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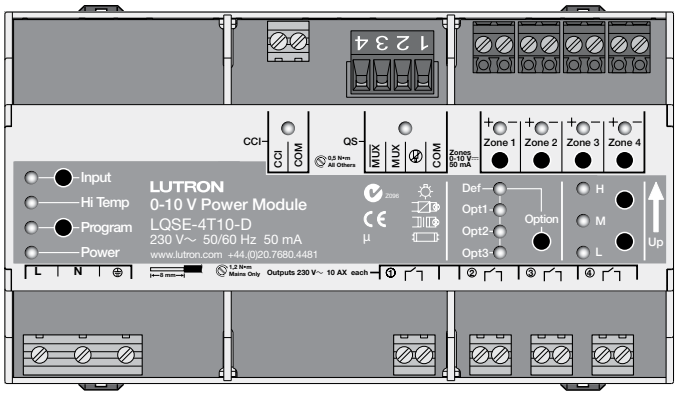
Power Module

The Power Module family is a group of modular products for the control of lighting loads. This document describes the following products:

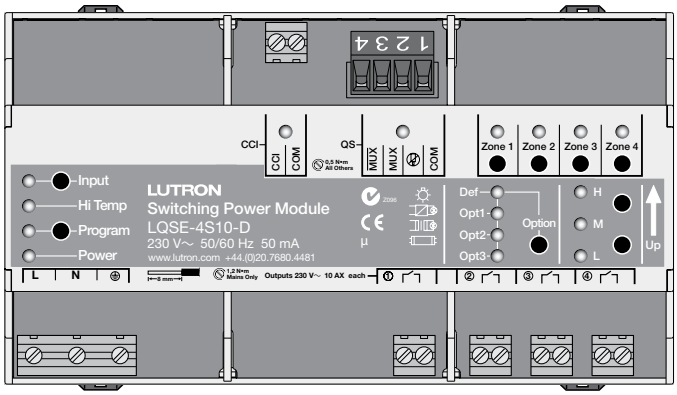
- Model Number LQSE-4S10-D: Power Module unit for Switching only
- Model Number LQSE-4T10-D: Power Module unit for 0–10 V/Switching

Features

- Includes QS link for seamless connection to a HomeWorks QS system.
- Power Module units can be used in a HomeWorks QS system to control and manage light in an entire home or building.

