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GP Dimming Panels: 120/277 V~

GP dimming panels provide power and dimming for up to 144 load circuits and control any light source, including full-conduction, non-dimming.

Models available with:

- 120 V~ and 277 V~ input power.
- 3 to 144 circuits.
- Different feed types and breakers.

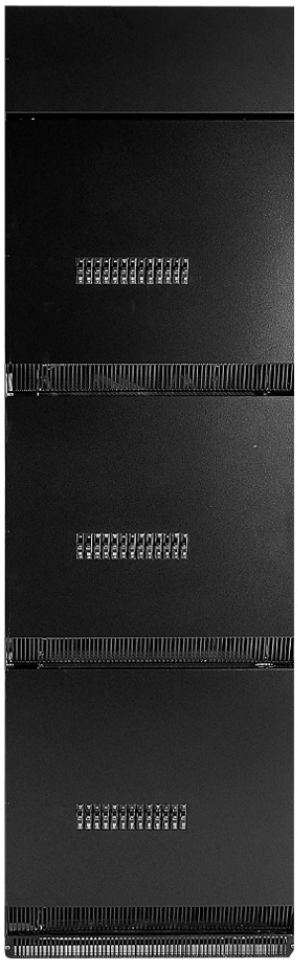
GP Dimming Panels work with:

- GRAFIK Eye 4000 Control Units.
- GRAFIK 5000, GRAFIK 6000, GRAFIK 7000 Systems and Quantum Systems.
- LP Dimming Panels.
- XP Softswitch Panels.
- DMX512 dimming systems via the 2LINK option.

GP3/4 Mini-Size Panels

GP8-24 Standard-Size Panels

GP36 Large-Size Panels



GP48-144 Large-Size Panels

LUTRON SPECIFICATION SUBMITTAL Page 1

Job Name:	Model Numbers:	
Job Number:		

GP Dimming Panels: 230 V~ (CE)

GP dimming panels provide power and dimming for up to 24 load circuits and control any light source, including full-conduction, non-dimming.

Models available with:

- 230 V~ input power.
- 3 to 24 circuits.
- Different feed types and breakers.

GP Dimming Panels work with:

- GRAFIK Eye 4000 Control Units.
- GRAFIK 5000, GRAFIK 6000, GRAFIK 7000 Systems and Quantum Systems.
- LP Dimming Panels.
- XP Softswitch Panels.
- DMX512 dimming systems via the 2LINK option.

GP3/4 Mini-Size Panels

GP8-24 Standard-Size Panels

Job Name:	Model Numbers:	
Job Number:		

GP Dimming Panels: 220–240 V~ (non-CE)

GP dimming panels provide power and dimming for up to 24 load circuits and control any light source, including full-conduction, non-dimming.

Models available with:

- 220–240 V~ input power.
- 3 to 24 circuits.
- Different feed types and breakers.

GP Dimming Panels work with:

- GRAFIK Eye 4000 Control Units.
- GRAFIK 5000, GRAFIK 6000, GRAFIK 7000 Systems and Quantum Systems.
- LP Dimming Panels.
- XP Softswitch Panels.
- DMX512 dimming systems via the 2LINK option.

GP3/4 Mini-Size Panels

GP8-24 Standard-Size Panels

Job Name:	Model Numbers:	
Job Number:		

Specifications: 120/277 V~

Standards

- UL® Listed (Reference: UL File E42071).
- Complies with CSA or NOM (where appropriate).
- California Energy Commission Listed
- Seismic Certified (Test Method AC156. Reference OSHPD Preapproval OSP-0215-10).

Power

- Input power: 120 V~ and 277 V~, 50/60 Hz, phase-to-neutral.
- Branch Circuit Capacity:
  - 120 V~ (up to 2000 W/VA)
  - 277 V~ (4500 W/VA)
  - Minimum load: 0 W
- Number of Circuits: 3–144
- Branch Circuit Breakers: UL® rated thermal magnetic. AIC ratings (other ratings available):
  - 120 V~ (10,000 A)
  - 277 V~ (14,000 A)
- Lightning strike protection: Meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6000 V~ and current surges of up to 3000 A.
- 10-year power failure memory: Automatically restores lighting to scene selected prior to power interruption.

Sources/Load Types

Operates these sources with a smooth continuous Square Law dimming curve or on a full-conduction, non-dimming basis:

- Incandescent (Tungsten)/Halogen
- Magnetic Low-Voltage Transformer
- LED drivers specified by the manufacturer to work with forward-phase dimming controls.*
- Electronic low-voltage transformers specified by the manufacturer to work with forward-phase dimming controls.
- Lutron Electronic Fluorescent Dimming Ballasts
- Magnetic Fluorescent Lamp Ballasts
- Optional modules allow for control of 0–10 V⎓, DSI, and PWM load types.
- Operates HID sources on a full-conduction, non-dimming basis.

Wiring

- Internal: Pre-wired by Lutron.
- System communications: Low-voltage IEC PELV/NEC® Class 2 wiring connects dimming panels to other components.
- Line (mains) voltage: Feed, load, and control circuit wiring only; no other wiring or assembly required.

Filter Chokes

- Load current rise time is measured at a 90-degree conduction angle.
- 10–90% of load-current waveform:
  - 350 µSec rise time at 50% dimmer capacity.
  - 400 µSec rise time at 100% dimmer capacity.
- 0–100% of load-current waveform:
  - 525 µSec rise time at 50% dimmer capacity.
  - 600 µSec rise time at 100% dimmer capacity.
- At no point in the waveform can the rate of current change exceed 300 mA per µSec.
- Consult Lutron for higher rise time options.

Dimming Cards

- Panel current ratings are listed for continuous operation; UL® listed specifically for each light source.
- RTISS filter circuit technology compensates for incoming line voltage variations; no visible flicker with +/–2% change in RMS voltage/cycle and +/–2% Hz change in frequency/second.
- Arcless relay air-gap OFF switches (one per load circuit) ensure open load circuits when OFF function is selected; eliminate arcing at mechanical contacts when loads are switched.

Physical Design

- Enclosure: NEMA-Type 1 (Type 2 available on request); IP-20 protection; 16 U.S. Gauge Steel; indoor use only.
- Weight: 30 to 1300 lb (14 to 590 kg).
- Mounting: Surface-mount only. Allow space for ventilating.
- Seismic Certification Limits: SDS = 2.5 g, z/h = 1.0, IP = 1.5 for wall or wall/floor mounted panels. SDS = 1.5 g for floor-mount panels only. Contact Lutron for details.

Environment/Heat Dissipation

- Patented, ribbed aluminum heat sink base cools panel by convection; no fans.
- 32 °F–104 °F (0 °C–40 °C); relative humidity less than 90%, non-condensing.

* Lutron cannot guarantee compatibility with untested LED drivers. Refer to the LED Product Selection tool at www.lutron.com/ledtool for a list of compatible products.

continued on next page…

Job Name:	Model Numbers:	
Job Number:		

Specifications: 120/277 V~ (continued)

Short Circuit Current Ratings (other ratings available)

Panel Type	Voltage	Std. Min. SCCR Rating
GP Main Lug (standard- and large-size)	120 V~; 277 V~	25,000 A
GP Main Breaker (standard-size)	120 V~	10,000 A
	277 V~	18,000 A
GP Main Breaker (large-size)	120 V~	25,000 A
	277 V~	25,000 A
GP Mini-Size	120 V~	10,000 A
	277 V~	14,000 A
GP Mini-Size (feed-through)	120 V~	10,000 A
	277 V~	14,000 A

Job Name:

Job Number:

Model Numbers:

Specifications: 230 V~ (CE)

Standards

- Complies with CE.

Power

- Input power: 230 V~ 50/60 Hz, phase-to-neutral.
- Branch Circuit Capacity: 10 A
  – Minimum load: 0 W
- Number of Circuits: 3–24
- Branch Circuit Breakers: IEC-rated thermal magnetic. AIC rating (other ratings available): 6000 A
- Lightning strike protection: Meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6000 V~ and current surges of up to 3000 A.
- 10-year power failure memory: Automatically restores lighting to scene selected prior to power interruption.

Sources/Load Types

Operates these sources with a smooth continuous Square Law dimming curve or on a full conduction, non-dimming basis:

- Incandescent (Tungsten)/Halogen
- Magnetic Low-Voltage Transformer
- LED drivers specified by the manufacturer to work with forward-phase dimming controls.*
- Electronic low-voltage transformers specified by the manufacturer to work with forward-phase dimming controls.
- Lutron Electronic Fluorescent Dimming Ballasts
- Magnetic Fluorescent Lamp Ballasts
- Optional modules allow for control of 0–10 V⎓, DSI, and PWM load types.
- Operates HID sources on a full-conduction, non-dimming basis.

Wiring

- Internal: Pre-wired by Lutron.
- System communications: Low-voltage IEC PELV/NEC® Class 2 wiring connects dimming panels to other components.
- Line (mains) voltage: Feed, load, and control circuit wiring only; no other wiring or assembly required.

Filter Chokes

- Load current rise time is measured at a 90-degree conduction angle, with 120 V~ input power.
- 10-90% of load current waveform:
  – 350 µSec rise time at 50% dimmer capacity.
  – 400 µSec rise time at 100% dimmer capacity.
- 0–100% of load current waveform:
  – 525 µSec rise time at 50% dimmer capacity.
  – 600 µSec rise time at 100% dimmer capacity.
- At no point in the waveform can the rate of current change exceed 300 mA per µSec.
- Consult Lutron for higher rise time options.

Dimming Cards

- Panel current ratings are listed for continuous operation.
- RTISS filter circuit technology compensates for incoming line voltage variations; no visible flicker with +/–2% change in RMS voltage/cycle and +/–2% Hz change in frequency/second.
- Arcless relay air-gap OFF switches (one per load circuit) ensure open load circuits when OFF function is selected; eliminate arcing at mechanical contacts when loads are switched.

Physical Design

- Enclosure: NEMA-Type 1 (Type 2 available on request), IP-20 protection; 16 U.S. Gauge Steel; indoor use only.
- Weight: 30 to 175 lb (14 to 80 kg).
- Mounting: Surface-mount only; allow space for ventilating.

Environment/Heat Dissipation

- Patented, ribbed aluminum heat sink base cools panel by convection; no fans.
- 32 °F–104 °F (0 °C–40 °C); relative humidity less than 90%, non-condensing.

* Lutron cannot guarantee compatibility with untested LED drivers. Refer to the LED Product Selection tool at www.lutron.com/ledtool for a list of compatible products.

Job Name:	Model Numbers:	
Job Number:		

Specifications: 220–240 V~ (non-CE)

Power

- Input power: 220–240 V~ 50/60 Hz, phase-to-neutral.
- Branch Circuit Capacity: 16 A or 10 A
  – Minimum load: 0 W
- Number of Circuits: 3–24
- Branch Circuit Breakers: IEC-rated thermal magnetic. AIC rating (other ratings available): 6000 A
- Lightning strike protection: Meets ANSI/IEEE standard 62.41-1980. Can withstand voltage surges of up to 6000 V~ and current surges of up to 3000 A.
- 10-year power failure memory: Automatically restores lighting to scene selected prior to power interruption.

Sources/Load Types

Operates these sources with a smooth continuous Square Law dimming curve or on a full-conduction, non-dimming basis:

- Incandescent (Tungsten)/Halogen
- Magnetic Low-Voltage Transformer
- LED drivers specified by the manufacturer to work with forward-phase dimming controls.*
- Electronic low-voltage transformers specified by the manufacturer to work with forward-phase dimming controls.
- Lutron Electronic Fluorescent Dimming Ballasts
- Magnetic Fluorescent Lamp Ballasts
- Optional modules allow for control of 0–10 V⎓, DSI, and PWM load types.
- Operates HID sources on a full-conduction, non-dimming basis.

Wiring

- Internal: Prewired by Lutron.
- System communications: Low-voltage IEC PELV/NEC® Class 2 wiring connects dimming panels to other components.
- Line (mains) voltage: Feed, load, and control circuit wiring only; no other wiring or assembly required.

Filter Chokes

- Load current rise time is measured at a 90-degree conduction angle, with 120 V~ input power.
- 10–90% of load current waveform:
  – 350 µSec rise time at 50% dimmer capacity.
  – 400 µSec rise time at 100% dimmer capacity.
- 0–100% of load current waveform:
  – 525 µSec rise time at 50% dimmer capacity.
  – 600 µSec rise time at 100% dimmer capacity.
- At no point in the waveform can the rate of current change exceed 300 mA per µSec.
- Consult Lutron for higher rise time options.

Dimming Cards

- Panel current ratings are listed for continuous operation.
- RTISS filter circuit technology compensates for incoming line voltage variations: No visible flicker with +/–2% change in RMS voltage/cycle and +/–2% Hz change in frequency/second.
- Arcless relay air-gap OFF switches (one per load circuit) ensure open load circuits when OFF function is selected; eliminate arcing at mechanical contacts when loads are switched.

Physical Design

- Enclosure: NEMA-Type 1 (Type 2 available on request), IP-20 protection; 16 U.S. Gauge Steel; indoor use only.
- Weight: 30 to 175 lb (14 to 80 kg).
- Mounting: Surface-mount only; allow space for ventilating.

Environment/Heat Dissipation

- Patented, ribbed aluminum heat sink base cools panel by convection; no fans.
- 32 °F–104 °F (0 °C–40 °C); relative humidity less than 90%, non-condensing.

* Lutron cannot guarantee compatibility with untested LED drivers. Refer to the LED Product Selection tool at www.lutron.com/ledtool for a list of compatible products.

