

H971 & EA20 SERIES

DC Applications



H971

Hawkeye DC Transducers provide accurate load level monitoring of DC loads. The H971 and EA20 use Pulse Reset Technology™ with field proven circuitry to provide a superior solution for DC applications with minimal risk of permanent magnetization, providing longer life and better accuracy.

The EA20 and the H971 have 4 to 20 mA output only. The H971 also offers bi-directional sensing capability and a user-adjustable span to allow greater application flexibility.

SPECIFICATIONS

System Technology	Exclusive Pulse Reset Technology™
Amperage Range	H971: ±200 ADC; EA20: 0 to 100 ADC/0 to 150 ADC/0 to 200 ADC
Sensor Supply Voltage	12 to 24 Vdc ¹
Supply Current	35 mA ²
Insulation Class	H971: 600 Vdc, EA20: 1000 Vdc
Temperature Range	-30 to 60 °C (-22 to 140 °F)
Humidity Range	10 to 90% RH non-condensing
Output	H971: Bidirectional 4 to 20mA (adjust. span) ³ ; EA20: Unidirectional 4 to 20 mA
Terminal Block Wire Size	24 to 14 AWG (0.2 to 2.1 mm ²)
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)
Response Time	Less than 150 msec

ACCURACY

Accuracy at Ranges Below 100 A	±0.5 A (combined linearity, hysteresis, and repeatability) ⁵
Accuracy at Ranges Above 100 A	±0.5% full scale (combined linearity, hysteresis, and repeatability) ⁴
Withstand Current	25,000 ADC

WARRANTY

Limited Warranty	5 years
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Retrofit

Self-gripping iris for easy installation

Flexibility

Bracket can be installed in three different configurations

Pulse Reset Technology™

Patented Pulse Reset Technology significantly increases accuracy... sensor is not affected by stray magnetic fields, minimize magnetization from over-current faults

APPLICATIONS

- Battery chargers
- Motor armature current
- Motor field current
- Automotive loads
- Marine equipment
- Solar energy applications
- Telecom
- Electroplating

HOA

Bi-directional model...user-adjustable span from ±20 to ±200 A (H971)

Status LED

Status LED ensures proper wiring

100, 150 and 200 Amp span

100, 150, and 200 A versions available...application flexibility (EA20 uni-directional model)

AGENCY APPROVALS

Agency Approvals	CE 4: EN61010-1, CAT III, Pollution Degree 2, basic insulation
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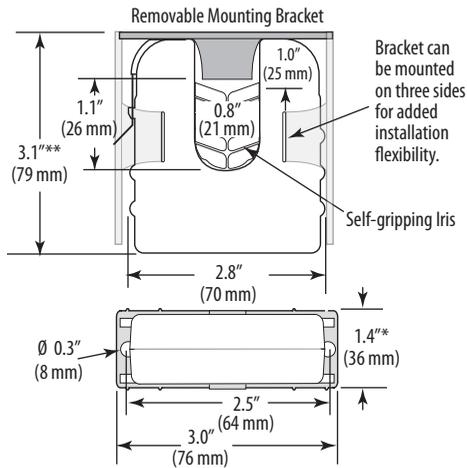
Note: Do not use the LED status indicators as evidence of applied voltage.

1. For currents over 120A, supply voltage must be at least 15V.
2. For H971, at zero monitored current: 35mA max.; at 200A monitored current: 55mA to 100mA depending on supply voltage and current polarity.
3. Unless factory set per customer specifications (H971SP only).
4. For single conductor through product (no wraps).



H932/H952

Dimensional Drawing

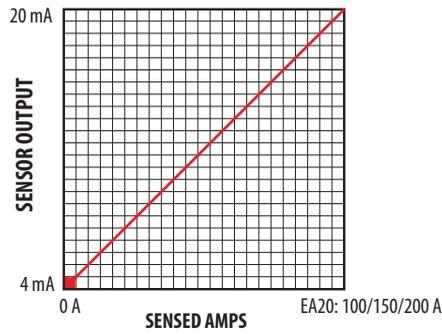


* Terminal block may extend up to 1/8" over the height dimensions shown.

** Slide switch may extend up to 1/4" over the height dimensions shown.

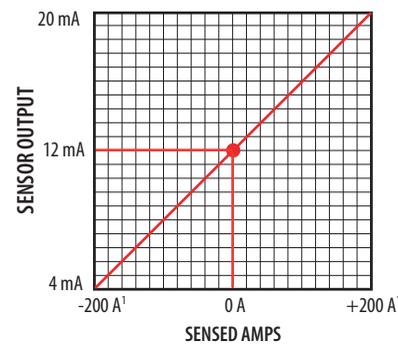
EA20 LINEAR OUTPUT

Scale software as shown



H971 BIDIRECTIONAL OUTPUT

Scale software as shown

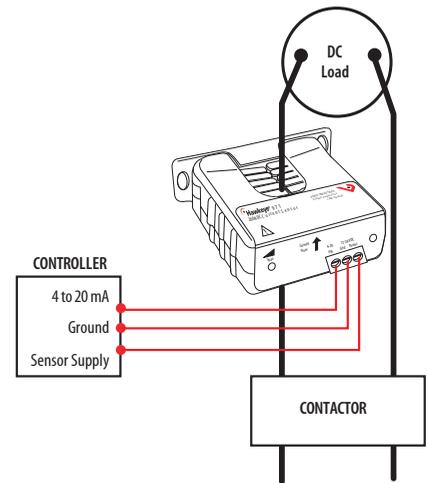


1. Field Adjustable from ±20 A to ±200 A

(not applicable to customer-specified factory scaled models)

H971/EA20

Wiring Diagram



ORDERING INFORMATION

MODEL	PULSE RESET TECHNOLOGY	AMPERAGE RANGE (DC)	SENSOR OUTPUT	HOUSING	STATUS LED	UL	CE	ROHS
Hawkeye Series								
H971	•	0 to 200 A	Bidirectional 4 to 20 mA	Split-core	•	•	•	•
H971SP	•	0 to 200 A ¹	Bidirectional 4 to 20 mA	Split-core	•	•	•	•
EA Series								
EA20BB010	•	0 to 100 A	Unidirectional 4 to 20 mA	Split-core	•	• ²	•	•
EA20BB015	•	0 to 150A	Unidirectional 4 to 20 mA	Split-core	•	• ²	•	•
EA20BB020	•	0 to 200A	Unidirectional 4 to 20 mA	Split-core	•	• ²	•	•

1. Range set in factory per customer specified value from 0 to ±20 A through 0 to ±199 A.

2. UL Recognized.