

AKS 180 C - G

Current Operated Switches

$I_{PN} = 1 \dots 175 \text{ A}$

Combines a current transformer, signal conditioner and two threshold alarms into a single package. The AKS 180 Series has a jumper selected current input ranges, solid-state AC output and a wide frequency range.



Electrical data

| | | Low | Mid | High | |
|----------|----------------------------------------------|------|------|--------|----|
| I_p | Primary current (manually selectable jumper) | 1-6 | 6-40 | 40-175 | A |
| I_{oc} | Overload capacity @ | | | | |
| | Continuous | 150 | 150 | 210 | A |
| | 6 sec | 400 | 500 | 800 | A |
| | 1 sec | 600 | 800 | 1200 | A |
| e_H | Hysteresis (of setpoint) | 0.15 | 0.3 | 0.9 | A |
| | ON Delay | 230 | 50 | 30 | mS |
| | OFF Delay | 20 | 20 | 10 | mS |

| References | Output State | Output | Options |
|----------------------------|-----------------|-------------------------|---------|
| AKS 180 C NCAC G | Normally closed | 1 A @ 240 V AC | |
| AKS 180 C NCAC NLG | Normally closed | 1 A @ 240 V AC | No LED |
| AKS 180 C NOAC G | Normally Open | 1 A @ 240 V AC | |
| AKS 180 C NOAC NLG | Normally Open | 1 A @ 240 V AC | No LED |
| AKS 180 C NOAC 15 G | Normally Open | 15A@120V or 10A@240V AC | |
| AKS 180 C NCDC G | Normally closed | 0.15A @ 30 V DC | |
| AKS 180 C NCDC NLG | Normally closed | 0.15A @ 30 V DC | No LED |
| AKS 180 C NODC G | Normally Open | 0.15A @ 30 V DC | |
| AKS 180 C NODC NLG | Normally Open | 0.15A @ 30 V DC | No LED |

| | | | |
|-------------------|---------------------------------------------------|------|---------------|
| Off State leakage | | | |
| | - NO AC | < 10 | μA |
| | - NO DC | < 10 | μA |
| | - NC AC | 2.5 | mA |
| | - NC DC | 1.4 | mA |
| V_C | Supply voltage | | Self Powered |
| 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 @ 90 % of I_{PN} | 120 | ms |
| f | Frequency range | 50-60 | Hz |

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 |
| | Safety | IEC 61010-1 | |
| | EMC | EN 61326 | |

Features

- Choice of Outputs
 - Solid state switch N.C. or N.O.
 - 1A @ 240VAC.
 - 15A @ 120VAC or 10A @ 240 V AC.
 - 0.15A @ 30VDC.
- Self-powered
Cuts installation and operating costs.
- Adjustable Setpoint
Speeds startup.
- Selectable jumper.
- Built-in Mounting Bracket
Provides the solid installation inspectors want.

Applications

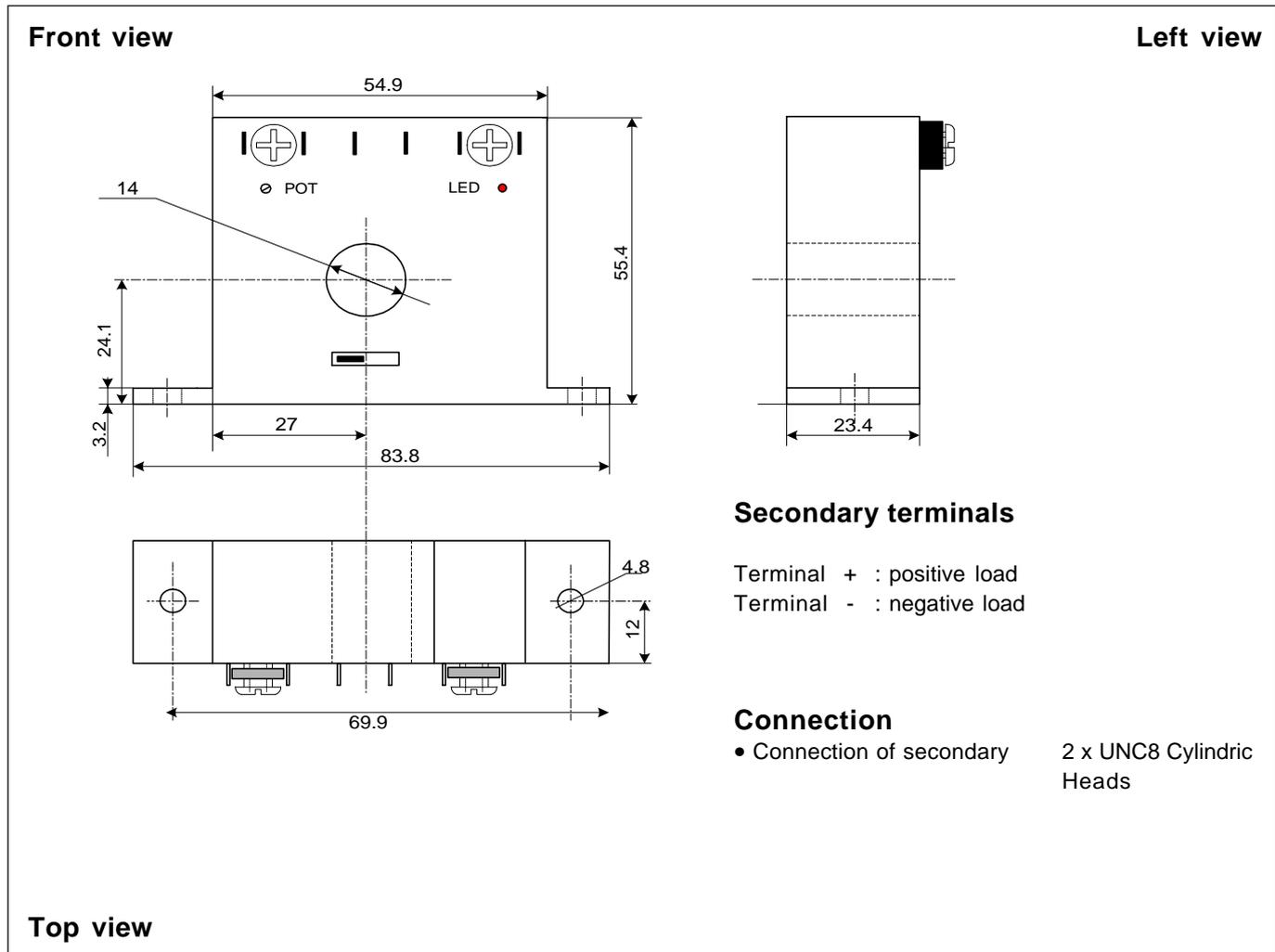
- Electronic Proof of Flow
 - No need for pipe or duct penetrations.
 - More reliable than electro-mechanical pressure or flow switches.
- Conveyors
 - Detects jams and overloads.
 - Interlocks multiple conveyor sections.
- Lighting Circuits
Easier to install and more accurate than photocells.
- Electric Heaters
Faster response than temperature sensors.

Option

- DIN mounting.

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Dimensions AKS 180 C - (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 1 mm
- Fastening 2 holes $\varnothing 4.5$ mm
- Primary through-hole $\varnothing 14$ 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:

