

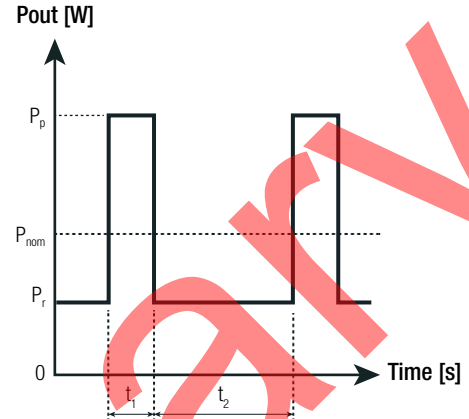
**Specifications** (measured @ Ta= 25°C, rated input, rated load unless otherwise stated)

**Peak Load Capability**

**Peak Load Calculation**

- P<sub>nom</sub> = nom. output power [W]
- P<sub>p</sub> = peak output power (≤230W) [W]
- P<sub>r</sub> = recovery output power [W]
- t<sub>1</sub> = peak time set (10s max.) [s]
- t<sub>2</sub> = recovery time (min. 4 x t<sub>1</sub>) [s]
- k = safety factor 1.7 []

$$P_r = \frac{P_{nom} \times (t_{1set} + t_2) - (P_p \times t_{1set})}{t_2 \times k}$$



**Practical Example (RACM230-12SG):**

Take the RACM230-12SG at 230VAC input Voltage and full load at T<sub>AMB</sub> = 25°C (160W) with conduction cooling.

- P<sub>nom</sub> = refer to derating graph (160W)
- P<sub>p</sub> = 230W
- t<sub>1</sub> = 1s
- t<sub>2</sub> = 40s
- k = 1.7

$$P_r = \frac{160 \times (1 + 40) - (230 \times 1)}{40 \times 1.7} = 93W$$

**REGULATIONS**

Parameter	Condition	Value
Output Accuracy		±1.0% typ.
Line Regulation	low line to high line, full load	±0.5% typ.
Load Regulation <sup>(8)</sup>	10% to 100% load	0.5% typ.

**Notes:**

Note8: Operation below 10% load will not harm the converter, but specifications may not be met

**ADDITIONAL FEATURES**

Parameter	Condition	Min.	Typ.	Max.
Fan Output Power	@50°C (not protected)			500mA

**PROTECTIONS**

Parameter	Type	Value
Internal Input Fuse <sup>(9)</sup>	line and neutral	2x T6.3A, slow blow type
Short Circuit Protection (SCP)		hiccup mode, auto recovery
Over Voltage Protection (OVP)		105% - 150%, latch off mode
Over Load Protection (OLP)		105% - 200% (150% typ.); hiccup mode auto recovery
Over Voltage Category (OVC)		OVCIII
Isolation Voltage (safety certified) <sup>(10)</sup>	I/P to O/P	1 minute
Isolation Resistance		10MΩ min.
Insulation Grade		reinforced
Leakage Current		0.3mA max.
Means of Protection	250VAC working voltage	2MOPP

**Notes:**

Note9: Refer to local safety regulations if input over-current protection is also required. Recommended fuse: slow blow type

