



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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

| | | | |
|--------------|--|---------|---------------|
| ϵ_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 | $^{\circ}\text{C}$ |
| 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.

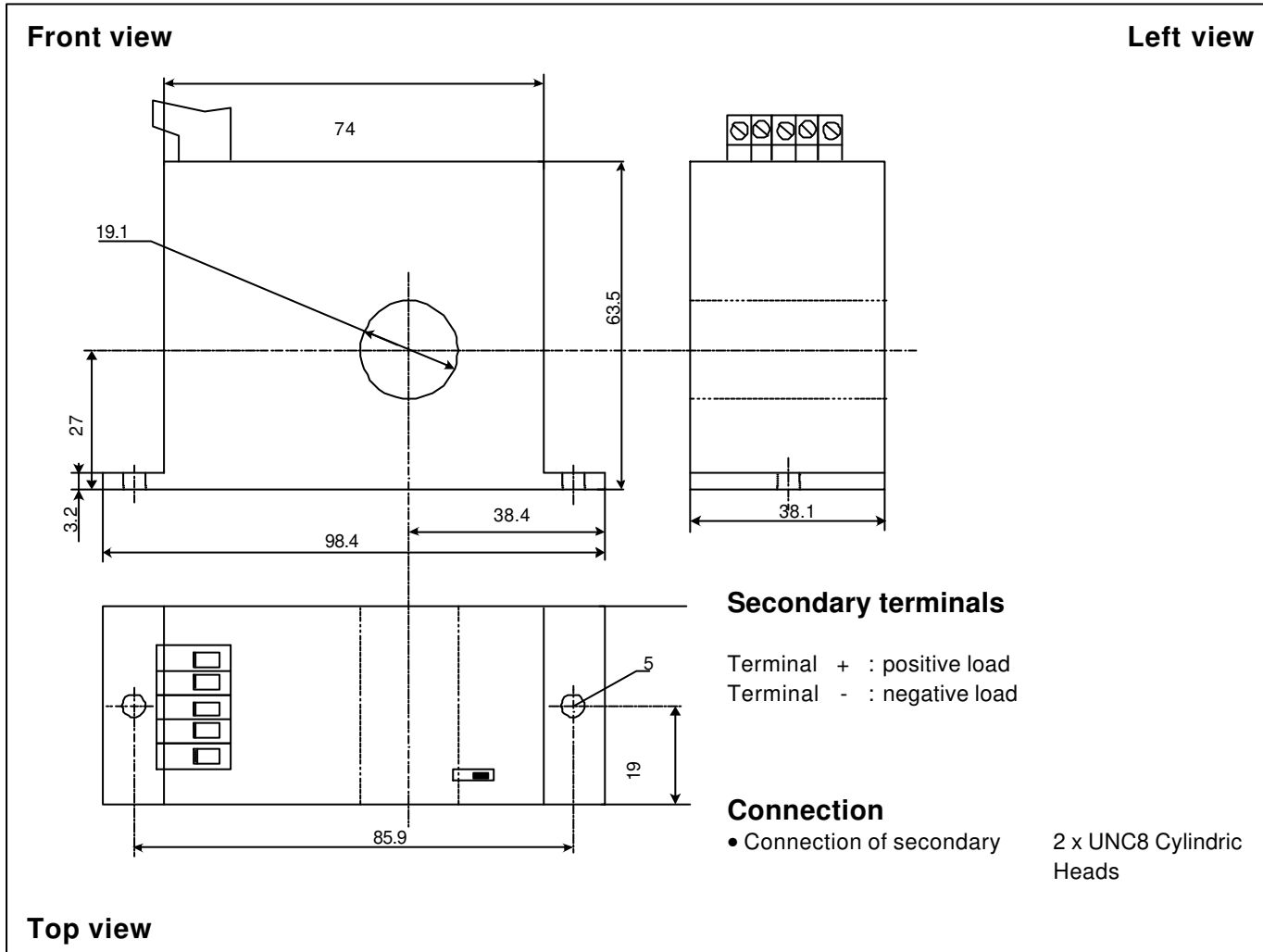
Applications

- 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
¹⁾ 3A Inductive @ 240 V AC.

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



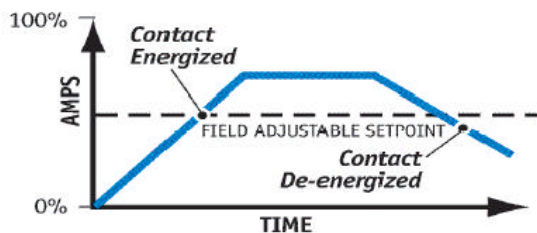
Mechanical characteristics

- 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

