LISTEN.
THINK.
SOLVE.®

SWITCHED MODE & UNITERRUPTIBLE POWER SUPPLIES

EXCELLENT PERFORMANCE. SUPERIOR EFFICIENCY.

INTRODUCING
INDUSTRY-LEADING POWER SUPPLIES

1606-XLS120E

POWER SUPPLIES

There is no doubt about it - the world is changing. In today's competitive global arena, you are challenged to do more with less. More quality with less cost, more control with less people, and more output with less time.

To help you overcome these challenges, Rockwell Automation is committed to providing you with the most reliable power supply solutions that help power the world.

From switched mode to industrial uninterruptible power supplies, every product is designed with what matters most to help you achieve your goals.

1606-XLE120E

BULLETIN 1606
SWITCHED MODE POWER SUPPLIES

Leading the industry in performance and reliability, the Bulletin 1606 family offers four switched mode power supply families that meet most worldwide single and three-phase application requirements. These Allen-Bradley® units from Rockwell Automation are designed and manufactured to accept wide ranges of both AC and DC input voltages and are tested to meet global safety standards.

The industry-leading efficiency and service life of these units can be attributed to the intelligent circuit design with long life electrolytic capacitors along with industry leading high efficiency. These products generate minimal heat and allow up to 50% additional power reserve without reducing output voltage while minimizing ripple and noise.

So, whether you are looking for a standard product covering a broad range of applications or a compact unit to save precious space and costs, there is sure to be an excellent fit for your unique power needs.

1606-XLP30E

1606-XL480E-3

BULLETIN 1609
UNINTERRUPTIBLE POWER SUPPLIES (UPSs)

Designed specifically for the industrial market, the Bulletin 1609 family of UPSs include three distinct series to meet worldwide industrial application requirements up to 10 kVA. These units are globally certified to provide backup AC power to bridge dips, sags, or brief power losses.

With an Allen-Bradley UPS from Rockwell Automation in place, you can spend less time dealing with lost data, extended downtime and damaged equipment, and more time focusing on your mission critical activities. Regardless if you need performance inside or outside of your control panel, the Bulletin 1609 family offers a reliable power solution that can help your operations succeed and grow.

1609-U

1609-S

1609-P

BULLETIN 1606
SWITCHED MODE POWER SUPPLIES

BULLETIN 1606-XLS

Building on the successful design of its predecessors, the XLS line couples a new technology that significantly reduces unit size yet delivers a 150% power boost. Sleek and compact, these highly efficient devices have enough reserve current available to start even your most stubborn loads.

Advantages

- Rated outputs between 80...480 W (3.3...20 A at 24V DC)
- Multiple single and three-phase inputs available for global applications
- Small size for panel space savings
- "Elite" performance for special applications

BULLETIN 1606-XLE

Designed with simplicity in mind, the XLE line offers high performing, ultraslim power supplies with the most basic feature set. These products contain the essential features for long service life and high reliability. This line is ideal if you are interested in a cost-effective solution to power your operations.

Advantages

- Rated outputs between 80...240 W (3.3...10 A at 24V DC)
- Multiple single and three-phase inputs available for global applications
- Cost-effective solution for single-phase applications