Note10: For repeat Hi-Pot testing, reduce the time and/or the test voltage

**Specifications** (measured @ Ta= 25°C, rated input, rated load unless otherwise stated)

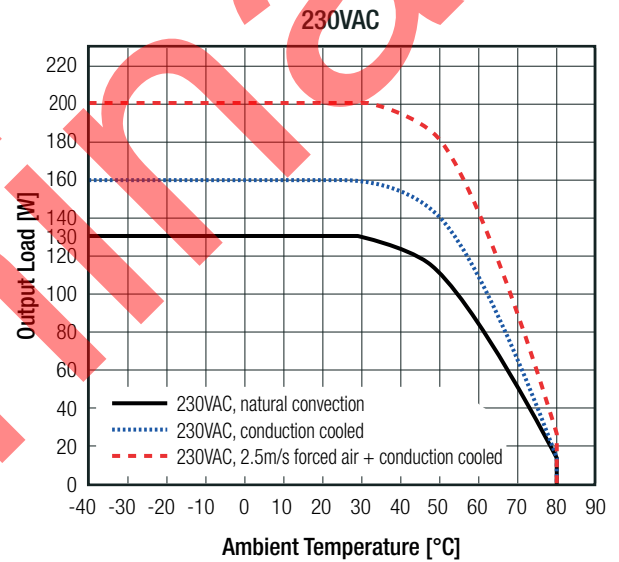
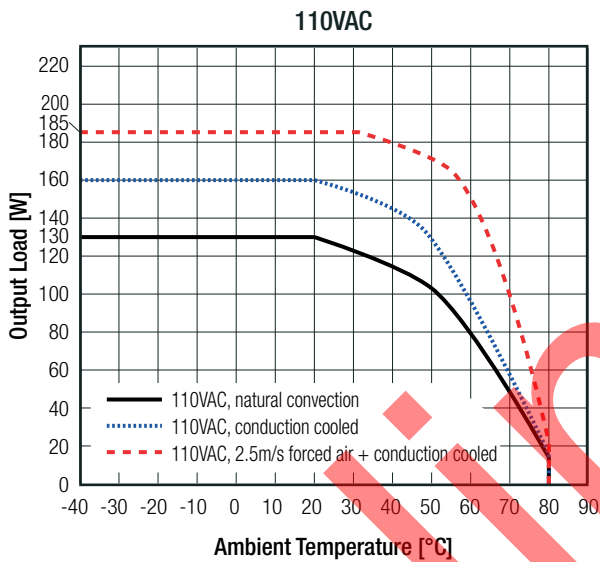
**ENVIRONMENTAL**

Parameter	Condition	Value
Operating Temperature Range	refer to derating graphs	-40°C to +80°C
Temperature Coefficient		±0.05%/K
Operating Altitude <sup>(11)</sup>		5000m
Operating Humidity	non-condensing	5% - 90% RH max.
Pollution Degree		PD2
MTBF	according to MIL-HDBK-217F, G.B.	+25°C (forced air cooling)
		+50°C (forced air cooling)
		200 x 10 <sup>3</sup> hours
		60 x 10 <sup>3</sup> hours

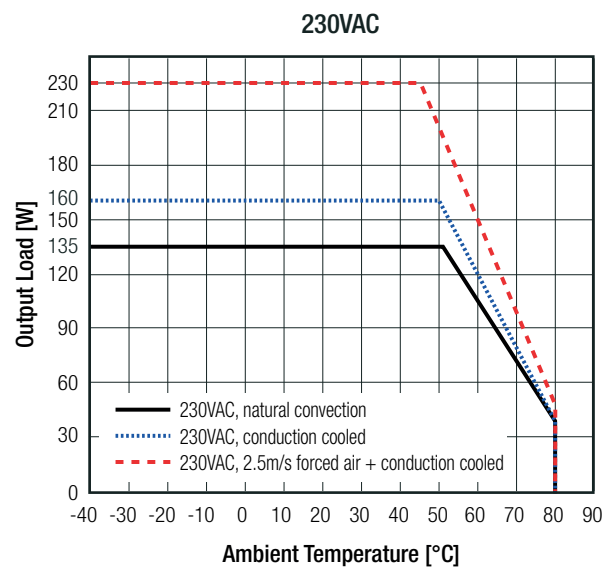
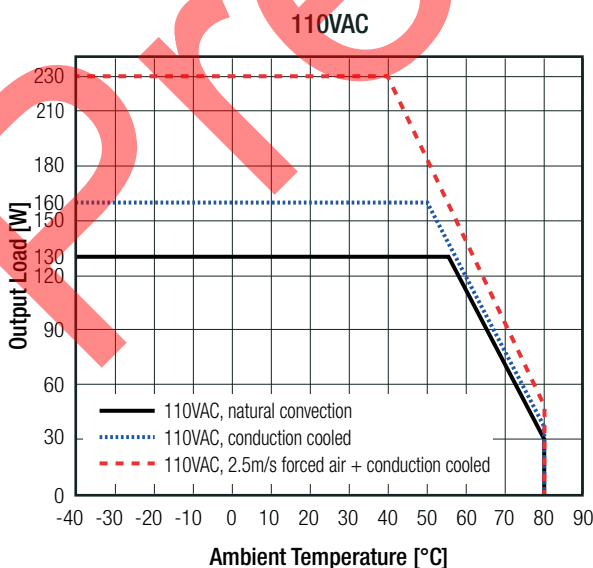
**Notes:**

Note11: Recognized by safety agency for safe operation up to 5000m. High altitude operation may impact the performance and lifetime. Please contact RECOM tech support for advice.

**RACM230-12SG**



**Other Models**



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