



INTRODUCTION • NEMA 4X METALLIC



VR/VP



ALLEN/SLOT TERMINALS



VSQ



VBQ

600 VAC/250VDC; 50-400 hertz
 NEMA 3, 4, 4X
 Class I, Div. 1 & 2, Groups B, C, D;
 NEMA 7 B, C, D^②
 Class I, Zones 1 & 2, IIB+H2, IIA^②
 Class II, Div. 1 & 2, Groups F & G;
 NEMA 9 F, G^②
 Class III^②



FEATURES-SPECIFICATIONS

NEMA 4X VersaMATE®

THE FIRST NEMA 4X RATED LINE OF METALLIC PLUGS & RECEPTACLES.

VersaMate® metallic pin & sleeve plugs & receptacles are designed for heavy duty industrial use. These devices supply power to both fixed and portable electrical equipment including pumps, generators, welders, vacuums, blowers and similar apparatus.

Suitable for indoor or outdoor use. Applications include the wet, cold, hosedown, hazardous or corrosive areas in such industrial applications as:

- Pulp & Paper Mills
- Electrical Power Plants
- Petrochemical Plants
- Wastewater Treatment
- Marine, Docks, Ports
- Construction Sites
- Breweries
- Refineries
- Chemical Plants
- Grain Facilities
- Textile Manufacturing
- Food Processing Facilities

^① VersaMate® components are UL classified and intermateable with other UL 1686-C1 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device. 150A models UL intermateable w/Appleton® Powertite® only.

^② See product pages for specific ratings.

Arktite® is a registered trademark of Crouse-Hinds®. Powertite® is a registered trademark of Appleton®.

Standard Materials:

Copper-free aluminum construction with electrostatically applied epoxy/polyester finish. Contacts are brass with a patented beryllium copper spring tensiometer. External screws are 316 stainless steel.

Features:

The VersaMate product line includes 30, 60, 150^①, 100 and 200 Amp plugs, receptacles and connectors with a full range of back boxes. Popular options include reverse service and polarization. The VersaMate line is **FULLY INTERCHANGEABLE**^① with UL1686 configured and listed devices such as Crouse-Hinds® Arktite® or Appleton® Powertite®. Standard location receptacle bolt hole patterns match competitive back boxes so users can upgrade to VersaMate without changing back boxes in instances where changing the conduit system is difficult.

Plugs:

Octagonal style (patented) for a firm and sure grip when connecting or disconnecting is featured on both plug and cable connector bodies. Insulators have high mechanical and dielectric strength and are "Low Arc Tracking." "Increased Safety" type box terminals with gripper ribs securely clamp around conductors. Funneled conductor entry chambers lead all properly stripped conductors into terminals **simultaneously**. NEMA 4X rating when inserted into VersaMate receptacle and locking ring is tightened. Includes suitability for Type P marine cable.



Receptacles:

Exclusive Patented "Breach-Lock" cap serves as either flip lid or screw cover. Receptacle is NEMA 3R with lid snapped shut or NEMA 4X with lid turned shut or when VersaMate plug is inserted and locking ring tightened. Patented notch in cap arm holds cap open for easy plug insertion or maintenance. Patented pin design uses slotted spring clip which avoids excessive wear while providing continuous electrical pin to sleeve contact. VersaMate® receptacles use the same "Increased Safety" terminals and funnel design as VersaMate® plugs.



Cable Clamping Assembly:

Plugs and cable connectors are supplied with an exclusive neoprene "Onion Skin" peel-away type grommet. The VersaMate® cable clamp system captures cable with **four grip points** using **only two** tightening screws. Clamp guide assembly provides a firm fit over a wide range of cable diameters. Non-removable set screws prevent clamp guide assembly from backing out. Clamps have smooth contoured shoulder design to prevent snags or damage when moving equipment.



Back Boxes:

VersaMate back boxes come in a variety of mounting styles. Exclusive "blind" receptacle mounting holes prevent moisture from entering box via thread cavities. Boxes come with a green grounding screw.



