

# DX



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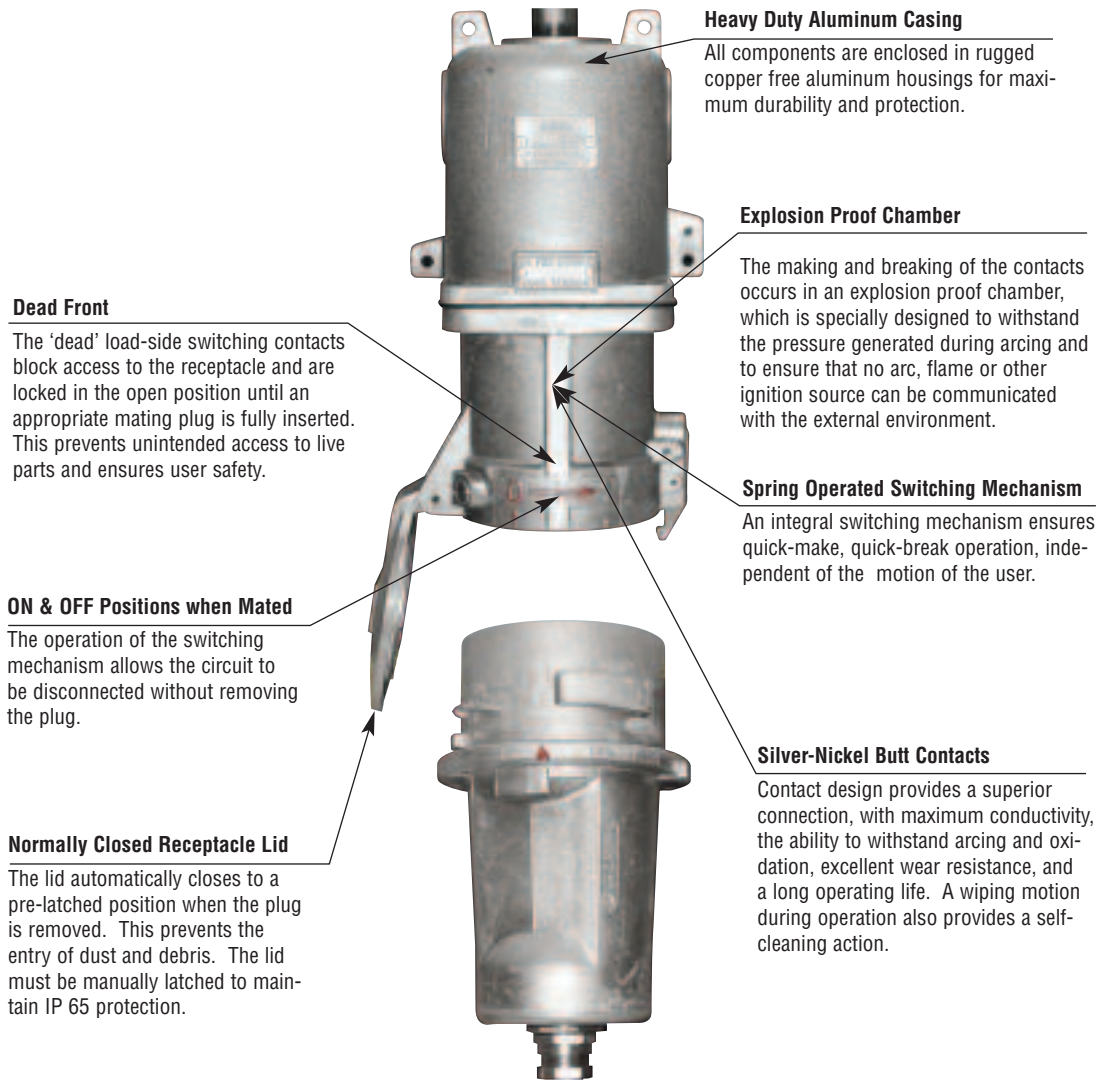
## Hazardous duty rated plugs and receptacles

DX Series plugs and receptacles are heavy duty metallic devices that are a good choice for refineries, petroleum platforms, chemical and pharmaceutical plants, grain silos and other locations where exposure to flammable gases and/or dusts is likely to occur. DX's are ATEX rated and they have also been tested and approved by ETL for operation under load in a gaseous environment (14.5% acetylene). This is one of the key performance tests required for UL Class 1, Division 1 products.