Job Name:	Model Numbers:	
Job Number:		

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How to Build a GP Model Number: 120/277 V~

GP 12 – 120 4 ML – 20 – CGP – XXX

- GP: Prefix
- 12: Number of Load Circuits
- 120: Voltage
- 4: Feed Type
- ML: Panel Feed
- 20: Branch Circuit Breakers
- CGP – XXX: Custom Panel Suffix

Prefix

- **GP**: GP Dimming Panel

Number of Load Circuits

- Indicates number of load circuits in the panel

Voltage

- **120**: 120 V~
- **277**: 277 V~

Feed Type

- **2**: 1-phase, 2-wire
- **3**: 1-phase, 3-wire (split phase)
- **4**: 3-phase, 4-wire

Panel Feed

- **ML**: Main Lugs only
- **Mxx**: Main Breaker with xx = breaker size in Amps

Branch Circuit Breakers

- **20**: 20 A branch circuit breakers
- **15**: 15 A branch circuit breakers

Custom Panel Suffix

- Indicates panel with special options

Job Name:	Model Numbers:	
Job Number:		

How to Build a GP Model Number: 230 V~

GP12–2304IS–10CE–CGP–XXX

- GP — Prefix
- 12 — Number of Load Circuits
- 230 — Voltage
- 4 — Feed Type
- IS — Panel Feed
- 10 — Branch Circuit Breakers
- CE — Region Suffix
- CGP–XXX — Custom Panel Suffix

Prefix

- **GP**: GP Dimming Panel

Number of Load Circuits

- Indicates number of load circuits in the panel

Voltage

- **230**: CE

Feed Type

- **2**: 1-phase, 2-wire
- **4**: 3-phase, 4-wire

Panel Feed

- **IS**: Isolator Switch

Branch Circuit Breakers

- **10**: 10 A branch circuit breakers

Region Suffix

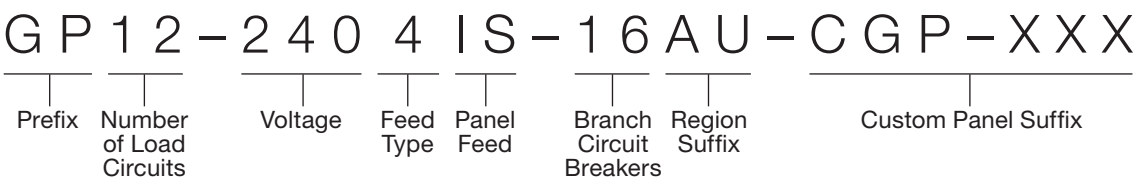
- **CE**: 230 V~

Custom Panel Suffix

- Indicates panel with special options

Job Name:	Model Numbers:	
Job Number:		

How to Build a GP Model Number: 220–240 V~



Prefix
- **GP**: GP Dimming Panel

Number of Load Circuits
- Indicates number of load circuits in the panel

Voltage
- **240**: 220–240 V~

Feed Type
- **2**: 1-phase, 2-wire
- **4**: 3-phase, 4-wire

Panel Feed
- **IS**: Isolator Switch

Branch Circuit Breakers
- **16**: 16 A branch circuit breakers
- **10**: 10 A branch circuit breakers

Region Suffix
- **AU**: 220–240 V~

Custom Panel Suffix
- Indicates panel with special options

Job Name:	Model Numbers:	
Job Number:		

Ratings: 120/277 V~

GP3/4 Mini-Size Models[1]

120 V~ Power

		Panel Branch Ratings		
Number of Circuits	Feed Type	Maximum Feed	Circuit Breakers[2]	Maximum Dimmed Hot Load[3]
GP3	1-phase, 2-wire	40 A	15 A	1500 W/VA
		40 A	20 A	2000 W/VA
	1-phase, 3-wire	30 A	15 A	1500 W/VA
		40 A	20 A	2000 W/VA
	3-phase, 4-wire	15 A	15 A	1500 W/VA
		20 A	20 A	2000 W/VA
GP4	Feed-through	20 A	15 A[4]	1500 W/VA
		20 A	20 A[4]	2000 W/VA

277 V~ Power

		Panel Branch Ratings		
Number of Circuits	Feed Type	Maximum Feed	Circuit Breakers[2]	Maximum Dimmed Hot Load[3]
GP3	1-phase, 2-wire	40 A	20 A	4500 W/VA
	3-phase, 4-wire	20 A	20 A	4500 W/VA
GP4	Feed-through	20 A	20 A[4]	4500 W/VA

[1] Only standard panels listed. Consult Lutron for further options.
[2] 20/16 A, 15/12 A continuous load rating.
[3] Measured current will not exceed continuous load rating due to voltage drop in the dimmer.
[4] Breakers located in distribution panel supplied by others.

continued on next page…

Job Name:	Model Numbers:	
Job Number:		

Ratings: 120/277 V~ (continued)

GP8–24 Standard-Size Models[1]

120 V~ Power

			Panel Branch Ratings		
Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Circuit Breakers[2]	Maximum Dimmed Hot Load[3]
GP8	1-phase, 2-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
	1-phase, 3-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		60 A Main Breaker	60 A	15 A	1500 W/VA
		80 A Main Breaker	80 A	20 A	2000 W/VA
	3-phase, 4-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		50 A Main Breaker	50 A	15 A	1500 W/VA
		60 A Main Breaker	60 A	20 A	2000 W/VA
GP12	1-phase, 3-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
	3-phase, 4-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		60 A Main Breaker	60 A	15 A	1500 W/VA
		80 A Main Breaker	80 A	20 A	2000 W/VA
GP16	1-phase, 3-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		125 A Main Breaker	125 A	15 A	1500 W/VA
		175 A Main Breaker	175 A	20 A	2000 W/VA
	3-phase, 4-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		100 A Main Breaker	100 A	15 A	1500 W/VA
		125 A Main Breaker	125 A	20 A	2000 W/VA
GP20	3-phase, 3-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		110 A Main Breaker	110 A	15 A	1500 W/VA
		150 A Main Breaker	150 A	20 A	2000 W/VA
GP24	3-phase, 4-wire	Main Lugs Only	175 A	15 A	1500 W/VA
			175 A	20 A	2000 W/VA
		125 A Main Breaker	125 A	15 A	1500 W/VA
		175 A Main Breaker	175 A	20 A	2000 W/VA

[1] Only standard panels listed. Consult Lutron for further options.
[2] 20/16 A, 15/12 A continuous load rating.
[3] Measured current will not exceed continuous load rating due to voltage drop in the dimmer.

continued on next page…

Job Name:	Model Numbers:	
Job Number:		

Ratings: 120/277 V~ (continued)

GP8–24 Standard-Size Models[1] (continued)

277 V~ Power

			Panel Branch Ratings		
Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Circuit Breakers	Maximum Dimmed Hot Load[2]
GP8	1-phase, 2-wire	Main Lugs Only	175 A	20 A	4500 W/VA
	3-phase, 4-wire	Main Lugs Only	175 A	20 A	2000 W/VA
		60 A Main Breaker	60 A	20 A	2000 W/VA
GP12	3-phase, 4-wire	Main Lugs Only	175 A	20 A	2000 W/VA
		80 A Main Breaker	80 A	20 A	2000 W/VA
GP16	3-phase, 4-wire	Main Lugs Only	175 A	20 A	2000 W/VA
		125 A Main Breaker	125 A	20 A	2000 W/VA

[1] Only standard panels listed. Consult Lutron for further options.

[2] Measured current will not exceed continuous load rating due to voltage drop in the dimmer.

continued on next page…

Job Name:	Model Numbers:	
Job Number:		

Ratings: 120/277 V~ (continued)

GP36–144 Large-Size Models[1]

120 V~ Power

			Panel Branch Ratings		
Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Circuit Breakers[2]	Maximum Dimmed Hot Load[3]
GP36	3-phase, 4-wire	Main Lugs Only	750 A	15 A	1500 W/VA
			750 A	20 A	2000 W/VA
		200 A Main Breaker	200 A	15 A	1500 W/VA
		250 A Main Breaker	250 A	20 A	2000 W/VA
GP48	3-phase, 4-wire	Main Lugs Only	750 A	15 A	1500 W/VA
			750 A	20 A	2000 W/VA
		250 A Main Breaker	250 A	15 A	1500 W/VA
		350 A Main Breaker	350 A	20 A	2000 W/VA
GP60	3-phase, 4-wire	Main Lugs Only	750 A	15 A	1500 W/VA
			750 A	20 A	2000 W/VA
		300 A Main Breaker	300 A	15 A	1500 W/VA
		400 A Main Breaker	400 A	20 A	2000 W/VA
GP72	3-phase, 4-wire	Main Lugs Only	750 A	15 A	1500 W/VA
			750 A	20 A	2000 W/VA
		350 A Main Breaker	350 A	15 A	1500 W/VA
		400 A Main Breaker	400 A	20 A	2000 W/VA
GP96-144	3-phase, 4-wire	Main Lugs Only	750 A	15 A	1500 W/VA
			750 A	20 A	2000 W/VA

277 V~ Power

			Panel Branch Ratings		
Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Circuit Breakers[2]	Maximum Dimmed Hot Load[3]
GP36	3-phase, 4-wire	Main Lugs Only	750 A	20 A	4500 W/VA
		250 A Main Breaker	250 A	20 A	4500 W/VA
GP48	3-phase, 4-wire	Main Lugs Only	750 A	20 A	4500 W/VA
		350 A Main Breaker	350 A	20 A	4500 W/VA
GP60	3-phase, 4-wire	Main Lugs Only	750 A	20 A	4500 W/VA
		400 A Main Breaker	400 A	20 A	4500 W/VA
GP72	3-phase, 4-wire	Main Lugs Only	750 A	20 A	4500 W/VA
		400 A Main Breaker	400 A	20 A	4500 W/VA
GP96-144	3-phase, 4-wire	Main Lugs Only	750 A	20 A	4500 W/VA

1 Only standard panels listed. Consult Lutron for further options.
2 20/16 A, 15/12 A continuous load rating.
3 Measured current will not exceed continuous load rating due to voltage drop in the dimmer.

Ratings: 230 V~

GP3/4 Mini-Size Models[1]

230 V~ (CE) Power

Number of Circuits	Feed Type	Maximum Feed	Panel Feed / Branch Circuit Breakers
GP3	1-phase, 2-wire	30 A	10 A
	3-phase, 4-wire	10 A	10 A
GP4	Feed-through	10 A	10 A[2]

[1] Only standard panels listed. Consult Lutron for further options.
[2] Breakers located in distribution panel supplied by others.

GP8–24 Standard-Size Models[1]

230 V~ (CE) Power

Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Branch Circuit Breakers
GP8	1-phase, 2-wire	Isolator Switch	125 A	10 A
	3-phase, 4-wire	Isolator Switch	125 A	10 A
GP12	3-phase, 4-wire	Isolator Switch	125 A	10 A
GP16	3-phase, 4-wire	Isolator Switch	125 A	10 A
GP20	3-phase, 4-wire	Isolator Switch	125 A	10 A
GP24	3-phase, 4-wire	Isolator Switch	125 A	10 A

[1] Only standard panels listed. Consult Lutron for further options.

Ratings: 220–240 V~

GP3/4 Mini-Size Models[1]

220–240 V~ Power

Number of Circuits	Feed Type	Maximum Feed	Panel Feed / Branch Circuit Breakers
GP3	1-phase, 2-wire	48 A	16 A
		30 A	10 A
	3-phase, 4-wire	16 A	16 A
		10 A	10 A
GP4	Feed-through	16 A	16 A
		10 A	10 A

GP8–24 Standard-Size Models[1]

220–240 V~ Power

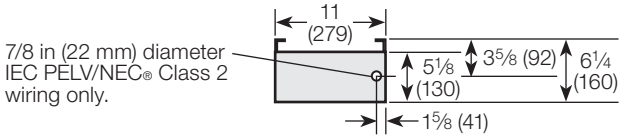
Number of Circuits	Feed Type	Panel Feed	Maximum Feed	Branch Circuit Breakers
GP8	1-phase, 2-wire	Isolator Switch	125 A	16 A
				10 A
	3-phase, 4-wire	Isolator Switch	125 A	16 A
				10 A
GP12	3-phase, 4-wire	Isolator Switch	125 A	16 A
				10 A
GP16	3-phase, 4-wire	Isolator Switch	125 A	16 A
				10 A
GP20	3-phase, 4-wire	Isolator Switch	125 A	16 A
				10 A
GP24	3-phase, 4-wire	Isolator Switch	125 A	16 A
				10 A

[1] Only standard panels listed. Consult Lutron for further options.

Dimensions: GP3/4 Mini-Size Panels

All dimensions shown as: in (mm)

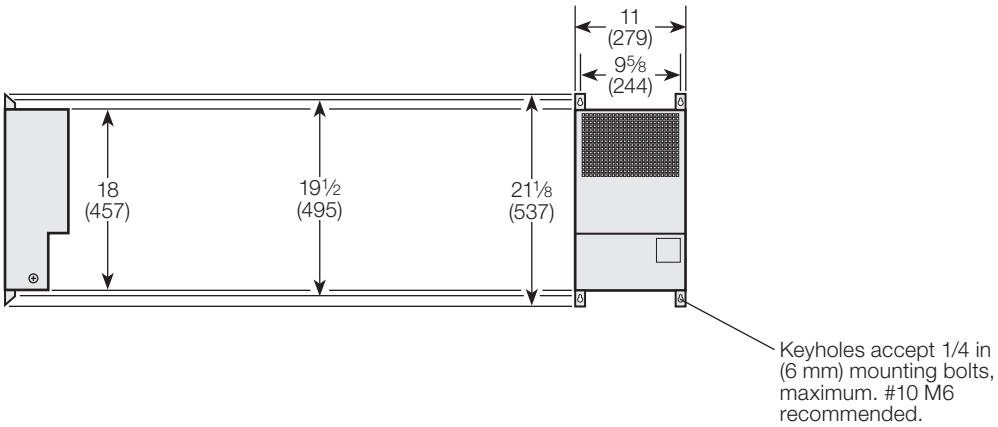
Top View



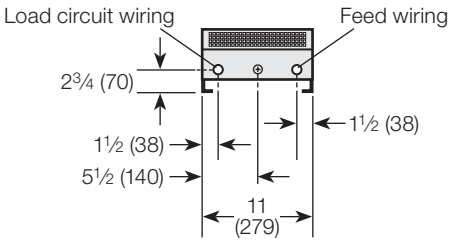
Left-Side View

Front View

Right-Side View



Bottom View

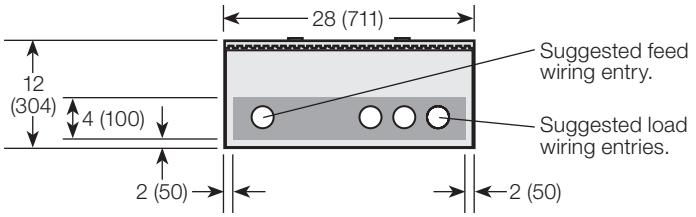


Job Name:	Model Numbers:	
Job Number:		

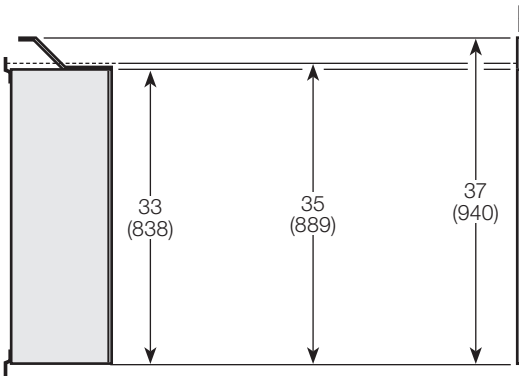
Dimensions: GP8–24 Standard-Size Panels

All dimensions shown as: in (mm)