RECEPTACLES

VERSAMATE® SERIES



FEATURES / COMPARISONS



- First NEMA 4X – Still the BEST!
- Exclusive interior gasketing
- Exclusive Terminal Designs
 - » No conductor machining
 - » Allen or Phillips types

- Exclusive Onion-Skin Gasket
 - » Perfect Cable Fit
- Exclusive 4-Point Cable Grip
 - » Uses only 2 Recessed Screws
- Exclusive Breech-Lock Cap
 - » Flip or Screw-On
 - » Notch to hold open

KILLARK BRAND TERMINALS	RECEPTACLE/CONNECTOR PIN CONFIGURATION						
	STYLE 1			STYLE 2			
	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	
 <p>New Allen/slot terminal screws do not contact or machine conductor. Allows higher torque values typical in the oil industry.</p>	30	2W2P		30	2W3P		
		3W3P			3W4P		
		4W4P			60	2W3P	
 <p>VersaMate original Phillips/slot "Increased Safety" type terminals reduce connection fatigue. Screws do not contact or machine conductor and are under spring tension to reduce loosening and pullout due to vibration.</p>	60	2W2P		100		3W4P	
		3W3P			2W3P		
		4W4P			150A	3W4P	
 <p>"Breech-Lock" design serves as both flip lid or screw cover style. Special notch in lid arm holds cover open to ease plug insertion or maintenance. *Slip pencil or screwdriver into notch.</p>	100	2W2P		200		2W3P	
		3W3P				3W4P	
		4W4P			200	3W4P	
 <p>Exclusive "Onion Skin" style gasket assures a tight seal around cable. Skin layers are removed from a single gasket to adjust for various cable diameters.</p>	150A	4W4P					
	200	3W3P					
		4W4P					

REVERSE SERVICE: S39

Add suffix **S39** for factory Reverse Service of receptacles, plugs or connectors. Receptacles or connectors are assembled with plug interiors while plugs are assembled with receptacle interiors. For applications where the plug is energized (i.e. from a generator) to feed a non-energized receptacle. Prevents easy contact with energized exposed pins. This conversion can be performed in the field with a complementary plug and receptacle (30A to 150A devices shown on pages PR5-PR8). 200A Amp devices shown on page PR9 are a factory-only option. Reverse service is not for hazardous locations.



Typical Application

POLARIZED OPTION: S37

Add suffix **S37** for special polarity.

Can prevent connection between mismatched voltages or frequencies in areas where devices of the same amperage, poles and grounding style are used. Receptacle or connector interiors are rotated 22-1/2° to the right; plug is rotated opposite to match. This is a factory only option.



Standard



S37 Option



EXCLUSIVE FEATURES & GROUNDING METHODS



P Patented Exclusive “Breech-Lock” cap serves as either flip lid or screw cover

- NEMA 3R Rating: When receptacle cap is snapped shut
- NEMA 4X Rating: When receptacle cap is turned shut or with VersaMate® plug inserted and ring tightened

P Patented Special notch is designed to hold cap open for easy field service or plug insertion with **two** free hands

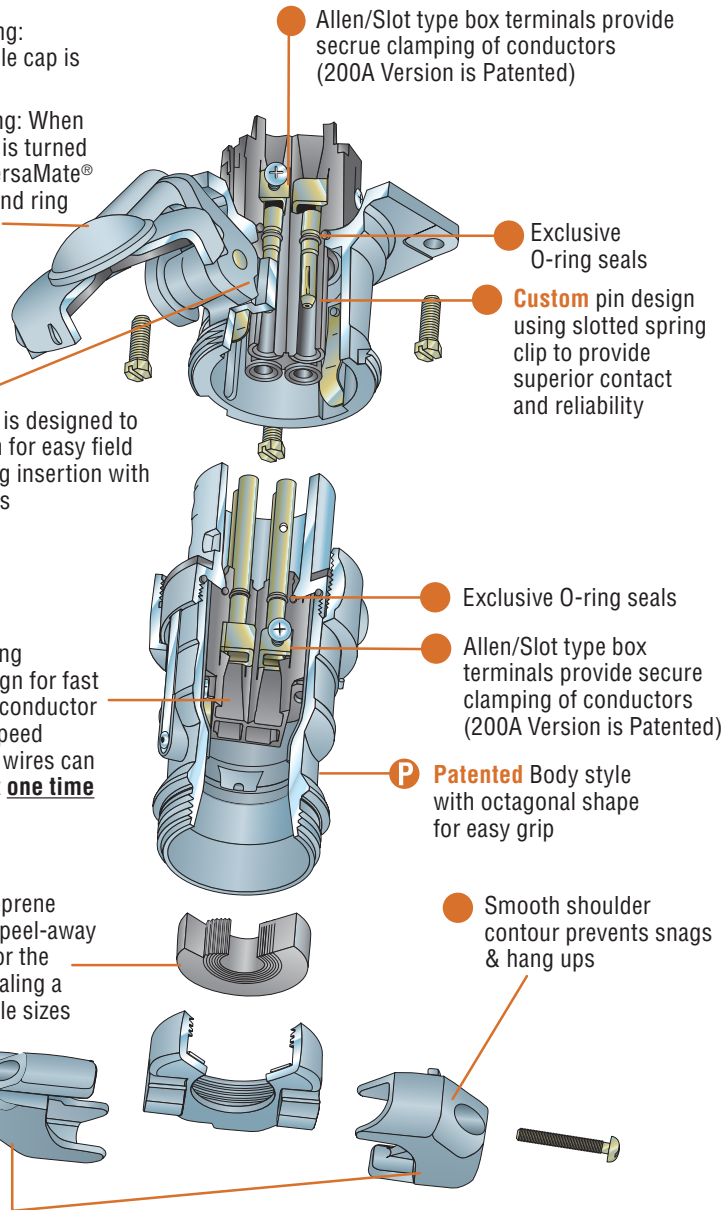
• Funneled wiring chamber design for fast and accurate conductor insertion to speed assembly. All wires can be inserted at **one time**

