

# Z-TRAUQ INC. compact CURRENT SENSORS

## Switched out

## Analog out

### Current switch details

#### Application:

The current switch monitors all types of loads such as fans, pumps, heating elements and cables, motors, lamps, and relays.

#### Features:

- Auto-ranging
- Status LED's
- Self-powered
- Field adjustable
- Built-in mounting feet
- Input / Output isolation
- True digital switching
- UL, cUL, CE



Solid Core

#### Specifications:

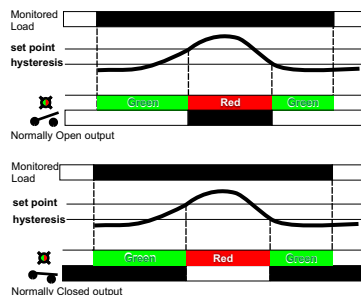
Power Supply: . . . . . None – self-powered  
 Setpoint: . . . . . fixed at 0.5A for ZSF model,  
 . . . . . adjustable from 1-200 Amps for ZSA models,  
 . . . . . adjustable from 1.5-200 Amps for ZJA models  
 Hysteresis: . . . . . < 2% FS max  
 Frequency range: . . . . . 10 - 400Hz  
 Off-state leakage: . . . . . <1mA  
 Operating Temp.: . . . . . -30 to 50°C (-22 to 122°F)  
 Response Time: . . . . . < 200 mS  
 Housing: . . . . . UL 94V-0  
 Insulation Class: . . . . . 600V  
 Wiring Connections: . . Rising clamp screw terminals (14 to 22 AWG)

#### Operation:

**Normally Open output** - when the monitored current exceeds the trip value, the switch will make and the red LED will illuminate.

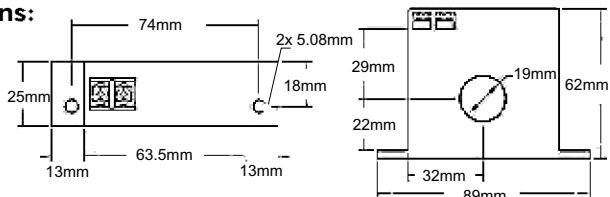
**Normally Closed output** - when the monitored current exceeds the trip value, the switch will break and the red LED will illuminate.

The green power LED, if fitted, will illuminate whenever there is sufficient current flowing in the conductor to operate the device circuitry, typically a minimum of 1 Amp for solid-core units and 1.5 Amp for split-core devices. Extinguishes when the output is energized.



#### Dimensions:

Solid core



Model	Core type		Input range	Trip Point*	Output		LED Indicator (s)	
	Solid	Split			NO	NC	Red	Green
ZJA-NO3		✓	0-200 AAC	A	*		✓	✓
ZJA-NC3		✓		A		*	✓	✓
ZJA-NO1		✓		A	◆		✓	✓
ZJA-NC1		✓		A		◆	✓	✓
ZSA-NO3	✓			A	*		✓	✓
ZSA-NC3	✓			A		*	✓	✓
ZSA-NO1	✓			A	◆		✓	✓
ZSA-NC1	✓			A		◆	✓	✓
ZSF-NO3	✓			F	*		✓	

\*F = fixed A = adjustable \* 0.3A@135vac/dc ◆ 1A @ 240vac

### Analog output details

#### Application:

Current transducers provide an analog output relative to the current sensed on the input.

#### Features:

- Three ranges per unit.
- No field adjustment necessary
- Solid-state circuitry
- Input / Output isolation
- Reverse polarity protected
- UL, cUL, CE

#### Specifications:

Loop power: . . . . . 12 to 40 Vdc for mAdc output  
 Operating Temp.: . . . . . -30 to 70°C (-22 to 158°F)  
 Input Current Ranges (field selectable):  
 . . . . . 0-10/0-20/0-50 Amps  
 . . . . . 0-50/0-100/0-200 Amps  
 Operating Humidity: . . 0 to 95% RH, non-condensing  
 Maximum Continuous Input Current:  
 . . . . . 10/20/50 Amp ranges – 80/120/200 respectively  
 . . . . . 50/100/200 Amp ranges – 175/300/400 respectively  
 Wiring Connections: Rising clamp screw terminals (14 to 22 AWG)  
 Frequency range: . . . . . 10 - 400Hz  
 Response Time: . . . . . 250 mS (0-90% step change)  
 Housing: . . . . . UL 94V-0



Split Core

Output Signal & Accuracy:  
 . . . . . 4 to 20 mA represents 0 to 100% of current span.  
 . . . . . Better than ±1% FS for all three ranges.

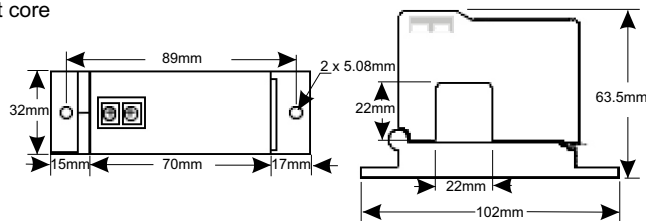
Loading: . . . . . 1mΩ

#### Operation:

Average measurement is equivalent to True RMS for pure sine waves. No loop power is required for the 0-5 or 0-10V analog output versions. Loop power for those having a 4-20mA output can be from 12 to 40vdc. Use the JHZ models True RMS measurement for choppy sine waves like those produced by variable frequency drives.

#### Dimensions:

Split core



Model	AC Input Range		DC Output			Core Type	
	10/20/50	100/150/200	0-5v	0-10v	4-20mA	Solid	Split
Z50J5	✓		✓				✓
Z50S5	✓		✓			✓	
Z50J10	✓			✓			✓
Z50S10	✓			✓		✓	
Z50J20	✓				✓		✓
Z50S20	✓				✓	✓	
Z50JHZ20	✓				✓		✓
Z200J5		✓	✓				✓
Z200S5		✓				✓	
Z200J10		✓		✓			✓
Z200S10		✓		✓		✓	
Z200J20		✓			✓		✓
Z200S20		✓			✓	✓	
Z200JHZ20		✓			✓		✓