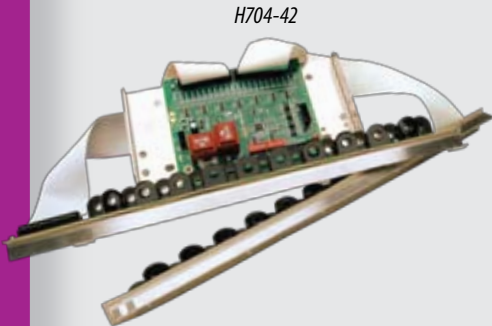


MONITOR CURRENT ON EVERY BREAKER IN A PANELBOARD



Monitor current draw on dynamic loads

Branch Circuit Monitors, Solid-Core

The H704 Series branch circuit current monitoring system provides a cost-effective solution for electrical load management, making it ideally suited for applications where load capacity requirements are dynamic, such as the data storage industry, lighting panels, etc.

The H704 monitors the current draw of each breaker in a panelboard. The accumulated information can be transmitted to a Modbus host and/or viewed on an optional local display via an RS-485 network. Data updates occur approximately once per second to provide timely preventative maintenance information. As a circuit approaches capacity, warning and alarm levels trigger (see graph, facing page). Additional capacity can then be added, or loads balanced, to prevent costly downtime from overloaded circuits and unexpected breaker trips.

APPLICATIONS

- Retrofitting panel boards
- Allocating load-based costs
- Protecting against overload
- Managing and balancing load
- Lighting circuits

A simple solution for individual circuit current monitoring


- Up to 63 H704s can be networked on one Modbus RS-485 drop...simplified wiring
- Reports current consumed on each circuit in the panel board...one product covers multiple points
- 3/4 or 1 inch on center current sensors accommodate standard breakers...easy installation
- Provides Modbus registers for current limit warnings and alarms...prevents breaker trips
- Integrates with available network display for local indication
- Built-in ability to set the orientation and numbering of the circuits

SPECIFICATIONS

Operating Temp. Range	0° to 60°C (32° to 140°F) (<95%RH, non-condensing)
Storage Temp. Range	-40° to 70°C (-40° to 158°F)
Power Source	120VAC (+10/-25%) line-to-neutral, 50/60Hz.; (208/230VAC for H704-42E)
<i>Measured Current Inputs:</i>	
Number of Channels	up to 42
Frequency	50/60Hz
Sample Rate	1280Hz
Update Rate	1.2 sec
Accuracy	±2% of reading from 5A to 50A
Overload Capability	Tested to 10,000A single cycle
Connection to Conductor	Solid-core toroid†
<i>Network Communications:</i>	
Type	Modbus® RTU
Connection	DIP-switch selectable 2-wire or 4-wire
Address	DIP-switch selectable address 1 to 247
Baud Rate	DIP-switch selectable 2400, 4800, 9600, 19200
Parity	DIP-switch selectable NONE, ODD, EVEN
Communication Format	8 data-bits, 1 start-bit, 1 stop-bit
Termination	5-position pluggable connector (TX+ TX- SHIELD TX+/RX+ TX-/RX-)
<i>Defaults:</i>	
Warning Register	60% of current sensor rating (configurable)
Alarm Register	70% of current sensor rating (configurable)
Current Settings	20 Amp