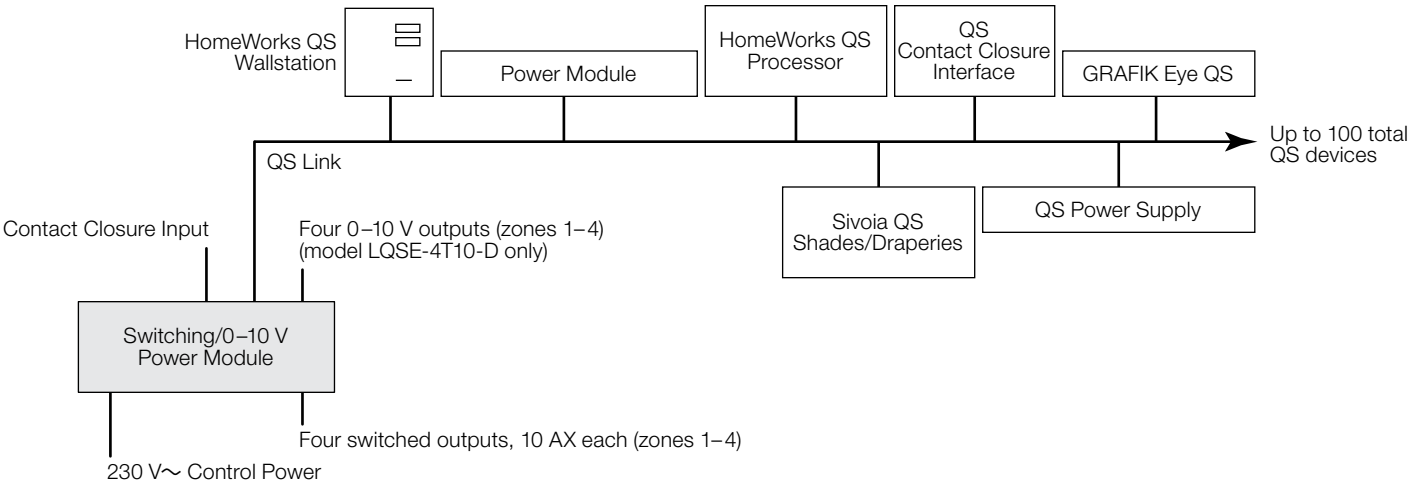


LQSE-4T10-D



LQSE-4S10-D

System Example



LUTRON SPECIFICATION SUBMITTAL Page 1

Job Name:	Model Numbers:	
Job Number:		

Specifications

Power

- 230 V~ 50/60 Hz
- Lightning strike protection meets ANSI/IEEE standard 62.31–1980. Can withstand voltage surges of up to 6 000 V~ and current surges of up to 3 000 A.
- Current draw: 50 mA max
- Standby power : 1 W
- BTUs/hour when fully loaded: 4

Standards

- IEC/EN 60669-2-1, EN50428
- Lutron Quality Systems registered to ISO 9001:2008
- CE
- C-Tick ✔

Environment

- Ambient Temperature Operating Range (inside mounting panel): 0 ºC to 40 ºC
- Calibration point maximum: 65 ºC
- Relative humidity: less than 90% non-condensing
- For indoor use only

Terminals

- Mains wiring: 0.5 mm^2 to 6.0 mm^2
- 0–10 V Wiring: 0.5 mm^2 to 2.5 mm^2
- CCI Wiring: 0.5 mm^2 to 6.0 mm^2
- Zone wiring: 0.5 mm^2 to 6.0 mm^2

Mounting

- Use an IP20 (minimum) rated consumer panel or breaker panel with integrated DIN rail
- Width = 9 modules (161.7 mm)

Programming and Compatibility Requirements

- LQSE-4T10-D and LQSE-4S10-D can be used only with the HomeWorks QS system.
- HomeWorks QS software version 3.0 or higher required.

Output Zone Ratings

- Each zone is rated at 10 AX for switching. Rated for resistive, capacitive, or inductive lighting loads as defined by IEC/EN 60669-2-1.
- Switched outputs utilize latching relays to maintain relay state if control power is lost.
- 0–10 V rated for 50 mA maximum output, source or sink per zone.

HomeWorks QS Wallstations

- HomeWorks QS wallstations can be configured to control Power Modules with the HomeWorks QS programming utility.
- LED indicator displays the status of programmed lights.

QS Link Limits

- A QS link in a HomeWorks QS system can have up to 512 zones (outputs) and 100 devices.
- Each Power Module counts as one device toward the 100 device limit.

Manual Mode Operation

- Zone buttons:
  - selects zone to control
- Raise/Lower buttons:
  - turns loads on and off
  - dim loads up and down (LQSE-4T10-D only)

Note: Program, Input, and Option buttons are not used in LQSE models.

Contact Closure Input (CCI)

- The CCI behaves as a Manual Override Closure Input.
- If the CCI is open, the Power Module unit will enter Manual Override Mode, which will turn on all loads and disable control from other devices.
- When the CCI is closed or jumpered (factory default), Power Module unit zones will return to the settings or levels they were at prior to entering Manual Override Mode.

⚠ **WARNING — Entrapment hazard —** May result in serious injury or death. These controls should only be used to control equipment which is visible from every control location.

⚠ **WARNING – Fire hazard –** May result in serious injury or death. Only use these controls to operate approved load and equipment types.

