

H971 & EA20 SERIES

DC Applications



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) ⁵
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

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. The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.
5. For single conductor through product (no wraps).

HOA

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

Status LED

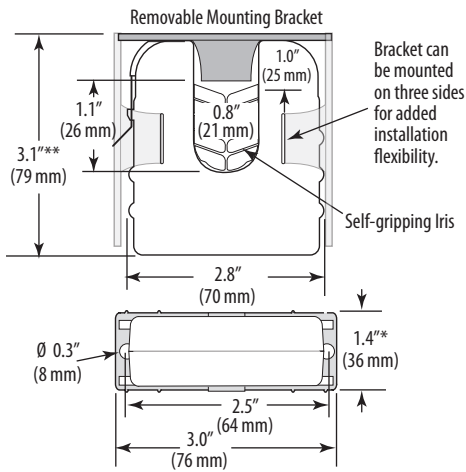
Status LED ensures proper wiring

100, 150 and 200 Amp span

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

H932/H952

Dimensional Drawing

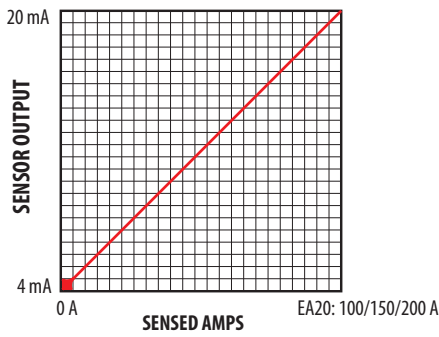


* Terminal block may extend up to 1/8" over the height dimensions shown.

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

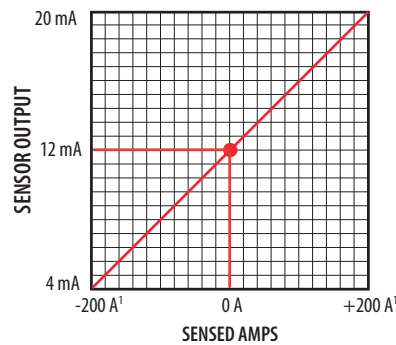
EA20 LINEAR OUTPUT

Scale software as shown



H971 BIDIRECTIONAL OUTPUT

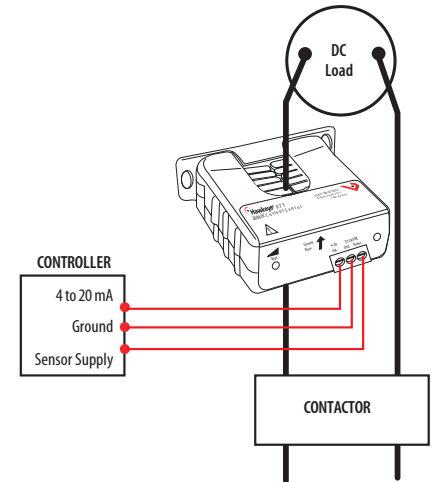
Scale software as shown



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.