

# On-Machine Power Supply Specifications

Bulletin Number 1607

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## Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

<b>Topic</b>	<b>Page</b>
Added catalog numbers 1607-XT10001B, 1607-XT20001B, and 1607-XT20002B	throughout

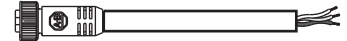
## Product Selection

### On-machine Power Supplies

Type	Input Voltage	Output Power [W]	Output Voltage [V DC]	Output Current [A]	Inrush Current	Floating Output Cat. No.	Grounded Output Cat. No.
50 W	100...240V AC, 100...300V DC	48.0	24 (+1%)	2.0	<25 A	1607-XT50D1A	—
100 W		91.2		3.8		1607-XT100D1A	1607-XT100D1B
200 W 1 Output		192 W (288 W with Power Boost)		8		1607-XT200D1A	1607-XT200D1B
200 W 2 Outputs		91.2 W per output		3.8 per output		1607-XT200D2A	1607-XT200D2B

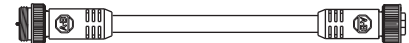
## Accessories

### Cordsets



Type	No. of Pins	Assembly Rating	Straight Female Cat. No.	Right Angle Female Cat. No.	Straight Male Cat. No.	Right Angle Male Cat. No.
Input	3-Pin	600V, 13 A	889N-F3AFC-⊕F	889N-R3AFC-⊕F	—	—
Output	4-Pin	600V, 10 A	—	—	889N-M4AFC-⊕F	889N-E4AFC-⊕F

⊕ Replace symbol with 6 (6 ft), 12 (12 ft), or 20 (20 ft) for standard cable lengths.



### Patchcords

Type	No. of Pins	Assembly Rating	Straight Female Straight Male Cat. No.	Straight Female Right Angle Male Cat. No.	Right Angle Female Straight Male Cat. No.	Right Angle Female Right Angle Male Cat. No.
Input	3-Pin	600V, 13 A	889N-F3AFNM-§	889N-F3AFNE-§	889N-R3AFNM-§	889N-R3AFNE-§
Output	4-Pin	600V, 10 A	889N-F4AFNM-§	889N-F4AFNE-§	889N-R4AFNM-§	889N-R4AFNE-§

§ Replace symbol with 1 (1 m), 2 (2 m), 5 (5 m), or 10 (10 m) for standard cable lengths.

### T-ports

Type	No. of Pins	Assembly Rating	Cat. No.
Input	3-Pin	300V, 8A	898N-33PB-N4KF
Output	4-Pin		898N-43PB-N4KF

### Panel Mount Receptacles

Type	No. of Pins	Assembly Rating	Thread Size	Female Cat. No.	Male Cat. No.
Input	3-Pin	250V, 13 A	1/2 in. – 14 NPT	888N-D3AF1-⊕F	—
Output	4-Pin	600V, 10 A		—	888N-M4AF1-⊕F
<b>Description</b>				<b>Cat. No.</b>	
Mounting nuts for 1/2 inch-14 NPT threaded receptacles are available in bags of 10 pieces				889A-U1NUT-10	

⊕ Replace symbol with 1 (1 ft) or 3 (3 ft) for standard cable lengths.