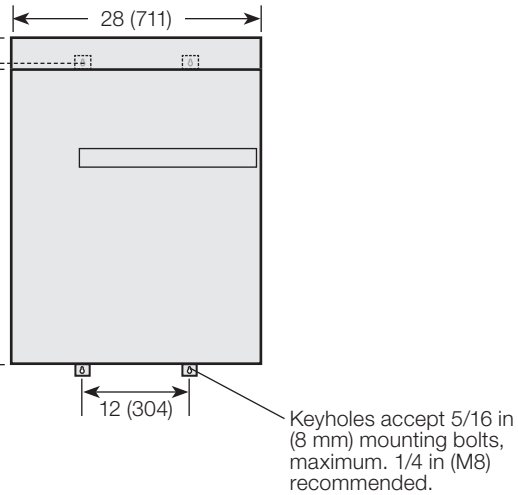
Top View



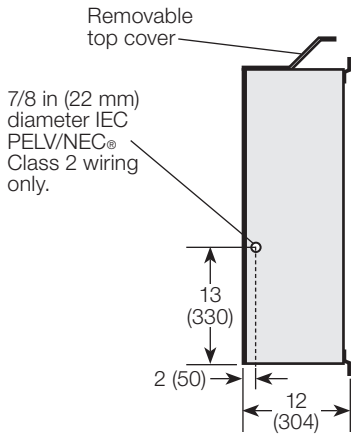
Left-Side View



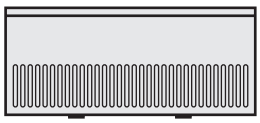
Front View



Right-Side View



Bottom View

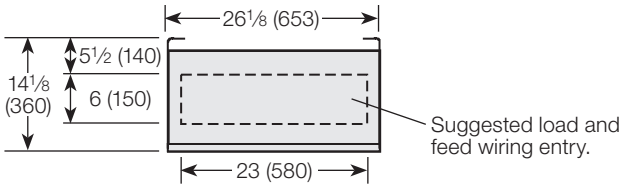


Job Name:	Model Numbers:	
Job Number:		

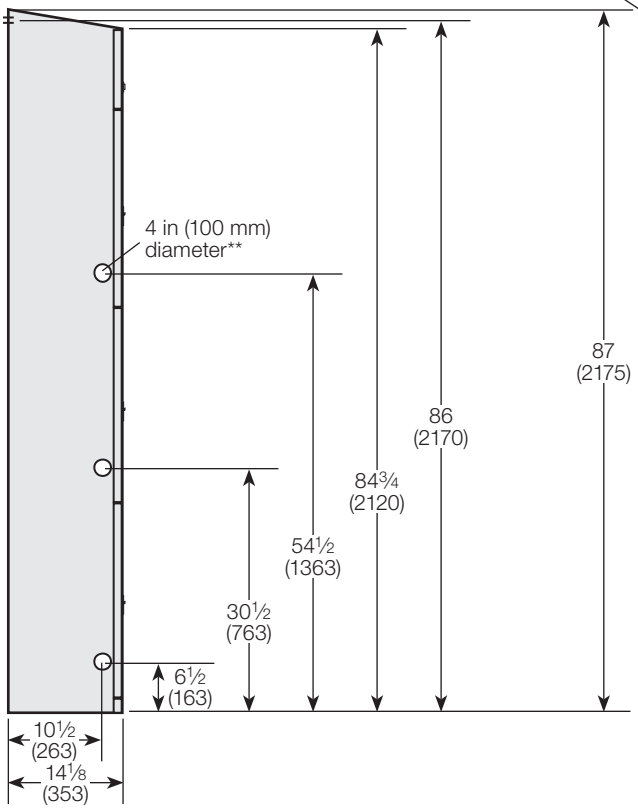
Dimensions: GP36 Large-Size Panels

All dimensions shown as: in (mm)

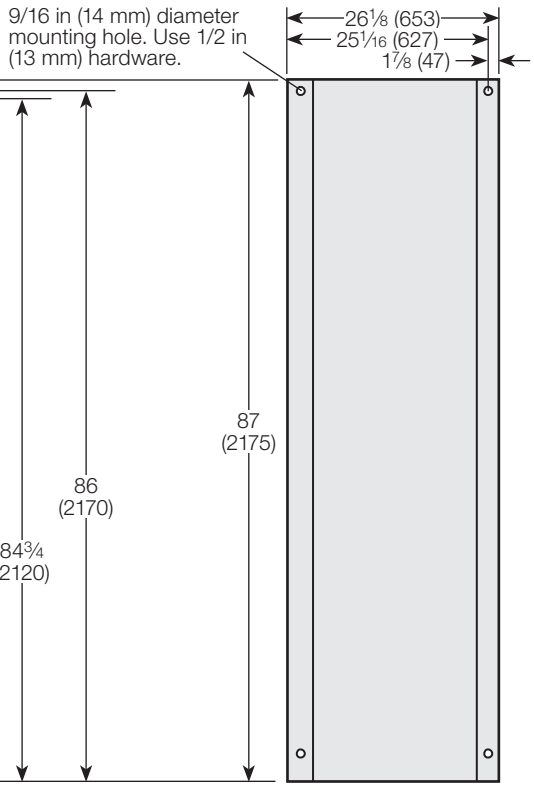
Top View



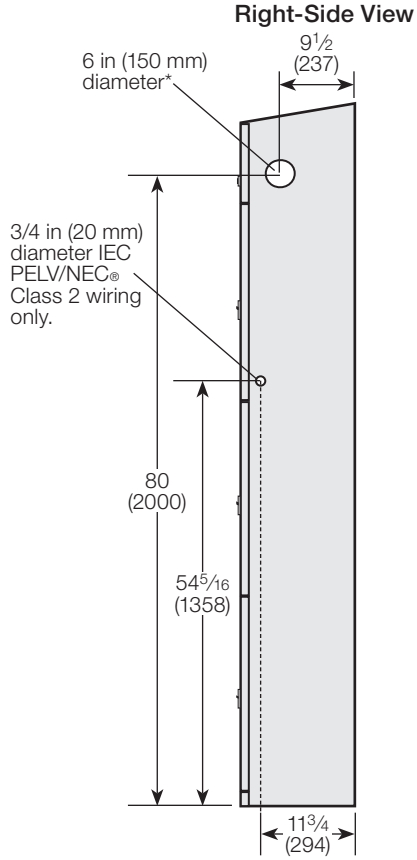
Left-Side View



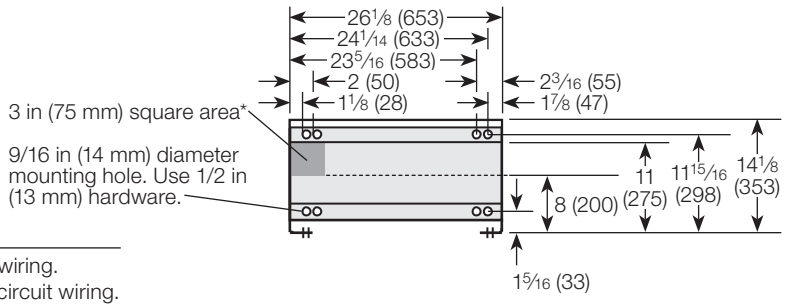
Back View



Right-Side View



Bottom View

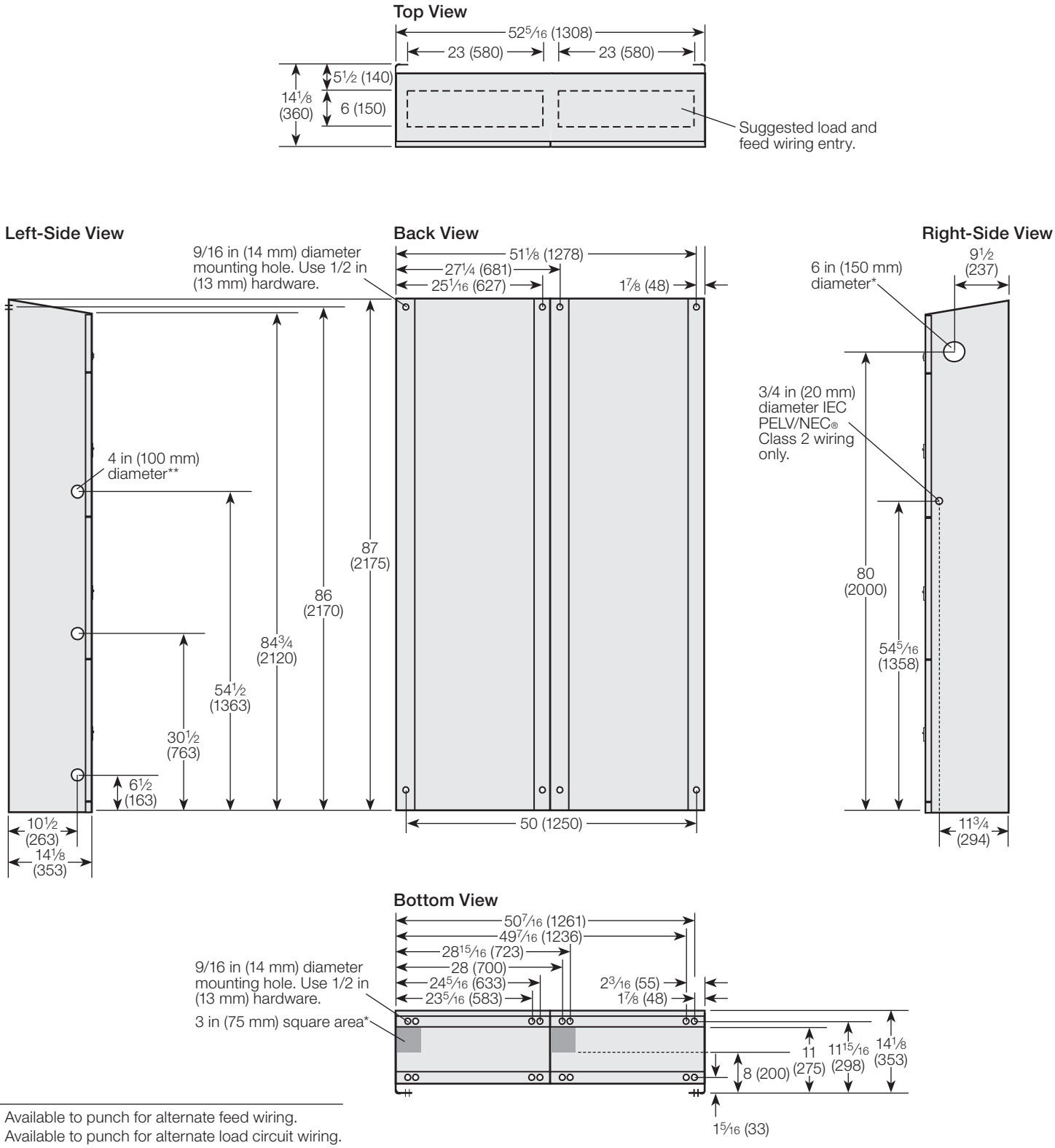


* Available to punch for alternate feed wiring.
** Available to punch for alternate load circuit wiring.

Job Name:	Model Numbers:	
Job Number:		

Dimensions: GP48/60/72 Large-Size Panels

All dimensions shown as: in (mm)

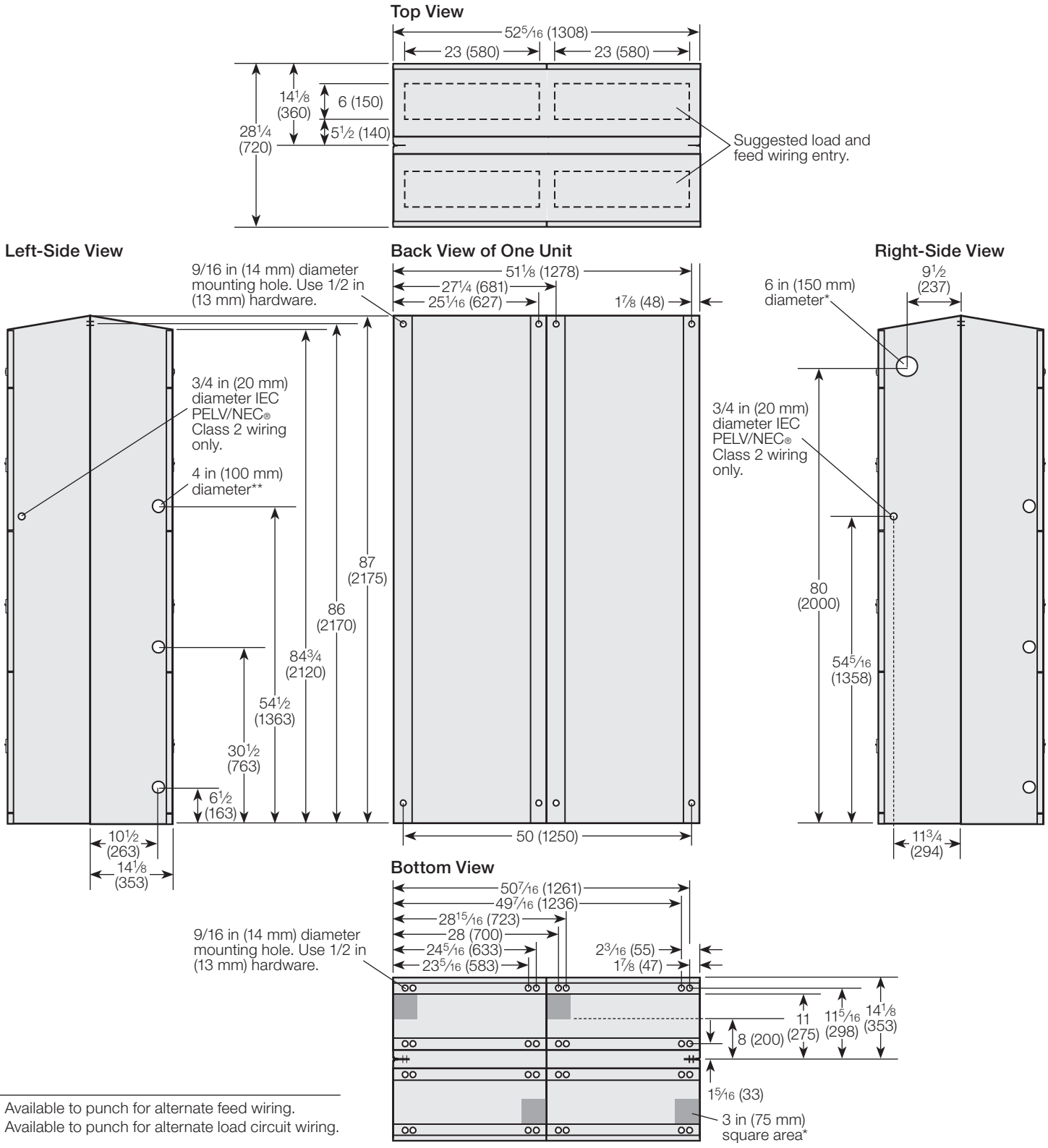


* Available to punch for alternate feed wiring.
** Available to punch for alternate load circuit wiring.

Job Name:	Model Numbers:	
Job Number:		

Dimensions: GP96–144 Large-Size Panels (two units installed back-to-back)

All dimensions shown as: in (mm)



* Available to punch for alternate feed wiring.
** Available to punch for alternate load circuit wiring.

Job Name:	Model Numbers:	
Job Number:		

Mounting: GP3/4 Mini-Size Panels

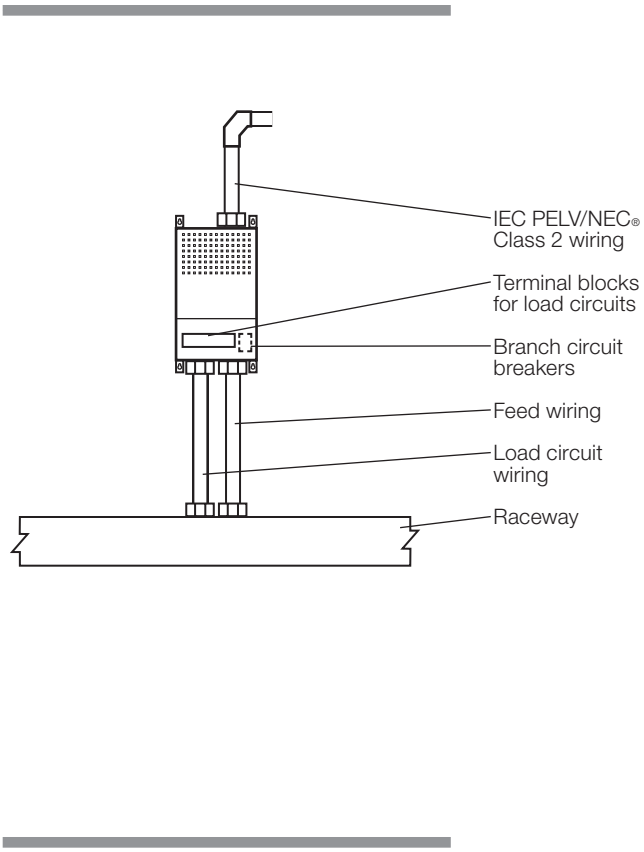
- Surface mount indoors.
- Panel generates heat. Mount only where ambient temperature will be 0–40 °C (32–104 °F).
- This equipment is air cooled. Do not block vents or warranty will be void. Leave 12 in (310 mm) clearances above, below, and in front of panel. No clearance necessary on sides.
- Reinforce wall structure for weight and local codes.

Panel	Maximum BTUs/Hour	Weight (without packaging)
GP3/4	685	30 lb (14 kg)

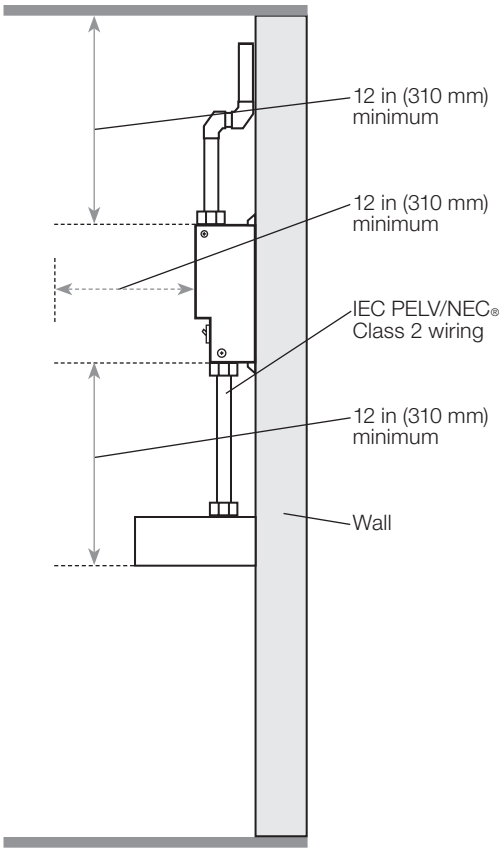
- Dimming panels will hum slightly and internal relays will click while in operation. Mount where audible noise is acceptable.
- Mount panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- GP panels must be mounted within 7° of true vertical.
- For maximum feed and wire sizes, consult **Wiring Overview** page.

Note: Water damages panels. Install where they will not get wet.

Front View



Side View



Job Name:	Model Numbers:	
Job Number:		

Mounting: GP8–24 Standard-Size Panels

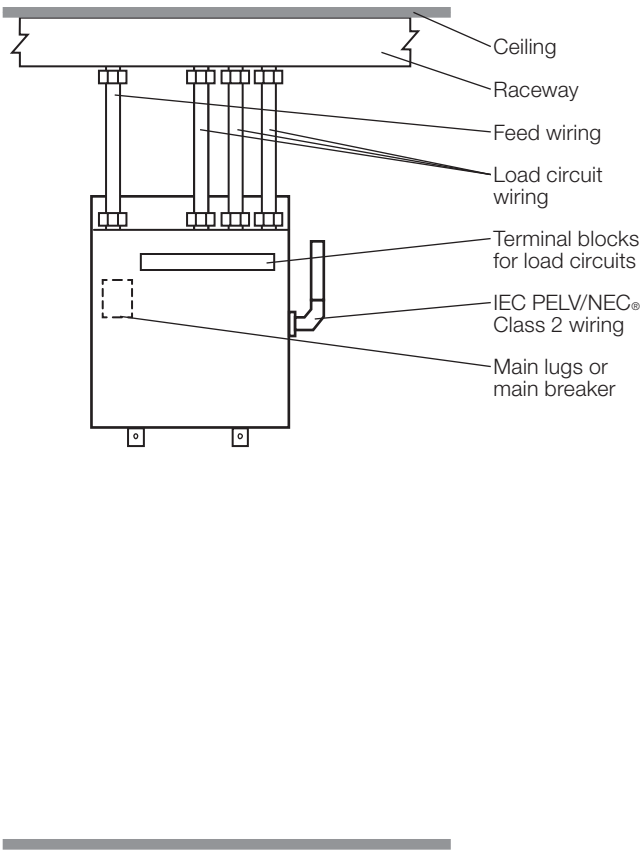
- Surface mount indoors.
- Panel generates heat. Mount only where ambient temperature will be 32–104 °F (0–40 °C).
- This equipment is air cooled. Do not block vents or warranty will be void. Leave 12 in (310 mm) clearances above, below, and in front of panel. Leave clearance on sides for IEC PELV/NEC® Class 2 wiring.
- Reinforce wall structure for weight and local codes.

Panel	Maximum BTUs/Hour	Weight (without packaging)
GP8	1365	115 lb (52 kg)
GP12	2045	130 lb (59 kg)
GP16	2725	145 lb (66 kg)
GP20	3405	160 lb (73 kg)
GP24	4085	175 lb (80 kg)

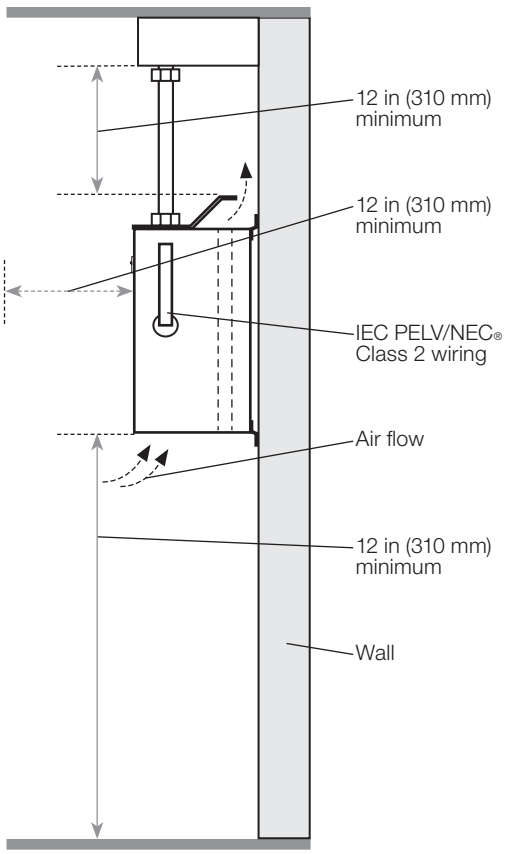
- Dimming panels will hum slightly and internal relays will click while in operation. Mount where audible noise is acceptable.
- Mount panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- GP panels must be mounted within 7° of true vertical.
- For maximum feed and wire sizes, consult **Wiring Overview** page.

Note: Water damages panels. Install where they will not get wet.

Front View



Side View



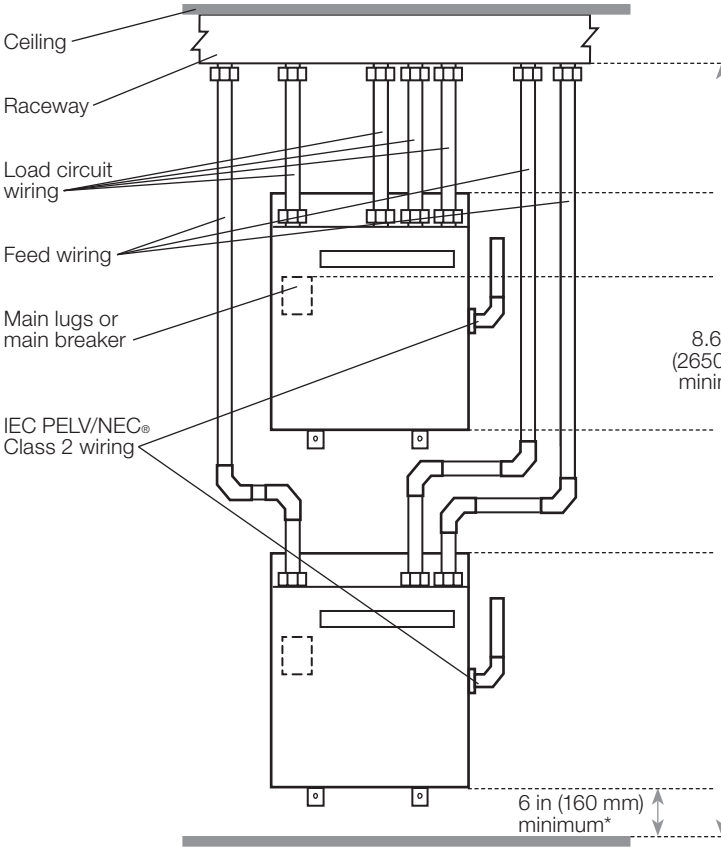
Job Name:	Model Numbers:	
Job Number:		

Mounting One Panel Above Another

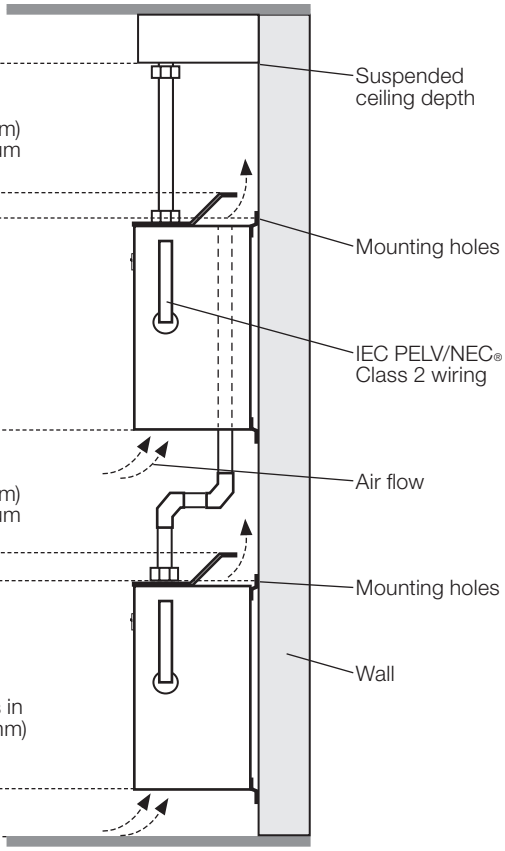
At least 8.67 ft (2650 mm) between the floor and the suspended ceiling is required for this layout.

Note: Water damages panels. Install where they will not get wet.

Front View (GP8–24)



Side View (GP8–24)



* 6 in (160 mm) minimum approved for this layout only.

Job Name:	Model Numbers:	
Job Number:		

Mounting: GP36–72 Large-Size Panel

- Surface mount indoors.
- Panel generates heat. Mount only where ambient temperature will be 32–104 °F (0–40 °C).
- This equipment is air cooled. Do not block vents or warranty will be void. Leave 12 in (310 mm) clearances above and in front of panel. Leave clearance on sides for IEC PELV/NEC® Class 2 wiring.

Panel	Maximum BTUs/Hour	Weight (without packaging)
GP36	4350	325 lb (147 kg)
GP48	5800	550 lb (250 kg)
GP60	7250	600 lb (273 kg)
GP72	8700	650 lb (295 kg)

- Mount panel on floor and against a wall. Use 1/2 in (13 mm) mounting bolts.
- Dimming panels will hum slightly and internal relays will click while in operation. Mount where audible noise is acceptable.
- Mount panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- GP panels must be mounted within 7° of true vertical.

GP36-72 Mounting

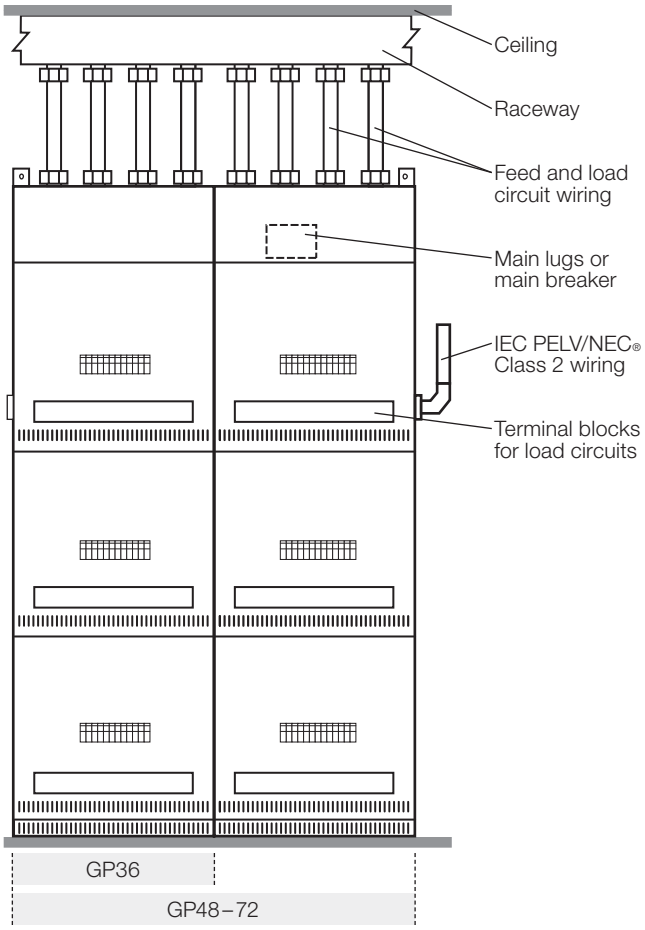
GP36 consists of the right side module only. Mount as shown.

Alternate Conduit Locations

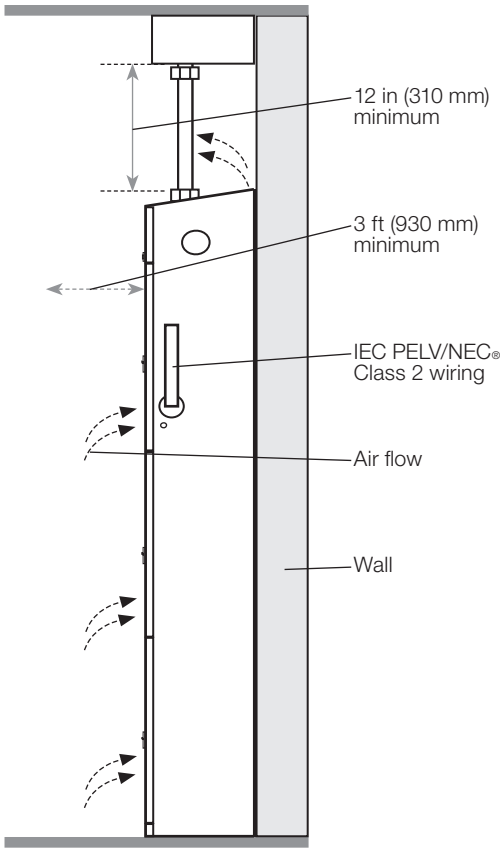
- Run feed wiring in from bottom.
- Run load circuit wiring in from left side.

Note: Water damages panels. Install where they will not get wet.

Front View



Side View



Job Name:	Model Numbers:	
Job Number:		

Mounting: GP96–144 Large-Size Panel

- Surface mount indoors.
- Panel generates heat. Mount only where ambient temperature will be 32–104 °F (0–40 °C).
- This equipment is air cooled. Do not block vents or warranty will be void. Leave 12 in (310 mm) clearances above and in front of panel. Leave clearance on sides for IEC PELV/NEC® Class 2 wiring.

Panel	Maximum BTUs/Hour	Weight (without packaging)
GP96-144	17400	1300 lb (590 kg)

- Mount panel on floor and against a wall. Use 1/2 in (13 mm) mounting bolts.
- Dimming panels will hum slightly and internal relays will click while in operation. Mount where audible noise is acceptable.
- Mount panels so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- GP panels must be mounted within 7° of true vertical.

GP96-144 Mounting

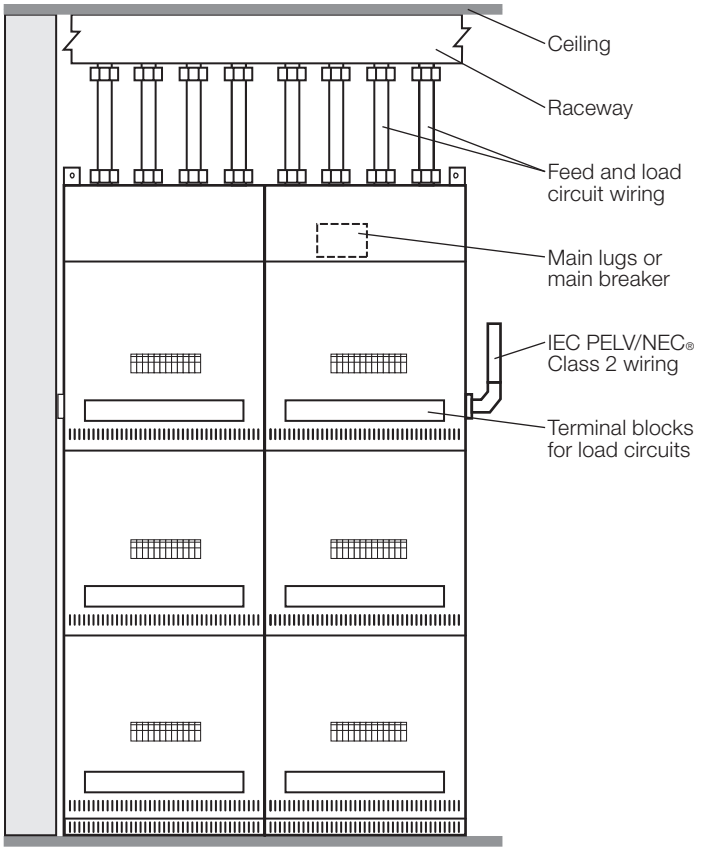
- Allow airflow and 3 ft (92 cm) clearance from fronts/sides of panel as shown.
- Note the extra IEC PELV/NEC® Class 2 wiring.

Alternate Conduit Locations

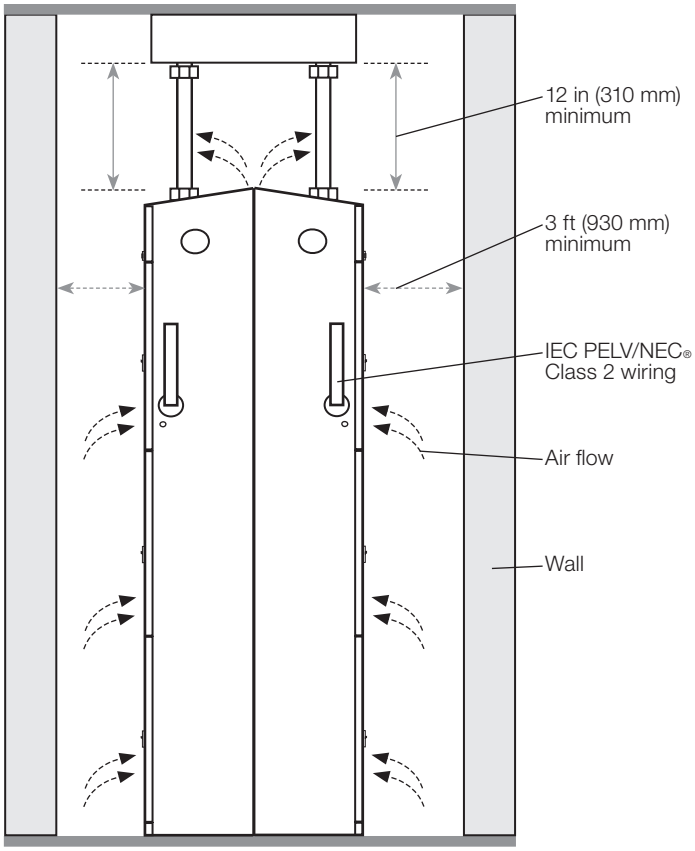
- Run feed wiring in from bottom.
- Run load circuit wiring in from left side.

Note: Water damages panels. Install where they will not get wet.

Front View



Side View



Job Name:	Model Numbers:	
Job Number:		

Wiring Overview: GP3 Mini-Size Panels (120/277 V~, 230 V~ [CE], 220–240 V~)

Wire Sizes

120/277 V~

- Power Feed: 14 AWG (2.0 mm^2) to 8 AWG (6.0 mm^2)
- Neutral Feed: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)

230 V~ (CE), 220–240 V~

- Power Feed: 18 AWG (1.0 mm^2) to 4 AWG (25.0 mm^2)
- Neutral Feed: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)

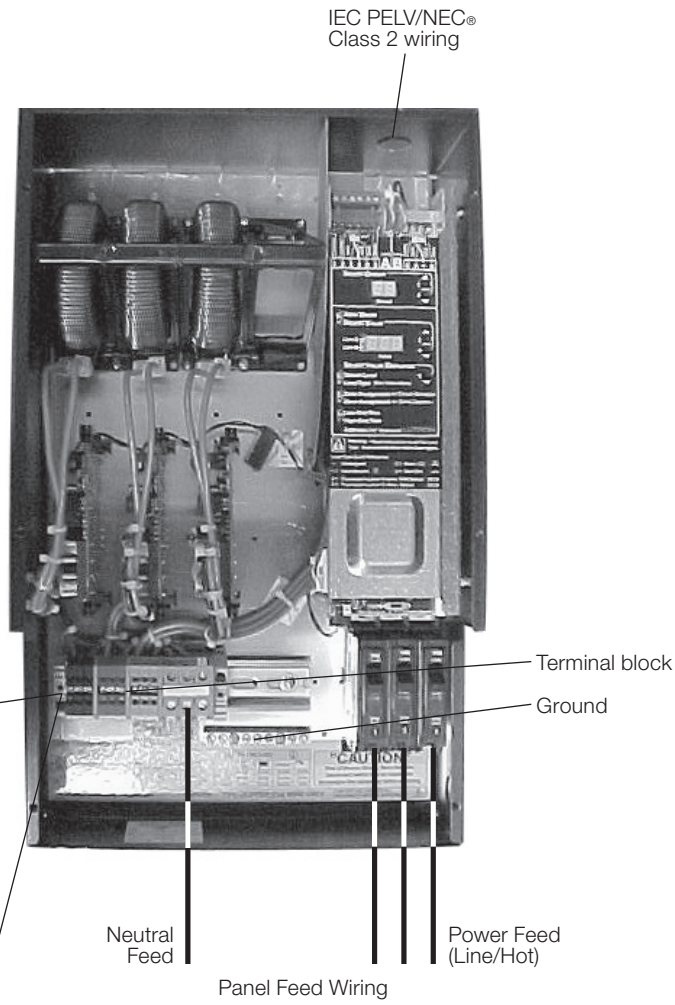
Wiring Tips

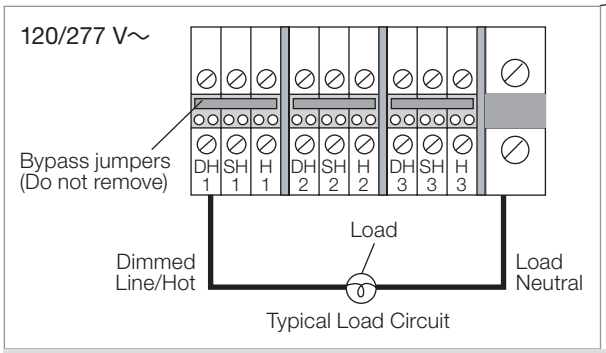
Wire GP3 Mini-Size panels similarly to a lighting distribution panel:

- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted. Run separate neutrals for each load circuit.

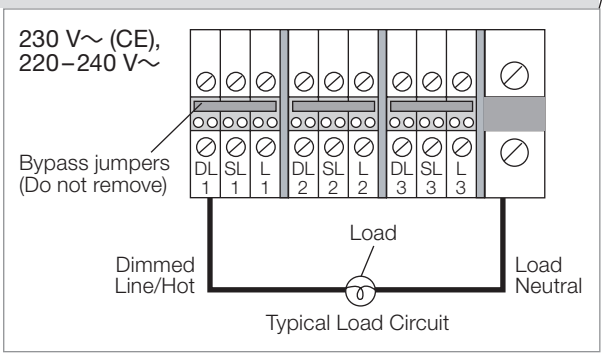
GP3 panels can provide temporary lighting.

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.





OR



Job Name:	Model Numbers:	
Job Number:		

Wiring Overview: GP4 Mini-Size Panels (120/277 V~, 230 V~ [CE], 220–240 V~)

Wire Sizes

- Power Feed: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Neutral Feed: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)

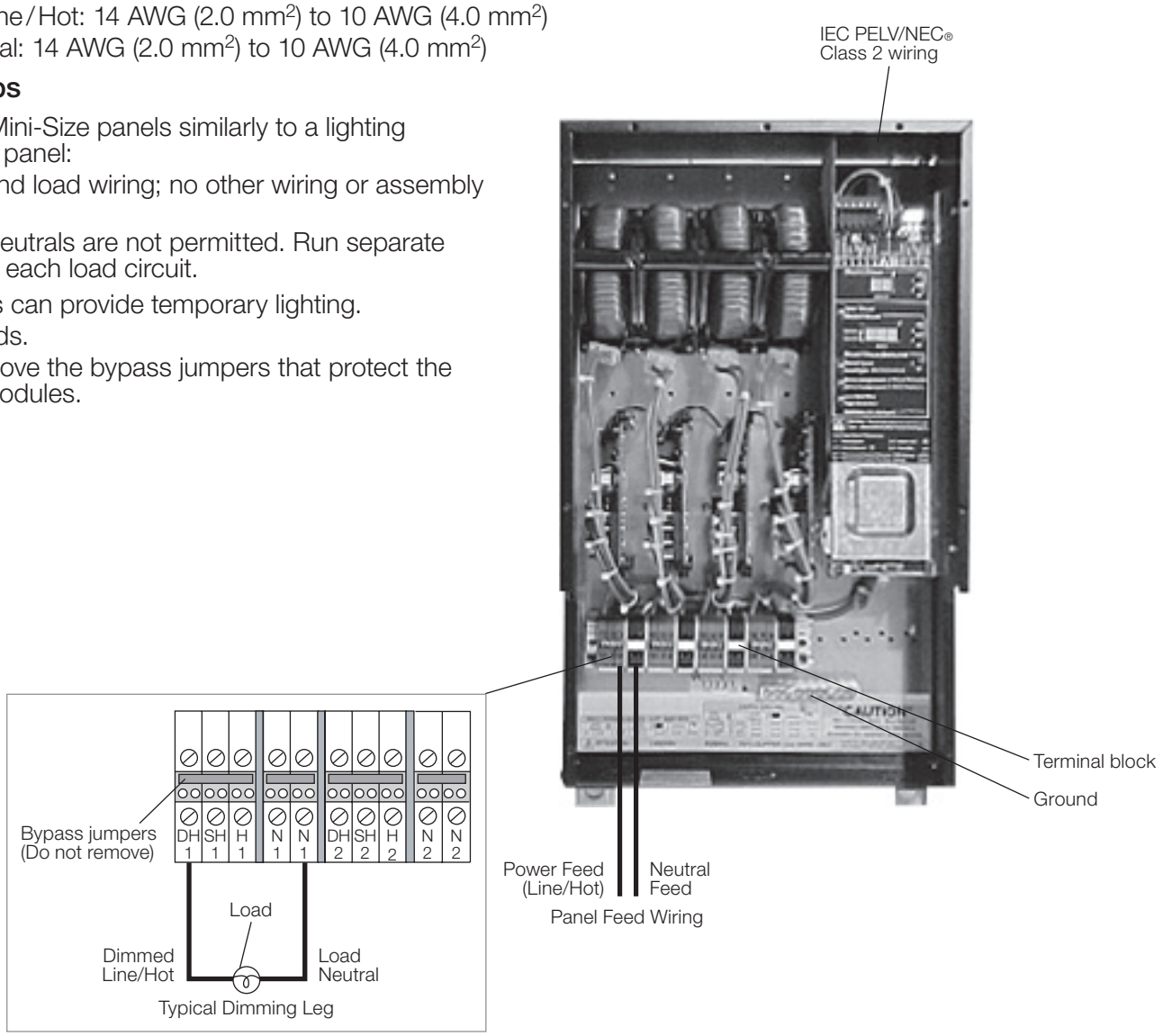
Wiring Tips

Wire GP4 Mini-Size panels similarly to a lighting distribution panel:

- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted. Run separate neutrals for each load circuit.

GP4 panels can provide temporary lighting.

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.



Job Name:	Model Numbers:	
Job Number:		

Wiring Overview: GP8–24 Standard-Size Panels (120/277 V~)

Wire Sizes

- Power Feed Standard Main Lugs: 14 AWG (2.0 mm^2) to 2/0 AWG (70.0 mm^2)
- Power Feed Dual-Tap Main Lugs: 6 AWG (10.0 mm^2) to 4/0 AWG (120 mm^2)
- Neutral Feed: 6 AWG (10.0 mm^2) to 350 mcm (177.0 mm^2)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)

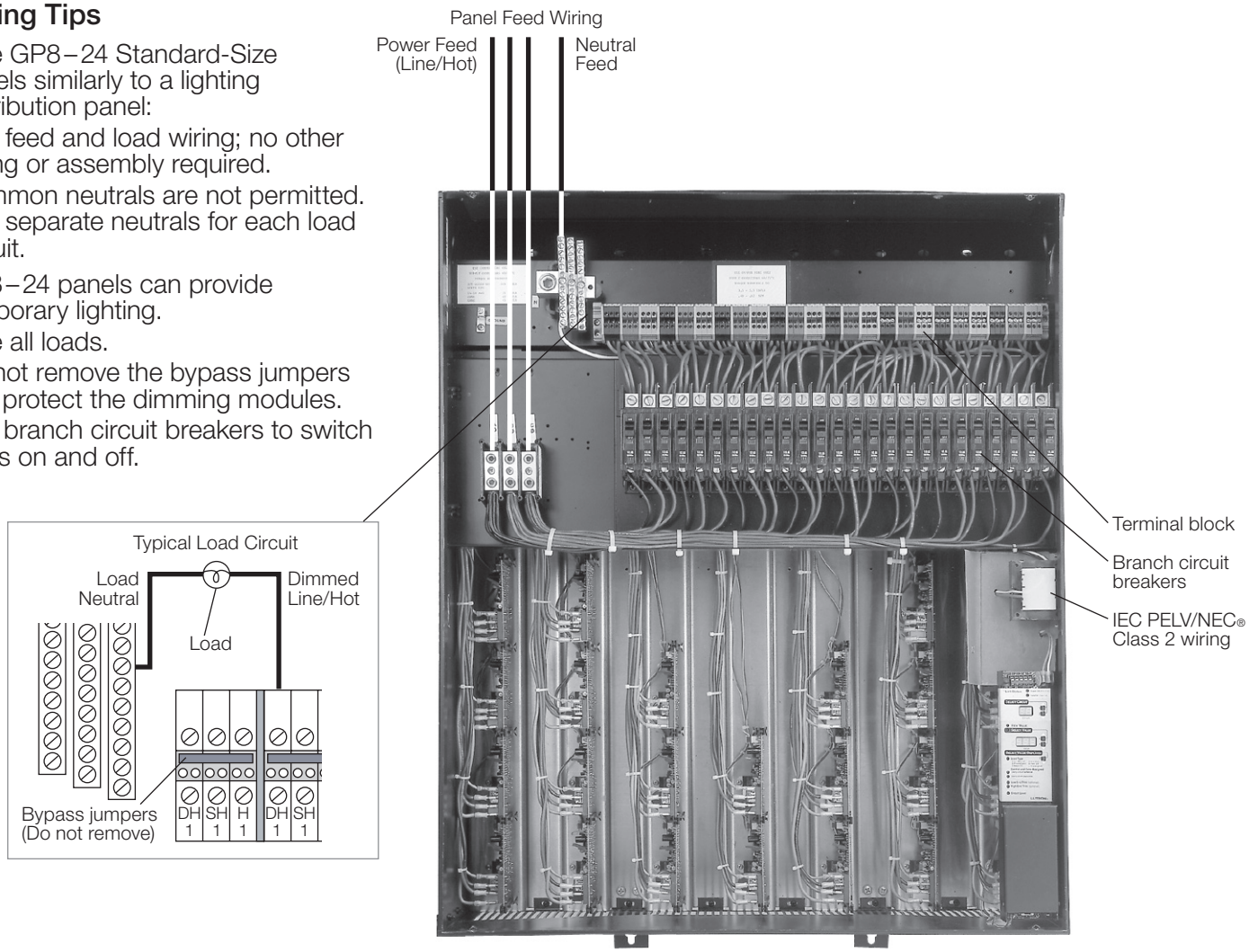
Wiring Tips

Wire GP8–24 Standard-Size panels similarly to a lighting distribution panel:

- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted. Run separate neutrals for each load circuit.

GP8–24 panels can provide temporary lighting.

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.



Job Name:	Model Numbers:	
Job Number:		

Wiring Overview: GP8–24 Standard-Size Panels (230 V~ [CE], 220–240 V~)

Wire Sizes

- Power Feed: 14 AWG (2.0 mm^2) to 2 AWG (35.0 mm^2)
- Neutral Feed: 14 AWG (2.0 mm^2) to 2 AWG (35.0 mm^2)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)

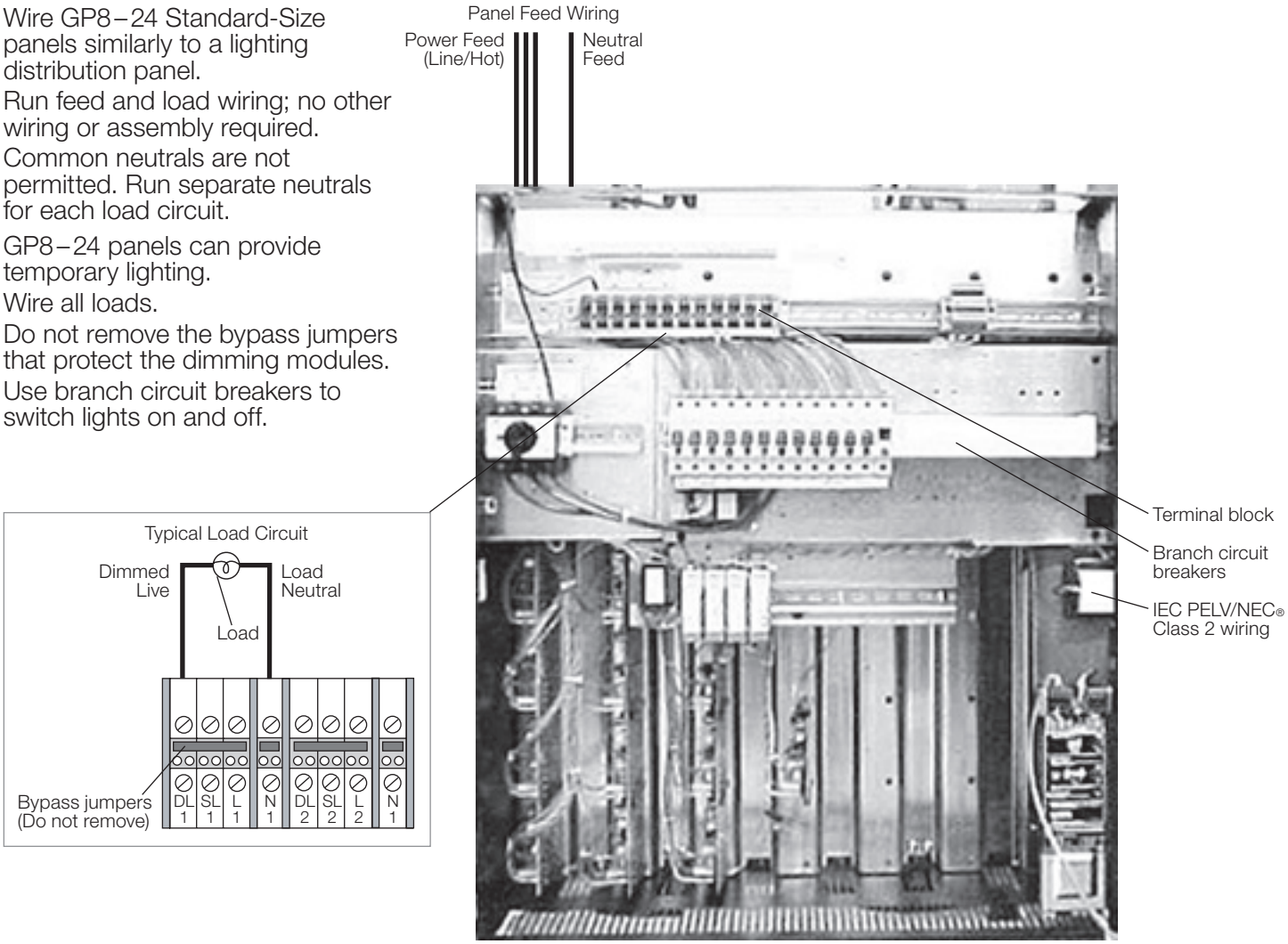
Wiring Tips

Wire GP8–24 Standard-Size panels similarly to a lighting distribution panel.

- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted. Run separate neutrals for each load circuit.

GP8–24 panels can provide temporary lighting.

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.



Job Name:	Model Numbers:	
Job Number:		

Wiring Overview: GP36–144 Large-Size Panels (120/277 V~)

Wire Sizes

- Panel Feed Wiring:
  - – Main lugs only: Parallel 4 AWG to 500 kcmil (mcm)
  - – 200 A to 400 A main breakers: 1/0 AWG (50 mm^2) to 600 kcmil (mcm)
- Dimmed Line/Hot: 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2)
- Load Neutral: 14 AWG (2.0 mm^2) to 6 AWG (10.0 mm^2)

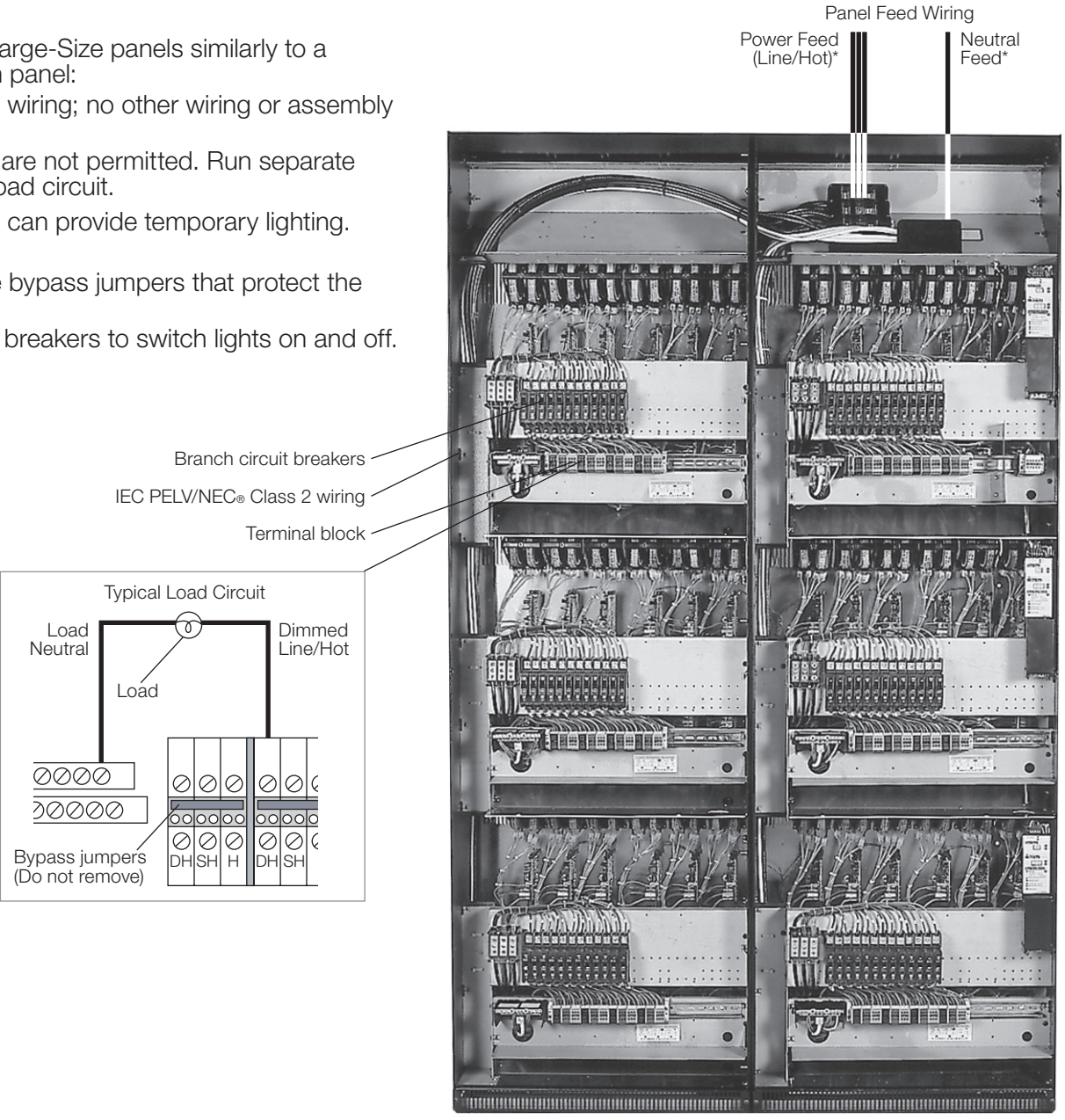
Wiring Tips

Wire GP36–144 Large-Size panels similarly to a lighting distribution panel:

- Run feed and load wiring; no other wiring or assembly required.
- Common neutrals are not permitted. Run separate neutrals for each load circuit.