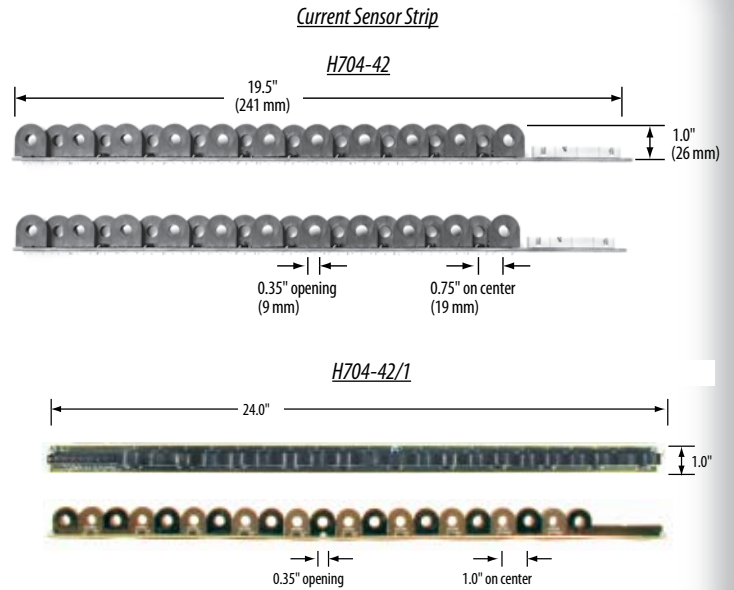
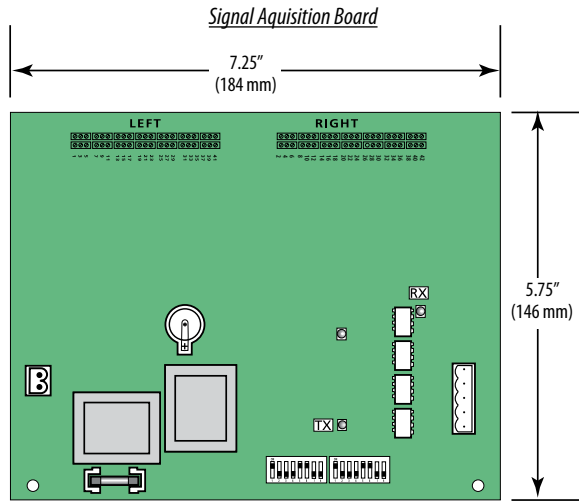
† Do not apply 300V Class current transformers to circuits having a line-to-neutral voltage greater than 300V, unless adequate additional insulation is applied between the primary conductor and the current transformers. Veris assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.

U.S. Patent Number 6,330,516.

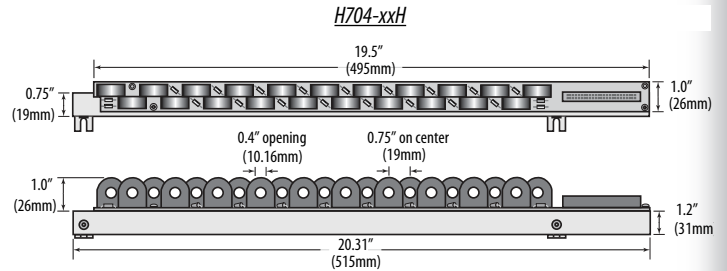
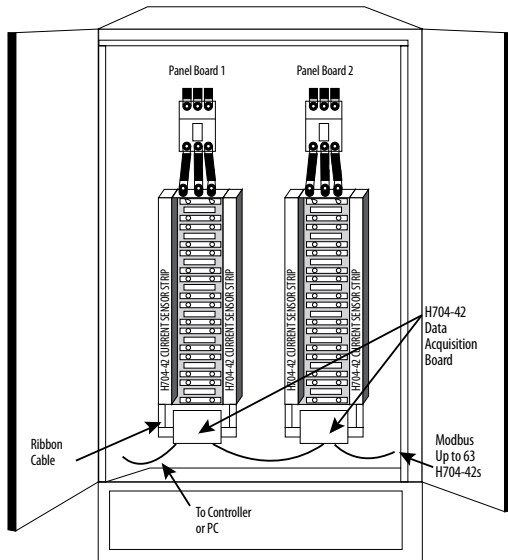
 H704 Series transducers are sold as an open device. Observe handling precautions for static sensitive devices to avoid damage to the circuitry which would not be covered under the factory warranty.



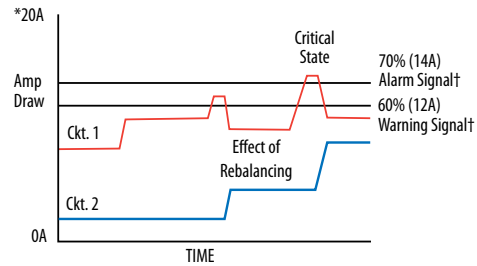
DIMENSIONAL DRAWINGS



TYPICAL PANELBOARD INSTALLATION



OPERATION EXAMPLE



*Example represents 20 Amp circuit
†Configurable time delay for alarm and warning

ORDERING INFORMATION

MODEL	BREAKER SPACING	AMPERAGE RANGE	OUTPUT
H704-42	3/4" on center	10-50* (configurable)	RTU Modbus†
H704-42/1	1" on center	10-50* (configurable)	RTU Modbus†

For the 100A version, order the H704-42H or H704-42/1H.
 For the 240VAC supply voltage version, order the H704-42E or H704-42/1E.
 For the 240VAC, 100A version, order the H704-42EH or H704-42/1EH.
 For N2 protocol versions, order H726-xx.

NOTES:

*Hole size accommodates up to 6 AWG (10mm²) THHN insulated conductors.
 †Other protocols available, consult factory.

ACCESSORIES

H8936 Network Display...see page 106.

