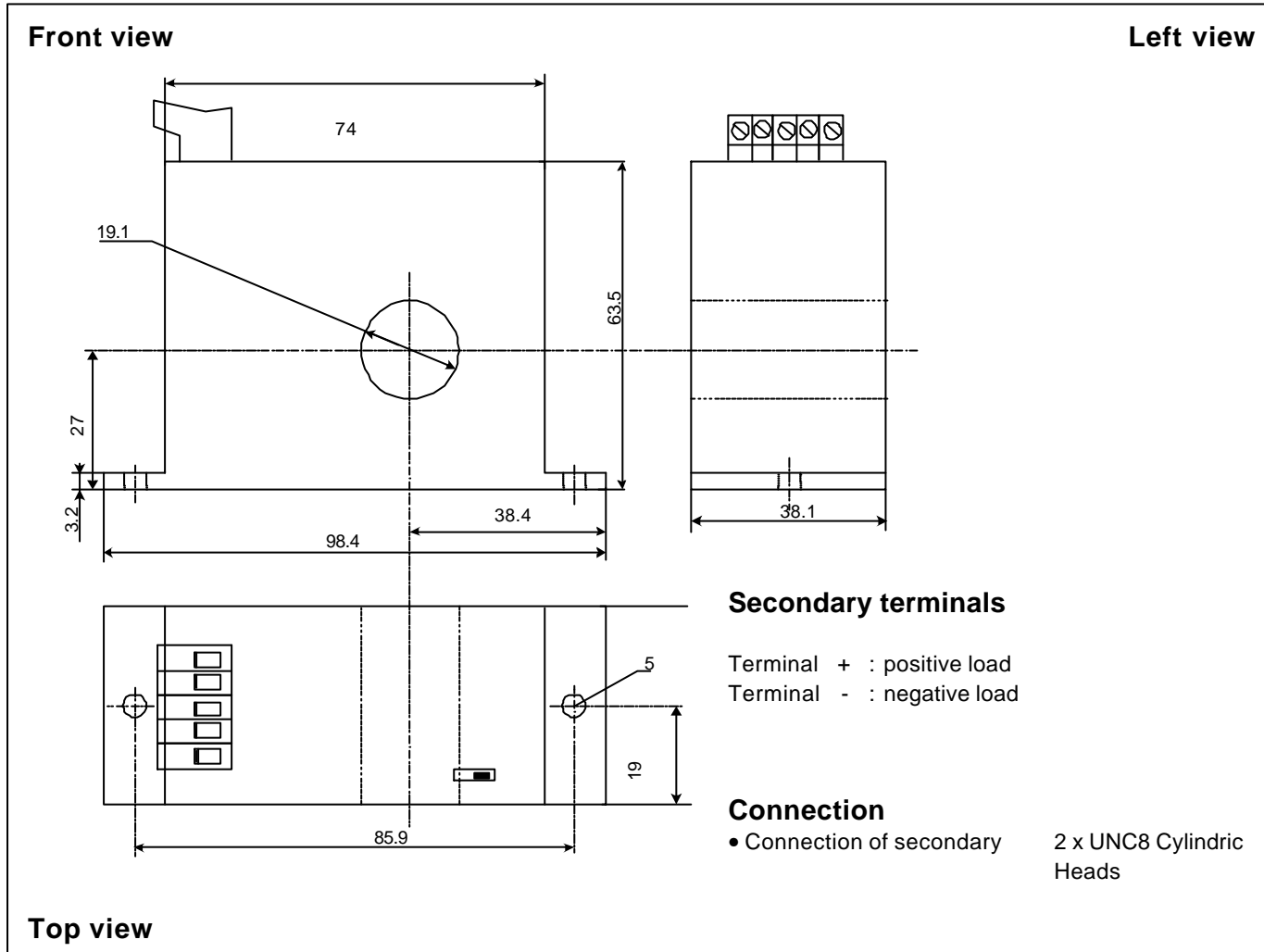
Applications

- Electric Heating Elements
Instant indication of heater status.
- Power Supplies
Signals over-current before equipment fails.
- Machine Operation
Instant status of motors, lamps and other loads.
- Telecom Sites
Monitors battery output

Notes : $I_{p \text{ adj}}$: Setpoint current adjusted by the user
¹⁾ 3A Inductive @ 240 V AC.

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Dimensions DKS 100 C - (in mm. 1 mm = 0.0394 inch)



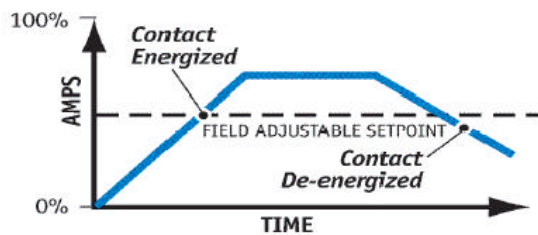
Mechanical characteristics

- 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.

Threshold Levels



Connections

