

Current Sensors: 4-20mA Analog Output, High Current Monitoring

Large Load Trending With 4-20mA Output



DESCRIPTION

Hawkeye x21/x21SP analog current sensors provide reliable load trending information for large motor loads (up to 2400A), with a proportional 4-20mA signal. Three devices are available, each with a different amperage range. The Hx21 versions include a span potentiometer that allows each sensor to be calibrated for maximum resolution. The Hx21SP versions are factory-calibrated at a range specified by the customer.

APPLICATIONS

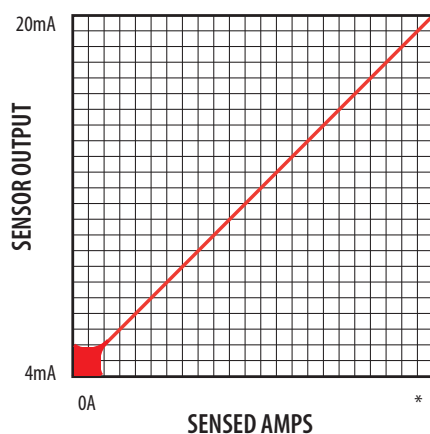
- Load trending of large motors and other loads up to 2400 Amps
- Monitor critical motors (compressor, fuel, etc.)

FEATURES

- Split-core design for easy installation and fast retrofits
- Eliminates need for external CTs on large conductors
- Large openings for heavy conductors
- Loop powered 4-20mA output
- Two-wire design reduces wiring cost
- Hx21 models offer zero and span adjustments for field flexibility
- Hx21SP models are factory-set at a range specified by the customer for easy setup and high confidence
- 100% solid state...no moving parts to fail
- 5-year warranty

EXAMPLE LINEAR OUTPUT

Scale software as shown



*Adjusted with Span Potentiometer for Hx21 models;
Factory-set per customer specification for Hx21SP models

100 to 300A (H221/H221SP)
300 to 800A (H321/H321SP)
1000 to 2400A (H421/H421SP)



SPECIFICATIONS

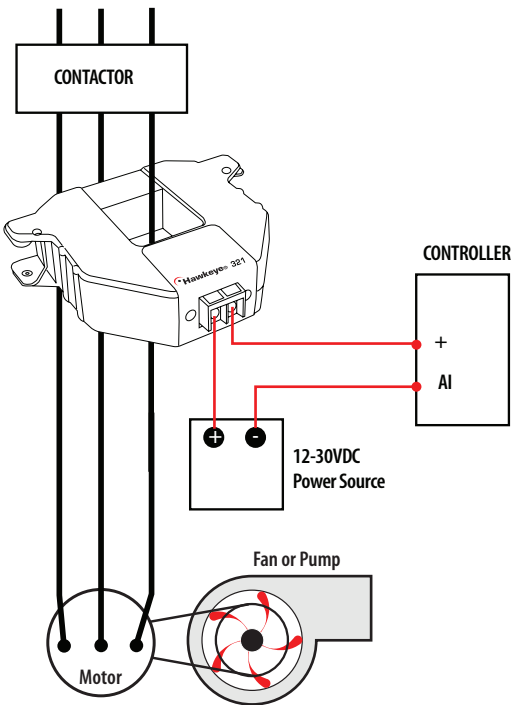
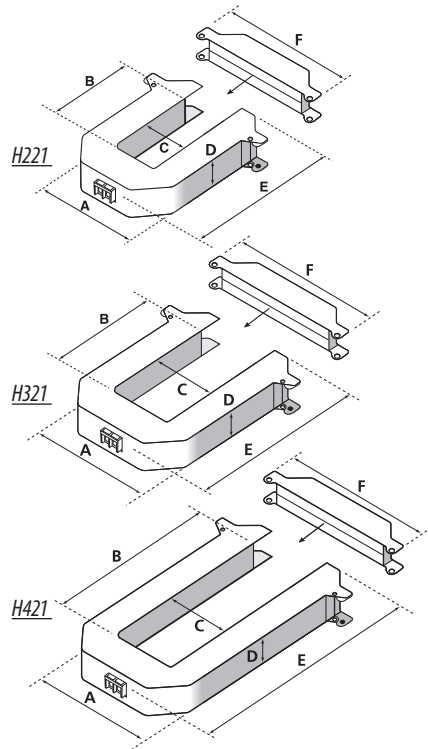


Sensor Power	30mA (max)@12-30VDC
Insulation Class	600VAC RMS
Frequency Range	50/60 Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH, non-condensing
Accuracy	±2% from 10 to 100% of full scale
Response Time	2 sec.
Zero Adjustment	nominal output@0A: 4mA ± 0.5
Terminal Block Maximum Wire Size	12 AWG (3.3 mm ²)
Terminal Block Torque	7 to 8 in-lbs (0.8 to 0.9 N-m)
Agency Approvals	UL 508 open device listing

DIMENSIONAL DRAWINGS

APPLICATION/WIRING DIAGRAM

Monitoring Fan /Pump Motor Loads



H221	H321	H421
A = 3.7" (94 mm)	A = 4.9" (124 mm)	A = 4.9" (124 mm)
B = 1.6" (40 mm)	B = 2.9" (75 mm)	B = 5.5" (141 mm)
C = 1.4" (35 mm)	C = 2.5" (63 mm)	C = 2.5" (65 mm)
D = 1.1" (29 mm)	D = 1.2" (29 mm)	D = 1.1" (29 mm)
E = 4.2" (106 mm)	E = 5.5" (140 mm)	E = 8.1" (206 mm)
F = 4.7" (120 mm)	F = 6.0" (151 mm)	F = 6.0" (151 mm)

ORDERING INFORMATION



MODEL	AMPERAGE RANGE		SENSOR OUTPUT	HOUSING	UL	CE	RoHS
	4mA (Lower Limit)	20mA (Upper Limit)					
H221	0A	100 to 300A	4-20mA DC	Split-core	● ¹	●	●
H221SP		100, 150, 200, 250, or 300A ²			● ¹	●	●
H321		300 to 800A			● ¹	●	●
H321SP		300, 400, 500, 600, 700, or 800A ²			● ¹	●	●
H421		1000 to 2400A					●
H421SP		1000, 1200, 1400, 1600, 1800, 2000, 2200, or 2400A ²					●

ACCESSORIES

Universal Power Supply (PS Series)

Universal Mounting Bracket Kit (AH06)



¹ Listed for use on 75°C insulated conductors.

² Standard factory-calibration, but no longer field adjustable

Note: When ordering HxxxSP versions, specify upper current limit for factory calibration (device is not field adjustable).