### Main Advantages

- ▼ Rugged Construction, cost effective design
- ▼ ATEX II 2 G/D T85°C Eex ed IIC T6 rated for Zone 1 and Zone 21 applications

# Product Features



### Heavy Duty Aluminum Casing

All components are enclosed in rugged copper free aluminum housings for maximum durability and protection.

### Explosion Proof Chamber

The making and breaking of the contacts occurs in an explosion proof chamber, which is specially designed to withstand the pressure generated during arcing and to ensure that no arc, flame or other ignition source can be communicated with the external environment.

### Spring Operated Switching Mechanism

An integral switching mechanism ensures quick-make, quick-break operation, independent of the motion of the user.

### Silver-Nickel Butt Contacts

Contact design provides a superior connection, with maximum conductivity, the ability to withstand arcing and oxidation, excellent wear resistance, and a long operating life. A wiping motion during operation also provides a self-cleaning action.

### Dead Front

The 'dead' load-side switching contacts block access to the receptacle and are locked in the open position until an appropriate mating plug is fully inserted. This prevents unintended access to live parts and ensures user safety.

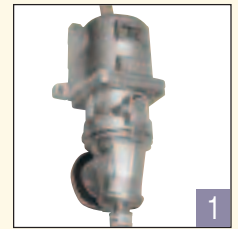
### ON & OFF Positions when Mated

The operation of the switching mechanism allows the circuit to be disconnected without removing the plug.

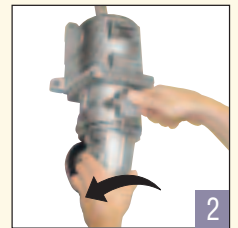
### Normally Closed Receptacle Lid

The lid automatically closes to a pre-latched position when the plug is removed. This prevents the entry of dust and debris. The lid must be manually latched to maintain IP 65 protection.

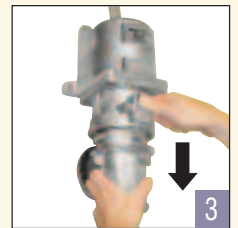
## Operating Instructions



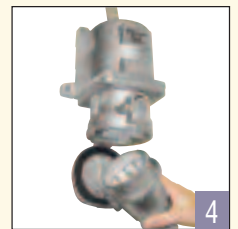
When a DX is connected there is total safety.



Pressing the pawl while turning the plug about 30° counterclockwise causes the circuit to be broken.



Press the pawl while withdrawing the plug from the receptacle. This is done in complete safety because the circuit is already dead.



The plug and receptacle are separated. The safety shutter prevents access to live parts.

**5** To reconnect, insert plug into receptacle fully, then twist the plug approximately 30° clockwise to make the circuit.

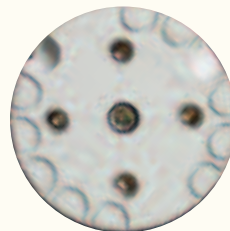
## General Ratings

Amperage	20 to 100A
Voltage	600 VAC Max
Frequency	50-400 Hz
Environmental	IP65
Temperature	min -5°F/max 120°F*

\* DX20 and DX30 only. DX60 and DX100 are max 105°F

## Highlighted Feature

### Dead Front



The dead front on the DX receptacle provides protection from accidental tool and wire insertion.

