

1606-XLP Compact — Single- and Two-Phase
Single-Phase

Input Voltage	Output Power [W]	Output Voltage	Output Current [A]	Input Circuit Protection	Steady State Input Current 120/230 [V AC]	Parallel Operation	DC OK Relay	Cat. No.
100...240V AC, 85...375V DC	15	5...5.5	3	10 A Slow Blow Fuse or Cat. No. 1489-A1C100/ 15 A*	0.28/.017	Yes	—	1606-XLP15A
		12...15	1.3		0.28/.017		—	1606-XLP15B
		24...28	0.6		0.28/.017		—	1606-XLP15E
	25	5...5.5	5		0.60/0.30	Yes	—	1606-XLP25A
		10...12	3		0.60/0.25	Yes	—	1606-XLP30B
	30	24...28	1.3		0.60/0.35		—	1606-XLP30E
		54	12...15		4.5		0.54/0.30	—
	36	+/- 12/15V	2.8		0.65/0.40	No	—	1606-XLP36C
	50	12...15	4.2		1.00/0.60	Yes	—	1606-XLP50B
		24...28	2.1		0.77/0.44	Yes	—	1606-XLP50E
		24...28	2.1		1.00/0.60	Yes	—	1606-XLP50EZ
		48...56	1		1.00/0.60	Yes	—	1606-XLP50F
	54	12...15	4.5		0.91/0.54	Yes	—	1606-XLP60BQ
	54	12...15	4.5		0.97/0.61	Yes	—	1606-XLP60BQT
	60	24...48	2.1		0.98/0.58	Yes	—	1606-XLP60EQ
	60	24...48	2.1		1.05/0.66	Yes	—	1606-XLP60EQT
100...120/220... 240V AC, 220...375V DC	72	24...28	3	1.60/0.80	Yes	—	1606-XLP72E	
	90	12...15	7.5	1.90/0.90	Yes‡	—	1606-XLP90B	
100...200/200... 240V AC, 220...375V DC	95	24...28	3.9	2.00/0.95	No	—	1606-XLP95E	
	100	24...28	4.2	2.10/1.00	Yes‡	—	1606-XLP100E	
		48...56	2.1	2.10/1.00	Yes‡	—	1606-XLP100F	

Two-Phase

Input Voltage	Output Power [W]	Output Voltage	Output Current [A]	Input Circuit Protection	Steady State Input Current 400...480 [V AC]	Parallel Operation	DC OK Relay	Cat. No.
380...480V AC	90	24...28	3.75	10 A Slow Blow Fuse or Cat. No. 1489-A1C100/ 20 A*	2 x 0.36	No‡	—	1606-XLP90E-2
380...480V AC	100	24...28	4.2		2 x 0.40	Yes‡	—	1606-XLP100E-2

* Unit has internal (not accessible/replaceable) input fuse. Additional protection is not required if used on branch circuits ≤ UL test levels.
‡ Single/parallel operation (inclined characteristic) selectable (jumper). Consult local codes and regulations for installation.

Bulletin 1606 Back-of-Panel Brackets

Instead of snapping the power supply onto a DIN Rail, you can mount it to the back of the panel. This set consists of two steel brackets which replace the existing DIN Rail aluminum brackets at the back of the unit.

Note: You need one set per unit.

Description	Cat. No.
Back-of-panel bracket for XLS and XLE power supplies, below 20 A	1606-XLB
Back-of-panel bracket for XLS and XLE power supplies, 20 A and above	1606-XLC

Bulletin 1606-XLP

	1606-XLP15A	1606-XLP15B	1606-XLP15E	1606-XLP25A
Output Volts/Watts	5...5.5V/15 W	12...15V/15 W	24...28V/15 W	5...5.5V/25 W
Input Voltage (47...63 Hz)	100...240V AC wide range; 85...370V DC			
Operational Range	85...264V AC			
Hold-up Time	>168 ms (230V AC) >45 ms (100V AC)	>191 ms (230V AC) >46 ms (100V AC)	>196 ms (230V AC) >47 ms (100V AC)	>170 ms (230V AC) >19 ms (100V AC)
Rated Input Current	<0.28 A (100V AC) <0.17 A (196V AC)			<0.5 A (100V AC) <0.35 A (196V AC)
Efficiency	typ. >77%	typ. >83%	typ. >88%	typ. >80%
Output Voltage	5...5.5V 5.1V preset	12...15V	24...28V	5...5.5V 5.1V preset
Rated Output Current	3 A	1.0...1.3 A	0.54...0.63 A	5 A (at 5.1V), 4.5 A (at 5.5V)
Ripple/Noise	<50 mV _{pp}	<75 mV _{pp}	<50 mV _{pp}	<50 mV _{pp}
Operating Temperature Range (T _{amb})	-10...+70 °C, >60 °C: 0.4 W/K derating			-10...+70 °C >60 °C: 0.5 W/K derating
Non-Operating Temperature Range	-40...+85 °C			
MTBF*	2 686 000 hours	3 811 000 hours	4 369 000 hours	600 000 hours
Dimensions (W x H x D)	22.5 x 75 x 91 mm			45 x 75 x 91 mm
Weight	130 g			240 g
Certifications/Standards*	1, 2, 4, 5, 7, 9			
Special Features	NEC Class 2 power supply; ABS/GL/RINA (Marine); Class 1 Div. 2			

