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.

Retrofit

Self-gripping iris for easy installation

HOA

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

Flexibility

Bracket can be installed in three different configurations

Status LED

Status LED ensures proper wiring

Pulse Reset Technology™

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

100, 150 and 200 Amp span

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

APPLICATIONS

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

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			

AGENCY APPROVALS

Agency Approvals

CE 4: EN61010-1, CAT III, Pollution Degree 2, basic insulation



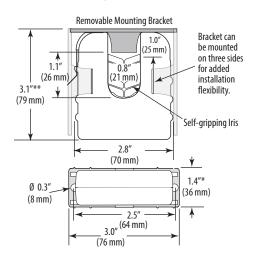
Note: Do not use the LED status indicators as evidence of applied voltage.

- 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

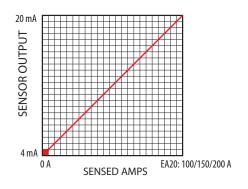
Dimensional Drawing



- * 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.

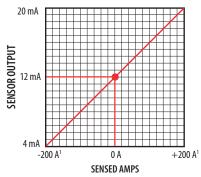
EA20 LINEAR OUTPUT

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 CONTROLLER 4 to 20 mA Ground Sensor Supply CONTACTOR

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.