Branch Current Monitor, Split-Core

Monitor Current on Every Breaker

H663

DESCRIPTION

The **H663 Series** split-core branch circuit current monitoring system provides a cost-effective solution for electrical load management. It is ideally suited for applications where load capacity requirements are dynamic, such as data centers and sales floors. The split-core housing makes this device perfect for retrofit projects.

The H663 monitors the current draw of each critical 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.

FEATURES

- Reports current consumed on each circuit in the panel board...one product covers multiple points
- Provides Modbus registers for current limit warnings and alarms...prevents breaker trips
- Integrates with available network display for local indication
- Split-core design and network compatibility... ideal for retrofit applications
- Up to 63 H663s can be networked on one Modbus RS-485 drop...simplified wiring
- Split-core CTs are perfect for quick installation on critical load applications that can't be powered down

APPLICATIONS

- Retrofitting panelboards
- Cost allocation
- Protecting against overload
- Managing and balancing loads
- Lighting circuits

Inputs:

SPECIFICATIONS



Input Power	120 VAC (+10/-25%) line-to-neutral, 50/60 Hz; (208/230 VAC for H663SM-xxE)		
Frequency	50/60 Hz		
Accuracy:			
Accuracy	\pm 5% of reading from 5 A to 50 A		
Sampling Frequency	1280 Hz		
Update Rate	1.2 sec		
Outputs:			
Туре	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		
Mechanical:			
Connection to Conductor	Inductive split-core CT*		
Number of Channels	42, 30, 24, 12, or 1 (Choose one option)		
Environmental:			

* Do not apply 300 V Class current transformers to circuits having a line-to-neutral voltage greater than 300 V, 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.



0° to 60°C (32° to 140°F) (<95% RH, non-condensing)

H663 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.

-40° to 70°C (-40° to 158°F)

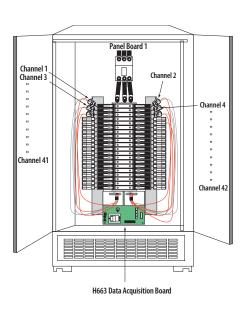




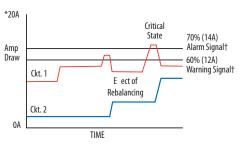
Operating Temperature Range

Storage Temperature Range

APPLICATION/WIRING EXAMPLES

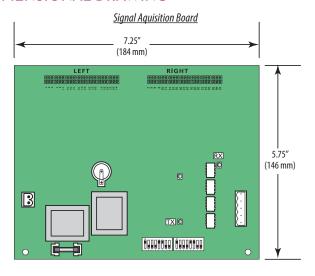


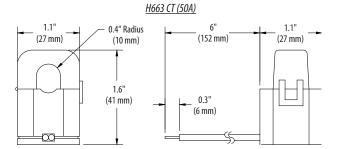
OPERATION EXAMPLE

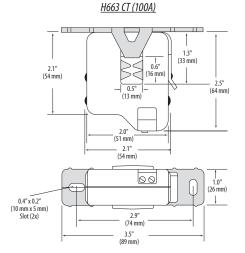


*Example represents 20 Amp circuit †Configurable time delay for alarm and warning

DIMENSIONAL DRAWING







ORDERING INFORMATION $\mathbf{C} \in \mathbb{Q}_{\mathsf{us}}$



MODEL	NUMBER OF CTs	AMPERAGE RANGE	OUTPUT
H663SM-xx(H)(E)	xx = 42, 30, 24, 12, or 1 (selectable)	Up to 50 A* (configurable)	Modbus RTU†

For 240 VAC supply voltage version, order the H663SM-xxE. For the 100 A CT version, order the H663SM-xxH. For the 240 V, 100A version, order the H663SM-xxHE. For N2 protocol versions, order H662SM-xx. NOTES:

* Hole size accommodates up to 6 AWG (10mm²) THHN insulated conductors.

† Other protocols available; consult factory.

ACCESSORIES Network Display (H8936)



