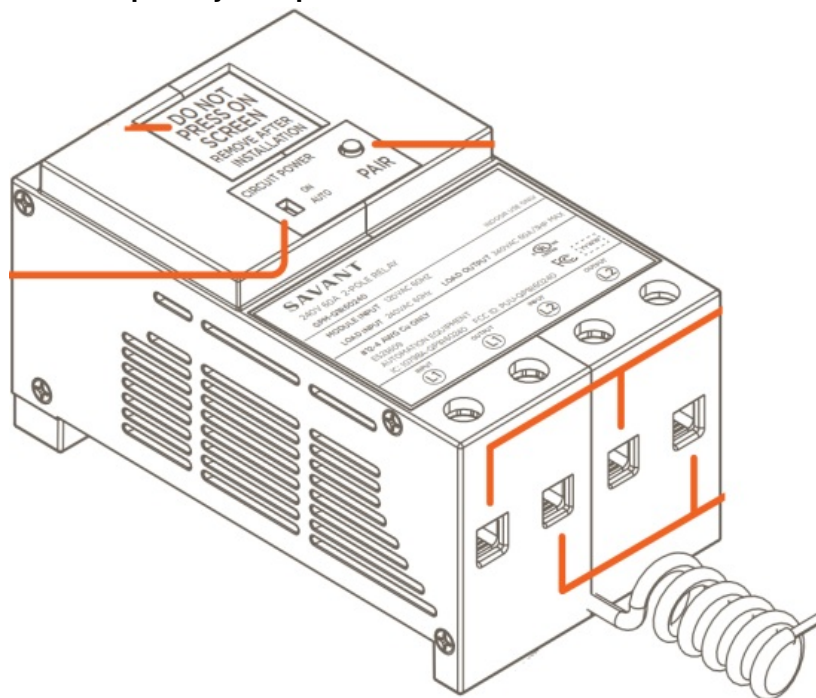




SAVANT QP1R60240 60 Amp Relay Companion Module with Current Transformer Installation Guide

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Important Safety Information – Read First!

Before installing, configuring, or operating any equipment, all relevant technical documentation must be read, understood, and followed. Savant technical documentation may contain important product-specific installation, mounting, and safety instructions, and can be accessed through the Savant Store.

Scan the QR code or visit the URL below, enter the relevant product name or SKU in the Search Savant prompt, and select the product purchased to find documents, specifications and more.



https://store.savant.com/DefaultStore/ccrz__HomePage

Safety Statements

All safety instructions below must be read, understood, and carefully followed under all applicable circumstances when working with any Savant equipment.

1. **Follow all input power ratings marked on product near power input!**
2. If fuse replacement is required, replacement fuse should match fuse rating marked on the product.
3. Do not use equipment near water.
4. Clean only with dry cloth.
5. Do not block any ventilation openings or install near any heat sources such as heat registers, stoves, radiators, amplifiers, etc.
6. Refer all servicing to qualified service personnel. Servicing is required when any part of the apparatus has

been damaged in any way, or fails to operate normally for any reason.

7. Use only attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/accessories.
8. For applicable equipment, use the included power cord with the grounding prong intact to insure proper grounding of the device.
9. If the provided plug does not fit the desired outlet, contact a licensed electrician to replace the obsolete outlet.
10. Protect any power cord from being walked on, pinched, strained, or otherwise potentially damaged, especially at the outlet or device connections.
11. Disconnect any outlet powered apparatus from its power source during lightning storms or when unused for long periods of time.
12. To completely disconnect equipment from AC mains power, disconnect the power supply cord plug from the AC receptacle on the device.
13. For any hardwired or fixed in-wall apparatus, carefully follow all wiring diagrams and instructions. All electrical wiring and servicing should be performed by a properly licensed electrician.