GP36–144 panels can provide temporary lighting.

- Wire all loads.
- Do not remove the bypass jumpers that protect the dimming modules.
- Use branch circuit breakers to switch lights on and off.



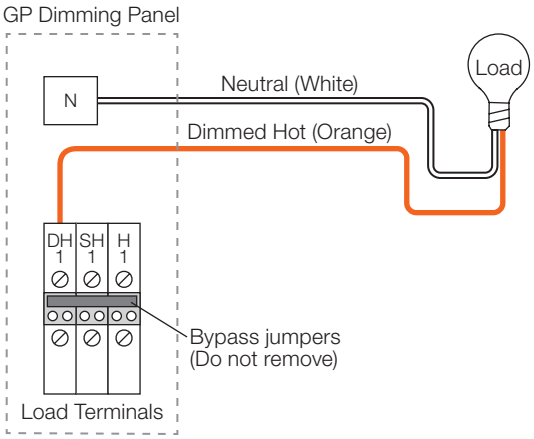
* Varies depending on MB or MLO. See model numbers page.

Job Name:	Model Numbers:	
Job Number:		

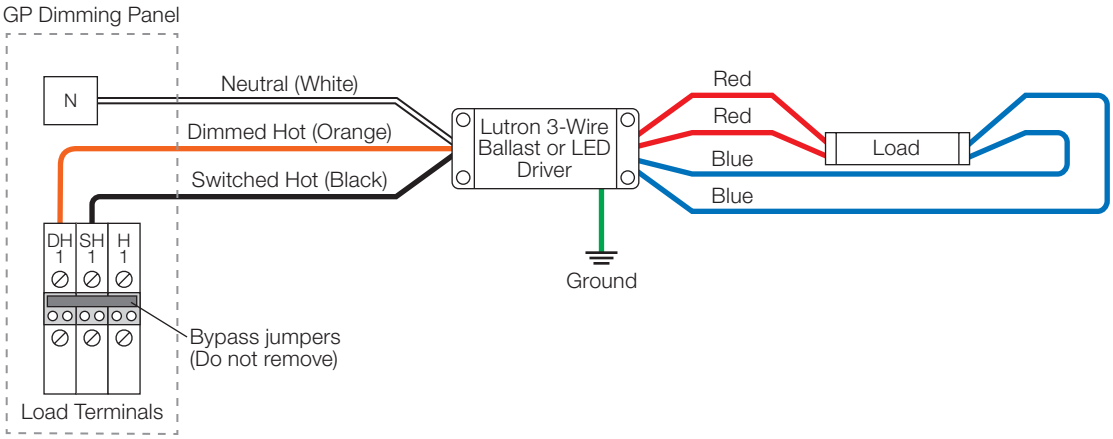
Load Circuits: 120/277 V~ (GP3–144)

- All load circuit wiring is 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2).
- Switched Hot (SH) must be used for 3-wire controlled loads only; use the Dimmed Hot (DH) for all non-dim load types.
- Consult **Wiring Overview** page for appropriate neutral location.

Wiring for 2-Wire Load Types

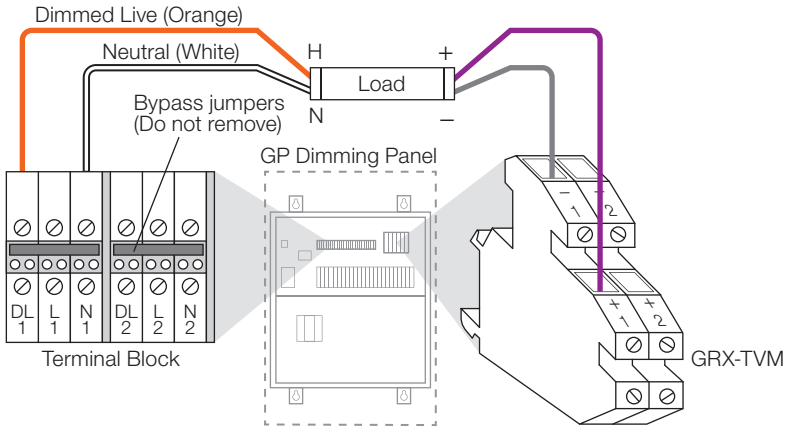


Wiring for Lutron Hi-lume A-Series L3D drivers, and Lutron Hi-lume fluorescent dimming ballasts



Lutron Hi-lume 120 V~ dimming ballast shown.

Wiring for Lutron GRX-TVM2 for 0– 10 V, PWM, DSI, and DALI (intensity broadcast only) Load Types

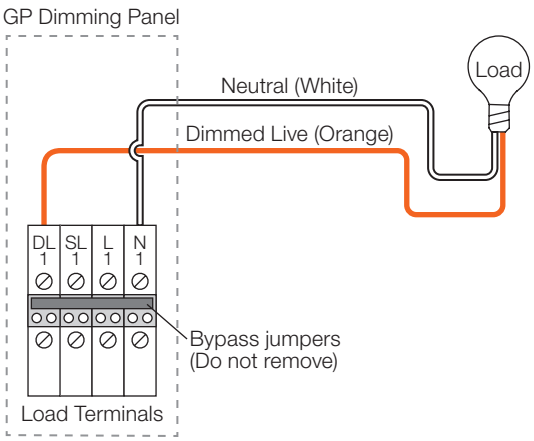


Job Name:	Model Numbers:	
Job Number:		

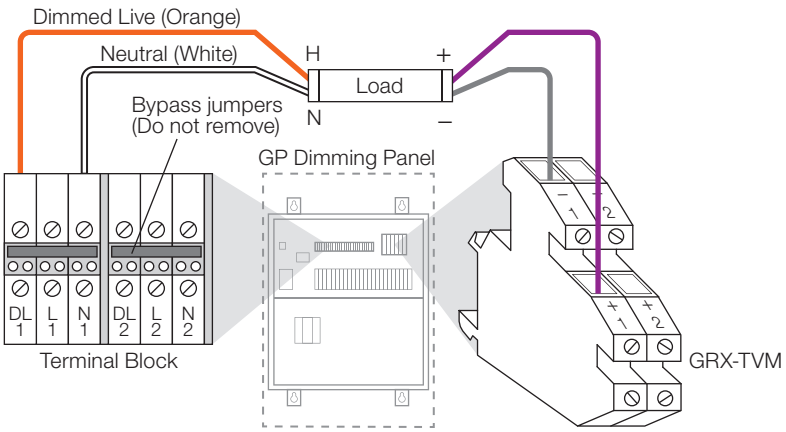
Load Circuits: 230 V~ (CE) (GP3–24)

- All load circuit wiring is 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2).
- Use the Dimmed Live (DL) for all non-dim load types.
- Consult **Wiring Overview** page for appropriate neutral location.

Wiring for 2-Wire Load Types



Wiring for Lutron GRX-TVM2 for 0– 10 V, PWM, DSI, and DALI (intensity broadcast only) Load Types

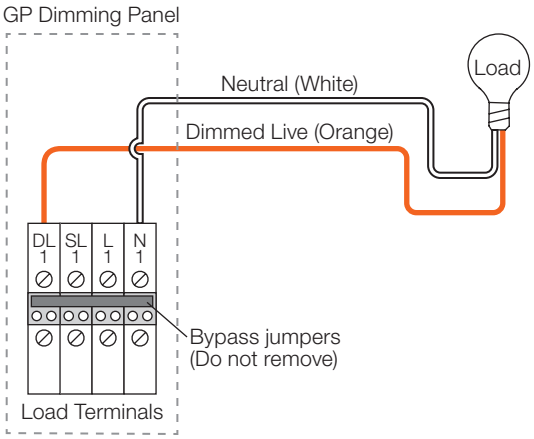


Job Name:	Model Numbers:	
Job Number:		

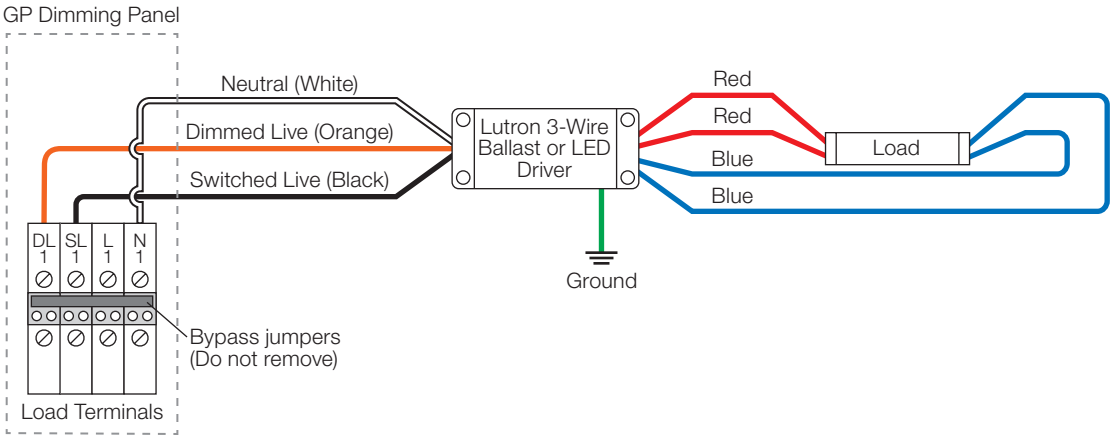
Load Circuits: 220–240 V~ (GP3–24)

- All load circuit wiring is 14 AWG (2.0 mm^2) to 10 AWG (4.0 mm^2).
- Switched Live (SL) must be used for Hi-lume FDB or Eco-10 loads only; use the Dimmed Live (DL) for all non-dim load types.
- Consult **Wiring Overview** page for appropriate neutral location.

Wiring for 2-Wire Load Types

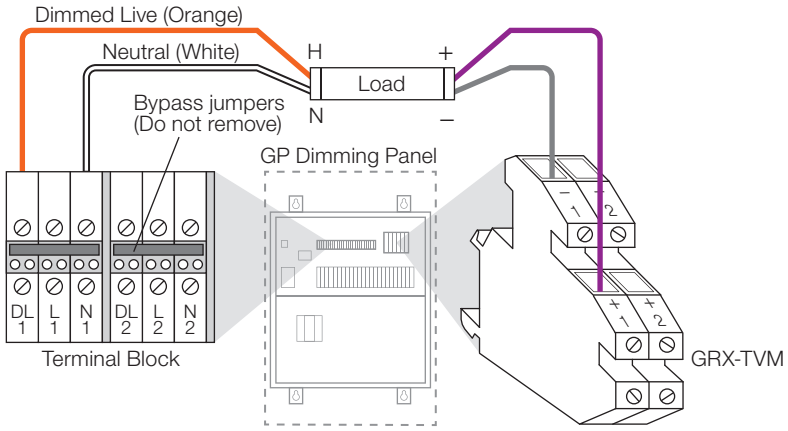


Wiring for Lutron Hi-lume or Eco-10 (ECO-Series) Fluorescent Dimming Ballasts



Lutron Hi-lume 220–240 V~ dimming ballast shown.

Wiring for Lutron GRX-TVM2 for 0– 10 V, PWM, DSI, and DALI (intensity broadcast only) Load Types



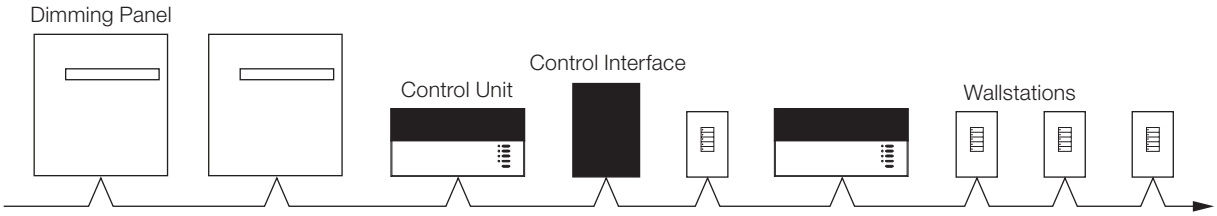
Job Name:	Model Numbers:	
Job Number:		

Low-Voltage IEC PELV/NEC® Class 2 Wiring (All Models)

- System communications uses low-voltage IEC PELV/NEC® Class 2 wiring.
- Wiring must be daisy-chained.
- Wiring must run separately from line (mains) voltage.

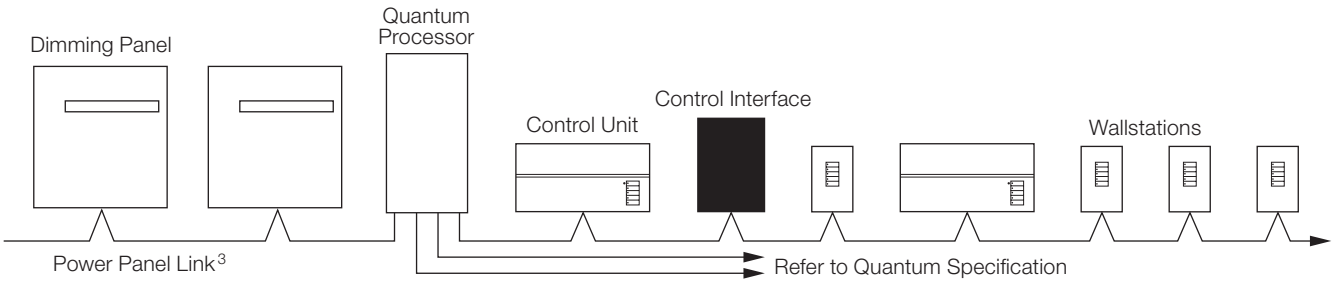
GRAFIK Eye 4000 System

- IEC PELV/NEC® Class 2 wiring link requires:
  - Two 12 AWG (2.5 mm^2) conductors for control power.
  - One twisted, shielded pair of 18 AWG (1.0 mm^2) for data link.
  - One 18 AWG (1.0 mm^2) conductor for emergency (essential) sense line, from panel to panel.
- Total length of control link may be no more than 2000 ft (610 m).
- Approved low-voltage cable is available from Lutron[1] and Belden. These are approved with 22 AWG (0.5 mm^2) data link wires.