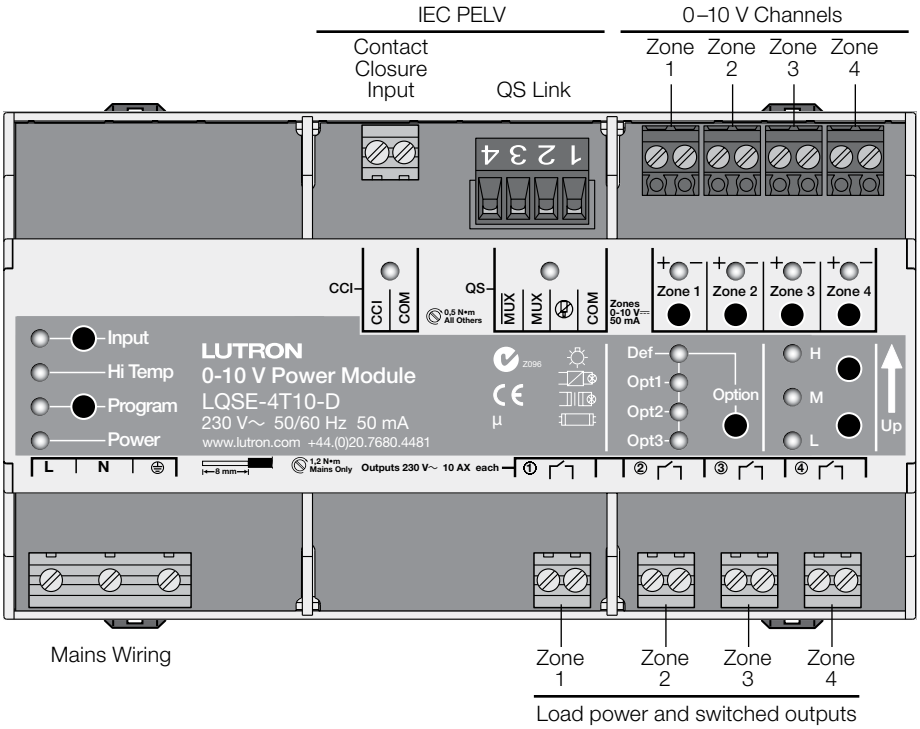
IMPORTANT NOTE:

Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, garage doors, industrial doors, microwave ovens, heating pads, fireplaces, space heaters, etc. It is the installer's responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

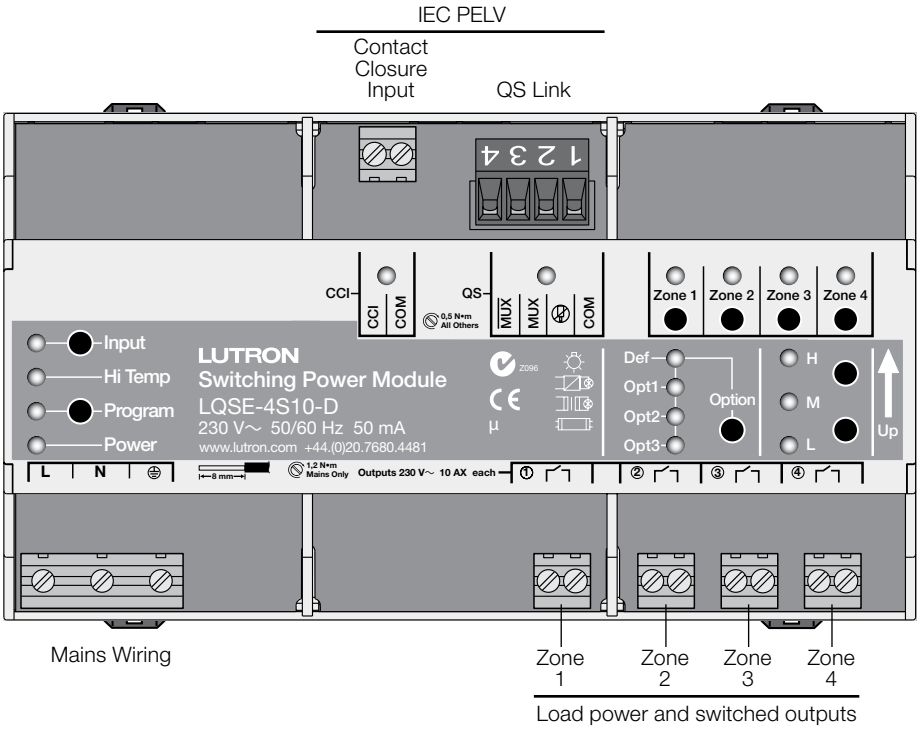
Job Name:	Model Numbers:	
Job Number:		

