

**Bulletin 1606**  
**Power Supplies**  
**Quick Selection Table**

Bulletin No.	1606-XLP	1606-XL	1606-XL
Type	Single Phase	Single Phase	Three Phase
Features	<ul style="list-style-type: none"> <li>• Low inrush current</li> <li>• Wide range input; auto select input</li> <li>• Superior overload design (continuous current, no hiccup)</li> <li>• NEC Class 2 “Limited Power” Option</li> <li>• Superior efficiency and temperature rating</li> </ul>	<ul style="list-style-type: none"> <li>• Low inrush current</li> <li>• PFC Choke</li> <li>• Wide range input; auto select input</li> <li>• Superior overload design (continuous current, no hiccup)</li> <li>• NEC Class 2 “Limited Power” Option</li> <li>• Selectable operating mode (single/parallel)</li> <li>• Superior efficiency and temperature rating</li> </ul>	<ul style="list-style-type: none"> <li>• Low inrush current</li> <li>• PFC Choke</li> <li>• Wide range input; auto select input</li> <li>• Superior overload design (continuous current, no hiccup)</li> <li>• Selectable operating mode (single/parallel)</li> <li>• Superior efficiency and temperature rating</li> <li>• Output signals</li> </ul>
Watts	25...100 W	60...480 W	120...960 W
Input Voltage	85...264V AC 85...375V DC	85...132/176...264V AC 160...375V DC	340...576V AC 450...820V DC
Efficiency	80...90%	87...93%	89...92.5%
Output Voltage	5, 10...12, 12, 15, 24, 48V DC	24, 36, 48V DC	24, 48V DC
Rated Output Current	1.3...4.2 A	2.5...20 A	4...40 A
Operating Temperature Range (Tamb)	-10...+70°C >60°C with derating	-10...+70°C >60°C with derating	-10...+70°C >60°C with derating
Approvals	CE, UL508, UL1950, IEC/EN 60950, EMC	CE, UL508, UL1950, IEC/EN 60950, EN 50178, EMC	CE, UL508, UL1950, IEC/EN 60950, EN 50178, EMC
Standards	EN 50081-1, EN 61000-6-2, EN 61000-3-2 (A14)	EN 55011 (Class B), EN 55022 (Class B), EN 61000-6-2, EN 61000-3-2 (A14), EN 50081-1	EN 55011 (Class B), EN 55022 (Class B), EN 61000-6-2, EN 61000-3-2 (A14), EN 50081-1
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**Power Supplies**



- Low inrush current
- PFC choke
- Wide range input; auto select input
- Superior overload design (continuous current, no hiccup)
- NEC Class 2 'Limited Power' option
- Selectable operating mode (single/parallel)
- Superior efficiency and temperature rating

Output Power	Output Voltage	Rated Current @ Nominal Voltage	Special Feature(s)	Parallel Operation (Inclined Char.)	Meets EN 61000-3-2 (PFC Harmonics)	Cat. No.	PQ
<b>1606-XLP Compact Single Phase</b>							
25 W	DC 5...5.5V	5 A	NEC Class 2	—	N/A	1606-XLP25A	
30 W	DC 10...12V	2.5 A	NEC Class 2	—	N/A	1606-XLP30B	
	DC 24...28V	1.3 A	NEC Class 2	—	N/A	1606-XLP30E	
36 W	DC +/- 12/15V	2.8 A	Output voltage adjustable NEC Class 2	—	N/A	1606-XLP36C	
50 W	DC 12...15V	4.2 A		—	N/A	1606-XLP50B	1
	DC 24...28V	2.1 A	NEC Class 2	—	N/A	1606-XLP50E	
	DC 48...56V	1.05 A	NEC Class 2	—	N/A	1606-XLP50F	
72 W	DC 24...28V	3 A	NEC Class 2	—	N/A	1606-XLP72E	
100 W	DC 24...28V	4.2 A	NEC Class 2	✓ ①	Yes	1606-XLP100E	
	DC 48...56V	2.1 A	NEC Class 2	✓ ①	Yes	1606-XLP100F	
<b>1606-XL Standard Single Phase</b>							
60 W	DC 24V	2.5 A	NEC Class 2	—	N/A	1606-XL60D	
120 W		5 A	—	—	Yes	1606-XL120D	
240 W	DC 24...28V	10 A	FM Class 1 Div. 2 T3A	—	No	1606-XL240E	
	DC 48...56V	5 A		—	Yes	1606-XL240EP	
480 W	DC 24...28V	20 A	Low inrush current	✓ ①	No	1606-XL480E	1
			—	✓ ①	Yes	1606-XL480EP	
			Remote shut down	✓ ①	Yes	1606-XL480EPT	
	DC 36...43V	13 A	—	✓ ①	Yes	1606-XL480GP	
	DC 48...56V	10 A	—	✓ ①	No	1606-XL480F	

