

STANDARD DIMMING MODULE

SDM12-EM



Supports control of up to 12 loads
plug-and-play design

Eliminates the need for field wiring
to the module

Alarms to the controller, can notify
dealer or end user of problem by
email

Support for AFCI breakers

Includes four spare fuses to
protect the module

Each dimming channel is
programmable to match the
dimming curve of the lighting load

Individual dimming channels can
be programmed to function as a
relay or a dimmer



DESCRIPTION

The InFusion™ Standard Dimming Module (SDM12-EM) is an integral component of the centralized lighting control system from Vantage®. It can be mounted in a main or secondary power enclosure and supports control of up to 12 standard (forward phase) loads with up to four line feeds and up to 64 total amps of load. The two additional line feeds provide added flexibility with AFCI circuit breakers. The modules have current sensing built in, allowing enhanced conditional programming in Design Center for increased support of Energy Management scenarios.

OPERATION

SDM12-EM series modules provide exceptional support of LED and CFL low wattage lighting (5W@120V / 12W@277V) as well as high wattage lighting loads. The SDM12-EM module is compatible with new and old enclosures using new AC terminal boards. The SDM12-EM is designed for 120 – 277 VAC and 50 or 60Hz electrical specifications providing global compatibility.

HIGHLIGHTS

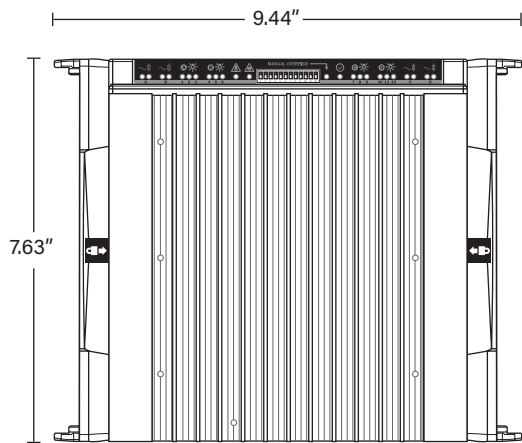
The SDM12-EM module is designed with improved module locking mechanisms for simple in-field installation and service, allowing modules to be quickly replaced without affecting load connections to the system. Field Serviceability is enhanced with field service alerts sent via email to installers for their convenience. Programming, installing, and replacement have been made easier with these added features.

APPLICATIONS

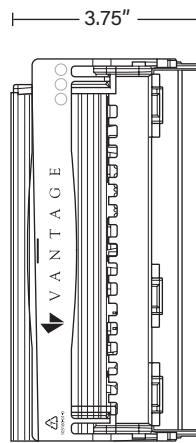
The InFusion Standard Dimming Module is ideal for all lighting automation projects. Vantage's InFusion systems are fully compliant with Title 24 requirements for both residential and non-residential buildings. Additionally, the SDM12-EM is UL and CUL listed. The InFusion Standard Dimming Module is a necessary component for Vantage's complete lighting control solution.

PROJECT		LOCATION/ TYPE	
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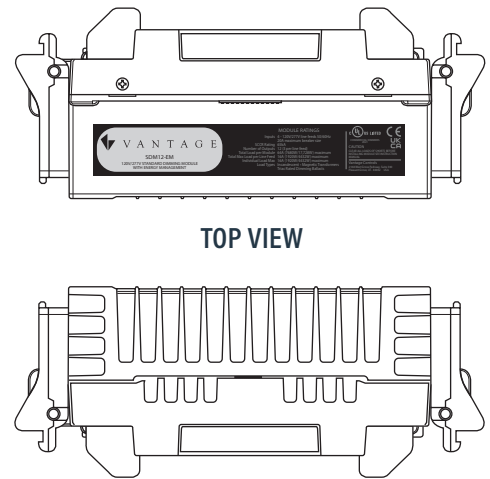
MULTI-VIEW LINE DRAWING



FRONT VIEW



SIDE VIEW



TOP VIEW

BOTTOM VIEW

FEATURES

- Supports control of up to 12 loads
- Plug-and-play design
- Eliminates the need for field wiring to the module
- Alarms to the controller can notify dealer or end user of problem by email
- Enhanced support for AFCI breakers
- Includes fuses to protect the module
- Includes two additional fuses as spares
- Current sensing for energy management applications
- Firmware is field upgradable
- 8080 steps for smooth ramping and dimming control
- Displays the operating and fuse status with LED indicators
- Protects against current and thermal overload
- Self-powered design for uninterrupted lighting during servicing
- Offers load by load selectable override control
- Allows manual overrides to be programmed to any dim level

SPECIFICATIONS

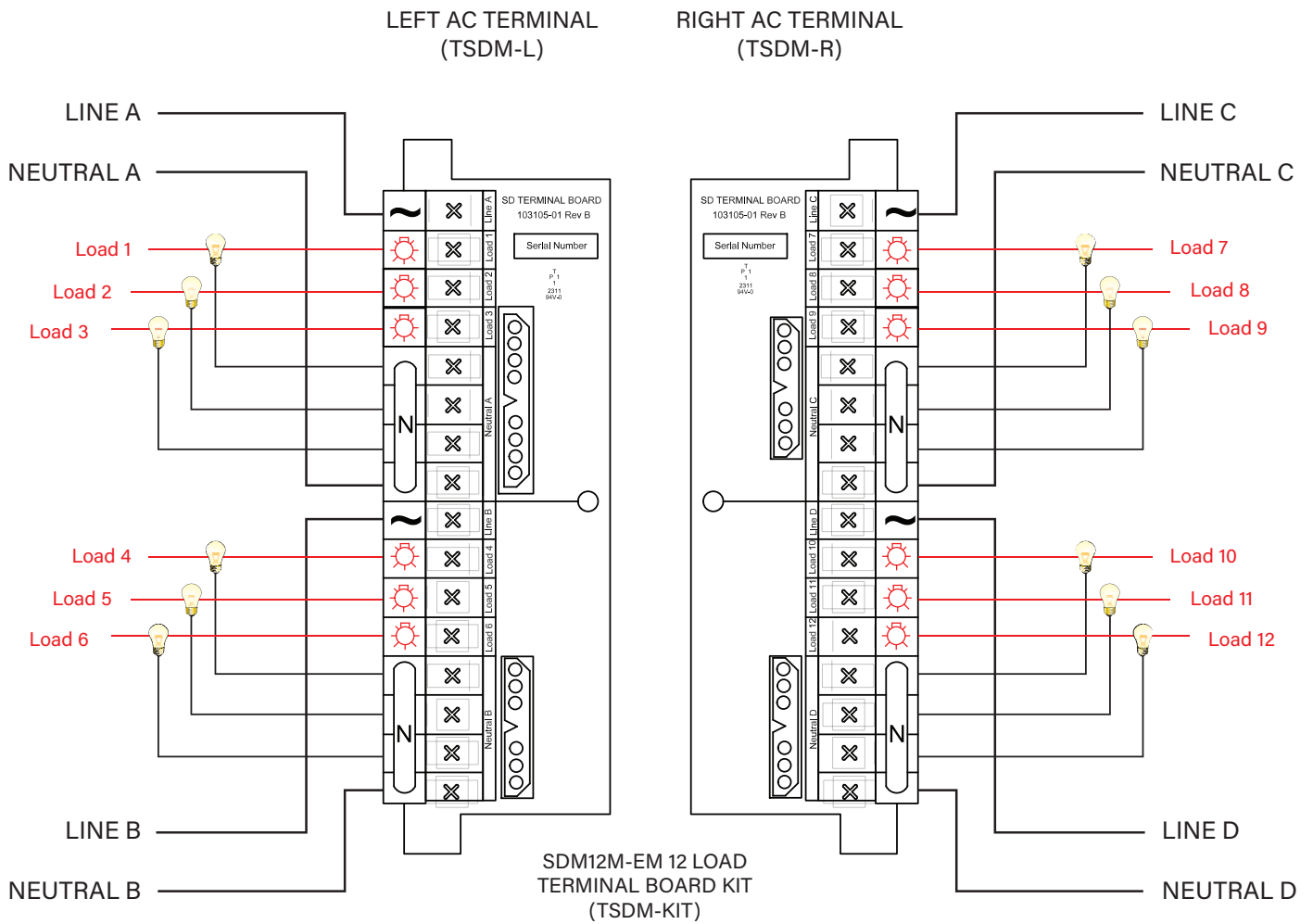
Dimensions (HWD):	7.63" x 9.44" x 3.75" (194mm x 240mm x 95mm)	
Model:	SDM12-EM	
Voltage:	120V-277V ~ 60/50Hz	
Maximum Amperage per Module:	64A (7680W@120V)	64A (17,728W@277V)
Maximum Individual Load Amperage:	16A (1920W @ 120V)	16A(4432W@277V)
Maximum Transformer Load:	1000VA@120V	2300VA@277V
Maximum Individual LED Load:	3.2A (384W@120V)	3.2A (886W@277V)
Weight:	5.7 lbs (2.6 kg)	
Ambient Operating Humidity:	5 - 95% non-condensing	
Ambient Operating Temperature:	32 - 104°F (0 - 40°C)	
Built-in Protection:	Fuse protection per line, MOV surge, thermal shutdown, short circuit, snubber circuit	
Chokes:	12 EMI Suppression	
Cooling:	Convection, 36" front clearance required	
Lightning Surge Protection High-voltage:	IEEE C62.41; (6000V & 3000A)	
Lightning Surge Protection Low-voltage:	ITU-T K.20	
Loads:	12	
Load Types:	Incandescent, HID, LED (see note on LED dimming), Fluorescent, Cold Cathode, Constant speed motors, Magnetic low-voltage	
Manual Override:	Load by Load selectable	
Maximum Line Feeds:	4 @ 20A (Maximum) breakers	
Minimum Load:	5W@120V / 12W@277V	
Status Indicators:	Line Power, Fuse Status, Load Power, Over Temp, Microprocessor Status, Manual Override, Overload	
System Compatibility:	InFusion	
SCCR Rating:	65KA	
Certifications:	UKCA, CE, UL, cUL, EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3	

