

Bulletin 1607-XT



ArmorPower™ On-Machine™ Power Supplies
50 & 100 W Power Capacity

Advantages

- IP67 rating
 - *Designed and rated to be mounted directly on-machine so no enclosure is needed*
- Minimizes voltage drop
 - *Reduces voltage drop due to line loss when power supply is placed closer to actual load*
- Vacuum encapsulation technology
 - *Increases protection against intense shock and vibration*
- NEC Class 2 rating
 - *Ideal for sensors and other power limited applications*
- Quick connectors
 - *Helps reduce installation costs and simplify connectivity*
- Smooth surface
 - *Suitable for washdown in food, beverage, and pharmaceutical applications*

On-Machine solutions are design philosophies that move industrial controls closer to the application.



Overview

The Allen-Bradley® Bulletin 1607-XT ArmorPower On-Machine Power Supplies from Rockwell Automation are the ideal solution for applications where voltage drop occurs due to line loss from long wire lengths, along with any application where compact size, high efficiency, and excellent reliability are critical. Available in 50 and 100 W models, these IP67 power supplies address a growing trend in the industrial automation marketplace for on-machine and factory floor installations where the traditional enclosure has been eliminated.

ArmorPower power supplies are extremely resistant to harsh environmental conditions. All models are vacuum encapsulated in potting material that helps provide maximum resistance to shock, vibration, and humidity. In addition, the potting material is thermally conductive to help pull heat away from sensitive electrical components.

LISTEN.
THINK.
SOLVE.®

Product Selection

Input Voltage	Output Power [W]	Output Voltage [V DC]	Output Current [A]	Inrush Current	Cat. No.
Single Output					
100...240V AC, 100...353V DC	48.0	24 (+1%)	2.0	<25 A	1607-XT50D1A
	91.2		3.8		1607-XT100D1A

Specifications

	1607-XT50D1A	1607-XT100D1A
Output Power	48.0 W	91.2 W
Input Voltage (47...63 Hz)	100...240V AC, 100...353V DC	
Operational Range	90...264V AC, 100...353V DC	
Power Factor Correction @ 47...63 Hz	—	
Hold-Up Time	50 ms	
Rated Input Current	1.0 A (115V AC), 0.5 A (230V AC)	2.0 A (115V AC), 1.0 A (230V AC)
Inrush Current	<25 A	
Efficiency	>88% 120V AC, >89% 230V AC	
Output Voltage	24V (+1%)	
Rated Output Current	2.0 A	3.8 A
Reserve Power (typ. 4 s, 60 s recovery time)	—	
Ripple Voltage	<240 mV _{pp} bandwidth, 1 MHz	
Noise	<480 mV _{pp} bandwidth, 20 MHz	
Overcurrent Protection	Electronic current limited to 2.2...2.7 A	Electronic current limited to 3.8...4.1 A
AC Power On LED Indication for Output 1	Yes	
AC Power On LED Indication for Output 2	—	
Operating Temperature Range (T _{amb})	-25...+70°C derate 2.5%/K, 50...70°C	
Non-Operating Temperature Range	-40...+85°C	
Humidity	Up to 100% with condensation	
MTBF*	>500 000 hours	
Dimensions (W x H x D)	140 x 36 x 85 mm (5.51 x 1.42 x 3.35 in.)	
Weight	750 g (1.65 lb)	
Ingress Protection	IP67, EN 60529	
Certifications/Standards	CE, UL 508, UL 60950 (cURus), Safety standards = IEC/EN 60950, EN 60529	
Special Features	NEC Class 2	

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

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