• Exclusive neoprene “Onion Skin” peel-away type gasket for the ultimate in sealing a variety of cable sizes

• The VersaMate® Cable clamp system captures cable with four grip points using only two tightening screws. Provides secure grip without damaging the cable insulation

• **Unique VersaMate® Feature**
The VersaMate Line is designed for the industrial customer based on engineering and user surveys

P Denotes Patented Feature

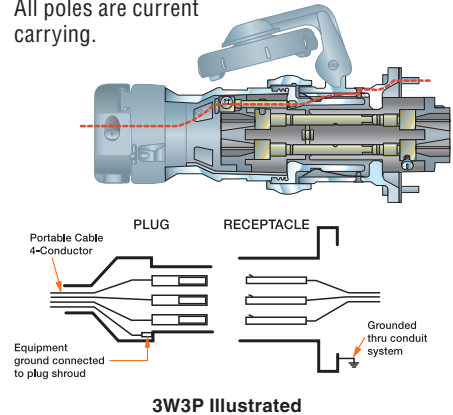


Grounding:

To minimize the danger of electrical shock when utilizing portable equipment, the National Electrical Code requires exposed metal parts be grounded if operated at more than 150 volts to ground. The VersaMate® plug & receptacle system is available in two grounding styles. Please note Style I and II devices cannot be intermated.

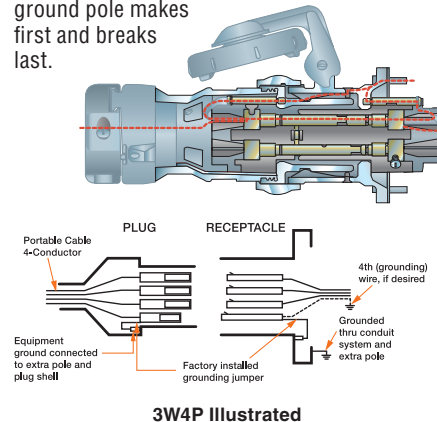
Style I

In a Style I plug, the cable's ground conductor is bonded to the plug housing by means of solderless connector. The receptacle is grounded by being part of a grounded conduit system. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing before current carrying poles. All poles are current carrying.



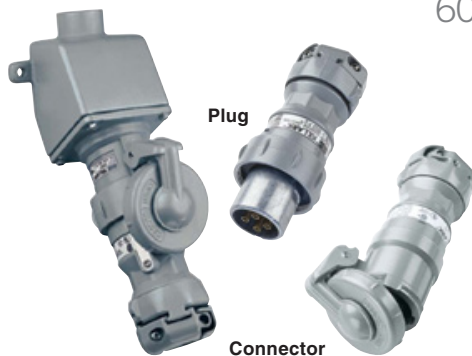
Style II

In a Style II plug, the cable's ground conductor is bonded to the extra grounding pole and to the plug housing via a bonding jumper. The receptacle has a matching grounding pole connected to the system ground conductor which is further tied to the grounded conduit system via a bonding jumper. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing; then the extra long ground pole connects before the current carrying poles engage. The Style II ground pole makes first and breaks last.





60A SELECTION INFORMATION



Plug

Connector



Original or AT
Terminals. See PR3 for
more information

• 60 Amp 600VAC/250VDC; 50-400 Hertz
NEMA 3, 4, 4X^①

Wire Range

Regular Stranding: #6 - #2 original style or "AT" type
(Includes Type P marine)
Extra flex: #6 - #4 original style or "AT" type

UL File No. E10757 SP Certified File No. LR111846

FEATURES-SPECIFICATIONS

60 AMP PLUGS & CONNECTORS						
GROUND STYLE	CIRCUIT	GROMMET RANGE	CATALOG NUMBER			
			PLUG		CONNECTOR	
			ORIG.	AT	ORIG.	AT
Style I	2W2P	.65 - 1.50 IN	VP6275	VP6022	VPR6255	VPR6022
	3W3P	.65 - 1.50 IN	VP6375	VP6033	VPR6355	VPR6033
	4W4P	.65 - 1.50 IN	VP6475	VP6044	VPR6455	VPR6044
Style II	2W3P	.65 - 1.50 IN	VP6385	VP6023	VPR6365	VPR6023
	3W4P	.65 - 1.50 IN	VP6485	VP6034	VPR6465	VPR6034

MODIFICATIONS*	
CATALOG NUMBER	DESCRIPTION
S39	Reverse service for receptacles, plugs & connectors
S37	Polarization for receptacles, plugs & connectors

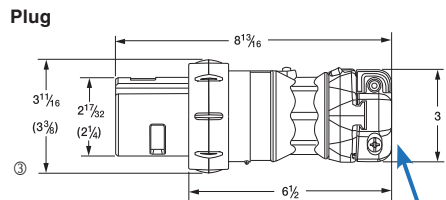
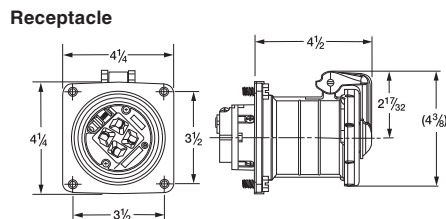
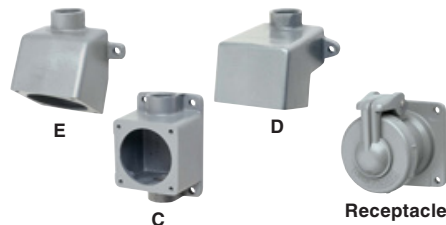
* See page PR3 for more information on these options.

60 AMP RECEPTACLES & BACK BOXES									
GROUND STYLE	CIRCUIT	CATALOG NUMBER							
		E [ⓐ] TYPE DEAD END		C [ⓑ] TYPE FEED THRU		D [ⓒ] TYPE ANGLED FEED THRU		RECEPTACLE ONLY	
		ORIG.	AT	ORIG.	AT	ORIG.	AT	ORIG.	AT
Style I	2W2P	VR621E4	VR6022E4	VR621C4	VR6022C4	VR621D4	VR6022D4	VR621	VR6022
	3W3P	VR631E4	VR6033E4	VR631C4	VR6033C4	VR631D4	VR6033D4	VR631	VR6033
	4W4P	VR641E4	VR6044E4	VR641C4	VR6044C4	VR641D4	VR6044D4	VR641	VR6044
Style II	2W3P	VR632E4	VR6023E4	VR632C4	VR6023C4	VR632D4	VR6023D4	VR632	VR6023
	3W4P	VR642E4	VR6034E4	VR642C4	VR6034C4	VR642D4	VR6034D4	VR642	VR6034
Splice box only [ⓓ]		VRE46	VRE46	VRC46	VRC46	VRD46	VRD46	-	-

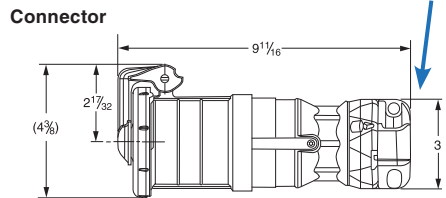
① Components are interchangeable & UL classified with other UL1686 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device.

② 60 Amp Back Boxes are available in 1", 1-1/4" and 1-1/2" conduit sizes. Size listed above is 1-1/4". For other available sizes, change the BOLD "4" in either the assembly or box only number as follows: **3=1"**, **4=1-1/4"**, **5=1-1/2"**. Assembly catalog numbers are listed for ease of ordering or specification and devices are shipped as components.

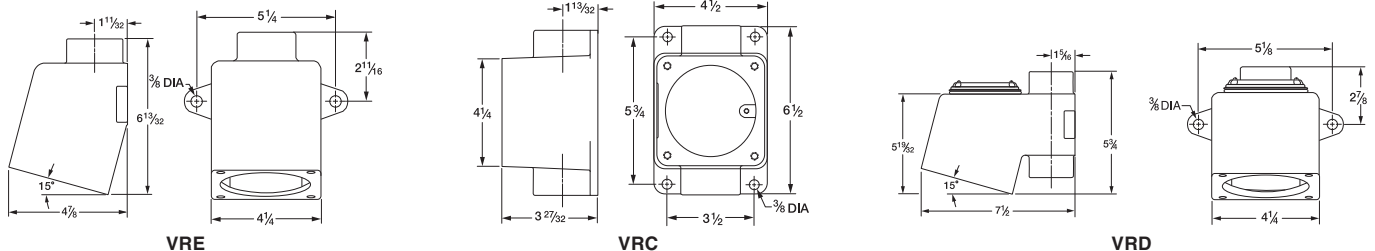
③ 60 Amp receptacles also fit 100 Amp mounting boxes - Dimensions in () are 3 pole devices; balance are 4 pole.



VersaMate® clamps provide a firm fit for one plug (or connector) over a wide range of cable diameters (competitors often need two - requiring additional sizing decisions).



Back Box Dimensions





INTRODUCTION • NEMA 4X METALLIC



VR/VP



ALLEN/SLOT TERMINALS



VSQ



VBQ

600 VAC/250VDC; 50-400 hertz
 NEMA 3, 4, 4X
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 NEMA 7 B, C, D^②
 Class I, Zones 1 & 2, IIB+H2, IIA^②
 Class II, Div. 1 & 2, Groups F & G;
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 Class III^②



FEATURES-SPECIFICATIONS

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Standard Materials:

Copper-free aluminum construction with electrostatically applied epoxy/polyester finish. Contacts are brass with a patented beryllium copper spring tensiometer. External screws are 316 stainless steel.

Features:

The VersaMate product line includes 30, 60, 150^①, 100 and 200 Amp plugs, receptacles and connectors with a full range of back boxes. Popular options include reverse service and polarization. The VersaMate line is **FULLY INTERCHANGEABLE**^① with UL1686 configured and listed devices such as Crouse-Hinds® Arktite® or Appleton® Powertite®. Standard location receptacle bolt hole patterns match competitive back boxes so users can upgrade to VersaMate without changing back boxes in instances where changing the conduit system is difficult.

Plugs:

Octagonal style (patented) for a firm and sure grip when connecting or disconnecting is featured on both plug and cable connector bodies. Insulators have high mechanical and dielectric strength and are “Low Arc Tracking.” “Increased Safety” type box terminals with gripper ribs securely clamp around conductors. Funneled conductor entry chambers lead all properly stripped conductors into terminals **simultaneously**. NEMA 4X rating when inserted into VersaMate receptacle and locking ring is tightened. Includes suitability for Type P marine cable.



Receptacles:

Exclusive Patented “Breach-Lock” cap serves as either flip lid or screw cover. Receptacle is NEMA 3R with lid snapped shut or NEMA 4X with lid turned shut or when VersaMate plug is inserted and locking ring tightened. Patented notch in cap arm holds cap open for easy plug insertion or maintenance. Patented pin design uses slotted spring clip which avoids excessive wear while providing continuous electrical pin to sleeve contact. VersaMate® receptacles use the same “Increased Safety” terminals and funnel design as VersaMate® plugs.



Cable Clamping Assembly:

Plugs and cable connectors are supplied with an exclusive neoprene “Onion Skin” peel-away type grommet. The VersaMate® cable clamp system captures cable with **four grip points** using **only two** tightening screws. Clamp guide assembly provides a firm fit over a wide range of cable diameters. Non-removable set screws prevent clamp guide assembly from backing out. Clamps have smooth contoured shoulder design to prevent snags or damage when moving equipment.



Back Boxes:

VersaMate back boxes come in a variety of mounting styles. Exclusive “blind” receptacle mounting holes prevent moisture from entering box via thread cavities. Boxes come with a green grounding screw.



