

# SAVANT

## Product Information and Regulatory Statement

### 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](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.

### Déclarations de Sécurité

Toutes les instructions de sécurité ci-dessous doivent être lues, comprises et soigneusement suivies dans toutes les circonstances applicables lorsque vous travaillez avec un équipement Savant.

1. **Suivez toutes les puissances nominales indiquées sur le produit près de la puissance absorbée!**
2. Si le remplacement du fusible est nécessaire, le fusible de remplacement doit correspondre à la valeur nominale du fusible indiquée sur le produit.
3. N'utilisez pas d'équipement près de l'eau.
4. Nettoyer uniquement avec un chiffon sec.
5. Ne bloquez pas les ouvertures de ventilation et n'installez pas à proximité de sources de chaleur telles que les registres de chaleur, les cuisinières, les radiateurs, les amplificateurs, etc.
6. Confiez toutes les réparations à un technicien qualifié. Un entretien est requis lorsqu'une partie de l'appareil a été endommagée de quelque manière que ce soit ou ne fonctionne pas normalement pour une raison quelconque.
7. Utilisez uniquement les attaches / accessoires spécifiés par le fabricant, en suivant toutes les précautions de sécurité applicables à ces attaches / accessoires.
8. Pour l'équipement applicable, utilisez le cordon d'alimentation inclus avec la broche de mise à la terre intacte pour assurer une mise à la terre correcte de l'appareil.
9. Si la fiche fournie ne correspond pas à la prise souhaitée, contactez un électricien agréé pour remplacer la prise obsolète.
10. Protégez tout cordon d'alimentation contre les piétinements, les pincements, les tensions ou autres dommages potentiels, en particulier au niveau de la prise ou des connexions de l'appareil.
11. Débranchez tout appareil alimenté par une prise de courant de sa source d'alimentation pendant les orages ou lorsqu'il n'est pas utilisé pendant de longues périodes.
12. Pour déconnecter complètement l'équipement du secteur, débranchez la fiche du cordon d'alimentation de la prise secteur de l'appareil.
13. Pour tout appareil encastré ou câblé, suivez attentivement tous les schémas de câblage et les instructions. Tout le câblage électrique et l'entretien doivent être effectués par un électricien dûment agréé.



### 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.

## 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 equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

## 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 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.

## Déclaration IC

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage, et
2. Cet appareil accepter toute interférence, y compris les interférences pouvant provoquer fonctionnement indésirable d'appareil.

## Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux radiations de la FCC définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

## Identificateur de la FCC et d'IC

Ce périphérique par voie électronique affiche le logo de déclaration de conformité FCC ainsi que l'identificateur de la FCC et d'IC. Cette information peut être trouvée sur le terminal en accédant à:

(Menu de service) > About (A propos de)



## Circuit Test Instructions

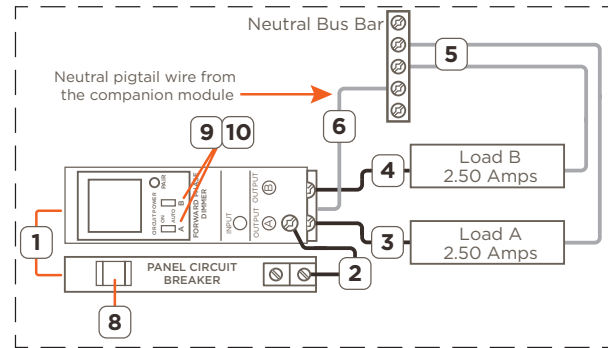
Use the instructions below to test that the dimmer module is functioning correctly. The setup requires the following:

- Forward Phase Companion Dimmer Module.
- Resistive loads with maximum amperage of 2.5 Amps.
- 15 amp circuit breaker.
- Breaker test panel. The type of dimmer module determines the type of breaker panel (plug-on neutral or not).
- 120V AC source

### ⚠ IMPORTANT!

- When making connections, observe all general electrical best practices including wire sizing guidelines.
- The GPM-QP2FPD05-21 and GPM-Q2FPD05-21 modules can accept up to a #14 AWG wire. See the Branch Circuit Minimum Size of Conductors table on the previous page for wire sizing information

1. Plug a feeder breaker and a Forward Phase Dimmer Companion Module into the circuit breaker test panel. The feeder breaker should not exceed 15A.
2. Connect the output of the feeder circuit breaker to the INPUT screw port on the dimmer module.
3. Connect a supported type load to Output A on the dimmer module.
4. Connect a second supported type load to Output B on the dimmer module.
5. Connect the unused side of each load to the neutral bus bar in the breaker panel.
6. On modules that contain a neutral pigtail wire, connect the neutral wire to the neutral bus bar.
7. Apply power to the breaker panel (not shown in diagram)
8. Toggle the feeder circuit breaker On.
9. To test, toggle the CIRCUIT POWER switches A and B to ON and verify both loads switch On.
10. Toggle the CIRCUIT POWER switches to AUTO and verify the loads switch Off.



## NOTES



# SAVANT

## Dual 300W Forward Phase Companion Module Dimmer Quick Reference and Installation Guide

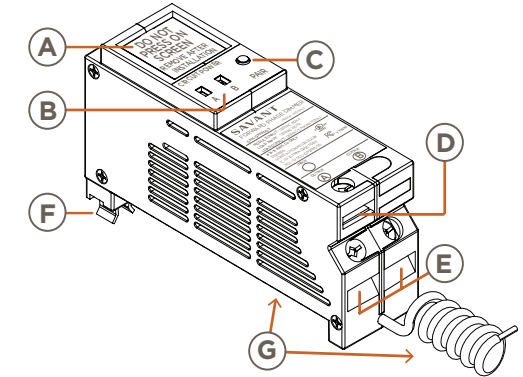
### Box Contents

- (1) Forward Phase Dimmer Module
  - GPM-QP2FPD05-21 QO™ Plug-on Neutral -or-
  - GPM-Q2FPD05-21 QO™ Pigtail
- (1) Product Information and Regulatory Insert (009-1950-xx)
- (1) Quick Reference Guide (this document)

### 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	
	Height      Width      Depth      Weight
Module	1.48 in.    5.00 in.    2.63 in.    .5 lbs
(QO)	(3.76 cm)    (12.70 cm)    (6.68 cm)    (.23 kg)
Shipping	1.71 in.    7.50 in.    4.30 in.    1.0 lbs
	(4.34 cm)    (19.05 cm)    (10.92 cm)    (.45 kg)
Power	
Input Power (powers the module)	120V AC (+/-10%) @ 60 Hz, 0.1A (max)
Input Power (from external source)	120 AC per input - 15A (max)
Load Power	300VA 2.5A @ 120V AC per channel 600VA 5.0a @ 120V AC per channel (when just one channel is used)
Features of Automatic Action	Type 1 Action
Standards	
Wireless	Bluetooth Low Energy (BLE) - 2.4 GHz radio frequency
Regulatory	
	FCC Part 15    UL    ICES 003
Safety and Emissions	 
Contains FCC ID:	PUU-QP2FPD05
Contains IC:	10798A-QP2FPD05
RoHS	Compliant
Recommended Load Center Types	
All QO™ compatible modules fit into ¾ inch load centers	
Supported Load Types	
Standard Configuration	<b>Dimmable circuits</b> - Incandescent, halogen, magnetic low-voltage transformer, and forward phase dimmable fluorescents
Electrical and Safety Characteristics	
Screw Tighten Torque	3.0 Nm
Wire / Conductor 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
Minimum Supported Release	
Savant OS	da Vinci 10.2

### Descriptions



Multi-Page LCD screen can display the following:

- A** - Energy usage in watts at the output.
- Percentage of brightness at the output.
- Firmware, Mac Address, and FCC/IC Info.
- Real time Bluetooth status connectivity icon.
- B** **Manual Load Switches** - Toggle to the ON position to switch load on. Toggle switch to AUTO for normal operation. Switch A controls output A and Switch B controls output B.
- 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.
- C** **Press and Release** - Cycles through the screens available on the LCD (POWER > DIMMER > 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.
- D** **Input Power Connection** - Connect the 120V AC output from the companion breaker to this input.
- E** **Output Connections** - The connections are labeled OUTPUT A and OUTPUT B. Connect each output to a separate load. See the [Wiring](#) section (page 2).
- F** **120V AC Connection** - Plugs into the 120V AC bus bar in the breaker panel. The voltage on this connection powers the module.
- 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