# Specifications

Floating Output	50 W	100 W	200 W, 1 Output	200 W, 2 Outputs
	1607-XT50D1A	1607-XT100D1A	1607-XT200D1A <sup>(1)</sup>	1607-XT200D2A <sup>(1)</sup>
Grounded Output	–	1607-XT100D1B <sup>(1)(2)</sup>	1607-XT200D1B <sup>(1)(2)</sup>	1607-XT200D2B <sup>(1)(2)</sup>
Output Power	48.0 W	91.2 W	192 W (288 W with Power Boost)	91.2 W per output (Two outputs per power supply)
Input Voltage (47...63Hz)	100...240V AC, 100...300V DC			
Operational Voltage Range	90...264V AC, 100...300V DC			
Power Factor Correction (47...63Hz)	-		>0.98 active	
Hold-up Time	50 ms			
Rated Input Current	1.0 A (115V AC), 0.5 A (230V AC); I <sub>max</sub> 1.5 A	2.0 A (115V AC), 1.0 A (230V AC); I <sub>max</sub> 2.0 A	2.4 A (115V AC), 1.2 A (230V AC); I <sub>max</sub> 2.5 A	2.2 A (115V AC), 1.1 A (230V AC); I <sub>max</sub> 2.5 A
Inrush Current	<25 A			
Efficiency	>88%, 120V AC; >89%, 230V AC		>82%, 120V AC; >85%, 230V AC	
Output Voltage	24V (+1%)			
Rated Output Current	2.0 A	3.8 A	8 A	3.8 A per output (two outputs per power supply)
Reserve Power (typ. 4 s, 60 s recovery me)	-		12 A	-
Ripple Voltage	<240 mVpp bandwidth, 1 MHz			
Noise	<480 mVpp bandwidth, 20 MHz			
Overcurrent Protection (electronic current limited to)	2.2...2.7 A	3.8...4.1 A	12.1...15.6 A (8.4...10.4 A after 4 s Power Boost times out)	3.8...4.1 A
AC Power Light-emitting Diode (LED) (Indication for Output 1)	Yes			
AC Power Light-emitting Diode (LED) (Indication for Output 2)	-			Yes
Operating Temperature Range (T <sub>amb</sub> )	-25...+70°C (-13...+158 °F) derate 2.5%/K, 50...70°C (122...158 °F)		-25...+60 °C (-13...+140 °F) derate 2.0%/K, 50...60 °C (122...140 °F) <sup>(3)</sup>	
Non-Operating (Storage) Temperature Range	-40...+85°C (-40...+185 °F)			
Humidity	Up to 100% with condensation			
MTBF <sup>(4)</sup>	>500,000 hours			
Dimensions (WxHxD)	140 x 36 x 85 mm (5.5 lx 1.42 x 3.35 in.)		245 x 74 x 122 mm (9.64 x 2.91 x 4.80 in.)	
Weight	750 g (1.65 lb)		3040 g (6.70 lb)	
Ingress Protection	IP67, EN 60529			
Certifications/Standards	CE, UL 508 (UL Listed), UL 60950 (cURus), Safety Standards= IEC/EN 60950, EN 60529			
Special Features	NEC Class 2		-	NEC Class 2
Mounting Recommendations	Clearance of 150 mm (5.9 in.) above power supply. Clearance of 50 mm (1.97 in.) on all other surfaces excluding mounting surface.		Panel that is mounted with vertically oriented heatsinks. Clearance of 150 mm (5.9 in.) above power supply, 50 mm (1.97 in.) on all other surfaces.	

(1) Protection class 1 unit, connection to PE (earth ground) is mandatory.

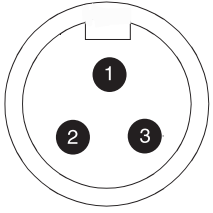
(2) These devices are intended only for installation in control circuits on Industrial Machines in accordance with NFP A79. Due to the nature of these devices (fixed equipment using cable connections), they may not be suitable for installation in accordance with the NEC (NFP A70).

(3) For IT applications per UL 60950, the maximum ambient temperature at full load current is 30 °C (86 °F).

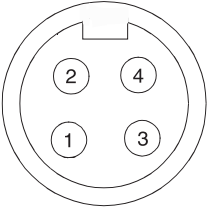
(4) MTBF determined by Siemens norm SN29500 at full load current and 40 °C (104 °F).

## Connections

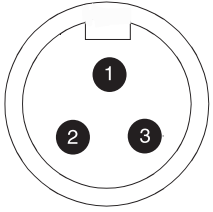
Floating Output Products—Catalog Numbers: 1607-XT50D1A, 1607-XT100D1A, 1607-XT200D1A<sup>(1)</sup>, 1607-XT200D2A<sup>(1)</sup>

Figure 1 - Input Connections	Pin	Color	1607-XT50D1A	1607-XT100D1A	1607-XT200D1A	1607-XT200D2A
	1	Green/Yellow	NC	NC	PE	PE
	2	White	L	L	L	L
	3	Black	N	N	N	N

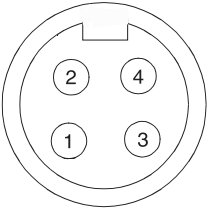






(1) This is a protection class 1 unit, connect on to PE (earth ground) is mandatory.

Figure 2 - Output Connections	Pin	Color	1607-XT50D1A	1607-XT100D1A	1607-XT200D1A	1607-XT200D2A
	1	White	+	+	+	+
	2	Black	+	+	+	+
	3	Red	-	-	-	-
	4	Green/Yellow	-	-	-	-

Grounded Output Products—Catalog Numbers: 1607-XT100D1B<sup>(1)</sup>, 1607-XT200D1B<sup>(1)</sup>, 1607-XT200D2B<sup>(1)</sup>

Figure 3 - Input Connections	Pin	Color	1607-XT100D1B	1607-XT200D1B	1607-XT200D2B
	1	Green/Yellow	PE	PE	PE
	2	White	L	L	L
	3	Black	N	N	N

(1) This is a protection class 1 unit, connect on to PE (earth ground) is mandatory.

