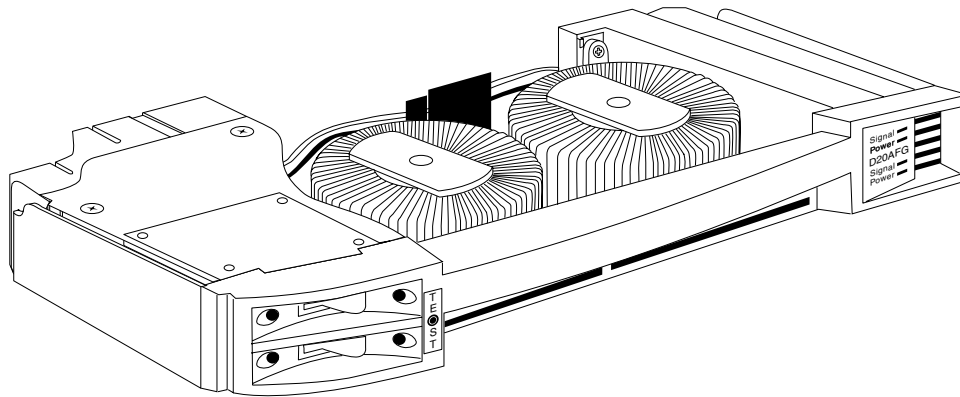


Advanced Features (AF) Series



**GENERAL INFORMATION**

Sensor® Ground Fault Current Interrupt (GFCI) dimmer modules are GFCI breaker-equipped versions of 15A and 20Amp Sensor® Advanced Features modules which provide ground fault protection to fixtures in damp or outdoor environments.

**APPLICATIONS** Dimming environments where Life Safety or equipment protection is desired

- Extra protection in aquatic applications
- Protection for fixtures exposed to elements
- Fixtures exposed to contact with the general public

**FEATURES** Patented UL943 compliant Class A GFCI Ground Fault protection

- 5mA leakage current breakers for Life Safety applications
- Can use standard load wiring, type XHHW recommended
- Up to 125 feet load wire length
- Voltage and current sensors in each dimmer
- 10,000 AIC rating
- 500µS rise-time chokes
- Die-cast aluminum chassis
- Tool-free installation and removal
- Dual back-to-back SCRs for each circuit
- Supports Advanced Features
- Includes GFCI trip notification
- Fully rated magnetic circuit breakers
- UL and cUL listed

**RESTRICTIONS** GFCI modules do not support ETC's Dimmer Doubling  
 GFCI Modules may not detect ground faults across a transformer  
 Contact ETC for applications requiring longer branch circuit runs or non-resistive loads such as motors or electronic/magnetic ballasts

**ORDERING INFORMATION**

**GFCI**

Model#	Description
D15AFG	Dual 15A dimmer module with 500µS chokes
D20AFG	Dual 20A dimmer module with 500µS chokes

**Compatible Systems**

Model#	Description
<b>Sensor+ dimming racks</b>	
SR12AFN+	Sensor+ 12 Module GFCI Rack with Advanced Features
SR24AFN+	Sensor+ 24 Module GFCI Rack with Advanced Features
SR48AFN+	Sensor+ 48 Module GFCI Rack with Advanced Features
SR12AFN+1P	Sensor+ 12 Module GFCI Single Phase Rack with Advanced Features
SR24AFN+1P	Sensor+ 24 Module GFCI Single Phase Rack with Advanced Features



## Advanced Features (AF) Series

### SPECIFICATIONS

<b>DIMMER MODULES</b>	Dimmers are UL and cUL listed for continuous duty at 100% of rated load D15AFG – 1.8kW D20AFG – 2.4kW Dimmer modules are plug-in, and may be replaced without tools Cast aluminum chassis, finished with textured epoxy paint Includes circuit breakers, toroidal filters, SCR module, power and control connectors Keyed to prevent insertion in inappropriately rated rack slots
<b>CIRCUIT BREAKER</b>	UL and cUL recognized GFCI subassembly
<b>ASSEMBLY</b>	125%, 10-120 seconds, must- trip rating Rated for 100% switching duty applications Circuit is broken when system detects a ground fault of 5mA or more Each module has a GFCI test switch
<b>GFCI LOAD WIRING</b>	Can use standard load wiring, type XHHW recommended Up to 125 feet load wire length Phase and Neutral wires must run in the same conduit Neutral wires cannot be ganged Wires from each GFCI load must connect to their designated dimmer
<b>ADVANCED FEATURES</b>	GFCI modules support ETC's Advanced Features when used in AF-equipped dimmer racks AF error messages include GFCI trip notification in addition to standard AF messages
<b>SCR ASSEMBLY</b>	Sealed, patented assembly Two back-to-back SCRs per circuit Integral bonded heatsink Integral temperature sensor
<b>CHOKES</b>	500µS risetime* toroidal filters *Risetime measured at full load, at worst case firing angle (about 50%), from 10-90% of output wave form
<b>ELECTRICAL</b>	10,000 AIC rating Rated for continuous operation at full load

### PHYSICAL

#### GFCI Module Weights

Model	Weight		Shipping Weight	
	lbs	kgs	lbs	kgs
D15AFG	5.75	2.6	7.6	3.4
D20AFG	5.75	2.6	7.6	3.4

#### Maximum BTU Production per Module

Model	BTU's	Watts	Efficiency
D15AFG	474	140	96.1%
D20AFG	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.

#### SCR Rating

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



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