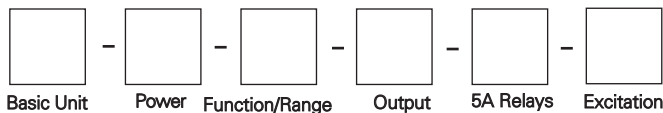


Hawk 3 Temperature Meter/Controller



- All parameters set from easy to understand front panel access
- One, two or four 5-amp relays optional
- 7-segment 4 digit red LED
- Five user-selectable brightness levels
- Activated set point indicators on display
- Min/Max and password lockout
- NEMA 4X rated front panel
- RS485 digital communications output available by special order
- 4-20mA or 0-10 DCV analog retransmission optional
- 1/8 DIN, shallow depth case, 3.24"
- Din Rail Adapter available (page C1)

Ordering Information



| Selection | Description | Selection | Description |
|-----------|--|-----------|----------------------------|
| H340 | Basic Unit 4 digit, Red LED | 0 | Output None |
| 1 | Power Supply 120 ACV 9-36 DCV 85-250 ACV | 1 | 4-20 DCmA |
| 3 | | 2 | 0-10 DCV |
| 4 | | | |
| 91 | Function/Range J Thermocouple K Thermocouple RTD, PT100 3-wire E Thermocouple T Thermocouple | 0 | 5A Relays None |
| 92 | | 1 | One |
| 93 | | 2 | Two |
| 94 | | 4 | Four |
| 95 | | | |
| | | 0 | Excitation None |
| | | 1 | 12 DCV - 100mA max current |
| | | 2 | 24 DCV - 100mA max current |

Specifications

DISPLAY

| | |
|-----------------------|---|
| Type | 7-segment, red LED |
| Quantity | 4 |
| Height | 0.56" (14.2mm) |
| Brightness | 5 settings, user programmable |
| Overrange indication | Display flashes "EEEE" indicating Maximum Value Exceeded |
| Underrange indication | Display flashes "-EEEE" indicating Minimum Value Exceeded |

| | |
|-------------------------|---|
| Sensor Break Excitation | Display reads "EEEE" 100mA Max Current |
|-------------------------|---|

POWER REQUIREMENTS

| | |
|----|-----------------------------|
| AC | 85 to 250 VAC/120VAC @ 10VA |
| DC | 9 to 36 DCV @ 10VA |

| ACCURACY @ 25°C as % of rdg | Accuracy | Temperature Range |
|-----------------------------|-----------------|-------------------|
| Sensor Type | | |
| RTD Pt 100 | 0.2% ± 2 counts | -200°C to +200°C |
| J | 0.2% ± 2 counts | -100°C to +760°C |
| K | 0.2% ± 2 counts | -200°C to +1250°C |
| E | 0.2% ± 2 counts | -100°C to +800°C |
| T | 0.2% ± 2 counts | -200°C to +400°C |

ENVIRONMENTAL

| | |
|-----------------------|--------------------------|
| Operating Temperature | 0 to 50°C |
| Storage Temperature | -10 to +60°C |
| Relative Humidity | <80% |
| Ambient Temp | 25°C |
| Temperature Drift | 100 ppm/°C ± 0.05 dgt/°C |
| Warmup time | 10 minutes |

NOISE REJECTION

| | |
|------|-------------------|
| NMRR | 60 dB @ 50-60 Hz |
| CMRR | 100 dB @ 50-60 Hz |

A TO D CONVERSION

| | |
|--------------|--|
| Technique | Successive approximation with oversampling |
| Sample Rate | 10 conversions per second |
| Display Rate | User programmable from 1/minute - 8/second |

MECHANICAL

| | |
|--------------|---|
| Bezel | 3.92" X 2.0" X 0.52" (99.8mm x 51.8mm x 13.2mm) |
| Depth | 3.24" (82.3mm) behind panel |
| Panel cutout | 3.62" x 1.77" (92 mm x 45 mm) 1/8 DIN |
| Weight | 10oz (283.5g) |
| Cover | NEMA 4X Rated front panel |