### Features

- Each output can control dimming loads up to 300 VA (volt-ampere). See the **Branch Circuit Minimum Size of Conductors** table on page 2.
- All QO™ style dimmer modules are compatible with Schneider Electric's Square D™ QO™ load centers.
- Modules are forward phase (leading edge) type dimmers.
- Built-in energy monitoring; +/- 3% accuracy / 1 sec sample time.
- Communicates over the air using Bluetooth Low Energy (BLE) technology.
- Color LCD display for easy identification and load status.

## Output Power Maximums

The table below shows the maximum wattage that the forward phase dimmer module can handle. Use the table to determine the number of loads that can safely be wired to each module's output.

Dimmer Type	Incandescent	MLV	LED
Forward Phase	300W	240W	Not Recommended

## Important Information

- To determine the feeder breaker's size, do the following:
  1. Determine the wattage requirements of each load connected to a dimmer module.
  2. Sum up the wattage of all loads.
  3. Divide the wattage requirements by the input voltage. This will be the current being drawn.
- To determine the number of breaker panel spaces needed, add the number of spaces required for each circuit breaker to the number of spaces needed for the dimmer module
  - Each circuit breaker requires one space
  - Each dimmer module requires two spaces
- The total current draw from the loads can't exceed 80% of the size of the breaker for that circuit. For example, with 15 amp breaker, 12 amps or 1440 watts. With a 20 amp breaker, max would be 16 amps or 1920 watts.
- Do not add MLV and ELV type loads to the same breaker/dimmer module circuit. MLV and ELV type loads should be connected to separate breaker circuits. Doing so can cause damage to the dimming module.

**⚠️ ELECTRIC SHOCK!** The 120V 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 Savant's 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

**NOTE:** This wiring requirement was based on the National Electric Code (NEC) (ANSI/NFPA70), Canadian Electric Code, Part 1 (CEC), and local codes Minimum Size of Conductors.

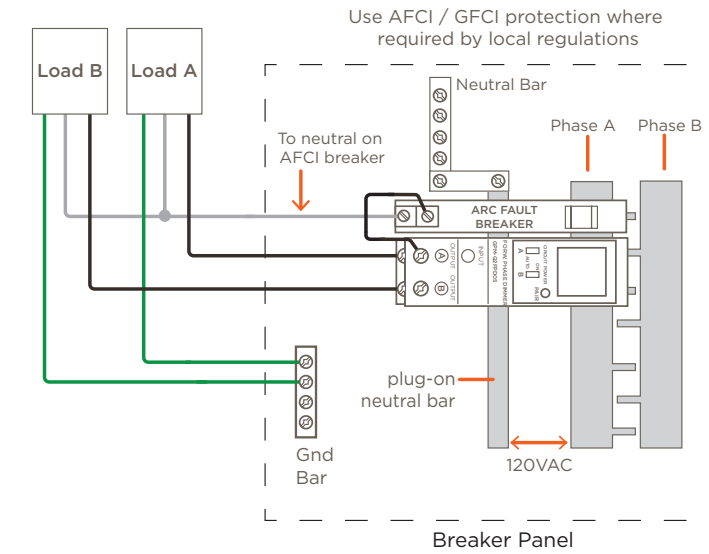
## Installation into Breaker Panel

1. Remove power from the breaker panel by switching off the panel's main breaker.
2. Position and install a circuit breaker into one of the slots in the panel. Press firmly until the breaker is fully seated onto the appropriate bus bars.
3. Position and install the Savant dimmer module into the slot where it will be installed. Press firmly until the module is fully seated onto the appropriate bus bars. Typically the Companion Module(s) are installed alongside the circuit breaker but doesn't need to be.
4. Use the wiring diagram on the next page to complete the wiring.

