

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}				
	At 230 V _{AC}				
	20% rated load	90	-	-	
	50 – 100 % rated load	92	-	-	%
	20% rated load	90	-	-	
	50 – 100 % rated load	94	-	-	
Input Power Consumption	Power on, 115-230 V _{RMS} , no load Stand by, 115-230 V _{RMS} , no load	- -	1 0.4	1.5 0.5	W
Power Factor	At full rated load, 115 VAC, 60 Hz and 230 VAC, 50 Hz input voltages	0.95	-	-	-
Harmonic Current Fluctuations and Flicker	Complies with EN-61000-3-2 Class C at 230 VAC 50 Hz, load >50 W. Complies with EN-61000-3-3 at nominal voltages and full load.				
Earth 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	-		
		-	48	-		
V1 Output Power Rating	All voltages, convection cooled models, All voltages, fan cooled + forced air cooled (> 400 LFM) models All models, peak power (≤ 10 s)			250	W	
				400		
				440		
V1 Output Current	V1: 12 V _{DC} V1: 24 V _{DC} V1: 28 V _{DC} V1: 36 V _{DC} V1: 48 V _{DC}			33.3	A	
				16.7		
				14.3		
				11.1		
				8.3		
V1 Voltage Adjustment Range		-	-	± 5	%V1	
V1 Load-Line-Cross Regulation	V _{AC} : 90 – 264 V _{RMS} V1 Load: 0 – 33.3 A (12 V) 0 – 16.7 A (24 V) 0 – 14.3 A (28 V) 0 – 13.9 A (36 V) 0 – 8.3 A (48 V) V2 Load: 0 – 1 A 5V _{SB} Load: 0 – 2 A			± 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 I ₁ = 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	12 V	-	-	33000	μ F
		24 V	-	-	16000	
		28 V	-	-	14300	
		36 V	-	-	10000	
		48 V	-	-	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 I ₁ rated	11.35	11.5	12.65	V	
V2 Output Current (I ₂)	Convection / forced air cooling	-	-	1	A	
5V _{SB} Output Voltage	3% set point accuracy	-	5	-	V	
5V _{SB} Output Current (I _{5V_{SB}})	Convection cooled models	-	-	1.5	A	
	Fan cooled + forced air cooled (> 400 LFM) models	-	-	2		
5V _{SB} Load-Line-Cross regulation	V _{AC} : 90 – 264 V _{RMS} V1 Load: 0 – 33.3 A (12 V) 0 – 16.7 A (24 V) 0 – 14.3 A (28 V) 0 – 13.9 A (36 V) 0 – 8.3 A (48 V) V2 Load: 0 – 1 A 5V _{SB} Load: 0 – 2 A			± 5	%5V _{SB}	