Quantum System

- IEC PELV/NEC® Class 2 wiring link requires:
  - Two 12 AWG (2.5 mm^2) conductors for control power.
  - One twisted, shielded pair of 22 AWG (0.5 mm^2) for data link.
  - One 18 AWG (1.0 mm^2) conductor for emergency (essential) sense line, from panel to panel.
- Total length of control link may be no more than 2000 ft (610 m).
- If MUX-RPTR interface[2] and GRX-CBL-46L cable[1] is used, length may be up to 4000 ft (1219 m).
- Maximum of 32 circuit selectors per link or 512 switch legs (controllable outputs) per link.
- It is not necessary to position the Quantum panel at the end of the link; it may be in the middle.



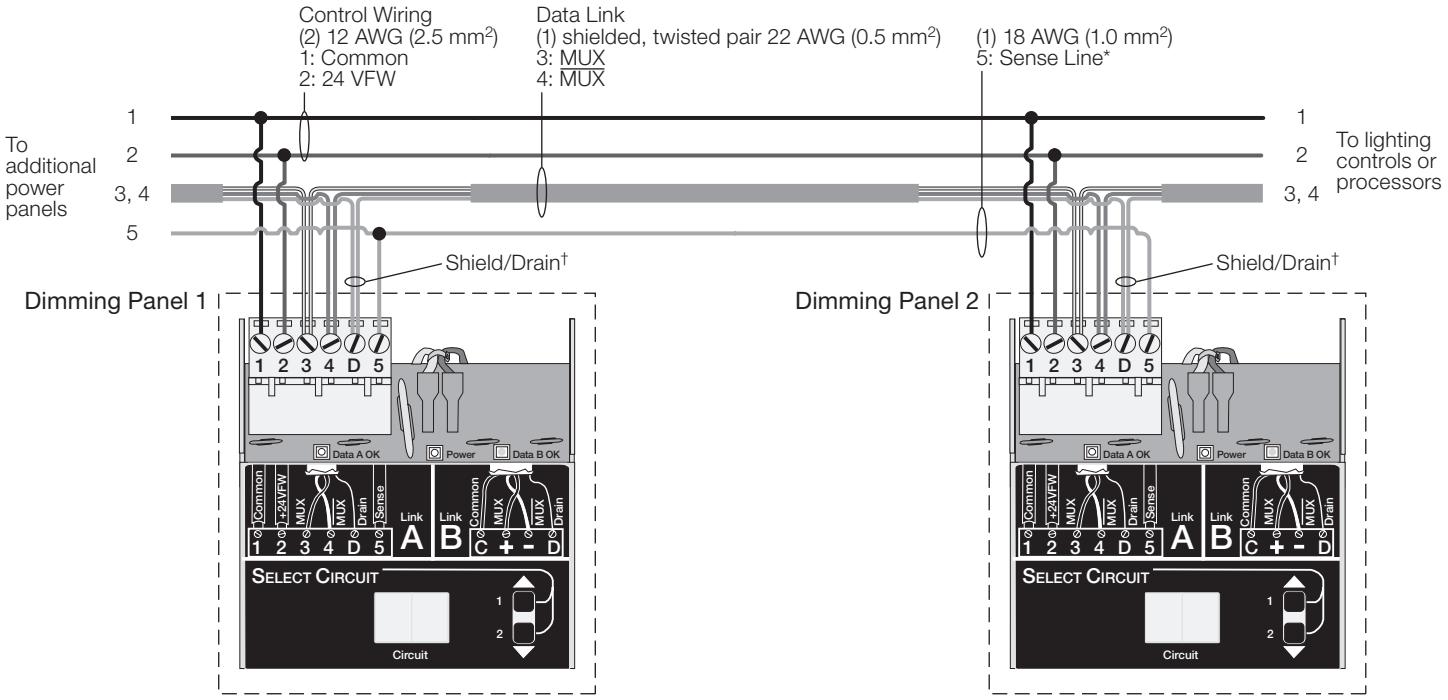
[1] GRX-CBL-46L IEC PELV/NEC® Class 2 wiring cable is available from Lutron and contains:
Two 12 AWG (2.5 mm^2) conductors for control power.
One twisted, shielded pair of 22 AWG (0.5 mm^2) for data link.
One 18 AWG (1.0 mm^2) conductor for emergency (essential) sense line.

[2] Only the MUX-RPTR interface can only be used to extend the length of a power panel link in Quantum. To extend a QS wallstation link, a QSPS-P1-10-60 must be used.

[3] Link terminators (LT-1) are required at the beginning and END of every power panel link.

Job Name:	Model Numbers:	
Job Number:		

IEC PELV/NEC® Class 2 Panel-to-Panel Wiring: GRAFIK Systems (All Models)

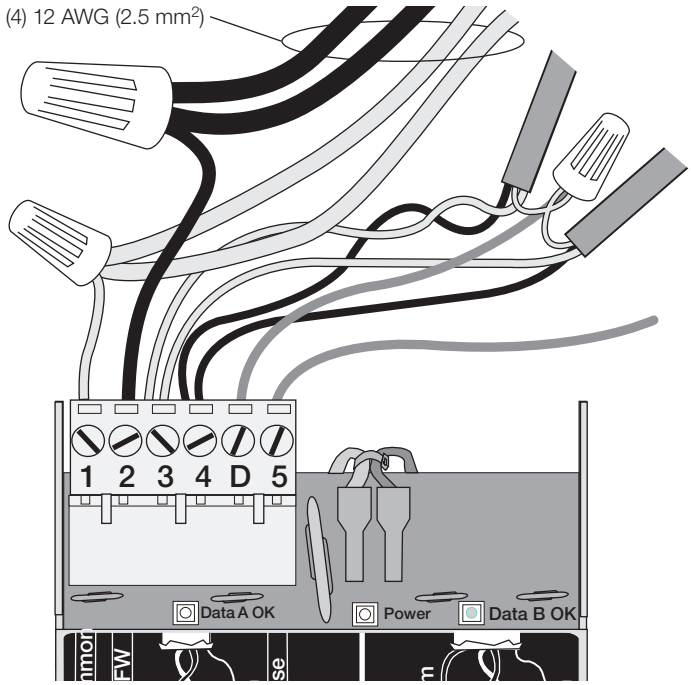


* Emergency power: The additional 18 AWG (1.0 mm²) wire is a "sense" line from terminal 5 of another panel. This sense line allows an emergency (essential) lighting panel to "sense" when normal (non-essential) power is lost. If more than one emergency lighting panel needs to sense from a specific normal panel, a dedicated wire between each pair of normal (non-essential) and emergency (essential) panels may be required.

† Shield/Drain: Connect shielding as shown. Do not connect to ground (earth) or circuit board of circuit selector. Connect the bare drain wires and cut off the outside shield.

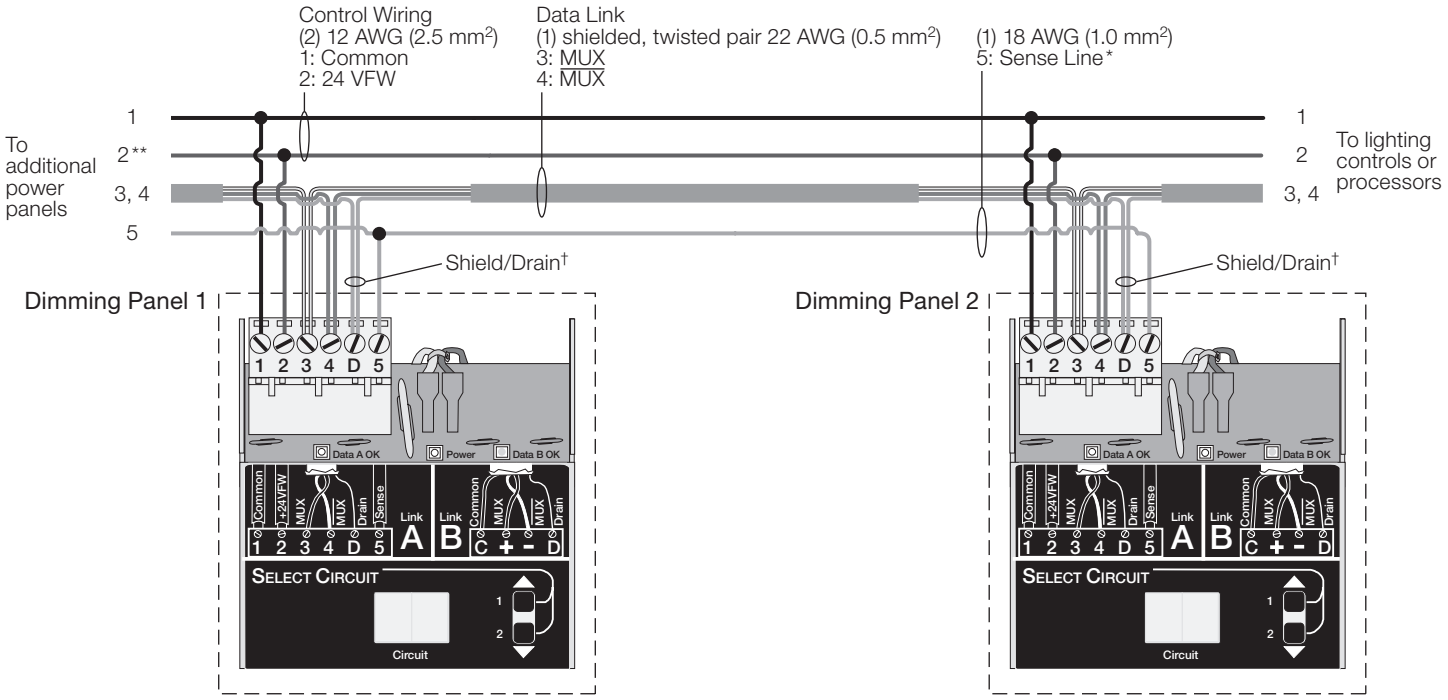
IEC PELV/NEC® Class 2 Terminal Connections: GRAFIK Systems™

Each Low-Voltage IEC PELV/NEC® Class 2 terminal can accept only two 18 AWG (1.0 mm²) wires. Two 12 AWG (2.5 mm²) conductors will not fit. Connect as shown, using appropriate wire connectors.



Job Name:	Model Numbers:	
Job Number:		

IEC PELV/NEC® Class 2 Panel-to-Panel Wiring: Quantum



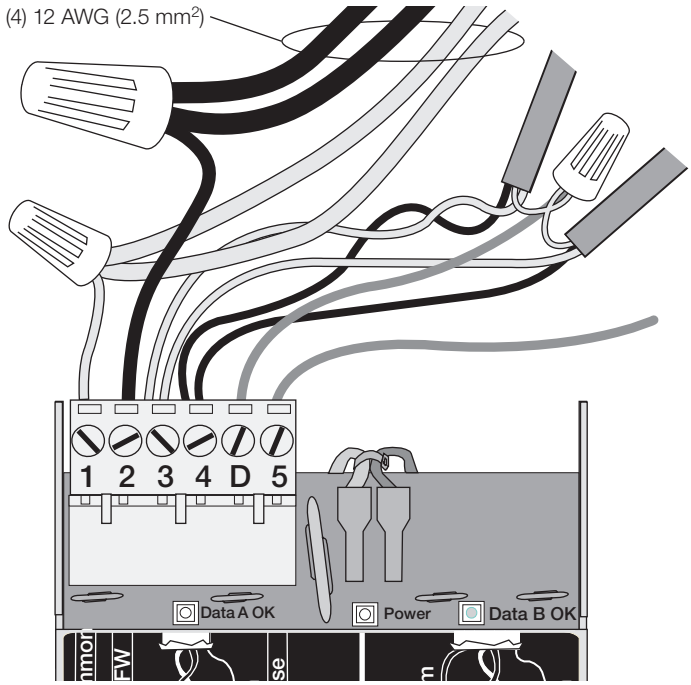
* Emergency power: The additional 18 AWG (1.0 mm²) wire is a "sense" line from terminal 5 of another panel. This sense line allows an emergency (essential) lighting panel to "sense" when normal (non-essential) power is lost. If more than one emergency lighting panel needs to sense from a specific normal panel, a dedicated wire between each pair of normal (non-essential) and emergency (essential) panels may be required.

† Shield/Drain: Connect shielding as shown. Do not connect to ground (earth) or circuit board of circuit selector. Connect the bare drain wires and cut off the outside shield.

** 24 V⎓: Only connect Pin 2 (24 V⎓) between power panels and LUT-ELI-3PH units. Pin 2 should not be connected to the Quantum processor on the link.

IEC PELV/NEC® Class 2 Terminal Connections: Quantum

Each Low-Voltage IEC PELV/NEC® Class 2 terminal can accept only two 18 AWG (1.0 mm²) wires or one 12 AWG to 22 AWG (2.5 mm² to 0.5 mm²) wire. Connect as shown, using appropriate wire connectors.



Job Name:	Model Numbers:	
Job Number:		

Custom Options

Option	Description	Application
Custom Main Breaker	Panel features a custom main breaker size	Jobs with special load requirements.
Dual Tap Lug Set	Panel accepts up to 225 A feed	A single feed with multiple GP Dimming Panels is required.
Branch Circuit Protection	Branch Circuit Breakers with higher AIC ratings or special breaker types such as GFI (Ground Fault Interrupt)	—
Lutron Ten-Volt Module (TVM)	Allows panel to operate fluorescent ballasts that meet IEC 929 standards for 0–10 V⎓ control including: • Lutron TVE ballasts • 0–10 V⎓ neon • PWM fluorescent • Tridonic® DSI (Digital Serial Interface). The TVM can sink or source 50 mA (typically 25–50 ballasts) on each circuit	Jobs with fluorescent ballasts that require 0–10 V⎓, PWM, or DSI control
MRI	Panel dims DC (Direct Current) lighting in Magnetic Resonance Imaging (MRI) facilities.	MRI facilities or sound studios where standard lighting-control equipment won't work because of RFI and EMI.
Locking Cover	• Prevents accidental switching of circuit breakers. • Adds an additional 2.25 in (57.2 mm) to the front of the panel. • Available for GP8–GP24 only.	Service corridors and public areas.
2Link	• Allows a DMX512 theatrical console to operate the load circuits in the dimming panel. • Allows a GRAFIK Eye 4000 System to handle 128 zones (two links of 64 zones) • Allows two GRAFIK Eye 4000 Systems to share the same dimming panel.	• Control of architectural lighting from DMX512 theatrical console is required. • A mix of architectural and theatrical lighting exists on the job. • Multiple systems where space for panels is limited.

Job Name:	Model Numbers:	
Job Number:		