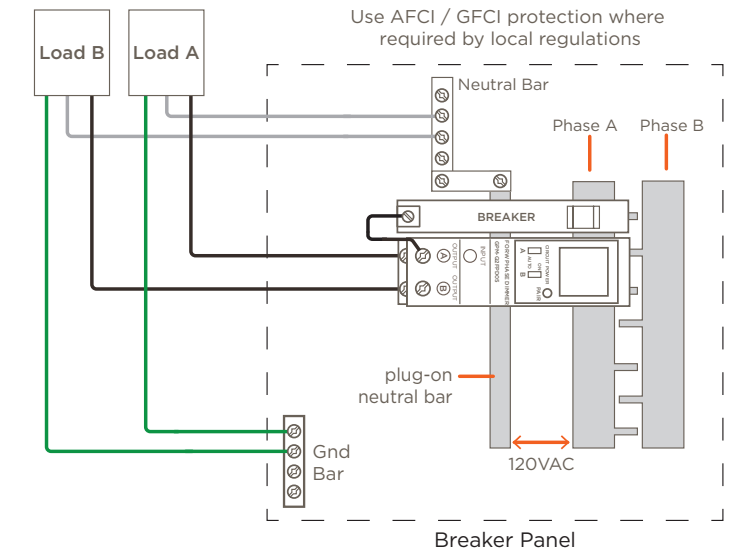
## Wiring

Use the appropriate diagram below when wiring the dimmer module, breaker, and load(s).

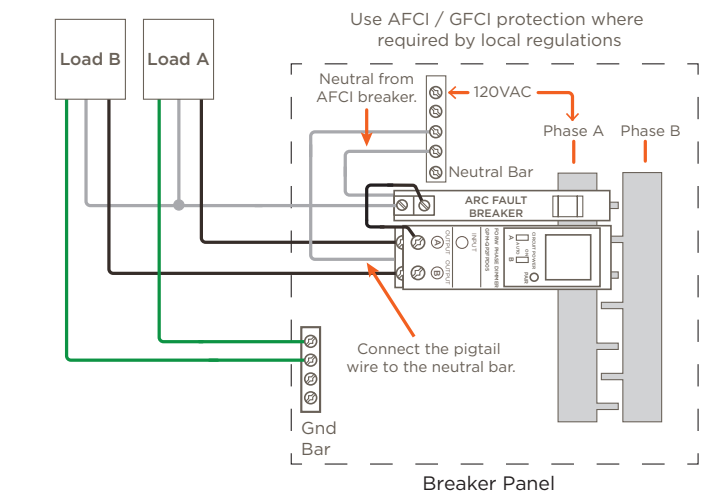
### Plug-on Neutral Bus Bar with ARC Fault Breakers



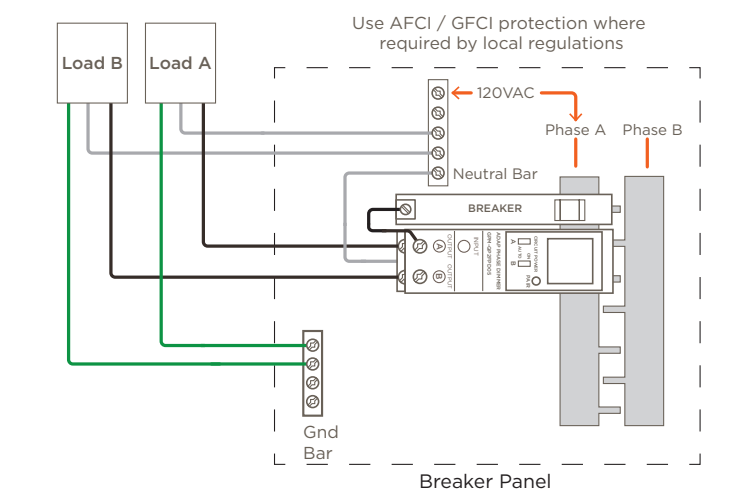
### Plug-on Neutral Bus Bar with Standard Breakers



### Standard Neutral Bus Bar with ARC Fault Breakers



### Standard Neutral Bus Bar with Standard Breakers



## 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.