

# 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 AC<sup>1)</sup> 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

$\epsilon_H$	Hysteresis (of setpoint)	$\pm 5$	%
$t_r$	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	$\mu\text{A}$

## General data

$T_A$	Ambient operating temperature	- 20 + 50	$^{\circ}\text{C}$
$T_S$	Ambient storage temperature	- 50 + 70	$^{\circ}\text{C}$
$m$	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.

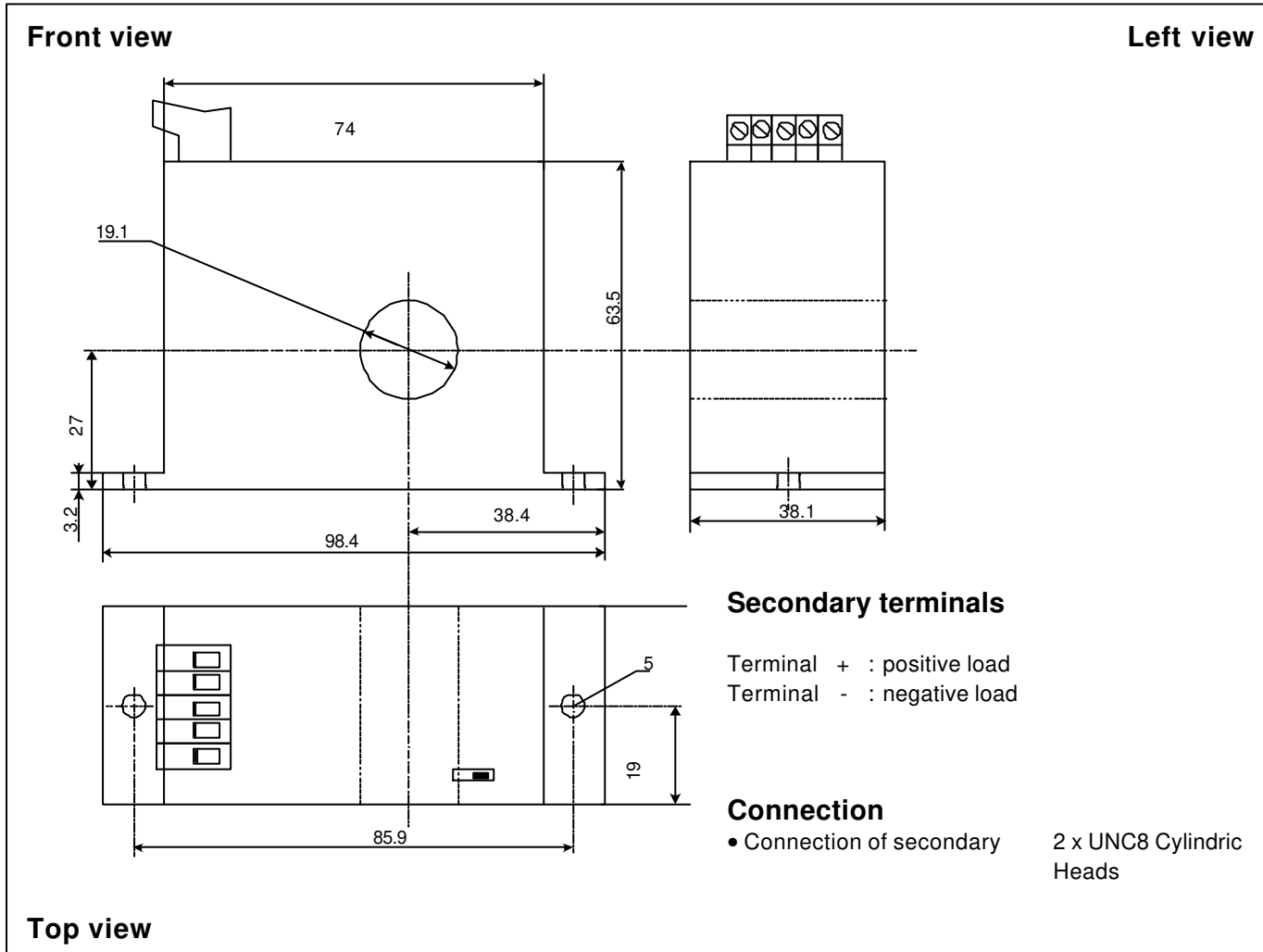
## Applications

- 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  
<sup>1)</sup> 3A Inductive @ 240 V AC.

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



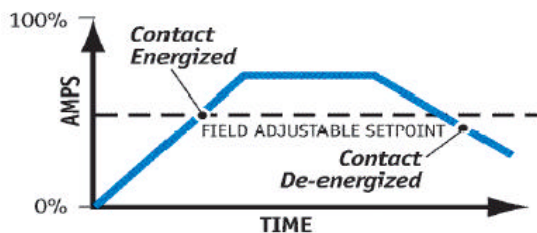
## Mechanical characteristics

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

## Remarks

- Temperature of the primary conductor should not exceed  $60^{\circ}\text{C}$ .
- Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.

## Threshold Levels



## Connections