* 1) = CE, 2) = UL 508 (cULus LISTED), 3) = UL 1950 (cURus), 4) = CSA C22.2, No. 60950, 5) Safety standards = IEC/EN 60950, EN 50178, 6) EMC standards = EN 55011 (Class B), EN 55022 (Class B), EN 61000-6-2, 7) EMC standards = EN 61000-3-2 (A14), EN 50081-1, 9) ABS/GL/RINA (Marine)

* MTBF determined by Siemens norm SN 29500 at full load current and 40 °C

	1606-XLP30B	1606-XLP30E	1606-XLP30EQ	1606-XLP36C	1606-XLP50B
Output Volts/Watts	10...12V/30 W	24...28V/30 W	24...28V/30 W	±12V/±15V/36 W	12...15V/50 W
Input Voltage (47...63 Hz)	100...240V AC wide range; 85...375V DC				
Operational Range	85...264V AC				
Hold-up Time	>170 ms (230V AC) >18 ms (100V AC)	>190 ms (230V AC) >19 ms (100V AC)	>141 ms (230V AC) >31 ms (100V AC)	>180 ms (230V AC) >18 ms (100V AC)	>170 ms (230V AC) >17 ms (100V AC)
Rated Input Current	<0.6 A (100V AC) <0.25 A (240V AC)	<0.6 A (100V AC) <0.35 A (196V AC)	<0.54 A (100V AC) <0.3 A (230V AC)	<0.65 A (AC 100V AC) <0.4 A (AC 196V AC)	<1.0 A (100V AC) <0.6 A (196V AC)
Efficiency	typ. 84%	typ. 87.5%	typ. 88.5%	typ. 86%	typ. 90%
Output Voltage	10...12V 12V preset (with jumper), 10...12V adjustable (without jumper)	24...28V 24.5V preset	24...28V	±12V (without jumper), ±15V (with jumper) ±15V preset	12...15V 15V preset (with jumper) 12...15V adjustable (without jumper)
Rated Output Current	3 A (@ 10V), 2.5 A (@ 12V)	1.3 A (@ 24.5V), 1 A (@ 28V)	1.3 A (@ 24V), 1 A (@ 28V)	0...2.8 A (@ +12V), 0...1.4 A (@ -12V) 0...2.4 A (@ +15V), 0...1.4 A @ (-15V)	4.2 A (@ 12V), 3.4 A (@ 15V)
Ripple/Noise	<10 mV _{pp}	<50 mV _{pp}	<50 mV _{pp}	<50 mV _{pp}	<100mV _{pp}
Operating Temperature Range (T _{amb})	-10...+70 °C >60 °C: 0.6 W/K derating	-10...+70 °C >60 °C: 0.5 W/K derating	-10...+70 °C >60 °C: 0.8 W/K derating	-10...+70 °C > 60 °C: 1 W/K derating	-10...+70 °C >60 °C: 1 W/K derating
Non-Operating Temperature Range	-10...+70 °C >60 °C: 0.6 W/K derating	-10...+70 °C >60 °C: 0.5 W/K derating	-10...+70 °C >60 °C: 0.5 W/K derating	-10...+70 °C > 60 °C: 1 W/K derating	-10...+70 °C >60 °C: 1 W/K derating
MTBF*	appr. 650 000 hours		2 123 000 hours	600 000 hours	appr. 600 000 hours
Dimensions (W x H x D)	45 x 75 x 91 mm	45 x 75 x 91 mm	22.5 x 75 x 91 mm	45 x 75 x 91 mm	45 x 75 x 91 mm
Weight	250 g	230 g	140 g	240 g	260 g
Certifications/Standards*	1, 2, 4, 5, 7, 9				
Special Features	NEC Class 2 power supply; Class 1 Div. 2, ABS/GL/RINA (Marine)	NEC Class 2 power supply; Class 1 Div. 2; Semi F47, ABS/GL/RINA (Marine)	NEC Class 2 power supply; Class 1 Div. 2; Semi F47, ABS/GL/RINA (Marine)	Output voltage adjustable: DC ±12V without jumper or DC ±15V with jumper; NEC Class 2 power supply; Class 1 Div. 2; ABS/GL/RINA (Marine)	Output voltage adjustable: DC 12...15V without jumper or DC 15V with jumper; NEC Class 2 power supply; Class 1 Div. 2 ABS/GL/RINA (Marine)

* 1) = CE, 2) = UL 508 (cULus LISTED), 3) = UL 1950 (cURus), 4) = CSA C22.2, No. 60950, 5) Safety standards = IEC/EN 60950, EN 50178, 6) EMC standards = EN 55011 (Class B), EN 55022 (Class B), EN 61000-6-2, 7) EMC standards = EN 61000-3-2 (A14), EN 50081-1, 9) ABS/GL/RINA (Marine)

* MTBF determined by Siemens norm SN 29500 at full load current and 40 °C