Overview of Wiring Terminals

LQSE-4T10-D



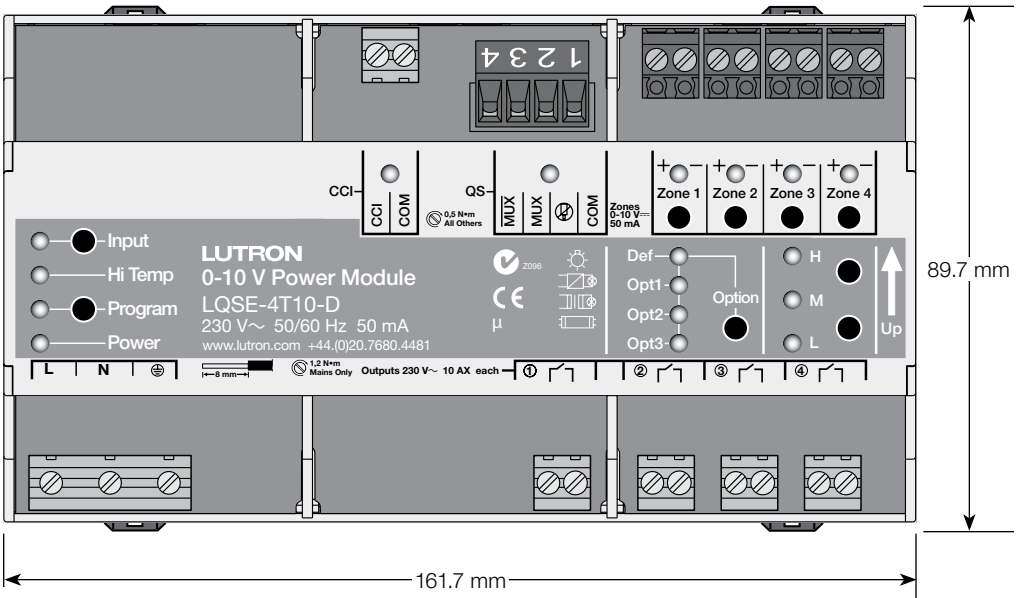
LQSE-4S10-D



Job Name:	Model Numbers:	
Job Number:		

