LUTZE SYSTEMATIC TECHNOLOGY

Power Supplies - Switching CPS Universal Series 1/2/3 Phase

CPSB-123-240-24

Overview

The LUTZE Universal Compact power supply series provides high efficiency, compact size, and power boost while allowing maximum installation flexibility. These models can take 1-, 2-, or 3-phase inputs to help installations in any application.

Features

- Compact footprint
- Aluminum housing
- 35mm DIN rail mount
- IP20
- 5 year warranty

Power Supplies - Switching CPS Universal Series 1/2/3 Phase Selection Chart								
Part Number	*Price*	*Output Voltage*	*Output Current*	*Output Power*	*Input Voltage*	*Power Boost*	*Dimensions (W x H x D)*	*Drawing Link*
CPSB-123-240-24 *	$230.00	24VDC	10A	240W	200-500 VAC	150% for 5s	54 x 115 x 110mm [2.12 x 4.52 x 4.33 in]	PDF
CPSB-123-480-24 *	$355.00		20A	480W		140% for 5s	73 x 140 x 125mm [2.87 x 5.51 x 4.92 in]	PDF

* Requires an external fuse.

Power Supplies - Switching CPS Universal Series 1/2/3 Phase Input Specifications		
Part Number	*CPSB-123-240-24*	*CPSB-123-480-24*
Operation Voltage Range	187–550 VAC 250–725 VDC	
Frequency Range	47-63Hz	
Rated Current	1-Phase/2-Phase 2.2 A @ 220VAC, 1.1 A @ 500VAC 3-Phase 1.5 A @ 220VAC, 0.8 A @ 500VAC	1-Phase/2-Phase 2.9 A @ 200VAC, 1.3 A @ 500VAC 3-Phase 1.8 A @ 200VAC, 0.8 A @ 500VAC
Inrush Current	≤ 45A / 1.31 A²s	≤ 55A / 2.16 A²s
Power Factor Correction	> 0.6 @ 230V, 0.5 @ 400V	> 0.9
Recommended Circuit Breaker	C-curve 6A or D-curve 4A	

Power Supplies - Switching CPS Universal Series 1/2/3 Phase Output Specifications		
Part Number	*CPSB-123-240-24*	*CPSB-123-480-24*
Maximum Output Current	15A, 6A	28A, 5s
Power Dissipation	< 18W	< 42W
Setting Range	23-28 VDC	23-28 VDC
Load Regulation	< 1%	< 1%
Ripple And Noise	<100mV pp	<50mV pp
Hold-Up Time	15ms @ 230VAC > 100ms @ 500VAC	> 50ms
Parallel / Redundant Mode	Yes, via external decoupling diode	
Efficiency (Typical)	> 93% @ 240VAC	> 92% @ 240VAC
Short-Circuit	38A	50A
MTBF	500,000h	500,000h

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Power Supplies - Switching CPS Series

Power Supplies - Switching CPS 3-Phase Series General Specifications				
Series	***ECO Series 1-Phase***	***Ultra Series 1-Phase***	***Universal Series - 1/2/3 Phase***	***3-Phase Series***
Overvoltage Protection	≤ 33VDC			CPSB3-120-24 <32V CPSB3-240-24 <32V CPSB3-960-24 <33VDC
Overtemperature Protection	Yes			
Status Indicators	DC ON LED (green): ≥ 21.6 V DC LOW LED (red): ≤ 21.6 V		CPSB-123-240-24 DC ON LED (green): ≥ 21.6 V DC LOW LED (red): ≥ 21.6 V CPSB-123-480-24 DC ON LED (green): ≥ 21.6 V DC LOW LED (red): I_{out} >1.1I_n	CPSB3-120-24 CPSB3-240-24 DC OK LED (green) ON U_{out} >95% U_{set} OFF U_{out} >90% U_{se} CPSB3-960-24 DC ON LED (green): ≥ 21.6 V DC LOW LED (red): ≥ 21.6 V
Humidity	5 to 95%, non-condensing			
Vibration	IEC 60068-2-6			
Shock	IEC 60068-2-27			
Protection Rating	IP20			
Mounting	35mm DIN rail (vertical)			
Housing Material	Aluminum (enclosed)			
Agency Approval	CE, UKCA, cULus E249179			

Additional Data							
Part Number	***Weight kg [lb]***	***Operating Temperature***	***Storage Temperature***	***Terminal Type***	***Solid Wire Size****		***Tightening Torque***
					Output	***Input***	
CPSB1-120-24E	0.45 [0.99]	-40 to 70°C [-40 to 158°F]	-40 to 80°C [-40 to 176°F]	Screw	0.20 – 2.5mm^2 [AWG 24-14]	0.20 – 2.5mm^2 [AWG 24-14]	0.5 – 0.6 N•m [4.42 – 5.30 lb•ft]
CPSB1-240-24E	0.75 [1.65]						
CPSB1-480-24E	1 [2.20]						
CPS2B1-120-24	0.45 [0.99]	-35 to 70°C [-31 to 158°F]	-40 to 80°C [-40 to 176°F]	Screw	0.20 – 2.5mm^2 [AWG 24-14]	0.20 – 2.5mm^2 [AWG 24-14]	0.5 – 0.6 N•m [4.42 – 5.30 lb•ft]
CPS2B1-240-24	0.75 [1.65]	-40 to 70°C [-40 to 158°F]					
CPS2B1-480-24	1.1 [2.42]						
CPSB-123-240-24	0.65 [1.43]	-40 to 70°C [-40 to 158°F]	-40 to 80°C [-40 to 176°F]	Screw	0.20 – 2.5mm^2 [AWG 30-12]	0.20 – 2.5mm^2 [AWG 30-12]	0.5 – 0.6 N•m [4.42 – 5.30 lb•ft]
CPSB-123-480-24	1 [2.20]				0.20 – 2.5mm^2 [AWG 24-14]	0.20 – 2.5mm^2 [AWG 24-14]	
CPSB3-120-24	0.66 [1.45]	-25 to 70°C [-13 to 158°F]	-40 to 85°C [-40 to 185°F]	Push-in	0.20 – 2.5mm^2	0.20 – 2.5mm^2	–
CPSB3-240-24	0.78 [1.71]				0.20 – 2.5mm^2	0.20 – 2.5mm^2	–
CPSB3-960-24	1.3 [2.86]	-40 to 70°C [-40 to 158°F]	-40 to 80°C [-40 to 176°F]	Screw	0.20 – 10mm^2 [AWG 24-14]	0.20 – 10mm^2 [AWG 24-14]	max. 62 N•m

*** For other types of wire please see the insert.**