Arrow Hart industrial grade power lock plugs, connectors and receptacles

Project Name:	Prepared By:				
Project Number:	Date:				
Catalog Number:	Type:				



AHPL20414N



AHPL20444N



AHPI 20415N



AHPL20445N



Plug 20A 125V, Grounding





Receptacle 20A 125V, Non-Grounding



Receptacle 20A 125V 20A 125V









Receptacle 30A 480V



Description

2-pole, 3-wire grounding 3-pole, 3-wire non-grounding 3-pole, 4-wire grounding 20A, 125V/AC; 20A, 250V/DC; 30A, 480V/AC; 30A, 600V/AC; Non-NEMA

Features

- Spring-loaded safety shutter automatically ejects the plug if it has not been properly locked into the female device (receptacle or connector) which eliminates contact interaction and insures long-lasting performance
- Spring-loaded safety shutter helps to contain and extinguish arcs if the devices are accidentally unmated under load, providing a quicker disconnect and higher degree of safety for the user
- Spring-loaded safety shutter prevents the entrance of foreign matter in the female contact chamber and provides an IP30 finger-safe rating
- Amperage/voltage and configuration clearly marked on the body of devices for easy identification of the device capabilities
- Terminal body assembly screws backed out for fast wiring and assembly
- Tri-combo screws to facilitate use of a wide variety of tools to assist with more rapid assembly
- Double dove tail provides for superior cord alignment and retention
- Longer bosses on cord grip allow for excellent clamp force on large diameter cords ensuring tight connections
- Dust shield is made of durable neoprene to keep foreign particles of entering the cord chamber

Table 1. Industrial grade plugs & connectors

Catalog No.	Description	Cord diameter	Amps	Volts	Color	
☐ AHPL23005UL	Plug interior	N/A	20	125AC	ВК	
	nylon		10	250DC/480AC		
☐ AHPL23005N	Ultra grip plug,	0.256-0.656"	20	125AC	BK & W	
	nylon	(6.5-16.7mm)	10	250DC/480AC	_	
☐ AHPL23056	Ultra grip plug, hospital use only	0.256-0.656" (6.5-16.7mm)	20	125AC	GY & W	
☐ AHPL20415N	Ultra grip plug,	0.38-1.06"	30	600AC	BK & W	
	nylon	(9.65-26.9mm)	20	250DC	_	
☐ AHPL20414N	Ultra grip	0.38-1.06"	30	600AC	BK & W	
	connector, nylon	(9.65-26.9mm)	20	250DC	-	
☐ AHPL20445N	Ultra grip plug, nylon	0.38-1.06" (9.65-26.9mm)	30	480AC	RD & W	
☐ AHPL20444N	Ultra grip connector, nylon	0.38-1.06" (9.65-26.9mm)	30	480AC	RD & W	

Technical Data Effective October 2019

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Table 1. Industrial grade receptacles

Catalog No.	Description	Amps	Volts	Color
☐ AHPL23000	Industrial grade	20	125AC	BK
	receptacle	10	250DC/480AC	
☐ AHPL23000G	Industrial grade	20	125AC	BK
	receptacle	10	250DC	
☐ AHPL23050	Industrial grade receptacle, hospital use only	20	125	BK & GY
☐ AHPL20403N	Industrial grade	30	600AC	BK
	receptacle	20	250DC	
☐ AHPL20443N	Industrial grade receptacle	30	480	BK & RD

Applications

Eaton's power lock devices are designed for safety, energizing within a chamber to eliminate the possibility of exterior arcing. The chamber is protected by a spring-loaded safety shutter that ejects the plug if it's not fully locked in place. The shutter also prevents the entrance of foreign matter and provides an IP30 finger-safe rating. These devices are ideal for high-abuse industrial and specialized hospital applications. Designed with the latest in ergonomic shape, the power lock devices provide a superior design and performance, making them ideal for many applications. The devices are available in a wide range of non-NEMA configurations.

Table 2. Specifications

Catalog no.	Ultra grip nylon power lock plugs and connectors AHPL23005UL AHPL23056N, AHPL20415N, AHPL20445N, AHPL23005N, AHPL20414, AHPL20444N						
Device type	Power lock plugs and connectors						
Wiring type	Pressure wire						
Testing & code compliance	 Listed to UL 498, file no. E3663 UL certified to C22.2, no. 42 						
Environmental specifications	Flammability: Meets UL 94 requirements; V0/V2 rated Temperature rating: -40°C to 75°C (-40°F to 167°F)						
Electrical specifications	Dielectric voltage: Twice the device rating + 1000V per UL498 Current interrupting: Yes, at full-rated current Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @ 150% of rated current (DC)						
Mechanical specifications	Terminal accommodation: #8 - #12 AWG / #10 - #16 AWG Voltage ratings: Permanently marked on device						

Table 3. Materials

Catalog no.	Ultra grip nylon power lock plugs and connectors AHPL23005UL AHPL23056N, AHPL20415N, AHPL20445N, AHPL23005N, AHPL20414, AHPL20444N						
Inlet flip lid cover & base	N/A						
Flanged housing	N/A						
Plug/connector outer shell	Nylon						
Interior body	Glass filled nylon						
Terminal retainer	Glass filled nylon						
Blades	0.070" thick copper						
Line contacts	_						
Terminal clamp	Steel, nickel plated						
Terminal screws	#8-32 brass						
Ground screw	#8-32 brass, green tone						
Assembly/mounting screws	#6-20 steel, nickel plated						
Cord clamp screws	#8-18 steel, nickel plated						
Cord clamp	Nylon						