Mechanical Dimensions

LQSE-4T10-D



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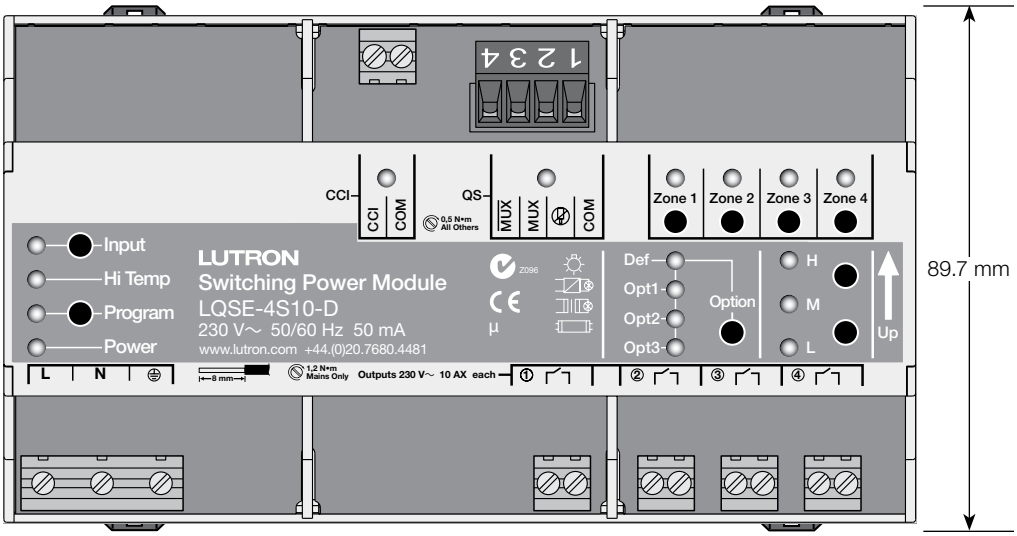
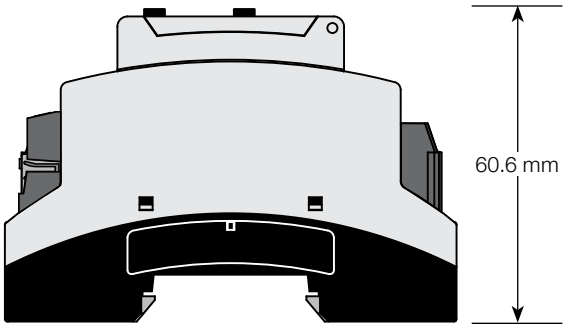




Job Name:	Model Numbers:	
Job Number:		

Mains Voltage Wiring

Wiring from Distribution to Power Module unit

- Turn off all circuit breakers or isolators feeding the Power Module unit at distribution panel.
- Run live, neutral, and earth (⏚) wires from a 230 V~ 50/60 Hz feed to the Power Module unit.

