

3. INPUT

General Condition: $T_A = 0 \dots 60 \text{ }^\circ\text{C}$, unless otherwise noted.

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
$V_{i\text{nom}}$	Nominal Input Voltage	100		240	VAC
V_i	Input Voltage Ranges	Normal operating ($V_{i\text{min}}$ to $V_{i\text{max}}$)		264	VAC
$I_{i\text{max}}$	Max Input Current	$V_{in} = 110 \text{ VAC} / 60 \text{ Hz}$, Full load		13.6	A_{rms}
I_{ip}	Inrush Current Limitation	$V_{i\text{min}}$ to $V_{i\text{max}}$, $T_{\text{NTC}} = 25 \text{ }^\circ\text{C}$		50	A_p
F_i	Input Frequency	47	50/60	63	Hz
PF	Power Factor	$V_{i\text{nom}}$, 50 Hz, $> 0.2 I_{i\text{nom}}$		0.95	W/VA
$V_{i\text{on}}$	Turn-on Input Voltage ¹	Ramping up		90	VAC
$V_{i\text{off}}$	Turn-off Input Voltage ¹	Ramping down		83	VAC
Power	Rated Power ²	See <i>Figure 2 & Figure 3</i>		1100	W
				1300	W
η	Efficiency without Fan	$V_{in} = 230 \text{ V}$, 12 V / 21.6 A, 3.3 V / 0.6 A $T_A = 25 \text{ }^\circ\text{C}$		93.0	
		$V_{in} = 230 \text{ V}$, 12 V / 54 A, 3.3 V / 1.5 A $T_A = 25 \text{ }^\circ\text{C}$		94.0	%
		$V_{in} = 230 \text{ V}$, 12 V / 108 A, 3.3 V / 3 A $T_A = 25 \text{ }^\circ\text{C}$		92.0	
T_{hold}	Hold-up Time	After last AC zero point, $V_1 > 11.6 \text{ V}$, V_{SB} within regulation, $V_i = 230 \text{ VAC}$, 12 V / 108 A, 3.3 V / 3 A		10	ms

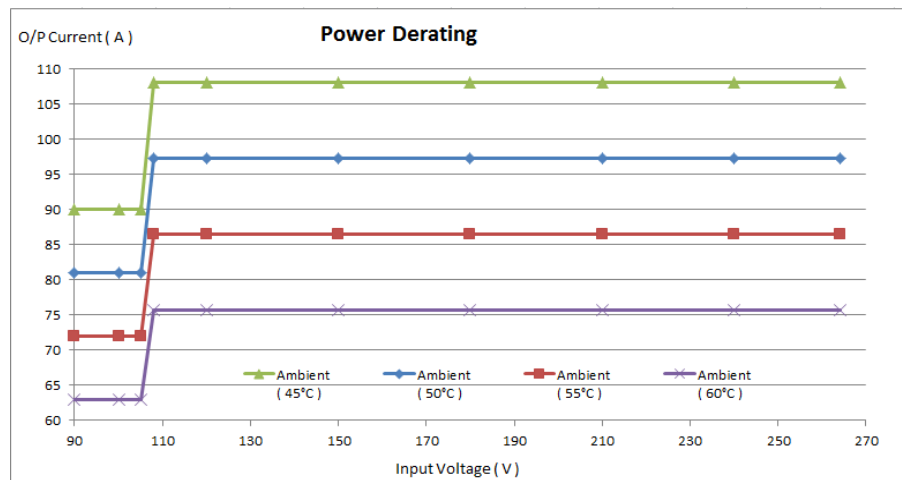


Figure 2. Derating on I_{out} vs V_{in} and T_a for PET1300-12-054NA

¹ The Front-End is provided with a minimum hysteresis of 3 V during turn-on and turn-off within the ranges.

² The output power is should be derating as below curve if operation temperature increases from 45°C to 60°C.

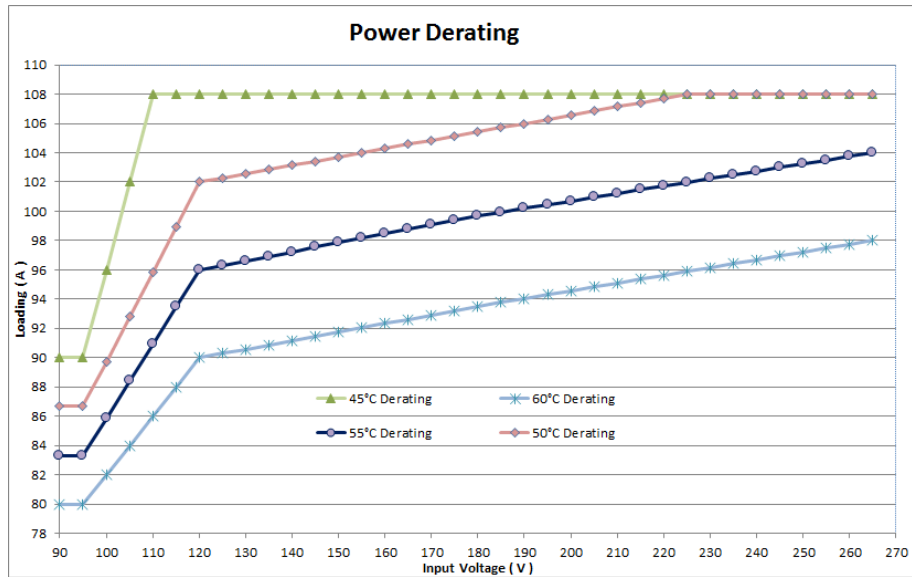


Figure 3. Derating on I_{out} vs V_{in} and T_a for PET1300-12-054RA

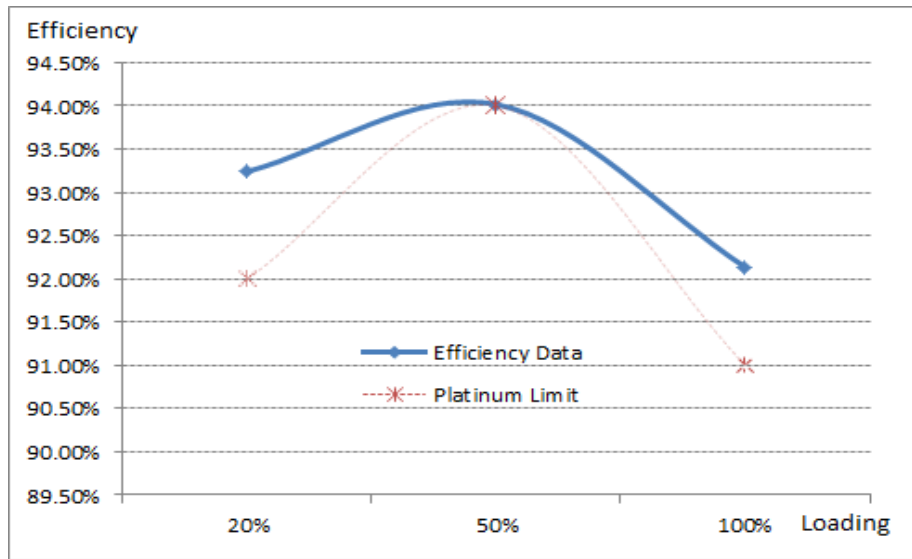


Figure 4. Efficiency Measurement Curve