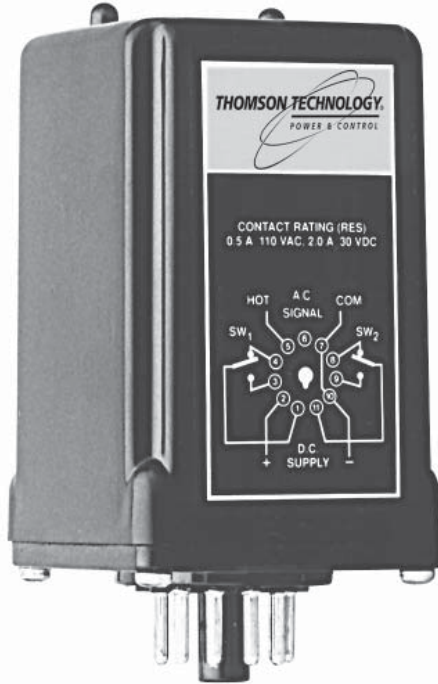


ELECTRONIC ENGINE SPEED SENSOR



- Compact 11 pin plug-in package contains two switch points
- All solid-state digital logic
- Ultra stable, temperature compensated circuitry
- Senses from transformer, magnetic pickup, or signal generator, etc.
- Input voltage range 1.0 to 20 volt R.M.S.
- Wide frequency ranges, user adjustable setpoints
- LED's indicated energized states
- Form-C output contacts (CSA: 0.5A @ 110 VAC, 2.0A @ 30 VDC (res.))
- Suitable for many other frequency sensing applications
- Quality Assurance System ISO 9001

The FSR 230 speed switch employs precision solid-state sensing networks to sense the frequency of an incoming signal. As the setpoint of any switch is exceeded, that output relay will become energized. The setpoints are adjustable over a wide range by 15 turn potentiometers. Adjustment and service procedures are simplified by LED "ON" state indicators.

The transformer sensing input requires a 12VAC secondary stepdown transformer energized from a generator set's output terminals. The FSR 230 is ideally suited as a crank disconnect sensor, as it will operate faithfully on a residual output voltage as low as 5% of nominal output voltage. (For applications with a seriously distorted sine wave, such as with SCR switched inductive loads, use of a magnetic pickup is recommended.)

STANDARD MODELS

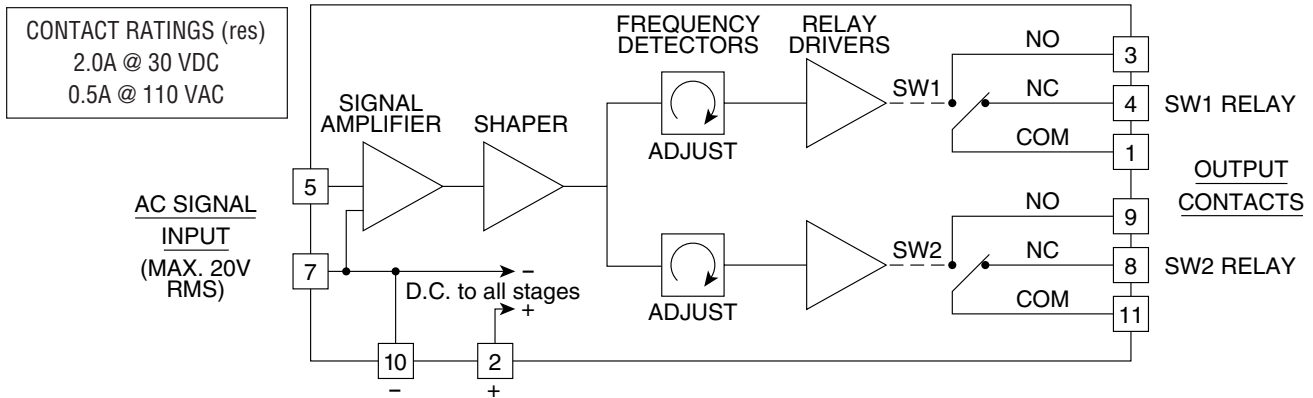
- FSR 230-1 = One switchpoint
- FSR 230-2 = Two switchpoints
- 12 or 24 VDC
- "LO" Frequency Range = 15-100 Hz (Transformer)
- "HI" Frequency Range = 300-7000 Hz (Magnetic Pickup)
- (Refer to Model Code)