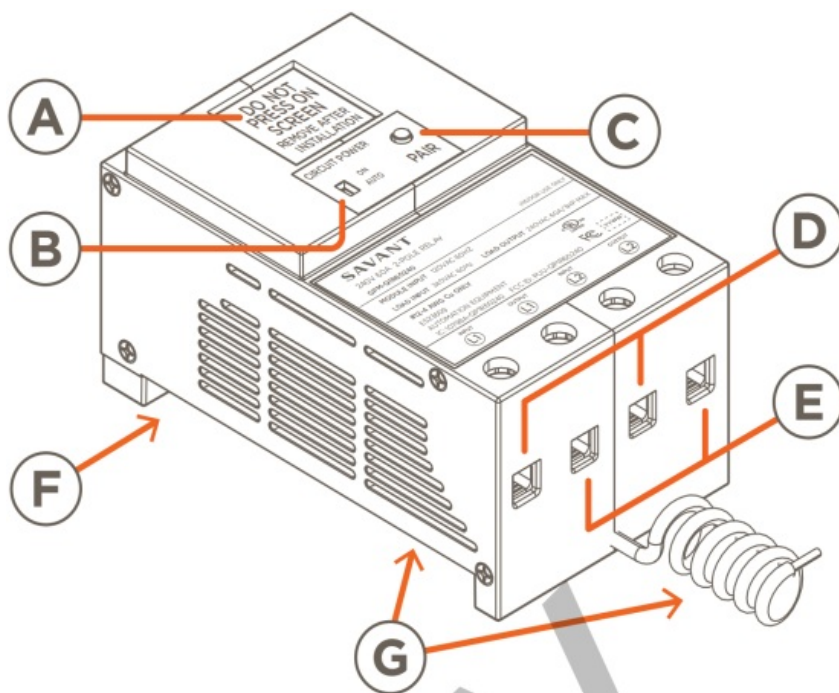
IMPORTANT NOTES:

- For product mounting, installation, safety instructions, technical specifications, and more, refer to the product Quick Reference Guide, available via the link or QR code noted above.
- For regulatory and compliance information, see reverse of this sheet and/or product packaging.

Box Contents

1. 240VAC (2 Pole) Relay Companion Module
 - GPM-QP1R60240-21 QO™ w/Plug-on Neutral **-or-**
 - GPM-Q1R60240-21 QO™ w/Pigtail
2. Product Information and Regulatory Insert (009-1950)
3. Quick Reference and Installation Guide (this document)

Descriptions



Multi-Page LCD screen that can display the following:

1. **A**

- Power draw at the output.
- Firmware, Mac Address, and Regulatory Info.
- UID of the Host that the module is communicating with.
- Real-time Bluetooth status connectivity icon.

2. **B**

Manual Load Switch: Toggle to the ON position to switch the load on. Toggle to AUTO for normal operation.

3. **C**

PAIR Button: The PAIR button is a multi-use button. The duration that the button is pressed and held determines the function that gets initiated:

Press and Release: Cycles through the various screens available on the LCD (POWER > INFO 1 > INFO 2)

Press and hold – Press and hold for 2 seconds to put module into pairing mode. Press and hold for 5 seconds to reset.

4. **D**

Input Power Connections: Connect outputs from a 2-pole breaker to inputs L1 and L2. See the Wiring section below.

5. **E**

Output Power Connections: Connect a 240V AC load across outputs L1 and L2. See the Wiring section below.

6. **F**

120V AC Connection: Plugs into the 120V AC bus bar in the breaker panel. The voltage from this connection powers the companion module.



7. **G**

Neutral: The model number of the module determines the type of neutral connection on the module:

- **Plug-On Neutral:** Positioned on the bottom of the module is a neutral clip that plugs directly onto the neutral bar.

- **Pigtail Neutral:** A neutral wire protrudes from the module's rear and gets wired to the neutral bar in the breaker panel.

Specifications

Environmental				
Temperature	32° to 104° F (0° to 40° C)			
Humidity	5% to 85% Relative Humidity (non-condensing)			
Location	Indoor Use Only			
Dimensions and Weights (net)				
	Height	Length	Depth	Weight
Module (QO)	2.875 in. (7.30 cm)	5.00 in. (12.70 cm)	2.60 in. (6.61 cm)	1.0 lbs (.45 kg)
Shipping	3.125 in. (7.94 cm)	7.25 in. (18.42 cm)	6.25 in. (15.88 cm)	1.25 lbs. (.57 kg)
Power				
Input Power (powers the module)	120V AC (+/- 10%) @ 60Hz, 0.1A (max)			
Input Power (from external source)	240V AC / 60A (max)			
Load Power	14400VA (240VAC 60A resistive load / 3HP max)			
Features of Automatic Action	Type 1.B action			
Standards				
Wireless	Bluetooth Low Energy (BLE) – 2.4 GHz radio frequency – IEEE 802.15.4			
Regulatory				
Safety and Emissions	FCC Part 15	UL	ICES 003	
				