# DX Certifications

## Hazardous Duty Certification

### ATEX

#### II 2 G/D DUST T85°C EEx ed IIC T6

- II** – Indicates suitability for installation in surface applications (as opposed to underground mine applications).
- 2** – Indicates suitability for use where a high level of protection is required and where the presence of an explosive atmosphere is likely to occur (Zone 1 and Zone 21 environments).
- G/D** – Indicates suitability for installation in areas that may contain flammable gases, vapors/mists, or dusts.
- T85°C** – Indicates a maximum surface temperature of the product of 85°C, at 40°C ambient.
- EEx ed** – Indicates that explosion protection is provided with (e) increased safety in the conductor termination area, and (d) explosion proof chambers for making and breaking the current that can withstand the pressure of internal ignition and that prevent arcs, flame or other ignition events from being communicated to the surrounding atmosphere.
- IIC** – Indicates suitability for installation in areas where exposure to any type of gas, including the most dangerous subdivision C gases may occur.
- T6** – Temperature class – the maximum product surface temperature is 185°F (85°C) for ambient temperature of 104°F (40°).

*ATEX certification was performed by LCIE.*

## Electrical Performance Testing

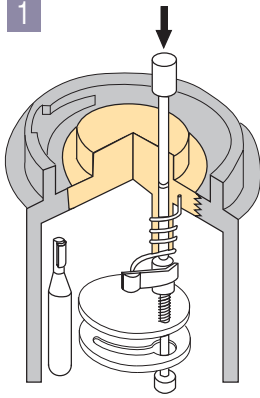
Key Performance Tests Passed				
Model	Mechanical Endurance	Electrical Endurance <sup>1</sup>	Overload Testing <sup>2</sup>	Dielectric Test
DX20	-	5000 Operations	50 Operations	2 x V (rated) + 1000V
DX30	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000V
DX60	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000V
DX100	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000V

<sup>1</sup> @ 100% of rated current and voltage and 0.6 power factor    <sup>2</sup> @ 125% of rated current, 110% of rated voltage, & 0.6 power factor

# DX Operation

## Connection

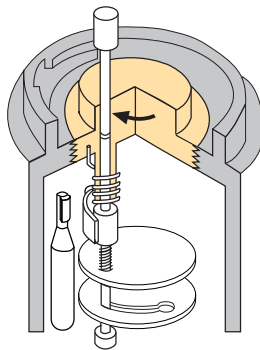
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### Insertion of the Plug

As the plug contact is inserted, it engages and depresses the 'dead' switching contact. This releases the locking mechanism. The switching contact is free to operate.

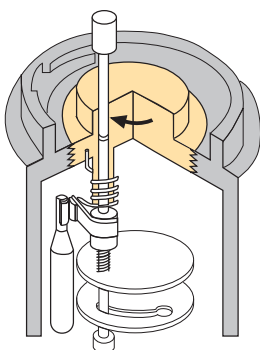
2



### Charging the Operating Spring

Clockwise rotation of the inserted plug winds the operating spring and rotates the switching contact into position to engage with the live receptacle contact.

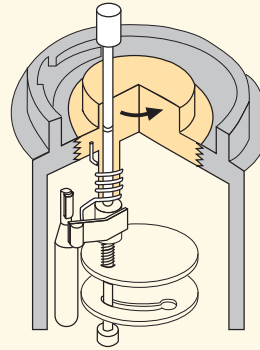
3



### Making the Circuit

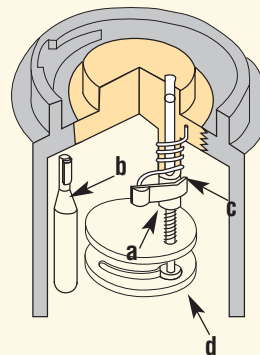
With the final few degrees of rotation, the switching contact is released and force from the spring quickly drives it into engagement with the live receptacle contact.

## Disconnection



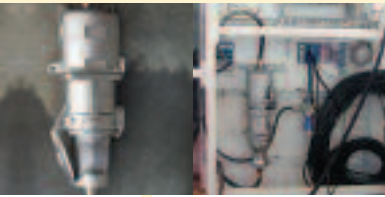
After depressing the pawl, the plug is rotated in a counter-clockwise direction. This frees the switching contact for operation and the release of the remaining spring tension causes a quick breaking of the contacts. The plug may now be removed, if desired.

## Receptacle with Plug Disconnected



- a. **Switching Contact**  
Shown in the open (dead) position
- b. **'Live' Receptacle Contact**  
Accessibility is denied
- c. **Operating Spring**  
Shown with tension released
- d. **Mechanical Locking Device**  
Blocks contact operation

# DX20



## DX – 20A Hazardous Duty Plugs & Receptacles

### Ratings

- Voltage**  
600 VAC
- Environmental Ratings**  
IP65
- Temperature Range**  
Min -5°F/Max 120°F
- Wiring Capacity\***  
Min 14 AWG Max 6 AWG  
\*Based on THHN wire sizes
- Listings**  
ATEX

### XXXX Suffix / Cable Range

XXXX (Suffix #)	Cable Range
-CG1275	.125 - .250
-CG2575	.250 - .375
-CG3775	.375 - .500
-CG5075	.500 - .625
-CG6275	.625 - .750
-CG7575	.750 - .875

### XX Suffix / NPT Size

NPT Thread Size	XX (Suffix #)
1/2"	-12
3/4"	-34
1"	-1

NPT sizes are determined by the cable diameter and third party cord grip.

### Accessories



**Protective Cap**

*For Male Devices Only*

**Part #**

DX20 26-2A126



**Surface Box**

**Part #**

1/2" 26-2A023-12

3/4" 26-2A023-34

1" 26-2A023-1

### Plug (male inlet w/handle)



Replace XXXX or XX with suffix number to indicate desired cable range (see chart)

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-21167-XXXX
125V	1P+N+E	26-21075-XXXX
125/250V	2P+N+E	26-21076-XXXX
208V	2P+E	26-21162-XXXX
208V	3P+E	26-21163-XXXX
250V	2P+E	26-21072-XXXX
250V	3P+E	26-21073-XXXX
277V	1P+N+E	26-21045-XXXX
277/480V	3P+N+E	26-21047-XXXX
480V	2P+E	26-21042-XXXX
480V	3P+E	26-21043-XXXX
600V	3P+E	26-21143-XXXX

### Inlet w/cap on box (male)



or

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-26167-XX
125V	1P+N+E	26-26075-XX
125/250V	2P+N+E	26-26076-XX
208V	2P+E	26-26162-XX
208V	3P+E	26-26163-XX
250V	2P+E	26-26072-XX
250V	3P+E	26-26073-XX
277V	1P+N+E	26-26045-XX
277/480V	3P+N+E	26-26047-XX
480V	2P+E	26-26042-XX
480V	3P+E	26-26043-XX
600V	3P+E	26-26143-XX

Other voltage configurations are available – contact customer service at 800.433.7642.

### Connector

(female receptacle w/handle)



### Receptacle on box

(female)



or

### Receptacle

(female)



or

Voltage	Polarity	Part # Metal	Part # Metal	Part # Metal
120/208V	3P+N+E	26-23167-XXXX	26-20167-XX	26-24167
125V	1P+N+E	26-23075-XXXX	26-20075-XX	26-24075
125/250V	2P+N+E	26-23076-XXXX	26-20076-XX	26-24076
208V	2P+E	26-23162-XXXX	26-20162-XX	26-24162
208V	3P+E	26-23163-XXXX	26-20163-XX	26-24163
250V	2P+E	26-23072-XXXX	26-20072-XX	26-24072
250V	3P+E	26-23073-XXXX	26-20073-XX	26-24073
277V	1P+N+E	26-23045-XXXX	26-20045-XX	26-24045
277/480V	3P+N+E	26-23047-XXXX	26-20047-XX	26-24047
480V	2P+E	26-23042-XXXX	26-20042-XX	26-24042
480V	3P+E	26-23043-XXXX	26-20043-XX	26-24043
600V	3P+E	26-23143-XXXX	26-20143-XX	26-24143

Other voltage configurations are available – contact customer service at 800.433.7642.

# DX – 30A

## Hazardous Duty Plugs & Receptacles

DX30

### Plug (male inlet w/handle)



Replace XXXX or XX with suffix number to indicate desired cable range (see chart)

or

### Inlet w/cap on box (male)



### Main Features

- **Voltage**  
600 VAC
- **Environmental Ratings**  
IP65
- **Temperature Range**  
Min -5°F/Max 120°F
- **Wiring Capacity**  
Min 14 AWG Max 6 AWG  
\* Based on THHN wire sizes
- **Listings**  
ATEX

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-31167-XXXX
125V	1P+N+E	26-31075-XXXX
125/250V	2P+N+E	26-31076-XXXX
208V	2P+E	26-31162-XXXX
208V	3P+E	26-31163-XXXX
250V	2P+E	26-31072-XXXX
250V	3P+E	26-31073-XXXX
277V	1P+N+E	26-31045-XXXX
277/480V	3P+N+E	26-31047-XXXX
480V	2P+E	26-31042-XXXX
480V	3P+E	26-31043-XXXX
600V	3P+E	26-31143-XXXX

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-36167-XX
125V	1P+N+E	26-36075-XX
125/250V	2P+N+E	26-36076-XX
208V	2P+E	26-36162-XX
208V	3P+E	26-36163-XX
250V	2P+E	26-36072-XX
250V	3P+E	26-36073-XX
277V	1P+N+E	26-36045-XX
277/480V	3P+N+E	26-36047-XX
480V	2P+E	26-36042-XX
480V	3P+E	26-36043-XX
600V	3P+E	26-36143-XX

### XXXX Suffix / Cable Range

XXXX (Suffix #)	Cable Range
-CG1275	.125 - .250
-CG2575	.250 - .375
-CG3775	.375 - .500
-CG5075	.500 - .625
-CG6275	.625 - .750
-CG7575	.750 - .875

Other voltage configurations are available – contact customer service at 800.433.7642.

### Connector (female receptacle w/handle)



or

### Receptacle on box (female)



or

### Receptacle (female)



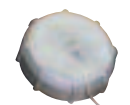
### XX Suffix / NPT Size

NPT Thread Size	XX (Suffix #)
1/2"	-12
3/4"	-34
1"	-1

NPT sizes are determined by the cable diameter and third party cord grip.

Voltage	Polarity	Part # Metal	Part # Metal	Part # Metal
120/208V	3P+N+E	26-33167-XXXX	26-30167-XX	26-34167
125V	1P+N+E	26-33075-XXXX	26-30075-XX	26-34075
125/250V	2P+N+E	26-33076-XXXX	26-30076-XX	26-34076
208V	2P+E	26-33162-XXXX	26-30162-XX	26-34162
208V	3P+E	26-33163-XXXX	26-30163-XX	26-34163
250V	2P+E	26-33072-XXXX	26-30072-XX	26-34072
250V	3P+E	26-33073-XXXX	26-30073-XX	26-34073
277V	1P+N+E	26-33045-XXXX	26-30045-XX	26-34045
277/480V	3P+N+E	26-33047-XXXX	26-30047-XX	26-34047
480V	2P+E	26-33042-XXXX	26-30042-XX	26-34042
480V	3P+E	26-33043-XXXX	26-30043-XX	26-34043
600V	3P+E	26-33143-XXXX	26-30143-XX	26-34143

### Accessories



Protective Cap

For Male Devices Only

Part #

DX30 26-3A126



Surface Box

NPT Part #

1/2"	26-3A023-12
3/4"	26-3A023-34
1"	26-3A023-1

Other voltage configurations are available – contact customer service at 800.433.7642.

