

Installation and Operating Instruction for B.E.G. Controls - Power Pack PP-A-J

1. Product information

- Full featured power pack that provides power to B.E.G. Control low voltage occupancy detectors
- Suitable for parallel interconnection
- Integrated manual/automatic mode switch
- LED status indicator
- 1/2 inch threaded chase nipple
- Two lock nuts
- UL 2043 plenum rated
- 120-277 VAC voltage
- For indoor use
- Type I

2. Operation

Automatic mode

In automatic mode the power relay closes and the Form C isolated relay (HVAC relay) changes state, when motion is detected. The power relay opens again and the Form C isolated relay (HVAC relay) changes states, after no motion is detected and their respective follow-up times elapse. The load can be turned-on or off using the optional momentary switch. If the load is turned-off by the switch, it will turn back on automatically, until no more motion is detected and the sensor follow-up time has elapsed.

The state of the Form C isolated relay (HVAC relay) can be changed using an optional momentary switch wired into the HVAC switch input. If the (HVAC relay) state was changed manually, it will remain in this state until the switch is pressed again or no motion is detected and the time delay has elapsed.

Both power relay and Form C isolated relay (HVAC relay) can be turned-off at the same time, using an optional momentary switch wired into the ALL OFF switch input. Either power relay or Form C isolated relay (HVAC relay) can be turned back on, using their respective optional momentary switches or when no motion is detected and the follow-up time has elapsed.

Semi-automatic mode

In the semiautomatic mode the power relay closes and the Form C isolated relay (HVAC relay) changes states, when their corresponding optional momentary switches are pressed. The power relay opens again when no motion is detected and the follow-up time elapses.

The load can be turned-on or off using the optional momentary switch. If the load is turned-off by the switch, it will turn back on automatically until no more motion is detected and the sensor follow-up time has elapsed.

The state of the Form C isolated relay (HVAC relay) can be changed using an optional momentary switch wired into the HVAC switch input. If the (HVAC relay) state was changed manually, it will remain in this state until the switch is pressed again or no motion is detected and the time delay has elapsed.

In either automatic or semi-automatic mode, if the optional momentary switch for either power relay or Form C isolated relay (HVAC relay) was used to turn the corresponding load on, but the motion detector(s) were not triggered, the power pack will turn the loads off automatically, after the following discrete time delays: Power relay will turn-off in 60 min and HVAC relay will turn-off in 240.

3. Safety advice

- WARNING:**
SHOCK HAZARD. MAY RESULT IN SERIOUS INJURY OR DEATH!
TURN POWER OFF AT THE CIRCUIT BREAKER BEFORE INSTALLING THE POWER PACK!
- POWER PACK MUST BE INSTALLED AND USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.**
- INSTALLATION BY A QUALIFIED PERSONAL OR ELECTRICIAN IS RECOMMENDED!**
- DO NOT WIRE HOT!!!!**

4. Installation Overview PP-A-J

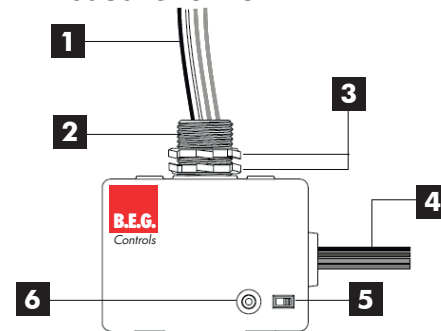
4a. Intended uses

- For indoor use only
- The power pack can be used as a stand alone unit, low voltage switch, or can be wired to a sensor for automated control

4b. Needed for installation

- Power packs should be installed according to state, local and national electrical Codes and requirements
- Low voltage wiring: at least 18-gauge.
High voltage wiring: at least 14-gauge.
- For plenum return ceilings, use UL listed plenum-approved cables or wire.

5. Product Overview



- 1 Line voltage wires
- 2 1/2 inch threaded chase nipple
- 3 Two lock nuts
- 4 Low voltage wires
- 5 Manual/automatic mode switch
- 6 LED status indicator

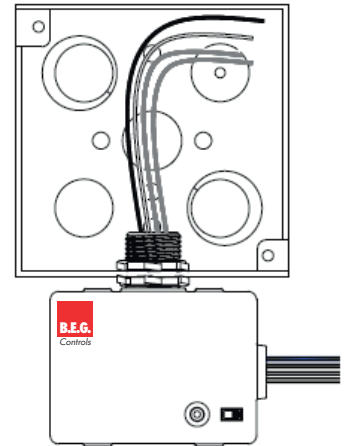
6. Mounting PP-A-J

6a. Mounting guidelines

- The power packs mount to a junction box with 1/2 inch knockouts.

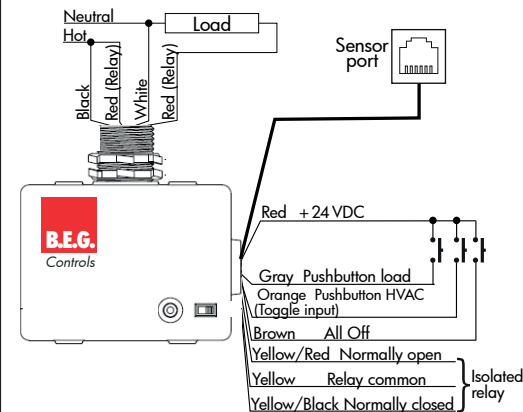
6b. Mounting instructions

- Remove the top lock nut from the 1/2" chase nipple.
- Place line voltage wires and 1/2" chase nipple through 1/2" knockout.
- Reinstall the lock nut and tighten.



7. Wiring PP-A-J

- Before installing Power Pack, make sure that power has been disconnected at the breaker and check that there is no voltage present with a volt meter.
- After Power Pack is installed, verify wiring is correct to avoid damage to the power pack, lighting, and control devices.



8. LED function indicators

Function	LED
Power relay	red
HVAC	green
Load/ HVAC	alternating between red and green
Over-current/ error	quickly blinking red

9. Description/Part No / Accessory

Typ	
Power-Pack-Auxiliary Relay Jack PP-A-J	97020

10. Trouble shooting

Problem	Solution
No Power at Sensor	Breaker has tripped - Check for shorts and reset breaker.
	Breaker is not on. – Turn Breaker On.
	Line Voltage Miswire. – Correct wiring.
	Short Circuit – Check for proper wiring connections with wiring details included.
	Low Voltage wiring to power pack is incorrect. – Check wiring details for proper connections.
Lights do not come on Auto-matically.	Auto / Manual switch in Manual. – Put Switch in Auto.
	Powers is off. – Turn Power On at Circuit Breaker.
	Sensor settings not correct. – Readjust Sensor.
	All Off input held Off. – Check brown wire on power pack.
Lights do not go off.	Movement in the Detection area. – Adjust Sensor or install shield.
	Push Button is on. – Check Grey wire on Power Pack.
Lights Switch ON/OFF.	Sensor sees movement outside of it detection zone. – Adjust Sensor or use shields.
	Low Voltage Overload on power pack. – To many devices connected to power pack.
Lights Switch on without obvious movement.	Sensor is detecting movement adjust sensor.

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