Contains FCC ID:	PUU- QP1R60240			
Contains IC:	10798A- QP1R60240			
RoHS	Compliant			
Recommended Load Center Types				
All QO™ compatible modules fit into ¾ inch load centers.				
Supported Load Types				
Standard	Relay On/Off type loads			

Configuration	(home automation)
Electrical and Safety Characteristics	
Screw Tighten Torque	5.0 Nm
Wire Type	Copper (Cu) only
Pollution Degree	2
Purpose of Control	Operating Control, Smart Relay Control Module or the equivalent
Software	Class A
Impulse Voltage	2500V
Construction of Control	
Open Type	Independently mounted for flush mounting
Supported Software	
Savant OS	da Vinci 10.x

Features

- Control capability for loads up to 14400VA (volt-ampere).
- All QO™ relay modules are compatible with Schneider Electric/ Square D™ QO™ load centers.
- Dynamic management of loads.
- Built-in energy monitoring; +/- .5% revenue grade accuracy / 1 sec sample time.
- Communicates with Panel Bridge Controller using Bluetooth Low Energy (BLE) technology.
- Manual load switches positioned on the front panel can toggle power to the output On and Off.
- Color LCD display for easy identification and load status.

Important Information

- The breaker feeding this companion module should not be larger than 60 amps.
- This companion module can handle loads up to 60 amps.
- To determine the number of breaker panel spaces needed, add the number of spaces required for the circuit breakers with the spaces needed for the companion module.
 - Each 2-pole circuit breaker requires two spaces.
 - Each relay companion module requires four spaces.
- Each Panel Bridge Controller can communicate with up to 40 companion modules.
- Savant recommends not connecting any mission critical loads such as medical devices to this relay companion module.



ELECTRIC SHOCK! The 120/240V AC, 60 Hz source poses an electrical shock hazard that has the potential to cause serious injury to installers and end users.



CAUTION! Risk of Electric Shock – More than one disconnect switch may be required to de-energize the

device before servicing.



IMPORTANT! A licensed electrician is required to install any of Savant's Relay Companion Modules.

Branch Circuit Minimum Size of Conductors (General circuit wiring, Copper Conductors)					
15A	20A	30A	40A	50A	60A
#14 AWG	#12 AWG	#10 AWG	#8 AWG	#6 AWG	#4 AWG

Installation into Breaker Panel

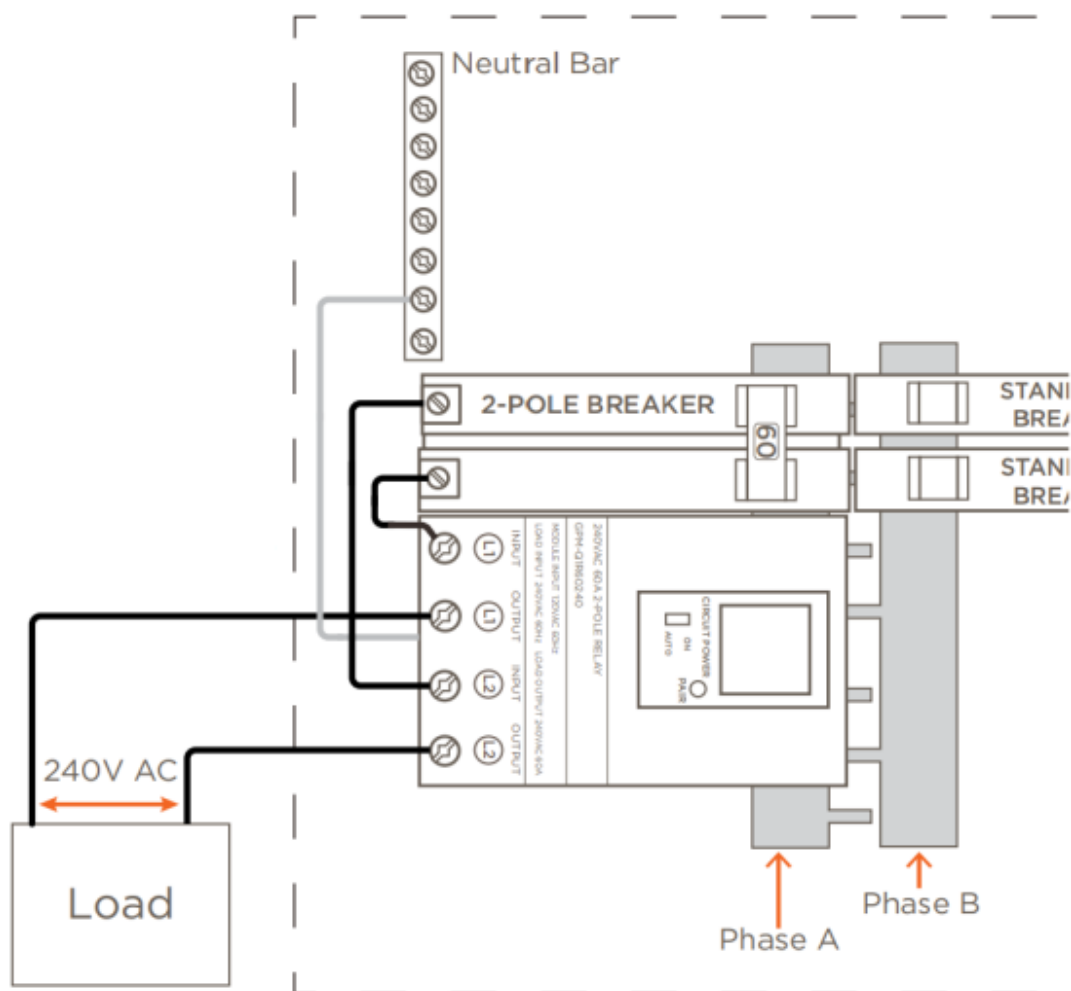
1. Remove power from the breaker panel by switching off the panel's main breaker.
2. Position and install a 2-pole breaker into any two slots in the breaker panel. Press firmly until the breaker is fully seated onto the appropriate bus bars.
3. Position and install the 60 Amp Relay Companion Module into any four empty slots in the breaker panel. Press firmly until the module is fully seated onto the appropriate bus bar. The companion module can be installed in any four open slots but is typically installed alongside the breaker installed in step 2.



