



Type No. _____

Job Name _____

Catalog No. _____



Shown: V24100M4502SC



Shown: V24450HP2SC

Vectra Series

**Commercial/Light Industrial
Emergency Lighting**

24 Volt, 100-450 Watts

Standard Self-Diagnostics Electronics

Housing

- Enclosure is constructed of 18 gauge steel with a 20 gauge cover with a white corrosion-resistant, epoxy powder coat finish
- Nine standard and custom colors available, consult factory
- Easily mounted with key hole slots or optional mounting plates
- Custom mounting plates are available to facilitate wall mount installations
- The use of the optional strapping kit allows the mounting plate to be fixed to columns, poles or I-beams
- 1/4" toggle bolts are recommended for installation
- All housings have six available 1/2" conduit knockouts
- The Vectra Series meets the Buy American requirements

Battery

- Maintenance-free sealed lead calcium battery with 5-year life

Illumination

- Illumination is accomplished with up to three MR16 or PAR 36 lamp heads mounted on the top of the enclosure
- Lamps can also be mounted on the side or bottom
- Accommodations for remote lamps are standard

Operating Temperature Range

- Standard Location: 65°F (18°C) to 85°F (29°C)
- Damp Location: 32°F (0°C) to 104°F (40°C)

Electrical Specifications

24V Lead Calcium

- 25-100 W units - 0.741 A (120), 0.312 A (277)

Code Compliance

- UL 924 listed
- UL damp location listing option 32°F (0°C) to 104°F (40°C)
- NFPA 101, NEC, BOCA, OSHA, and IBC illumination standards
- City of Chicago Approved, New York City Approved

Smart Charger Electronics

- Charging system is microprocessor driven with software embedded diagnostic routine and temperature compensation
- See Smart Charger specification sheet L2368 for electronics details
- 120/277 VAC input, surge protection, brownout, AC lockout and low voltage disconnect features are standard

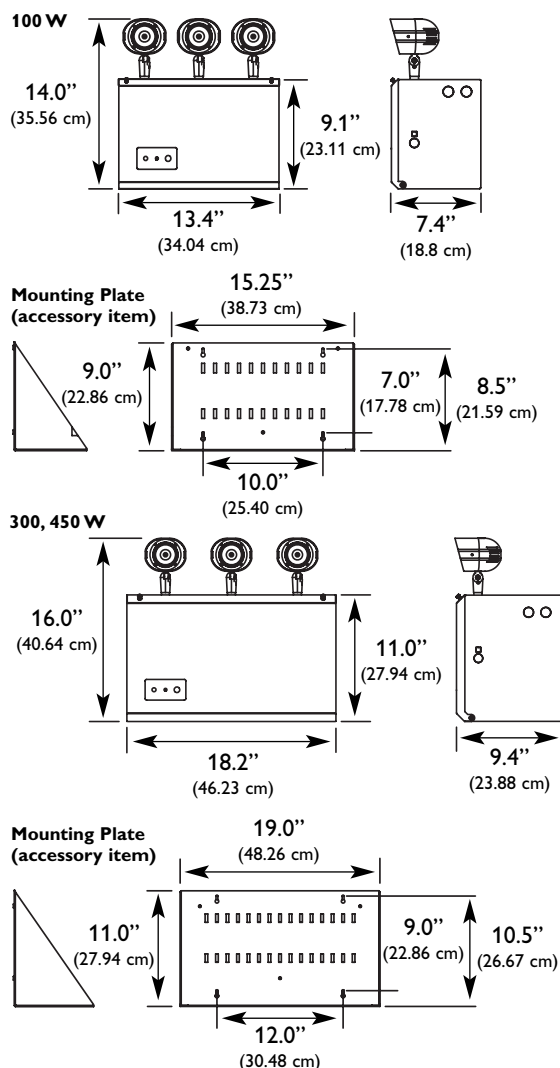
Smart Charger Self-Testing Diagnostics (Optional)

- The Smart Charger diagnostic/charging platform with optional self-testing mode automatically runs a one-minute self-test every 30 days and a 30-minute test on the sixth and twelfth month. A one-minute or 90-minute test may be initiated via the push to test switch on the unit or by activating the appropriate test command on the optional IR test device.