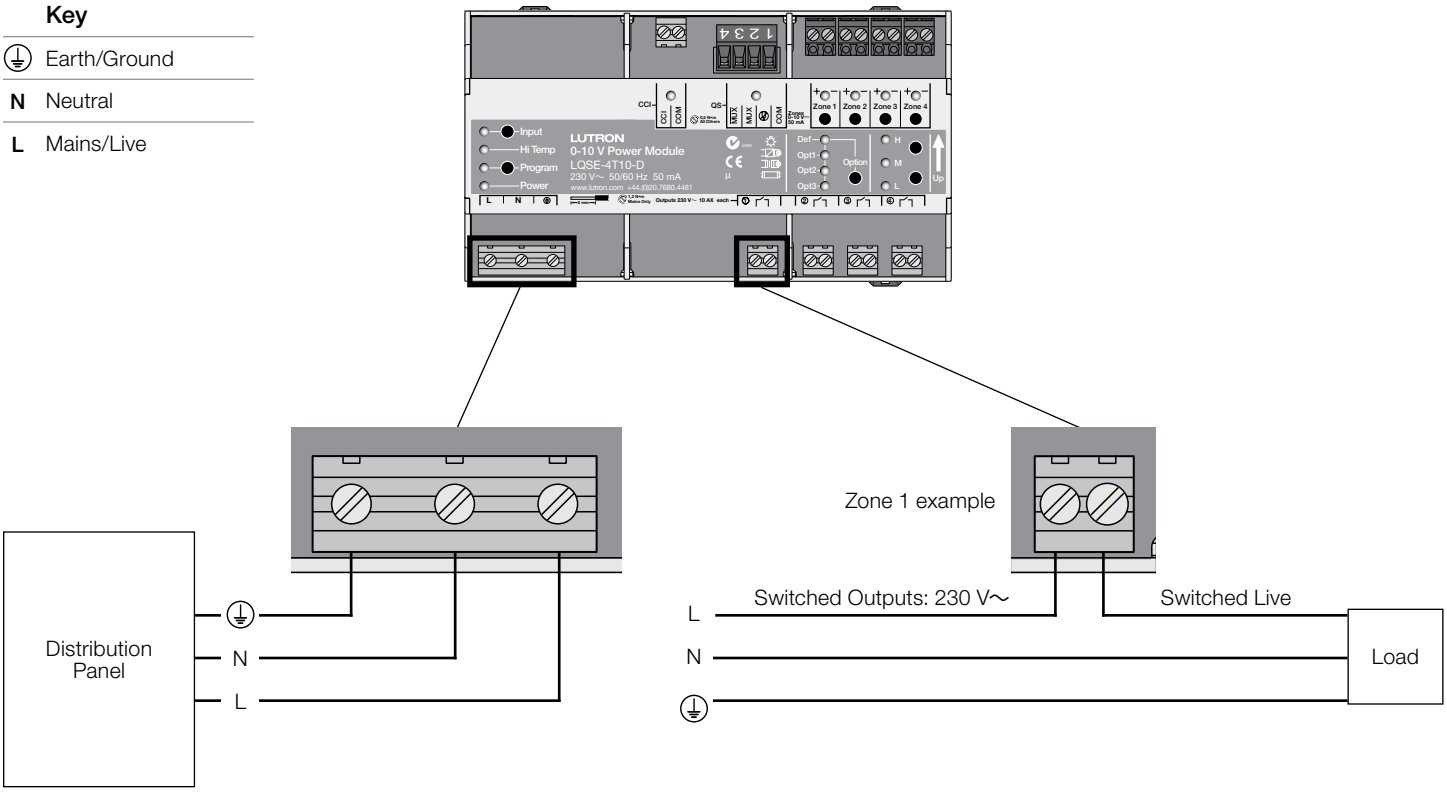
Mains Wiring and IEC PELV Separation

- Follow appropriate local and national codes to avoid violating required separation guidelines.

Behavior During Power Failure

- Relays do not change state when power is lost to the L/N/⏚ terminals. Follow local and national codes for emergency lighting requirements.

Key	
⏚	Earth/Ground
N	Neutral
L	Mains/Live

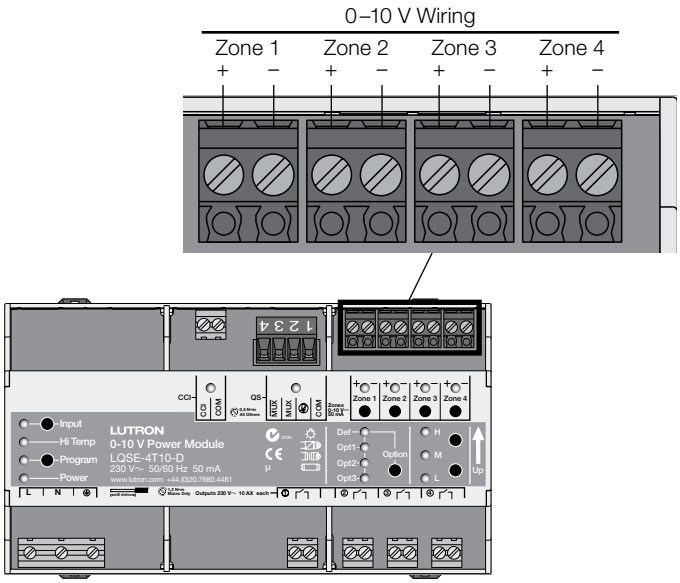


Job Name:	Model Numbers:	
Job Number:		

Wiring: 0–10 V

0–10 V Wiring (LQSE-4T10-D only)

- 0–10 V zones 1–4 are double-insulated from all other inputs and outputs.
- 0–10 V zones 1–4 are not insulated from each other. They share the same common terminal (negative "–" terminal).
- Connect only SELV/IEC PELV circuits, or connect only non-SELV/IEC PELV circuits to 0–10 V zones 1–4. Do not mix SELV/IEC PELV circuits and non-SELV/IEC PELV circuits.
- Follow all national and local electrical codes for separation requirements.