HELPFUL! The companion module fills four slots in the breaker panel but connects to only one phase. The 120V AC from the breaker panel is used only to power the companion module. See diagrams below.

4. Use the diagrams below and make the appropriate connections. The diagram on the left is for companion modules that contain a plug-on neutral clip. The diagram on the right is for companion modules that include a neutral wire.

Wiring with Plug-on Neutral Companion Module with Plug-on Neutral



Breaker Panel

NOTE: The companion module connects to just one phase. This 120V AC supplies power to the module. The 2-pole breaker connects to both phases.

Circuit Test Instructions

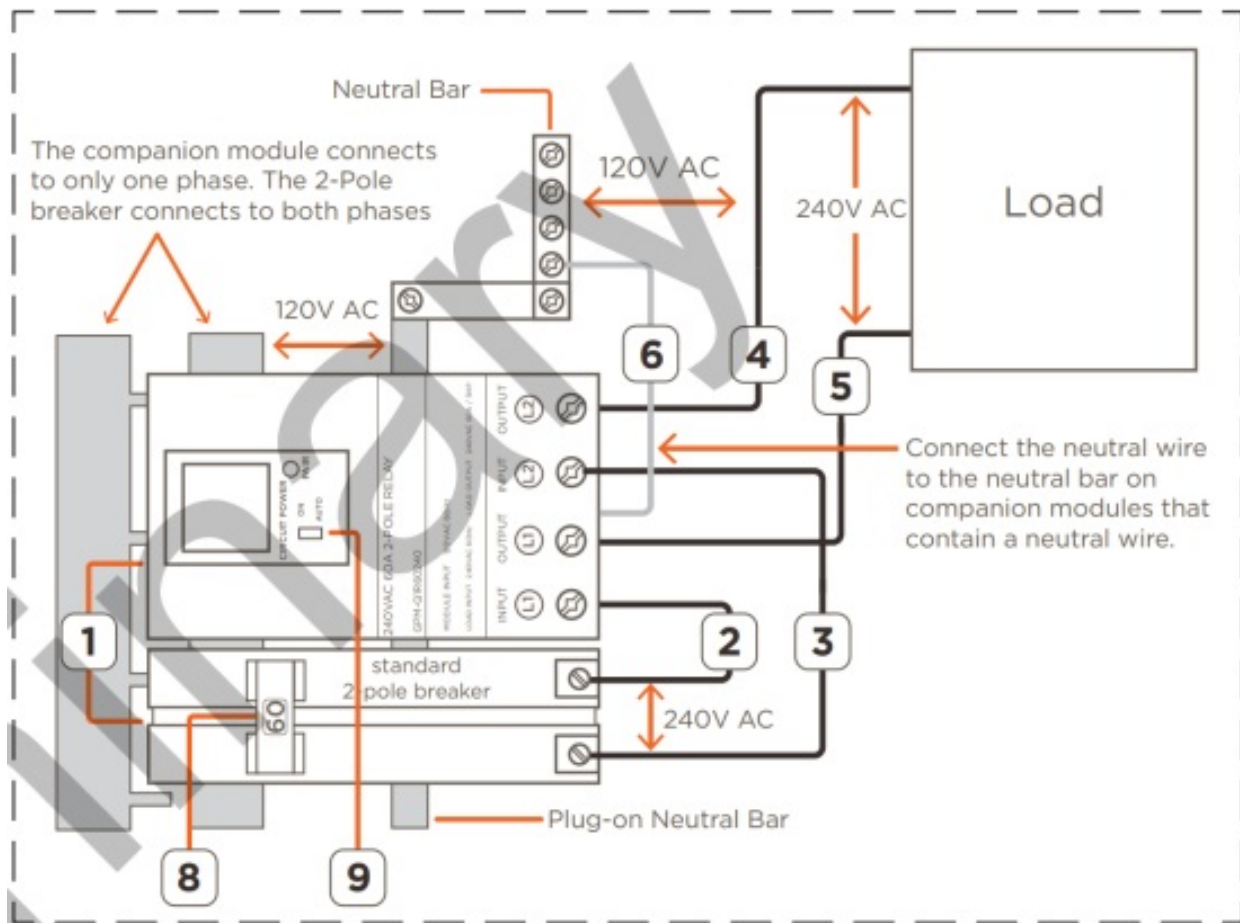
Use the instructions below to test the relay companion modules. The setup requires:

- 60 Amp Relay Companion Module.
- Load with maximum amperage of 60A.
- Standard 2-pole, 60 amp circuit breaker.
- Breaker test panel. The type of companion module determines the type of breaker panel (plug-on neutral or not)
- 120/240V AC source

⚠ IMPORTANT!

- The 2-Pole breaker connects across both phases in the breaker panel. The companion module, however, attaches to only one phase. This is shown in the image below.
- The GPM-Q160240-21 and GPM-QP160240-21 companion modules can accept up to a #4 AWG wire. See the Branch Circuit Minimum **Size of Conductors** table on the previous page.

1. Plug the 240V AC 2-Pole companion module and 60 amp 2-pole feeder breaker into the circuit breaker test panel.
2. Connect the output from one of the breakers on the 2-pole breaker to the L1 input on the companion module.
3. Connect the output from the remaining side of the 2-pole breaker to the L2 input on the companion module.
4. Connect one side of a load to the L1 output on the companion module.
5. Connect the remaining side of the load to the L2 output on the companion module.
6. On companion modules that contain a neutral wire, connect the neutral wire to the neutral bar.
7. Apply power to the breaker panel (not shown in diagram)
8. Toggle the 60 amp 2-pole breaker to On.
9. To test, toggle the CIRCUIT POWER switch on the companion module to the ON position and observe the load switches On. Toggle the CIRCUIT POWER switch to AUTO and verify the load switches Off.



Additional Documentation

Further information is available in the documents listed below and can be accessed via the **Savant Customer Community**.

- Panel Bridge Controller – PoE (PBC-P1000) – QRG
- Savant Panelized Lighting Deployment Guide.

Product Information and Regulatory Statement

FCC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for CLASS B digital devices, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correcting the interference with one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect this equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement – Wireless and Handheld Devices Only

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating procedure accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

FCC and IC Identifier – Devices with Integrated Screen or User Interface Only

This device electronically displays the FCC declaration of conformity logo as well as the FCC and IC identifier. This information can be found on the device by accessing:

(Service menu) > About (A propos de)



IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios. The Country Code Selection feature is disabled for products marketed in the US/Canada.

Customer Support

60 Amp Relay Companion Module – QRG

009-2103-00

45 Perseverance Way, Hyannis MA 0260

Savant.com

508.683.2500

SAVANT

Documents / Resources



[SAVANT QP1R60240 60 Amp Relay Companion Module with Current Transformer](#) [pdf] In stallation Guide

QP1R60240, PUU-QP1R60240, PUUQP1R60240, QP1R60240 60 Amp Relay Companion Module with Current Transformer, QP1R60240, 60 Amp Relay Companion Module with Current Transformer