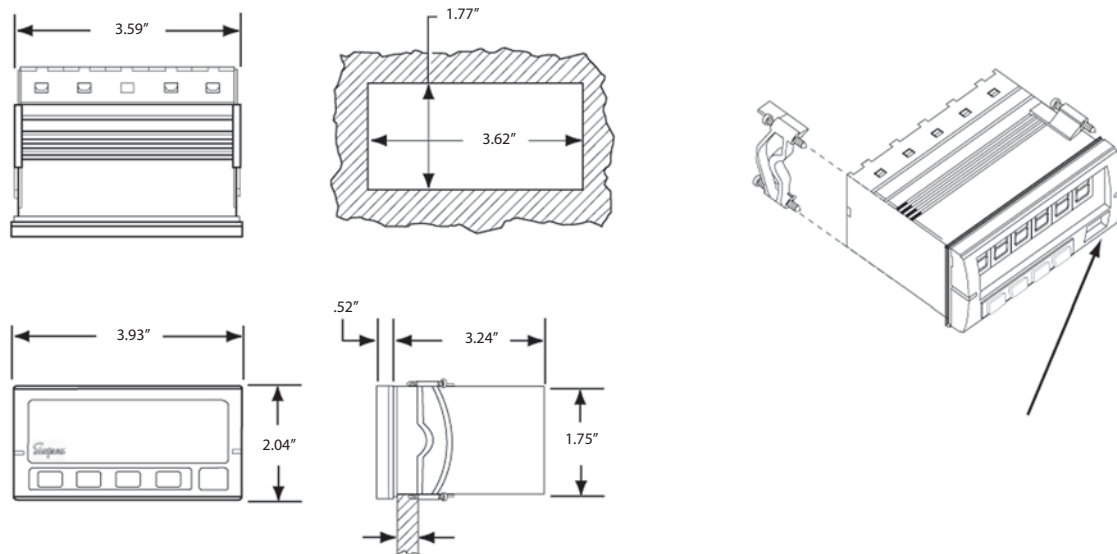


more >>



Hawk 3 Installation Instructions

Installation and Panel Cutout - H335, H340, H345



Mounting Requirements

The Hawk 3 Advanced Digital Controller 1/8 DIN meters require a panel cutout of 1.77" (45mm) high and 3.62" (92 mm wide). To install the Hawk 3 meter into the panel cutout, remove the clips from the side of the meter. Slide the meter through the panel cutout, then slide the mounting clips back on the meter. Press evenly to ensure a proper fit. Tighten screws.

Engineering Label Placement

To replace the engineering unit label, place the tip of a ballpoint pen into the small hole at the base of the engineering label in the bezel. Slide the label up until it pops out. Grasp and remove. Slide the new label half the distance in, then use the ballpoint pen to slide it into place.

Inputs

DC Voltage

| Range | Resolution 4.5 | Resolution 3.5 | Input Impedance | Overload |
|-------|----------------|----------------|-----------------|----------|
| 200mV | 10µV | .1 mV | 1 MΩ | 10DCV |
| 2 V | .1mV | 1 mV | 1 MΩ | 100DCV |
| 20 V | 1mV | 10 mV | 2 MΩ | 100DCV |
| 200 V | 10 mV | .1 V | 2 MΩ | 300DCV |
| 600 V | .1 V | 1V | 2 MΩ | 1K DCV |

DC Current

| Range | Resolution 4.5 | Resolution 3.5 | Input Impedance | Overload |
|-------|----------------|----------------|-----------------|-----------|
| 200µA | 10 nA | .1 mA | 1KΩ | 11mA DC |
| 2 mA | .1µA | 1 mA | 100Ω | 35mA DC |
| 20 mA | 1µA | 10 mA | 10Ω | 111mA DC |
| 200mA | 10 µV | .1 mA | 1Ω | 353 mA DC |
| 2 A | .1 mA | 1 mA | .013Ω | 7A DC |
| 5 A | .1 mA | 1 mA | .013Ω | 7A DC |

AC Current

| Range | Resolution 4.5 | Resolution 3.5 | Input Impedance | Overload |
|-------|----------------|----------------|-----------------|----------|
| 200µA | 10 nA | .1 mA | 1KΩ | 11mA AC |
| 2 mA | .1µA | 1 mA | 100Ω | 35mA AC |
| 20 mA | 1µA | 10 mA | 10Ω | 111mA AC |
| 200mA | 10 µV | .1 mA | 1Ω | 353mA AC |
| 2 A | .1 mA | 1 mA | .013Ω | 7A AC |
| 5 A | .1 mA | 1 mA | .013Ω | 7A AC |

AC Voltage

| Range | Resolution 4.5 | Resolution 3.5 | Input Impedance | Overload |
|-------|----------------|----------------|-----------------|----------|
| 200mV | 10µV | .1 mV | 200KΩ | 10DCV |
| 2 V | .1mV | 1 mV | 200KΩ | 100DCV |
| 20 V | 1mV | 10 mV | 2 MΩ | 300DCV |
| 200 V | 10 mV | .1 V | 2 MΩ | 300DCV |
| 600 V | .1 V | 1V | 2 MΩ | 1K DCV |

Resistance

| Range | Resolution 4.5 | Resolution 3.5 | Input Impedance | Overload |
|-------|----------------|----------------|-----------------|----------|
| 200mΩ | 10mΩ | .1Ω | 1.2KΩ | ± 5DCV |
| 2Ω | .1Ω | 1Ω | 12KΩ | ± 5DCV |
| 20Ω | 1Ω | 10Ω | 121Ω | ± 5DCV |
| 200Ω | 10Ω | .1Ω | 1.2MΩ | ± 5DCV |