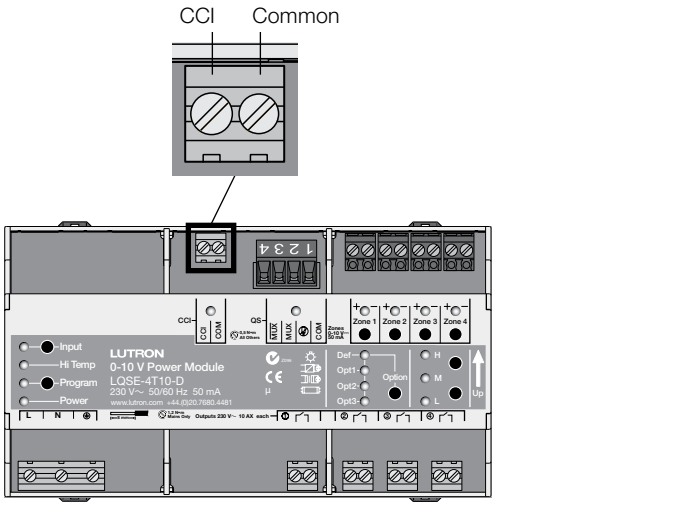


Wiring: Manual Override Contact Closure Input

IEC PELV Manual Override Contact Closure Input

- Contact Closure Input (CCI) wiring is IEC PELV. Follow all applicable national and local codes for proper circuit separation and protection.
- When in Manual Override mode, all ballasts and modules will be at their programmed Manual Override light level (default is 100%). All other controls are locked out.
- Manual Override contact closure input is normally closed (NC). The Power Module unit is shipped with a jumper pre-installed.

  Note: The Power Module unit will default to Manual Override Mode if the CCI is left open. If no Manual Override contact input is required, please leave the wire jumper in the CCI terminals.

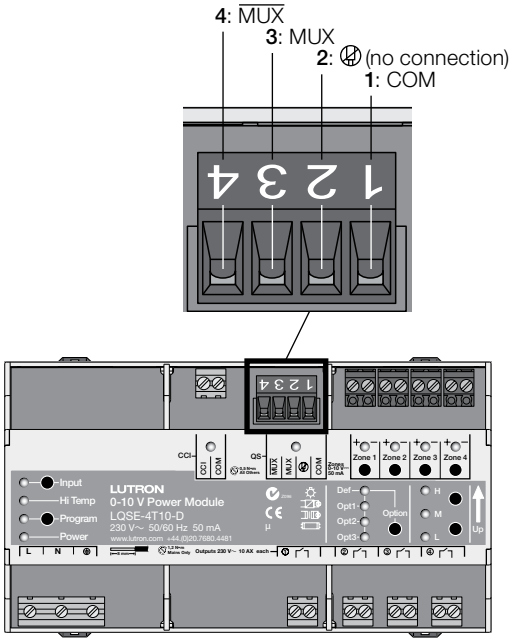


Job Name:	Model Numbers:	
Job Number:		

Wiring: QS Link

IEC PELV QS Link Wiring

- Link communicates using IEC PELV wiring.
- Follow all applicable national and local codes for proper circuit separation and protection.
- Wiring may be daisy-chained or T-tapped.
- Total length of QS link must not exceed 600 m.
- Wire Gauge:
  - Power (terminals 1 and 2): 1 pair 1.0 mm^2
  - Data (terminals 3 and 4): 1 pair 0.5 mm^2 to 1.0 mm^2, twisted and shielded.
  - Can use Lutron cable GRX-CBL-346S-500
- Do NOT connect terminal 2.



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