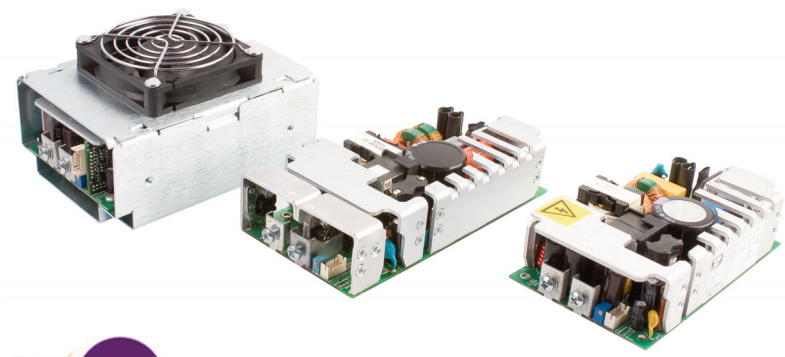
EMH Series



- 250 W & 350 W Forced–cooled
- Industry Standard 3”x 5”x 1.43”Format
- IT & Medical (BF) Approvals
- 80 V – 275 VAC Operation
- Optional ORing Diode (EMH350D Models)
- Analog & PMBus Signals Options (EMH350)
- 5 V Standby (EMH350)
- 3 Year Warranty

The EMH series of ultra compact high power density supplies deliver 250 W and 350W within the industry standard 3” x 5” (76mm x 127mm) footprint. They achieve this very high power density with a minimal 12 CFM forced air requirement and a profile of just 1.4” (36 mm) making them suitable for 1U and a host of other applications.

All models feature a main output and 12V/0.6A fan supply output along with IEC60950 (IT) and IEC60601 BF (Medical) family safety approvals, thus including patient contact equipment in the wide range of possible applications.

The EMH350 has a 5V/2A standby rail and can be supplied with a range of optional analogue and digital, PMBus compatible signals as well as a variable speed fan & cover. The EMH350D models have built in Oring diodes for use in redundant applications.

Models & Ratings

Output Voltage V1	Output Current V1	Fan Supply V3[1]	Output Power	Model Number[1]
12 V	21.0 A	12 V/0.6 A	252 W	EMH250PS12
18 V	14.0 A	12 V/0.6 A	252 W	EMH250PS18
24 V	10.5 A	12 V/0.6 A	252 W	EMH250PS24
48 V	5.2 A	12 V/0.6 A	250 W	EMH250PS48

Output Voltage V1	Output Current V1	Standby Supply V2	Fan Supply V3[2]	Output Power	Model Number[2]
12 V	29.2 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS12
18 V	19.5 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS18
24 V	14.6 A	5.0 V / 2.0 A	12 V/0.6 A	355 W	EMH350PS24
48 V	7.3 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS48

Output Voltage V1	Output Current V1	Standby Supply V2	Fan Supply V3	Output Power	Model Number[3]
12 V	29.2 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS12D
18 V	19.5 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS18D
24 V	14.6 A	5.0 V / 2.0 A	12 V/0.6 A	355 W	EMH350PS24D
48 V	7.3 A	5.0 V / 2.0 A	12 V/0.6 A	354 W	EMH350PS48D

Notes:
1. The EMH250 is available with a top mounted fan cover option. Add suffix '-TF' to model number e.g. EMH250PS12-TF. See mechanical drawing later in this datasheet. The fan supply V3 is no longer available with this option as it is used to drive the fan.
2. The EMH350 is available with various analog, digital signal and cover options. See availability table and mechanical drawing later in this datasheet. The fan supply V3 is no longer available with cover options as it is used to drive the fan.
3. The EMH350D models are fitted with an integral ORing diode and are also available with various analog and digital signal options. See availability table and mechanical drawing later in this datasheet.

Input Characteristics

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage - Operating	80	115/230	275	VAC	Derate output power < 90 VAC. See fig. 1
Input Frequency	47	50/60	63	Hz	
Power Factor		>0.9			EN61000-3-2 class A compliant
Input Current - No Load		0.05/0.03		A	115/230 VAC
Input Current - Full Load		2.6/1.3 3.7/1.8		A	115/230 VAC - EMH250 115/230 VAC - EMH350
Inrush Current			40	A	230 VAC cold start, 25 °C
No Load Input Power		5.8 6.4 1.0		W	EMH250 EMH350 EMH350 with output inhibit (via signal option)
Earth Leakage Current		90/160	250	µA	115/230 VAC/50 Hz (Typ.), 264 VAC/60 Hz (Max.)
Input Protection	F10 A/250 V internal fuse in both lines				

Derating Curve - All EMH250 & EMH350 models

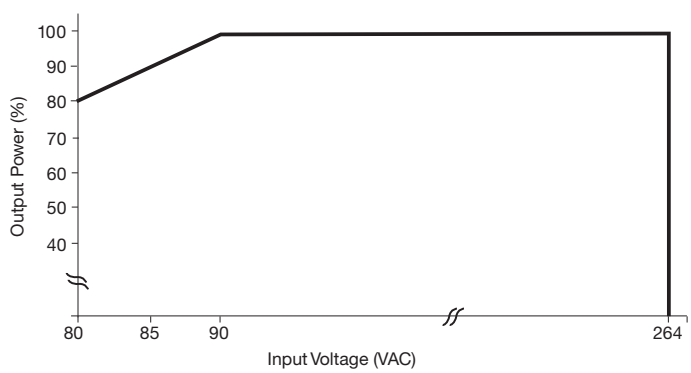



Figure 1