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Catalog Number:	Type:				

Table 4. Specifications

Catalog no.	Power lock receptacles AHPL20403N, AHPL20443N, AHPL23000, AHPL23000G, AHPL23050					
Device type	Power lock receptacles					
Wiring type	Wiring type					
Testing & code compliance	 Listed to UL498, file no. E2369, except 23000G UL certified to C22.2, no. 42 except 23000G, AH21420, 20443N 					
Environmental specifications	Flammability: Meets UL 94 requirements; V0 rated Temperature rating: -40°C to 105°C (-40°F to 221°F)					
Electrical specifications	Dielectric voltage: ≤300V: 2000V, 301-600V: 3000V per UL498 Current interrupting: Yes, at full-rated current Temperature rise: Max. 30°C (86°F) after 50 cycles of overload @ 150% of rated current (DC)					
Mechanical specifications	Terminal accommodation: #8 - 10 AWG / #10 - #14 AWG Voltage ratings: Permanently marked on device					

Table 5. Materials

Catalog no.	Power lock receptacles AHPL20403N, AHPL23443N, AHPL23000, AHPL23000G, AHPL23050						
Interior body/face & base	Glass-filled nylon						
Single receptacle strap	If applicable, 0.050" thick steel, nickel plated						
Grounding strap	N/A						
Contacts	0.030" thick copper						
Terminals	0.024" thick brass						
Terminal screws	#8-32 brass screw						
Ground screw	#8-32 brass screw, green tone						

Table 6. Color information

BK (Black), GY (Gray), RD (Red), W (White)



Product Dimensions

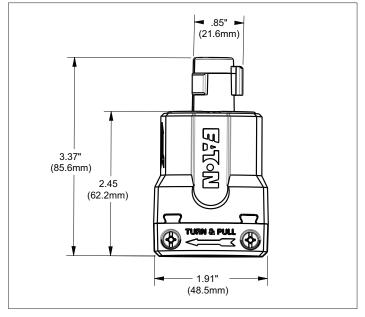


Figure 1. AHPL23056N/AHPL23005N Line art with dimensions

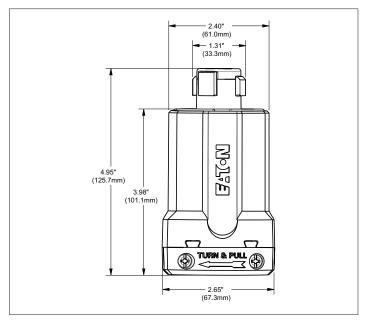


Figure 2. AHPL20415N Line art with dimensions

Project Name:	Prepared By:				
Project Number:	Date:				
Catalog Number:	Type:				

Product Dimensions

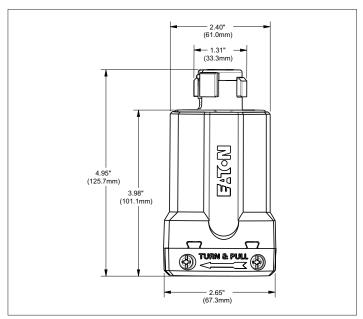


Figure 3. AHPL20445N Line art with dimensions

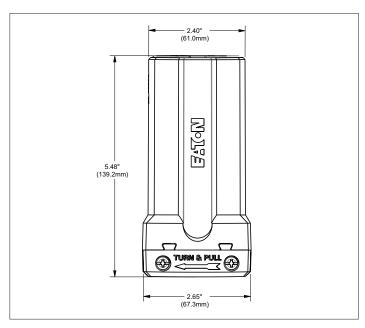


Figure 4. AHPL20414N/AHPL20444N Line art with dimensions

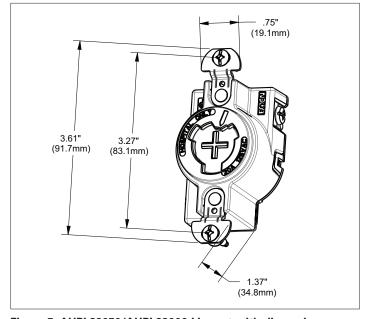


Figure 5. AHPL23050/AHPL23000 Line art with dimensions

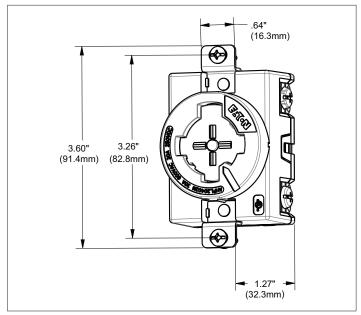


Figure 6. AHPL20403N Line art with dimensions

Project Name:	Prepared By:				
Project Number:	Date:				
Catalog Number:	Type:				

Product Dimensions

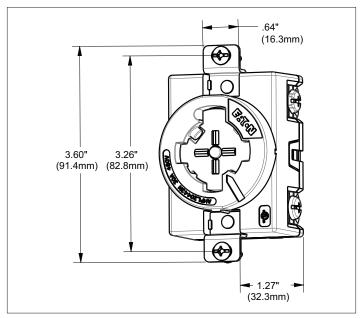
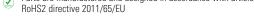


Figure 7. AHPL20443N Line art with dimensions

Certifications & Compliances

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AHPL23	056N		•		•		•	•	•	•		
AHPL20	415N		•		•		•		•	•		
AHPL20	445N		•		•		•	•	•	•		
AHPL23	005N		•									
AHPL20	414N		•									
AHPL20	444N		•									
AHPL20	403N			•								
AHPL20	443N			•								
AHPL23	000G			•								
AHPL23	050			•		•						
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