Advanced power management
Power supply and motor drive (PSMD) for chiller

The PSMD contains all the power generating system components to control compressor motor and fans for cabin beverage chiller equipment.

It includes the following functions:
- Compatible with wild frequency network
- Internal fault diagnostic (BITE) - improve reliability and avoid inflight failure
- 580 W power supply for drive actuator for sensorless motor
- Active power factor corrector rectifier - compatible with the last norms (including harmonics), last A/C
- Protection against over current, over voltage, under voltage and over temperature - prevent damage to the motor

Key features
- 3 phases 115 Volts alternative current (VAC) - variable frequency - power input
- Active power factor corrector rectifier
- Sensorless motor drive

Applications
- Airbus civil aircraft
- Boeing civil aircraft

Contact
TFE Electronics
Zone Actisud, Le Chapitre
18 rue Jean Perrin
31100 Toulouse
France
Tel: +33 (0) 534 666 566
tfe.sales@meggitt.com
www.tfelectroniques.com
www.meggitt.com
## Specifications

### Electrical

<table>
<thead>
<tr>
<th>Input voltage</th>
<th>3 phases 115 Volts alternating current (VAC) - variable frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Active power factor corrector rectifier sensorless motor drive</td>
</tr>
<tr>
<td></td>
<td>150 W/3phases - to brushless direct current electric motor (BLDC)</td>
</tr>
<tr>
<td></td>
<td>25.5 (Volts direct current) VDC/170W - insulated auxiliary power supply</td>
</tr>
</tbody>
</table>

### Physical

<table>
<thead>
<tr>
<th>Width</th>
<th>272 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>246 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>79 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2350 g</td>
</tr>
</tbody>
</table>

### Environmental

| Temperature                                    | -15°C to +65°C (normal operating conditions) |
|                                                | -40°C to +70°C (extended during 1 hour operating conditions) |

Note: Due to continuous process improvement, specifications are subject to change without notice

## Functional diagram

![Functional diagram](image_url)