Figure 4 - Output Connections	Pin	Color	1607-XT100D1B	1607-XT200D1B	1607-XT200D2B
	1	White	+	+	+
	2	Black	+	+	+
	3	Red	 FG	 FG	 FG
	4	Green/Yellow	 FG	 FG	 FG

## Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Figure 5 - Cat. No. 1607-XT50D1A, 1607-XT100D1A, 1607-XT100D1B

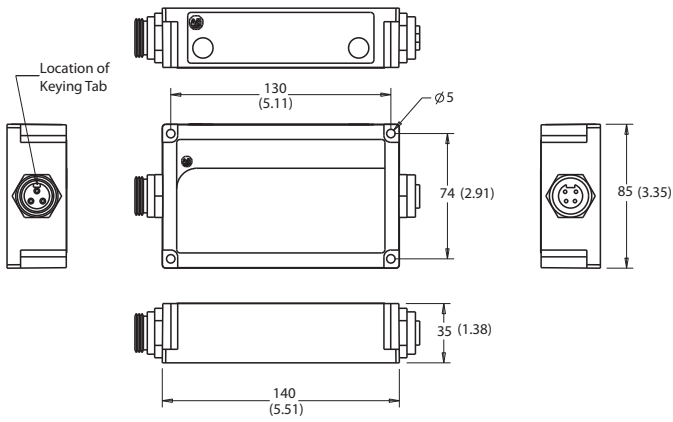


Figure 6 - Cat. No. 1607-XT200D1A, 1607-XT200D1B

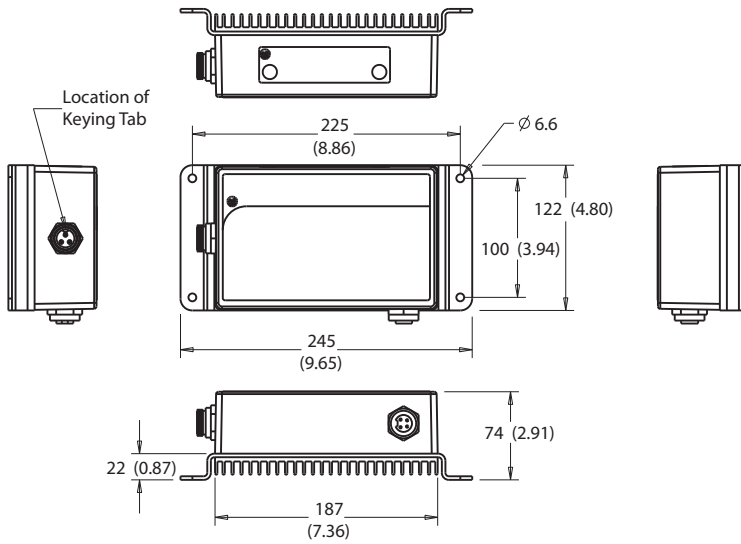
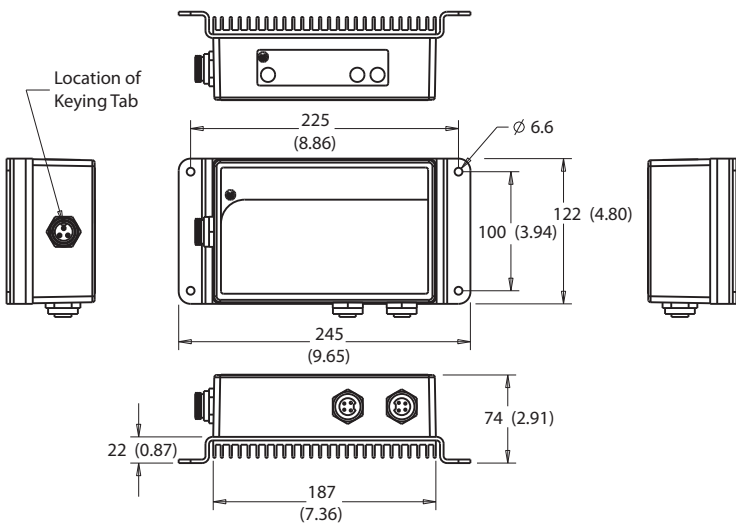


Figure 7 - Cat. No. 1607-XT200D2A, 1607-XT200D2B



## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
1607 On-Machine Power Supply Installation Instructions, publication <a href="#">1607-IN001A-EN-E</a>	Provides installation instructions, specificaitons and mounting clearance information.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication <a href="#">IC-TD002</a>	Provides a quick reference tool for Allen-Bradley industrial automation controls and assemblies.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-state Control, publication <a href="#">SGI-1.1</a>	Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components.
Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, <a href="#">rok.auto/certifications</a> .	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at [rok.auto/literature](#).

# Rockwell Automation Support

Use these resources to access support information.

<b>Technical Support Center</b>	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	<a href="http://rok.auto/support">rok.auto/support</a>
<b>Knowledgebase</b>	Access Knowledgebase articles.	<a href="http://rok.auto/knowledgebase">rok.auto/knowledgebase</a>
<b>Local Technical Support Phone Numbers</b>	Locate the telephone number for your country.	<a href="http://rok.auto/phonesupport">rok.auto/phonesupport</a>
<b>Literature Library</b>	Find installation instructions, manuals, brochures, and technical data publications.	<a href="http://rok.auto/literature">rok.auto/literature</a>
<b>Product Compatibility and Download Center (PCDC)</b>	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	<a href="http://rok.auto/pcdc">rok.auto/pcdc</a>

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