



**GENERAL INFORMATION**

The Universal-Module Series is designed for use in Unison DR Series Dimming Racks. Universal Modules provide cost-effective digital phase angle dimming for standard architectural loads such as incandescent, low voltage, quartz, neon, cold-cathode and 2 and 4-wire fluorescent ballasts. The patented, high-density, dual modules feature, tool free insertion 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 (with FLO Option Board)
- FEATURES**
- High-density modular assembly
  - Tool-free insertion and removal
  - Fully magnetic circuit breakers
  - Standard or Enhanced toroidal filters

**ORDERING INFORMATION**

**100-120 Volt Universal Dimmer Modules**

Model#	Description
D15S	Dual 15A Universal Module 100-120V - 350µS chokes
D15E	Dual 15A Universal Module 100-120V - 500µS chokes
D20S	Dual 20A Universal Module 100-120V - 350µS chokes
D20E	Dual 20A Universal Module 100-120V - 500µS chokes
AFM	Air Flow (blank) Module

**277 Volt Universal Dimmer Modules**

Model#	Description
AD15S	Dual 15A Universal Module - 277V - 200µS chokes
AD20S	Dual 20A Universal Module - 277V - 200µS chokes

**Compatible Systems**

Model#	Description
DR6	Unison 6 Module Rack*
DR12	Unison 12 Module Rack*

\* Racks available in 100,120, 230, and 277 Volt



# Unison™ Universal Module

## Standard Series

### SPECIFICATIONS

<b>PHYSICAL</b>	Universal dimmer modules are dual, plug-in modules, for use in DR series dimming racks Cast aluminum chassis, finished with textured epoxy paint Keyed to prevent insertion in inappropriately rated rack positions
<b>CIRCUIT BREAKERS</b>	Fully magnetic to eliminate nuisance tripping Fault Current Rating: 10,000 AIC rating — 100-120 Volt 14,000 AIC rating — 277 Volt
<b>ELECTRICAL RATINGS</b>	Module rating - 15, 20 amp Modules shall withstand hot-patching of cold incandescent loads up to the module's full rating, without tripping
<b>SCR ASSEMBLY</b>	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
<b>FILTERING</b>	350µS - Standard 100-120V modules 500µS - Enhanced 100-120V modules 200µS - Standard 277V module
<b>DIMMER RANGE</b>	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 Weights

Model#	Weight		Shipping Weight	
	lbs	kgs	lbs	kgs
D15/20	5	2.3	6.9	3.1
D15E/D20E	5	2.3	6.9	3.1
AD15/AD20	5	2.3	6.9	3.1

#### BTU Production per module

Model#	BTUs	Watts	Efficiency
D15	380	112	96.9%
D15E	474	140	96.1%
AD15	380	112	96.9%
D20	522	154	96.8%
D20E	810	238	95.0%
AD20	522	154	96.8%

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.

#### SCR Rating

Module	15/20 amp
Single cycle peak surge current	625 amp
Half cycle peak surge current	1620 amp
Transient over voltage	600V



### Electronic Theatre Controls

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