Courtesy of Gross Automation 1724 South Johnson Road New Berlin, WI PH: 262-446-0000 FAX: 262-446-0300 www.meltricsales.com



## DX – 60A Hazardous Duty Plugs & Receptacles

### Ratings

- Voltage**  
600 VAC
- Environmental Ratings**  
IP65
- Temperature Range**  
Min -5°F/Max 105°F
- Wiring Capacity\***  
Min 8 AWG Max 2 AWG  
\*Based on THHN wire sizes
- Listings**  
ATEX

### XXXX Suffix / Cable Range

XXXX (Suffix #)	Cable Range
-CG75125	.750 - .875
-CG87125	.875 - 1.000
-CG100125	1.000 - 1.125
-CG112125	1.125 - 1.250
-CG125125	1.250 - 1.375
-CG137125	1.375 - 1.500

### XX Suffix / NPT Size

NPT Thread Size	XX (Suffix #)
1"	-1
1 1/4"	-114
1 1/2"	-112
2"	-2

NPT sizes are determined by the cable diameter and third party cord grip.

### Accessories



**Protective Cap**

*For Male Devices Only*

**Part #**



**Metal Wall Box**

**NPT**

**Part #**

DX60	26-6A126
1"	26-6A023-1
1 1/4"	26-6A023-114
1 1/2"	26-6A023-112
2"	26-6A023-2

### Plug (male inlet w/handle)



Replace XXXX or XX with suffix number to indicate desired cable range (see chart)

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-61167-XXXX
125V	1P+N+E	26-61075-XXXX
125/250V	2P+N+E	26-61076-XXXX
208V	2P+E	26-61162-XXXX
208V	3P+E	26-61163-XXXX
250V	2P+E	26-61072-XXXX
250V	3P+E	26-61073-XXXX
277V	1P+N+E	26-61045-XXXX
277/480V	3P+N+E	26-61047-XXXX
480V	2P+E	26-61042-XXXX
480V	3P+E	26-61043-XXXX
600V	3P+E	26-61143-XXXX

### Inlet w/cap on box (male)



or

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-66167-XX
125V	1P+N+E	26-66075-XX
125/250V	2P+N+E	26-66076-XX
208V	2P+E	26-66162-XX
208V	3P+E	26-66163-XX
250V	2P+E	26-66072-XX
250V	3P+E	26-66073-XX
277V	1P+N+E	26-66045-XX
277/480V	3P+N+E	26-66047-XX
480V	2P+E	26-66042-XX
480V	3P+E	26-66043-XX
600V	3P+E	26-66143-XX

Other voltage configurations are available – contact customer service at 800.433.7642.

### Connector (female receptacle w/handle)



or

### Receptacle on box (female)



or

### Receptacle (female)



Voltage	Polarity	Part # Metal	Part # Metal	Part # Metal
120/208V	3P+N+E	26-63167-XXXX	26-60167-XX	26-64167
125V	1P+N+E	26-63075-XXXX	26-60075-XX	26-64075
125/250V	2P+N+E	26-63076-XXXX	26-60076-XX	26-64076
208V	2P+E	26-63162-XXXX	26-60162-XX	26-64162
208V	3P+E	26-63163-XXXX	26-60163-XX	26-64163
250V	2P+E	26-63072-XXXX	26-60072-XX	26-64072
250V	3P+E	26-63073-XXXX	26-60073-XX	26-64073
277V	1P+N+E	26-63045-XXXX	26-60045-XX	26-64045
277/480V	3P+N+E	26-63047-XXXX	26-60047-XX	26-64047
480V	2P+E	26-63042-XXXX	26-60042-XX	26-64042
480V	3P+E	26-63043-XXXX	26-60043-XX	26-64043
600V	3P+E	26-63143-XXXX	26-60143-XX	26-64143

Other voltage configurations are available – contact customer service at 800.433.7642.