① Single/parallel operation (inclined characteristic) selectable (jumper); low inrush current

See Publication 1606-SG001A-EN-P for complete product information  
PQ = Package Quantity

Power Supplies, continued



Output Power	Output Voltage	Rated Current @ Nominal Voltage	Special Feature(s)	Parallel Operation (Inclined Char.)	Meets EN 61000-3-2 (PFC Harmonics)	Cat. No.	PQ
<b>1606-XL Standard Three Phase</b>							
120 W	DC 24...28V	5 A	—	—	Yes	1606-XL120E-3	
240 W	DC 24...28V	10 A	Overload behaviour selectable (FUSE Mode/continuous current), 2-phase operation admissible	✓ ❶	Yes	1606-XL240E-3	
480 W	DC 24...28V	20 A	—	✓ ❶	Yes	1606-XL480E-3	1
			Wide input range; overload behaviour selectable (FUSE Mode/continuous current)	✓ ❶	Yes	1606-XL480E-3W	
	DC 48...56V	10 A	Input voltage 400V AC	✓ ❶	Yes	1606-XL480F-3H	
720 W	DC 24...28V	30 A	—	✓ ❶	Yes	1606-XL720E-3	
960 W	DC 24...28V	40 A	Passive load sharing	✓ ❶	Yes	1606-XL960E-3	
			Low inrush current; output signals	Active current sharing	Yes	1606-XL960E-3S	
<b>1606-XL Special Modules</b>							
—	DC23...27.8V	20 A	Burnout buffer module	—	N/A	1606-XLBUFFER	
40 W	DC 5.1V	8 A	DC/DC converter	—	No	1606-XLDC40A	
120 W	DC 24V	4 A	Electronically limited 4 A	—	Yes	1606-XLDNET4	
240 W	DC 24V	8 A	Electronically limited 8 A	—	No	1606-XLDNET8	
60 W	DC 24...28V	2.5 A	N+1 Redundant capable ❸ NEC Class 2	✓ ❶	N/A	1606-XL60DR	1
120 W				✓ ❶	Yes	1606-XL120DR	
240 W		5 A	N+1 Redundant capable ❸	✓ ❶	No	1606-XL240DR	
—	V <sub>in</sub> -.5V typ.	30 A	Dual N+1 redundancy ❷	—	N/A	1606-XLRED20-30	
—	V <sub>in</sub> -.6V typ.	40 A	Single N+1 redundancy ❹	—	N/A	1606-XLRED40	

**Accessories**

Description	Cat. No.	PQ
Back of panel bracket for XL	1606-XLA	1

- ❶ Single/parallel operation (inclined characteristic) selectable (jumper); low inrush current
- ❷ To be used alongside 20 and 30 A power supplies (or smaller)
- ❸ Used with a pair of identical power supplies to offer N+1 redundancy
- ❹ To be used alongside 40 A power supplies (or smaller)

See Publication 1606-SG001A-EN-P for complete product information  
 PQ = Package Quantity