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 50 – 100 % rated load	90 92	- -	- -	%
	At 230 V_{AC}	20% rated load 50 – 100 % rated load	90 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 24 28 36 48	- - - - -	V
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)			250 400 440	W
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 16.7 14.3 11.1 8.3	A
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/µs 12V at 2200 µF Load / I_{OUT}> 0.5 A 24 V at 1000 µF Load / I_{OUT}> 0.5 A 28 V at 1000 µF Load / I_{OUT}> 0.5 A 36 V at 820 µF Load / I_{OUT}> 0.5 A 48V at 560 µF Load / I_{OUT}> 0.5 A $5V_{SB}$ at 560 µF 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 µF 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	-	-	200 750 500	ms
Turn-on Overshoot	At I1 = 500 mA, V1 in regulation within 50 ms.	-	10 10 10	-	%V1 %V2 %V_{SB}
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 20 35	- - -	ms
Minimum Load *	All models; V1, V2 and 5 V_{SB}	0	-	-	A
Maximum Load Capacitance	At nominal V_{IN}, 25 °C ambient 12 V 24 V 28 V 36 V 48 V	- - - - -	- - - - -	33000 16000 14300 10000 7000	µF
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
$5V_{SB}$ Output Voltage	3% set point accuracy	-	5	-	V
$5V_{SB}$ Output Current ($I5V_{SB}$)	Convection cooled models Fan cooled + forced air cooled (> 400 LFM) models	- -	- -	1.5 2	A
$5V_{SB}$ 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	%$5V_{SB}$