PRODUCT SELECTION
BULLETIN 1606 SWITCHED MODE POWER SUPPLIES

	Input Voltage	Output Voltage	Output Power [W]	Output Current [A]	Steady State Input Current 120/230 VAC	Input Circuit Protection			Cat. No.
						Bulletin 1489 Circuit Breaker (UL 489)*	Bulletin 1492-SP Circuit Breaker (UL 1077)**	Fuse for Bulletin 1492-FB Fuse Holder	
Bulletin 1606-XLS Single-Phase	100…240V AC, 110…300V DC	24…28V DC	80	3.3	1.42 A / 0.82 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLS80E
	100…240V AC, 110…300V DC	24…28V DC	120	5	1.1 A / 0.62 A	1489-A1C030	1492-SP1C030	3A C-curve fuse	1606-XLS120E
	100…240V AC, 110…300V DC	24…28V DC	240	10	2.22 A / 1.22 A	1489-A1C040	1492-SP1C040	4A C-curve fuse	1606-XLS240E
	100…240V AC, 110…300V DC	24…28V DC	480	20	4.56 A / 2.48 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XLS480E
Three-Phase	380…480V AC, 600V DC	24…28V DC	480	20	3x 0.65 A (480 VAC)	1489-A3C030	1492-SP3C030	3A C-curve fuse	1606-XLS480E-3
Bulletin 1606-XLE Essential Single-Phase	100…240V AC	24…28V DC	80	3.3	1.50 A / 0.68 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE80E
	100…120/200…240V AC	24…28V DC	120	5	2.34 A / 1.23 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE120E
	90…132V AC	24…28V DC	120	5	1.23 A (120 VAC)	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE120EN
	180…264V AC	24…28V DC	120	5	1.17 A (230 VAC)	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE120EE
	100…120/200…240V AC	24…28V DC	240	10	4.34 A / 2.23 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE240E
	90…132V AC	24…28V DC	240	10	3.73 A (120 VAC)	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE240EN
	180…264V AC	24…28V DC	240	10	2.20 A (230 VAC)	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE240EE
	100…120/200…240V AC	24…28V DC	240	10	4.34 A / 2.00 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE240EP
	100…120/200…240V AC	48…52V DC	240	5	4.34 A / 2.23 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE240F
Bulletin 1606-XLP Single-Phase	100…240V AC, 85…375V DC	5…5.5V DC 12…15V DC 24…28V DC	15	3 1.3 0.6	0.28 A / 0.13 A 0.28 A / 0.17 A 0.28 A / 0.17 A	1489-A1C060 1489-A1C060 1489-A1C060	1492-SP1C060 1492-SP1C060 1492-SP1C060	6A C-curve fuse 6A C-curve fuse 6A C-curve fuse	1606-XLP15A 1606-XLP15B 1606-XLP15E
	100…240V AC, 85…375V DC	5…5.5V DC	25	5	0.60 A / 0.30 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XLP25A
	100…240V AC, 85…375V DC	10…12V DC 24…28V DC	30	3 1.3	0.60 A / 0.25 A 0.60 A / 0.35 A	1489-A1C100 1489-A1C100	1492-SP1C100 1492-SP1C100	10A C-curve fuse 10A C-curve fuse	1606-XLP30B 1606-XLP30E
	100…240V AC, 85…375V DC	+/- 12/15V DC	36	2.8	0.65 A / 0.40 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XLP36C
	100…240V AC, 85…375V DC	12…15V DC 24…28V DC 24…28V DC 48…56V DC	50	4.2 2.1 2.1 1	1.00 A / 0.60 A 0.77 A / 0.44 A 1.00 A / 0.60 A 1.00 A / 0.60 A	1489-A1C100 1489-A1C060 1489-A1C100 1489-A1C100	1492-SP1C100 1492-SP1C060 1492-SP1C100 1492-SP1C100	10A C-curve fuse 6A C-curve fuse 10A C-curve fuse 10A C-curve fuse	1606-XLP50B 1606-XLP50E 1606-XLP50EZ 1606-XLP50F
	100…120/220…240V AC, 220…375V DC	24…28V DC	72	3	1.60 A / 0.80 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XLP72E
	100…120/220…240V AC, 220…375V DC	12…15V DC	90	7.5	1.90 A / 0.90 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XLP90B
	100…120/200…240V AC, 220…375V DC	24…28V DC	95	3.9	2.00 A / 0.95 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLP95E
	100…120/200…240V AC, 220…375V DC	24…28V DC	100	4.2	2.10 A / 1.00 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLP100E
	100…120/200…240V AC, 220…375V DC	48…56V DC	100	2.1	2.10 A / 1.00 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLP100F
Two-Phase	380…480V AC	24…28V DC	90	3.75	2x 0.36 A (480 VAC)	1489-A2C060	1492-SP2C060	6A C-curve fuse	1606-XLP90E-2
	380…480V AC	24…28V DC	100	4.2	2x 0.40 A (480 VAC)	1489-A2C060	1492-SP2C060	6A C-curve fuse	1606-XLP100E-2
Bulletin 1606-XL Standard Single-Phase	100…120/200…240V AC, 160…375V DC	24V DC	60	2.5	1.30 A / 0.70 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL60D
	100…200/200…240V AC, 240…375V DC	12…15V DC	180	15	5.00 A / 2.30 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL180B
	200…240V AC, 270…370V DC	24…28V DC	480	20	5.00 A (230 VAC)	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL480E
	100…120/200…240V AC	24…28V DC	480	20	10.0 A / 5.00 A	1489-A1C160	1492-SP1C160	16A C-curve fuse	1606-XL480EP
	100…120/200…240V AC	24…28V DC	480	20	10.0 A / 5.00 A	1489-A1C160	1492-SP1C160	16A C-curve fuse	1606-XL480EPT
	100…120/200…240V AC	36…43V DC	480	13.3	10.0 A / 5.00 A	1489-A1C160	1492-SP1C160	16A C-curve fuse	1606-XL480GP
	100…120/200…240V AC	48…56V DC	480	10	12.0 A / 6.00 A	1489-A1C160	1492-SP1C160	16A C-curve fuse	1606-XL480F
Three-Phase	400…500V AC, 450…820V DC	24…28V DC	120	5	3x 0.50 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL120E-3
	400…500V AC, 450…820V DC	24…28V DC	240	10	3x 0.72 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL240E-3
	400…500V AC, 450…820V DC	24…28V DC	480	20	3x 1.50 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL480E-3W
	400V AC, 450…700V DC	48…56V DC	480	10	3x 1.50 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL480F-3H
	400…500V AC, 450…820V DC	24…28V DC	720	30	3x 2.00 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL720E-3
	400…500V AC	24…28V DC	960	40	3x 3.00 A (480 VAC) 3x 3.00 A (480 VAC)	1489-A3C100 1489-A3C100	1492-SP3C100 1492-SP3C100	10A C-curve fuse 10A C-curve fuse	1606-XL960E-3 1606-XL960E-3S
Bulletin 1606 Special Modules	100…240V AC, 110…300V DC	24V DC	91	3.8	1.02 A / 0.48 A	1489-A1C030	1492-SP1C030	3A C-curve fuse	1606-XLSDNET4
	100…240V AC, 110…300V DC	24V DC	192	8	2.13 A / 1.00 A	1489-A1C040	1492-SP1C040	4A C-curve fuse	1606-XLSDNET8
	100…120/200…240V AC, 160…375V DC	24V DC	60	2.5	1.30 A / 0.70 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL60DR
	100…120/200…240V AC, 210…375V DC	24V DC	120	5	2.60 A / 1.40 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL120DR
	100…120/200…240V AC, 210…375V DC	24V DC	240	10	6.00 A / 2.60 A	1489-A1C100	1492-SP1C100	10A C-curve fuse	1606-XL240DR
	24V DC	V_{in} - .5V typ	720	30	N/A	–	–	–	1606-XLRED20-30
	24V DC	V_{in} - .6V typ	960	40	N/A	–	–	–	1606-XLRED40
	10…60V DC	V_{in} 1 - .9V typ	384	16	N/A	–	–	–	1606-XLPRED
	10…60V DC	V_{in} 1 - .9V typ	480	20	N/A	–	–	–	1606-XLSRED
	24…60V DC	V_{in} 1 - .9V typ	480	20	N/A	–	–	–	1606-XLERED
	–	24…28V DC	120	5	2.34 A / 1.23 A	1489-A1C060	1492-SP1C060	6A C-curve fuse	1606-XLE120EC
	100…240V AC, 110…300V DC	24…28V DC	240	10	2.22 A / 1.22 A	1489-A1C040	1492-SP1C040	4A C-curve fuse	1606-XLS240EC
	400…500V AC, 450…820V DC	24…28V DC	240	10	3x 0.72 A (480 VAC)	1489-A3C100	1492-SP3C100	10A C-curve fuse	1606-XL240E-3C
	–	24…28V DC	480	20	3x 0.65 A (480 VAC)	1489-A3C030	1492-SP3C030	3A C-curve fuse	1606-XLS480E-3C
Bulletin 1606 Special Modules with UPS	22.5…30V DC	22.5…30V DC	240	10	N/A	–	–	–	1606-XLS240-UPS
	24…28.8V DC	23…27.8V DC	480	20	N/A	–	–	–	1606-XLBUFFER