OPTIONS

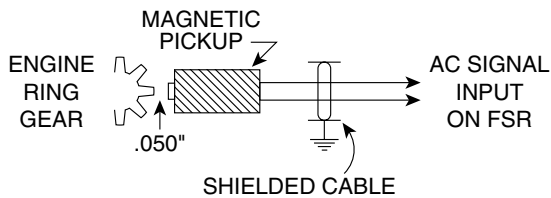
- 11 Pin Socket - model CRS;11P;1 (Surface mount)
- Factory calibration (No charge)
- Magnetic pickup or transformer (Supplied loose)



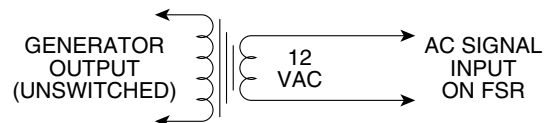
EXTERNAL CONNECTIONS



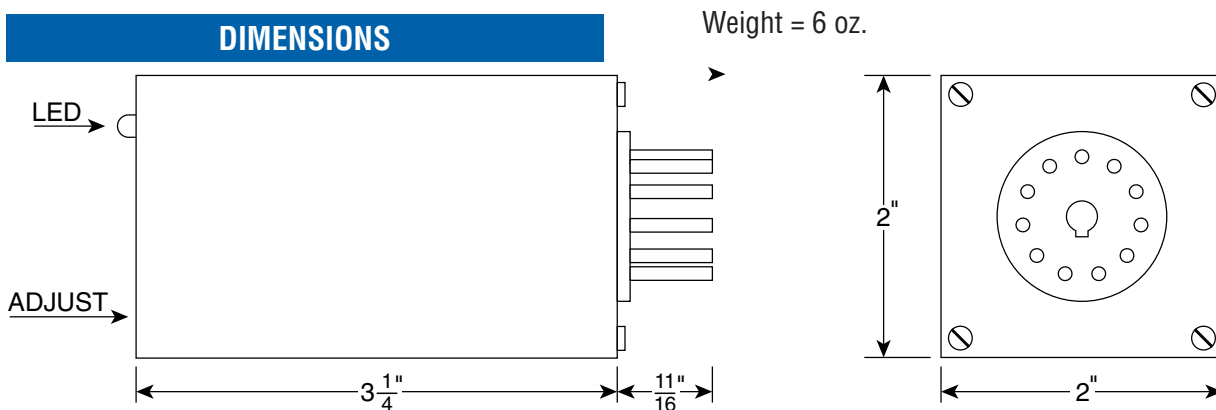
MAGNETIC PICKUP SENSING



TRANSFORMER SENSING



DIMENSIONS



TECHNICAL DATA

Output Contact Rating	2.0A @ 30 VDC, 0.5A @ 110 VAC
Maximum Input Signal	20 VRMS
Minimum Input Signal	1.0 VRMS
Differential = Pickup - Dropout	Approx. 0.5% of setting
Temperature Stability	$\pm 1.0\%$, -40°C to 50°C
Max. Delay on Pickup	100 m sec
Min. Delay on Dropout	500 m sec

MODEL CODE

Model Series FSR 230 - 1 / 24 - HI Frequency Range (LO or HI)

No. of Switchpoints (1 or 2) _____ DC Power Supply Voltage

NOTE: Specifications subject to change without notice.
CL045 Rev.1 00/04/01