Warranty

- Electronics: 3 years, Battery: 1 year full, 4 years pro-rata (lead calcium)

Dimensions (dimensions are approximate and subject to change)



Ordering Information

SC				
SERIES	LAMP TYPE**	# OF HEADS	MODEL DESIGNATOR	FACTORY INSTALLED OPTIONS
24 V, Lead Calcium V24100 = 100 W V24300 = 300 W V24450 = 450 W	(MR16 Metal Lamp Heads) 24 VDC Halogen M450 = 50 W, 40° (Metal Chrome Lamp Heads) 24 VDC PAR 36 HP = 50 W	Blank = No Heads 1 = One 2 = Two 3 = Three	SC = Smart Charger Diagnostics	A = Ammeter BD = Battery Disconnect Switch BM = Lamp Heads Installed on Bottom of Enclosure DL = UL Damp Location Listed (0°C to 40°C) EX = Special Input Transformer (specify voltage & frequency)¹ F1 = 120 VAC Input Fuse F2 = 277 VAC Input Fuse P1 = 120 VAC Power Switch P2 = 277 VAC Power Switch SM = Lamp Heads Installed on Side of Enclosure² SP = Special Paint, Specify Color T = Self-Testing Diagnostics TA = Audible Self-Testing Diagnostics TD = Time Delay, 15 Minutes V = Voltmeter
ACCESSORIES (ORDER AS A SEPARATE ITEM) SCIR = Smart Charger Infra-Red Remote SMMP = Mounting Plate (100 W) SLMP = Mounting Plate (300 W & 450 W) SKIT = Strapping Kit For Use With Mounting Plates To Affix To Columns, Poles and I-beams WGS = Wire Guard (100 W) WG = Wire Guard (300 W & 450 W)				

NOTES:

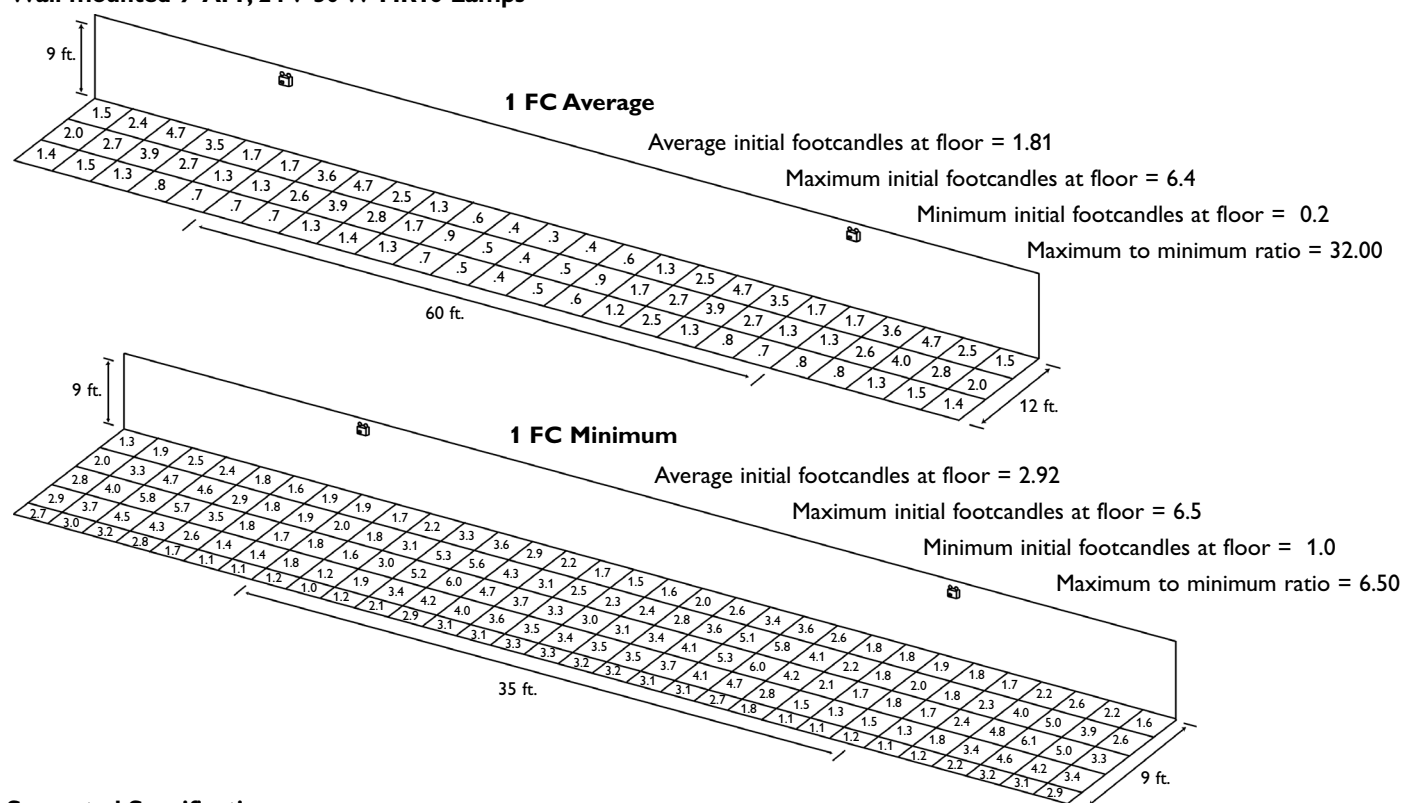
1) Some option combinations may impact UL listing. Consult factory for specifics.
 2) Side mounted lamp heads option (SM) are not installed onto the enclosure at the factory.