* Bulletin 1489 for use when North American branch circuit protection is required (UL 489, CSA 22.2 No. 5.1, IEC 60 947-2)

** Bulletin 1492-SP for use when only supplementary circuit protection is required (UL 1077, CSA 22.2 No. 235, IEC/EN 60 898)

BULLETIN 1606
MODULES

BULLETIN 1606 REDUNDANCY MODULES

The N+1 redundancy modules provide a cost effective means for providing back-up power in the event the primary power supply fails.

Advantages

- Available for all switched mode power supply lines
- Status indication for each switched mode power supply

BULLETIN 1606 BUFFER MODULES

Buffer modules are supplementary devices for regulated DC 24V power supplies. These devices buffer load currents during typical mains faults, switching events or load peaks.

Advantages

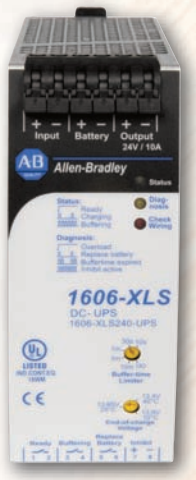
- Applications are not interrupted due to voltage dips and drops or inrush spikes
- Clear status indication by status LED and signaling terminals
- Provides additional power for short and heavy peak loads
- Any number of units can be installed in parallel to increase power buffer or back-up time

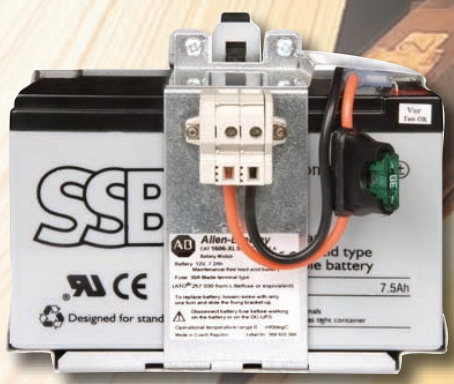
BULLETIN 1606 DC UPS MODULES

The DC UPS is a supplementary device for a 24V power supply. It provides back-up power to bridge dips, sags, or loss of power.

