ETC

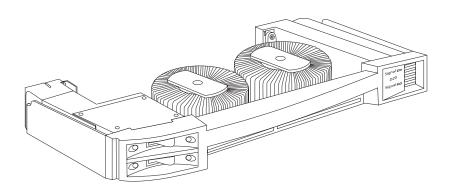
Unison® 120V Standard Dimmer Module





100V 120V

Standard Series



GENERAL INFORMATION

The Standard Dimmer Module is designed for use in Unison Dimming Series 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

- Designed for use in 100-120V Unison DRd rack enclosures
- Incandescent lighting
- Low voltage lighting
- Quartz lighting
- Neon lighting
- Cold Cathode lighting
- 2-wire Fluorescent ballast
- 4-wire Fluorescent ballast (with FLO Option Board)
- DALI ballast (with DALI Option Board)

FEATURES

- Two 1.8kW 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

100-120 Volt 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
DRd6-12-120	100-120V 6 module rack enclosure (12 circuits)
DRd12-24-120	100-120V 12 module rack enclosure (24 circuits)

*Rack enclosures also available for 230CE, 240 and 277 Volt applications



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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

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

ELECTRICAL 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
 - 350µS risetime Standard 100-120V modules*
 - 500µS 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	124
D15E	1.5	38	11.8	300	4.9	124
D20	1.5	38	11.8	300	4.9	124
D20E	1.5	38	11.8	300	4.9	124

Module Weights

MODEL	WEIGHT		EL WEIGHT SHIPPING WEIGH		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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Unison® products protected by one or more of the following: U.S. Patent No. 5,323,088, 6,849,943, and 5,352,958; European Patent No. 0603333; German Patent No. 69203609