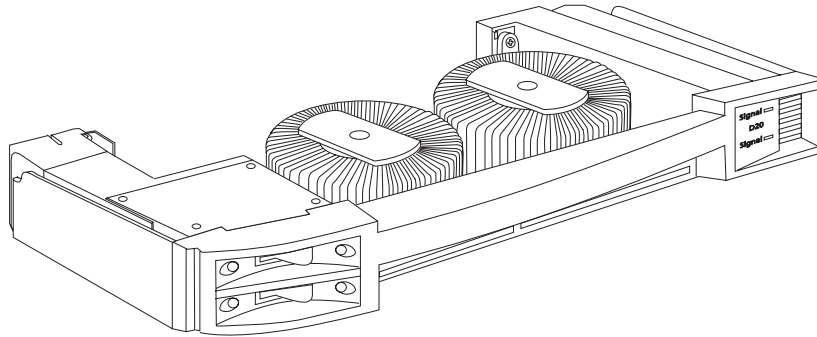




100V 120V

Standard Series



GENERAL INFORMATION

The Standard Dimmer Module is designed for use in both Sensor®+ and Unison® Dimming Series modular rack enclosures. Standard Dimmer Modules provide cost-effective digital forward phase angle dimming for standard loads such as incandescent, low voltage, quartz, neon, cold-cathode and 2 and 4-wire fluorescent ballasts. The patented, high-density, dual modules feature modular installation and removal, fully magnetic circuit breakers and standard or enhanced risetime toroidal filters.

APPLICATIONS

- Incandescent lighting
- Low voltage lighting
- Quartz lighting
- Neon lighting
- Cold Cathode lighting
- 2-wire Fluorescent ballast
- 4-wire Fluorescent ballast

FEATURES

- Two 1.8 or 2.4kW dimmers per module
- Standard or Enhanced risetime toroidal filters
- High-density modular assembly
- Die-cast aluminum chassis
- Fully magnetic circuit breakers

GENERAL

- 100,000A Short Circuit Current Rating (SCCR)
- UL and cUL LISTED

ORDERING INFORMATION

100-120V Standard Dimmer Modules

MODEL	DESCRIPTION
D15	Dual 15A Dimmer Module, 350µS
D15E	Dual 15A Dimmer Module, 500µS
D20	Dual 20A Dimmer Module, 350µS
D20E	Dual 20A Dimmer Module, 500µS
AFM	Air Flow Module

Compatible Systems

MODEL	DESCRIPTION
<b>SENSOR+ INSTALLATION RACKS*</b>	
SR6+	Sensor+ 6 module rack
SR12+	Sensor+ 12 module rack
SR24+	Sensor+ 24 module rack
SR48+	Sensor+ 48 module rack
SR6AF+	Sensor+ 6 module Advanced Features rack
SR12AF+	Sensor+ 12 module Advanced Features rack
SR24AF+	Sensor+ 24 module Advanced Features rack
SR48AF+	Sensor+ 48 module Advanced Features rack
SRAFN+	Sensor+ GFCI racks
<b>SENSOR+ TOURING RACKS</b>	
SP4820+	Sensor+ 24 module Touring Rack (48-20A dimmers)
SP9620+	Sensor+ 48 module Touring Rack (96-20A dimmers)
<b>SENSOR+ PORTABLE PACKS</b>	
SP1220+	Sensor+ 6 module Portable Pack (12-20A dimmers)
SP1215+	Sensor+ 6 module Portable Pack (12-15A dimmers)
SP2420+	Sensor+ 12 module Portable Pack (24-20A dimmers)
SP2415+	Sensor+ 12 module Portable Pack (24-15A dimmers)

\*Rack enclosures also available for 230CE and 240 Volt applications



## SPECIFICATIONS

## GENERAL

- UL and cUL Listed for continuous duty at 100% of rated load
  - D15/D15E – 1.8kW
  - D20/D20E – 2.4kW

## PHYSICAL

- Modular plug-in assemblies
- Cast aluminum chassis, finished with textured epoxy paint
- Keyed to prevent insertion in inappropriately rated rack positions

## CIRCUIT BREAKERS

- Fully magnetic to eliminate nuisance tripping
- 20x inrush current rating
- 125%, 10-120 seconds, must-trip rating
- Rated for 100% switching duty applications

## RATINGS

- 100,000A Short Circuit Current Rating (SCCR)
- Modules withstand hot-patching of cold loads up to full rating
- UL and cUL LISTED

## POWER DEVICE

- Sealed, patented assembly
- Field replaceable with screwdriver
- Two back-to-back SCRs per circuit
- One control LED per circuit
- 4000V isolation between control and power components
- Integral bonded heatsink
- Integral temperature sensor

## FILTERING

- High quality toroidal filters
  - 350 $\mu$ S risetime - Standard 100-120V modules\*
  - 500 $\mu$ S risetime - Enhanced 100-120V modules\*

\*Risetime measured at full load, at worst case firing angle (90 degrees), from 10-90% of output wave form

## DIMMER RANGE

- Incandescent, low voltage dimming range 100-0%
- Dimming range of 2 and 4-wire fluorescent ballast is dependent on lamp ballast combination. Contact ETC for range verification
- Sizing of Neon transformer used in dimming applications should be 1.5x greater than size used in non-dimming application

## PHYSICAL

## Module Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
D15	1.5	38.	11.8	300	4.9	127
D15E	1.5	38	11.8	300	4.9	127
D20	1.5	38	11.8	300	4.9	127
D20E	1.5	38	11.8	300	4.9	127

## Module Weights

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
D15/D20	5.0	2.3	6.9	3.1
D15E/D20E	5.5	2.5	6.9	3.1

## Maximum BTU Production per module

MODEL	BTUS	WATTS	EFFICIENCY
D15	380	112	96.9%
D15E	474	140	96.1%
D20	522	154	96.8%
D20E	810	238	95.0%

These values should be provided to a qualified HVAC design engineer, along with dimmer quantities, types and dimmer room dimensions, to calculate dimmer room air handling requirements.

Dimmer room HVAC systems must at all times maintain the specified ambient temperature **at the dimmer rack**. Dimming systems operating within 10°F of the upper or lower temperature limits must strictly follow installation and operation guidelines to operate reliably.

## SCR Rating

MODULE	D15/D20
Single cycle peak surge current	625A
Half cycle peak surge current	1620A
Transient over voltage	600V



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