HCS-4
HIGH CURRENT SENSOR
SPECIFICATIONS

Physical
Size
Length: 8.3"

Width: 2.9"

Height: 3.1"

Weight: 24 oz.

Environmental
Storage
Temperature: -50°C to +85°C

Humidity: 0% to 95%, non-condensing

Operating
Temperature: -40°C to +72°C

Humidity: 0% to 95%, non-condensing

Mounting
Shelf or desktop

Construction
Chassis
Fully enclosed, anodized aluminum

Externally accessible connectors and LEDs

No inside access required

Electrical
Single PCB board with conformal coating, mounted inside chassis

Power
Voltage
Input: 8 to 40 Vdc

Consumption
Maximum 120 mA (at 12 Vdc)

Protection
Isolation
Minimum 4000 Vdc to ground, infinite duration, to any terminal input

Input Impedance
Infinite to current conductor (fully isolated)

Current Sensors (4)
Range: 1.0 and 20.0 Adc or Aac

Hysteresis: 3% of Limit Value, applies to diminishing current only

Transient Filtering
Each sensor includes hysteresis and a 2.66 second filter that will ignore momentary current fluctuations

Accuracy
The greater of ±2.0% or ±.2 A as compared to 10 times Limit Value

Output Relays (4)
Operation
Operate when current exceeds Limit Value

Type
Non-latching mechanical, with dual form C contacts, wired in parallel

Contacts
Rated Load: 2 A at 24 Vdc, 1 A at 125 Vac

Minimum Load: 2 mA at 5 Vdc

Maximum Operating Voltage: 60 Vdc, 125 Vac

Maximum Switching Capacity: 125 VA, 60 W

Service Life: 5 million mechanical (minimum), 1 million electrical (typical)

Connectors
Power
Detachable, screw-down with 6 terminals, 12 to 22 AWG, requires .25" stripped end

Terminals 1 & 2: B, battery positive

Terminals 3 & 4: N, battery negative

Terminals 5 & 6: test inputs

Output Relays (4)
Detachable, screw-down with 4 terminals, 12 to 22 AWG, requires .25" stripped end

Terminal 1: normally open relay contact

Terminal 2: normally closed relay contact

Terminals 3 & 4: relay common

Controls
Potentiometers (4): 20-turn, used to adjust current Limit Values

Test Points (5): female, used to connect DVM when setting current Limit Values

Latching Mode Switches (4): selects latching or non-latching operation of relay outputs

Reset Switch: Pushbutton, resets LEDs and relays

LED Indicators
High Current (4)
Red: indicates current has exceeded Limit Value

Power
Green: flashes once per second to indicate unit is operational

MICRO-AIDE reserves the right to make changes, at its sole discretion, to any specification listed herein.