

2. INPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
AC Input Voltage	PS starts and operates at 90 V _{AC} at all load conditions	90	100-240	264	V _{RMS}
DC Input Voltage		170	-	270	V _{DC}
Input Frequency		47	50/60	440	Hz
Input Current	RMS at 180 V _{AC} , maximum load, 50 / 60 Hz RMS at 90 V _{AC} , maximum load, 50 / 60 Hz	-	-	2.5 5.0	A
Inrush Current	265 V _{AC} , 25 °C ambient, cold start. 24, 28, 36, 48 V, no damage 12 V	-	-	- 20	A
Fusing	2x Time Lag 6.3 A, 250 V on both L and N	-	-	6.3	A
Efficiency	At 115 V _{AC}				
	20% rated load	90	-	-	
	50 – 100 % rated load	92	-	-	%
	At 230 V _{AC}				
	20% rated load	90	-	-	
	50 – 100 % rated load	94	-	-	
Input Power Consumption	Power on, 115-230 V _{RMS} , no load	-	1	1.5	W
	Stand by, 115-230 V _{RMS} , no load	-	0.4	0.5	
Power Factor	At full rated load, 115 V _{AC} , 60 Hz and 230 V _{AC} , 50 Hz input voltages	0.95	-	-	-
Harmonic Current	Complies with EN-61000-3-2 Class C at 230 V _{AC} 50 Hz, load >50 W.				
Fluctuations and Flicker	Complies with EN-61000-3-3 at nominal voltages and full load.				
Leakage Current	Normal conditions, 240 V _{RMS} , 60 Hz.			300	μA

3. OUTPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT
V1 Output Voltage	0.5% set point accuracy for all voltage variants	-	12	-	V
		-	24	-	
		-	28	-	
		-	36	-	
V1 Output Power Rating	All voltages, convection cooled models only All voltages, fan cooled + forced air cooled (> 400 LFM) models All models, peak power (≤ 10 s)		48	250	W
				400	
				440	
				33.3	
V1 Output Current	* Fan cooled + forced air cooled (> 400 LFM) (All models)			16.7	A
				14.3	
				11.1	
				8.3	
	** Convection cooled: (-), -UC, -PC models)			20.8	A
				10.4	
				8.9	
				6.9	
V1 Voltage Adjustment Range				5.2	%V1
V1 Load-Line-Cross Regulation	V _{AC} : 90 – 264 V _{RMS}			±2	%V1
V1 Line Regulation	V _{AC} : 90 – 264 V _{RMS}			±0.1	%V1
Transient Response (Voltage Deviation) V1, 5V _{SB}	25% load changes at 1 A/ μ s 12V at 2200 μ F Load / I _{OUT} > 0.5 A 24 V at 1000 μ F Load / I _{OUT} > 0.5 A 28 V at 1000 μ F Load / I _{OUT} > 0.5 A 36 V at 820 μ F Load / I _{OUT} > 0.5 A 48V at 560 μ F Load / I _{OUT} > 0.5 A 5V _{SB} at 560 μ F Load / I _{OUT} > 0.1 A			±5	%V1 %5V _{SB}
V1 Ripple and Noise	All models, Peak-to-peak, 20 MHz BW. 100 nF ceramic and 10 μ F tantalum caps at the load.	-	-	1	%V1
Start-up Rise Time	90<V _{IN} <264, any load conditions.	5	-	85	ms
Start-up Delay	V1 in regulation after PS_ON is asserted V1 in regulation after AC is applied 5V _{SB} in regulation after AC is applied			200	ms
				750	
				500	
Turn-on Overshoot	At I1 = 500 mA, V1 in regulation within 50 ms.			10	%V1 %V2 %V _{SB}
				10	
				10	
Hold-up Time	At nominal V _{IN} , 400 W, for all models At nominal V _{IN} , 365 W, for all models At nominal V _{IN} , 200 W, for all models			16	ms
				20	
				35	
Minimum Load ***	All models; V1, V2 and 5 V _{SB}	0	-	-	A
Maximum Load Capacitance	At nominal V _{IN} , 25 °C ambient			33000	μ F
				16000	
				14300	
				10000	
				7000	
Temperature Drift		-1.2	-	+1.2	mV/°C
V2 Output Voltage ***	All models. Load on V2: from 5 to 1000 mA Load on V1: from 0.1 to I1 rated	11.35	11.5	12.65	V
V2 Output Current (I2)	Convection / forced air cooling	-	-	1	A
V2 Ripple	Peak-to-Peak measured at 20 MHz Bandwidth.	-	-	240	mV