# DX – 100A

## Hazardous Duty Plugs & Receptacles

DX100

### Plug (male inlet w/handle)



Replace XXXX or XX with suffix number to indicate desired cable range (see chart)

or

### Inlet w/cap on box (male)



Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-91167-XXXX
125V	1P+N+E	26-91075-XXXX
125/250V	2P+N+E	26-91076-XXXX
208V	2P+E	26-91162-XXXX
208V	3P+E	26-91163-XXXX
250V	2P+E	26-91072-XXXX
250V	3P+E	26-91073-XXXX
277V	1P+N+E	26-91045-XXXX
277/480V	3P+N+E	26-91047-XXXX
480V	2P+E	26-91042-XXXX
480V	3P+E	26-91043-XXXX
600V	3P+E	26-91143-XXXX

Voltage	Polarity	Part # Metal
120/208V	3P+N+E	26-96167-XX
125V	1P+N+E	26-96075-XX
125/250V	2P+N+E	26-96076-XX
208V	2P+E	26-96162-XX
208V	3P+E	26-96163-XX
250V	2P+E	26-96072-XX
250V	3P+E	26-96073-XX
277V	1P+N+E	26-96045-XX
277/480V	3P+N+E	26-96047-XX
480V	2P+E	26-96042-XX
480V	3P+E	26-96043-XX
600V	3P+E	26-96143-XX

Other voltage configurations are available – contact customer service at 800.433.7642.

### Main Features

- **Voltage**  
600 VAC
- **Environmental Ratings**  
IP65
- **Temperature Range**  
Min -5°F/Max 105°F
- **Wiring Capacity\***  
Min 4 AWG Max 2 AWG  
\* Based on THHN wire sizes
- **Listings**  
ATEX

### XXXX Suffix / Cable Range

XXXX (Suffix #)	Cable Range
-CG75125	.750 - .875
-CG87125	.875 - 1.000
-CG100125	1.000 - 1.125
-CG112125	1.125 - 1.250
-CG125125	1.250 - 1.375
-CG137125	1.375 - 1.500

### XX Suffix / NPT Size

NPT Thread Size	XX (Suffix #)
1"	-1
1 1/4"	-114
1 1/2"	-112
2"	-2

NPT sizes are determined by the cable diameter and third party cord grip.

### Accessories



For Male Devices Only

**Protective Cap**

**Part #**

DX100 26-9A126



**Metal Wall Box**

**NPT**

**Part #**

1" 26-9A023-1

1 1/4" 26-9A023-114

1 1/2" 26-9A023-112

2" 26-9A023-2

### Connector (female receptacle w/handle)



or

### Receptacle on box (female)



or

### Receptacle (female)



Voltage	Polarity	Part # Metal	Part # Metal	Part # Metal
120/208V	3P+N+E	26-93167-XXXX	26-90167-XX	26-94167
125V	1P+N+E	26-93075-XXXX	26-90075-XX	26-94075
125/250V	2P+N+E	26-93076-XXXX	26-90076-XX	26-94076
208V	2P+E	26-93162-XXXX	26-90162-XX	26-94162
208V	3P+E	26-93163-XXXX	26-90163-XX	26-94163
250V	2P+E	26-93072-XXXX	26-90072-XX	26-94072
250V	3P+E	26-93073-XXXX	26-90073-XX	26-94073
277V	1P+N+E	26-93045-XXXX	26-90045-XX	26-94045
277/480V	3P+N+E	26-93047-XXXX	26-90047-XX	26-94047
480V	2P+E	26-93042-XXXX	26-90042-XX	26-94042
480V	3P+E	26-93043-XXXX	26-90043-XX	26-94043
600V	3P+E	26-93143-XXXX	26-90143-XX	26-94143

Other voltage configurations are available – contact customer service at 800.433.7642.

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