RECEPTACLES

VERSAMATE® SERIES







FEATURES / COMPARISONS



- First NEMA 4X – Still the BEST!
- Exclusive interior gasketing
- Exclusive Terminal Designs
 - » No conductor machining
 - » Allen or Phillips types

- Exclusive Onion-Skin Gasket
 - » Perfect Cable Fit
- Exclusive 4-Point Cable Grip
 - » Uses only 2 Recessed Screws
- Exclusive Breech-Lock Cap
 - » Flip or Screw-On
 - » Notch to hold open

KILLARK BRAND	RECEPTACLE/CONNECTOR PIN CONFIGURATION					
	STYLE 1			STYLE 2		
TERMINALS	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*
 <p>New Allen/slot terminal screws do not contact or machine conductor. Allows higher torque values typical in the oil industry.</p>	30	2W2P		60	2W3P	
		3W3P			3W4P	
4W4P			100		2W3P	
 <p>VersaMate original Phillips/slot "Increased Safety" type terminals reduce connection fatigue. Screws do not contact or machine conductor and are under spring tension to reduce loosening and pullout due to vibration.</p>		2W2P			3W4P	
		3W3P			150A	2W3P
		4W4P		200		3W4P
CAP	100	2W2P			200	2W3P
 <p>"Breech-Lock" design serves as both flip lid or screw cover style. Special notch in lid arm holds cover open to ease plug insertion or maintenance. *Slip pencil or screwdriver into notch.</p>		3W3P		3W4P		
		4W4P		150A		200
GASKET	150A	4W4P				
 <p>Exclusive "Onion Skin" style gasket assures a tight seal around cable. Skin layers are removed from a single gasket to adjust for various cable diameters.</p>	200	3W3P		200	3W4P	
		4W4P				

REVERSE SERVICE: S39

Add suffix **S39** for factory Reverse Service of receptacles, plugs or connectors. Receptacles or connectors are assembled with plug interiors while plugs are assembled with receptacle interiors. For applications where the plug is energized (i.e. from a generator) to feed a non-energized receptacle. Prevents easy contact with energized exposed pins. This conversion can be performed in the field with a complementary plug and receptacle (30A to 150A devices shown on pages PR5-PR8). 200A Amp devices shown on page PR9 are a factory-only option. Reverse service is not for hazardous locations.



Typical Application

POLARIZED OPTION: S37

Add suffix **S37** for special polarity.

Can prevent connection between mismatched voltages or frequencies in areas where devices of the same amperage, poles and grounding style are used. Receptacle or connector interiors are rotated 22-1/2° to the right; plug is rotated opposite to match. This is a factory only option.



Standard



S37 Option



EXCLUSIVE FEATURES & GROUNDING METHODS



P **Patented** Exclusive “Breech-Lock” cap serves as either flip lid or screw cover

- NEMA 3R Rating: When receptacle cap is snapped shut
- NEMA 4X Rating: When receptacle cap is turned shut or with VersaMate® plug inserted and ring tightened

P **Patented** Special notch is designed to hold cap open for easy field service or plug insertion with **two** free hands

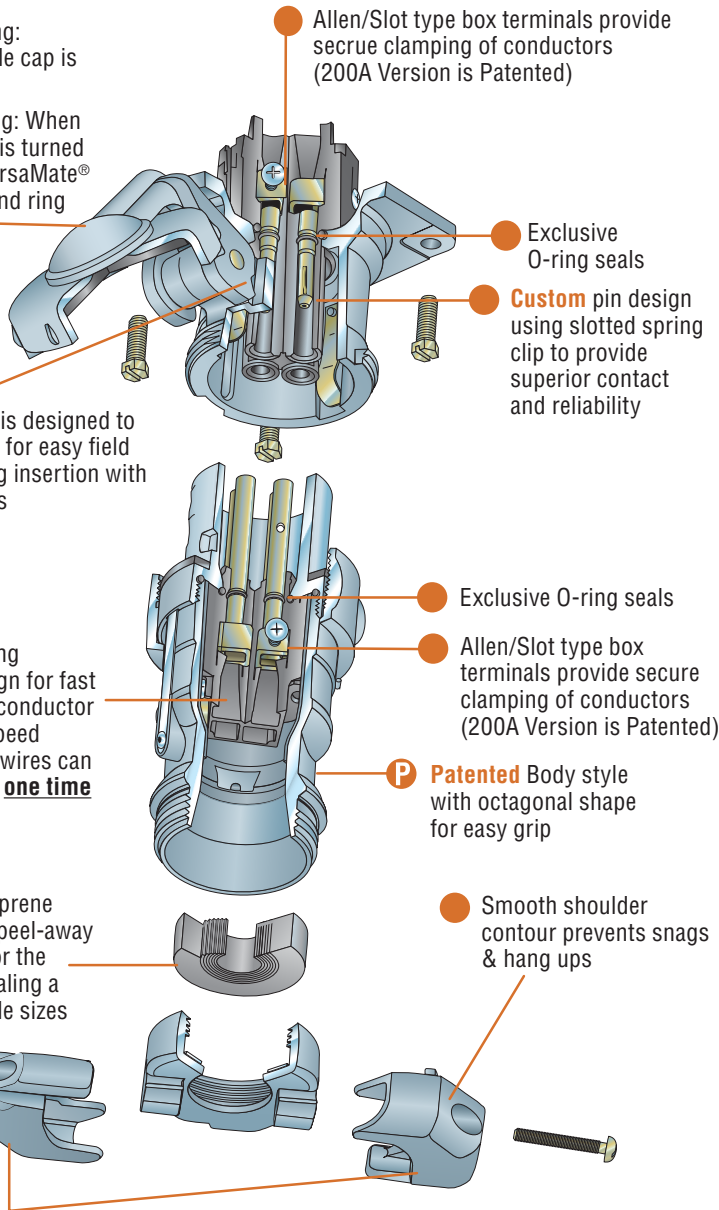
• Funneled wiring chamber design for fast and accurate conductor insertion to speed assembly. All wires can be inserted at **one time**