LED DIMMING NOTE

Vantage is leading the way in LED lighting control through innovations of new hardware and software products; however, industry standards are still undefined for dimming LED lamps and fixtures. Dimming performance of LED lighting cannot be guaranteed, even when applying the correct dimming technology specified by the LED manufacturer. While Vantage may be consulted when performance issues are present, Vantage will not be liable for on-site performance issues. Vantage recommends the following to assist installers and lighting specifiers:

- Check Vantage's online library of LED product test reports prior to installing LED products to be dimmed by Vantage dimmers
- Utilize our on-demand product testing of untested LED products - Please contact Vantage for details regarding this service
- Selecting a tested product greatly increases the likelihood of successful dimming; however, LED product tests are performed under laboratory conditions with a set number of samples and a quality power source
- There are many factors that may contribute to unsatisfactory results within a specific installation, including, but not limited to:
 - line noise originating from electrical equipment within the premises
 - line noise from the source (particularly with local generators or inverters)
 - interference between dimmed LED products
 - wiring conditions (i.e. shared neutrals, loose neutrals, incorrectly bonded neutral, or grounding issues)
 - LED product variances, including:
 - unintended batch-related variances
 - product revisions

TYPICAL TERMINAL BOARD WIRING



ORDERING INFORMATION

Catalog #	Description	Voltage / Misc.
<input type="checkbox"/> SDM12-EM	InFusion Standard Dimming Module	129-240V, 50/60Hz - Up to 12 loads
<input type="checkbox"/> TSDM-KIT	Standard Dimming Module Terminal Kit	Supports 12 loads as well as four line feeds and 16 neutrals
<input type="checkbox"/> TROSDM-KIT	Standard Dimming Module Retro Terminal Kit	For retrofit installations, supports eight loads as well as two line feeds and 12 line feeds and 12 neutrals
<input type="checkbox"/> TROSDM-P-KIT	Standard Dimming Module Retro Terminal Kit + Plastic Back Plate	For retrofit installations, supports eight loads as well as two line feeds and 12 neutrals
<input type="checkbox"/> TROSDM12-P-KIT	Standard Dimming Module 12 Load Retro Terminal Kit + Plastic Back Plate	For retrofit installations, supports 12 loads as well as two line feeds and 16 neutrals