**GENERAL INFORMATION**

Sensor® Ground Fault Interrupt (GFI) dimmer modules are GFI 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 GFI 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 GFI trip notification
- Fully rated magnetic circuit breakers
- UL and cUL listed

**RESTRICTIONS**
- GFI modules do not support ETC's Dimmer Doubling
- GFI 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**

**GFI Modules**

<table>
<thead>
<tr>
<th>Model#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT5AFG</td>
<td>Dual 15A dimmer module with 500µS chokes</td>
</tr>
<tr>
<td>D20AFG</td>
<td>Dual 20A dimmer module with 500µS chokes</td>
</tr>
</tbody>
</table>

**Compatible Systems**

<table>
<thead>
<tr>
<th>Model#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor dimming racks</td>
<td></td>
</tr>
<tr>
<td>SRN12</td>
<td>12 slot Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN24</td>
<td>24 slot Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN48</td>
<td>48 slot Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN12AF</td>
<td>12 slot Advanced Features Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN24AF</td>
<td>24 slot Advanced Features Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN48AF</td>
<td>48 slot Advanced Features Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN12-1P</td>
<td>Single Phase 12 slot Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN24-1P</td>
<td>Single Phase 24 slot Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN12AF-1P</td>
<td>Single Phase 12 slot Advanced Features Rack w/ Neutral Bussing</td>
</tr>
<tr>
<td>SRN24AF-1P</td>
<td>Single Phase 24 slot Advanced Features Rack w/ Neutral Bussing</td>
</tr>
</tbody>
</table>

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**ETC Modules**

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GFI Modules
Advanced Features (AF) Series

SPECIFICATIONS

DIMMER MODULES
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

CIRCUIT BREAKER ASSEMBLY
UL and cUL recognized GFCI subassembly
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 GFI test switch

GFI LOAD WIRING
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 GFI load must connect to their designated dimmer

ADVANCED FEATURES
GFI modules support ETC’s Advanced Features when used in AF-equipped dimmer racks
AF error messages include GFI trip notification in addition to standard AF messages

SCR ASSEMBLY
Sealed, patented assembly
Two back-to-back SCRs per circuit
Integral bonded heatsink
Integral temperature sensor

CHOKES
500µS risetime* toroidal filters
*Risetime measured at full load, at worst case firing angle (about 50%), from 10-90% of output wave form

ELECTRICAL
10,000 AIC rating
Rated for continuous operation at full load

PHYSICAL

GFI Module Weights

<table>
<thead>
<tr>
<th>Model#</th>
<th>Weight</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lbs</td>
<td>kgs</td>
</tr>
<tr>
<td>lbs</td>
<td>kgs</td>
<td></td>
</tr>
<tr>
<td>D15AFG</td>
<td>5.7</td>
<td>2.6</td>
</tr>
<tr>
<td>D20AFG</td>
<td>5.7</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Maximum BTU Production per Module

<table>
<thead>
<tr>
<th>Model#</th>
<th>BTUs</th>
<th>Watts</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D15AFG</td>
<td>474</td>
<td>140</td>
<td>96.1%</td>
</tr>
<tr>
<td>D20AFG</td>
<td>810</td>
<td>238</td>
<td>95.0%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Module</th>
<th>15/20AF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single cycle peak surge current</td>
<td>625A</td>
</tr>
<tr>
<td>Half cycle peak surge current</td>
<td>1620A</td>
</tr>
<tr>
<td>Transient over voltage</td>
<td>600V</td>
</tr>
</tbody>
</table>

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