• Exclusive neoprene “Onion Skin” peel-away type gasket for the ultimate in sealing a variety of cable sizes

• The VersaMate® Cable clamp system captures cable with four grip points using only two tightening screws. Provides secure grip without damaging the cable insulation

• **Unique VersaMate® Feature**
The VersaMate Line is designed for the industrial customer based on engineering and user surveys

P **Denotes Patented Feature**

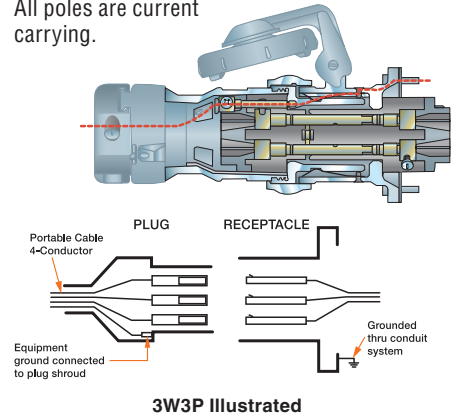


Grounding:

To minimize the danger of electrical shock when utilizing portable equipment, the National Electrical Code requires exposed metal parts be grounded if operated at more than 150 volts to ground. The VersaMate® plug & receptacle system is available in two grounding styles. Please note Style I and II devices cannot be intermated.

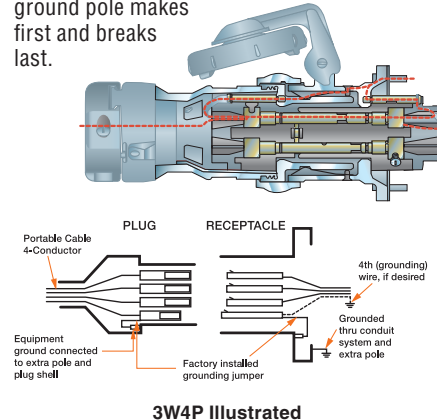
Style I

In a Style I plug, the cable's ground conductor is bonded to the plug housing by means of solderless connector. The receptacle is grounded by being part of a grounded conduit system. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing before current carrying poles. All poles are current carrying.



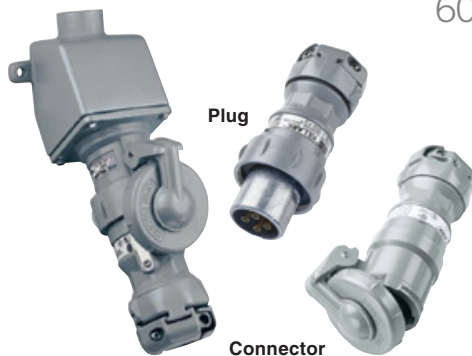
Style II

In a Style II plug, the cable's ground conductor is bonded to the extra grounding pole and to the plug housing via a bonding jumper. The receptacle has a matching grounding pole connected to the system ground conductor which is further tied to the grounded conduit system via a bonding jumper. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing; then the extra long ground pole connects before the current carrying poles engage. The Style II ground pole makes first and breaks last.