Advantages

- When power supply provides sufficient voltage, DC UPS charges the battery
- Sophisticated battery management system
- Extensive diagnostic and monitoring functions to aid in troubleshooting





BULLETIN 1606-XLP

When saving critical space is one of your main objectives, the XLP line is an excellent alternative. Although these devices are equipped with many of the same features and certifications as the XL devices, they support low-power applications. This line is ideal if you require a cost-effective way to save space while delivering safe and reliable power.

Advantages

- Rated outputs between 15...100 W (0.6...4.2 A at 24V DC)
- Multiple output voltages available
- Multiple single and three-phase inputs available for global applications
- Smaller, cost-effective solution for low power applications

BULLETIN 1606-XL

If you are looking for a power supply designed to enhance safety and reliability of your industrial applications, the XL line provides just that. The wide power range and feature set support most application demands. Additionally, this line carries CE, cULus, and cURus approvals to meet the most stringent EMC standards.

Advantages

- Rated outputs between 60...960 W (2.5...40 A at 24V DC)
- Multiple output voltages available
- Multiple single and three-phase inputs available for global applications
- Versatility for almost any application

BULLETIN 1609
UNINTERRUPTIBLE POWER SUPPLIES

BULLETIN 1609-U

With the most comprehensive set of industrial features for single-phase applications up to 500 VA, the U series was specifically designed for industrial environment control panels. In addition, the U series performs a surge and filter protective function along with bridging dips, sags, and brief power losses to help insure efficiency in your operations.

Advantages

- DIN rail and panel mount capabilities
- Integrated dry contact I/O communicates to the PLC (battery status)
- Optional 50°C battery
- Hardwired input/output connections
- Comprehensive network management capabilities (Ethernet, RS232)
- Line interactive design with pure sine wave output

BULLETIN 1609-S

The S series is a great alternative if you are looking for an industrial UPS but do not require the entire feature set of the U series. These units are ideal for single-phase application up to 350 VA. The S series also performs a surge and filter protective function along with bridging dips, sags, and brief power losses to help insure efficiency in your operations.

Advantages

- DIN rail and panel mount capabilities
- Hardwire input/output connections
- Optional dry contact I/O communication cables
- Serial communication capabilities (RS232)
- Line interactive design with pure sine wave output

BULLETIN 1609-P

The P series features powerful high density double conversion on-line UPSs for the industrial environment and are available in a 3...10 kVA power range for both 208/230V applications. Additionally, the 3 kVA is also available in 120 V. These units are typically assembled in a tower configuration and installed outside of a control panel.

Advantages

- Hot swappable battery packs
- Rack convertible
- Network management capabilities (Ethernet, RS232)
- Extended runtimes
- Double conversion online topology

CATALOG NUMBER EXPLANATIONS

BULLETIN 1609-U UNINTERRUPTIBLE POWER SUPPLIES

1609 - U (a) 500 (b) N (c) H (d) C (e)

a

Power Supply Type	
Code	Description
U	Uninterruptible Power Supply

b

Rated Output Power	
Code	Description
500	500 VA (325 W)

c

Input/Output Voltage	
Code	Description
N	115V AC
E	208/230V AC

e

Network Management	
Code	Description
C	NMC Included
	Can be left blank

d

Special Functions	
Code	Description
S	Standard Battery
H	High Temp Battery
	Can be left blank

BULLETIN 1609-S UNINTERRUPTIBLE POWER SUPPLIES

1609 - S (a) 350 (b) N (c)

a

Power Supply Type	
Code	Description
S	Line Interactive, Panel Mount Uninterruptible Power Supply

b

Rated Output Power	
Code	Description
350	350 VA (280 W)

c

Output Voltage	
Code	Description
N	120V AC
E	208/230V AC

d

Battery Type	
Code	Description
S	40°C Battery

BULLETIN 1609-P UNINTERRUPTIBLE POWER SUPPLIES

1609 - P (a) 3000 (b) N (c)

a

Power Supply Type	
Code	Description
P	Double Conversion Online Uninterruptible Power Supply

b

Rated Output Power	
Code	Description
3000	3000 VA (2100 W)
5000	5000 VA (3500 W)
8000	8000 VA (6400 W)
10000	10000 VA (8000 W)

c

Input/Output Voltage	
Code	Description
N	115V AC
E	208/230V AC
A	230V AC

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

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