**Optional lamp heads available, consult factory or refer to lamp heads page.

Optics* (IES formatted files are available on-line)

Wall mounted 9' AFF, 24 V 50 W MR16 Lamps

* The optics layout shown is intended to be used as reference only. Standard reflectances used were 80/50/20. LightGuard is not responsible for site specific conditions that may alter the results.



Suggested Specification

Furnish and install LightGuard's emergency lighting unit model _____. The unit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Unit shall be easily field connected to a 120 or 277 VAC, 60 Hz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

ELECTRONICS - All models shall be provided with LightGuard's Smart Charger self-diagnostics electronics platform. Smart Charger will detect and notify the installer regarding incorrect wiring of the transformer primary and restrict the damaging effects from affecting the printed circuit board. The Smart Charger electronics package shall provide continuous, real-time monitoring of all the critical equipment functions including, but not limited to: line voltage status and condition, charger fault, transfer fault, battery fault, and lamp load fault and notify personnel with a visual indicator sequence. Optional audible diagnostics shall be available from the factory. The optional self-testing software shall satisfy the periodic testing requirements in NFPA 101, Life Safety Code, as well as the International Building Code (IBC). The Smart Charger diagnostic/charging platform with self-testing mode automatically runs a one-minute self-test every 30 days and a 30-minute test on the sixth and twelfth month. The Smart Charger circuit shall continuously sample ambient temperature conditions and adjust the charging regime to compensate for typical and dramatic ambient conditions equal to 3mV/°C compensation to maximize the life of the battery. An on-board IR receiver shall be standard and pre-programmed to operate from an optional IR user interface device (available as an accessory item).

BATTERY - The battery shall be a maintenance-free, sealed lead calcium battery. The models selected with optional damp location listing shall provide trouble-free operation in temperatures up to 104°F (40°C).

HOUSING - The enclosure is constructed of 18 gauge steel with a 20 gauge cover with a white corrosion-resistant, epoxy powder coat finish. A mounting plate may be used to facilitate wall mounting or used with an optional strapping kit to affix to columns, poles or I-beams.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



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