60A SELECTION INFORMATION



Plug

Connector



Original or AT
Terminals. See PR3 for
more information

• 60 Amp 600VAC/250VDC; 50-400 Hertz
NEMA 3, 4, 4X^①

Wire Range

Regular Stranding: #6 - #2 original style or "AT" type
(Includes Type P marine)
Extra flex: #6 - #4 original style or "AT" type

UL File No. E10757 SP Certified File No. LR111846

FEATURES-SPECIFICATIONS

60 AMP PLUGS & CONNECTORS						
GROUND STYLE	CIRCUIT	GROMMET RANGE	CATALOG NUMBER			
			PLUG		CONNECTOR	
			ORIG.	AT	ORIG.	AT
Style I	2W2P	.65 - 1.50 IN	VP6275	VP6022	VPR6255	VPR6022
	3W3P	.65 - 1.50 IN	VP6375	VP6033	VPR6355	VPR6033
	4W4P	.65 - 1.50 IN	VP6475	VP6044	VPR6455	VPR6044
Style II	2W3P	.65 - 1.50 IN	VP6385	VP6023	VPR6365	VPR6023
	3W4P	.65 - 1.50 IN	VP6485	VP6034	VPR6465	VPR6034

MODIFICATIONS*	
CATALOG NUMBER	DESCRIPTION
S39	Reverse service for receptacles, plugs & connectors
S37	Polarization for receptacles, plugs & connectors

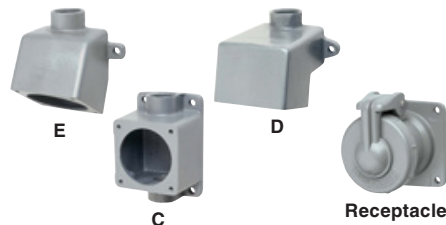
* See page PR3 for more information on these options.

60 AMP RECEPTACLES & BACK BOXES									
GROUND STYLE	CIRCUIT	CATALOG NUMBER							
		E [ⓐ] TYPE DEAD END		C [ⓑ] TYPE FEED THRU		D [ⓒ] TYPE ANGLED FEED THRU		RECEPTACLE ONLY	
		ORIG.	AT	ORIG.	AT	ORIG.	AT	ORIG.	AT
Style I	2W2P	VR621E4	VR6022E4	VR621C4	VR6022C4	VR621D4	VR6022D4	VR621	VR6022
	3W3P	VR631E4	VR6033E4	VR631C4	VR6033C4	VR631D4	VR6033D4	VR631	VR6033
	4W4P	VR641E4	VR6044E4	VR641C4	VR6044C4	VR641D4	VR6044D4	VR641	VR6044
Style II	2W3P	VR632E4	VR6023E4	VR632C4	VR6023C4	VR632D4	VR6023D4	VR632	VR6023
	3W4P	VR642E4	VR6034E4	VR642C4	VR6034C4	VR642D4	VR6034D4	VR642	VR6034
Splice box only [ⓓ]		VRE46	VRE46	VRC46	VRC46	VRD46	VRD46	-	-

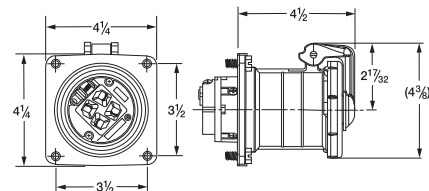
① Components are interchangeable & UL classified with other UL1686 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device.

② 60 Amp Back Boxes are available in 1", 1-1/4" and 1-1/2" conduit sizes. Size listed above is 1-1/4". For other available sizes, change the BOLD "4" in either the assembly or box only number as follows: **3**=1", **4**=1-1/4", **5**=1-1/2". Assembly catalog numbers are listed for ease of ordering or specification and devices are shipped as components.

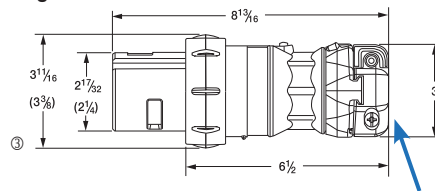
③ 60 Amp receptacles also fit 100 Amp mounting boxes - Dimensions in () are 3 pole devices; balance are 4 pole.



Receptacle

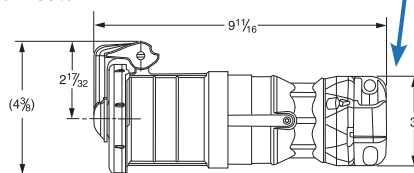


Plug



VersaMate® clamps provide a firm fit for one plug (or connector) over a wide range of cable diameters (competitors often need two - requiring additional sizing decisions).

Connector



Back Box Dimensions

