

DX

Hazardous Location



Main Advantages

- Rugged construction
- Cost effective design
- Rated for Zone 1 and Zone 21 application

- Features and Ratings p. 206
- Certifications and Testing p. 207
- Operation p. 208
- DX1 p. 209
- DX3 p. 210
- DX6 p. 211
- DX9 p. 212
- Dimensions p. 213

SCAN ME >>



PRODUCT FEATURES

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

Self-Returning Receptacle Lid
The lid automatically self-returns 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 IP65 protection.

Heavy-Duty Aluminum Casing
All components are enclosed in rugged, copper free aluminum housings for maximum durability and protection.

Arc Isolation Chamber
Minimizes gas/dust volume present during arcing, withstands internal pressure due to ignition of it and isolates the ignition from the outside 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-Style 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.

General Ratings

Amperage	20 to 125 A
Voltage	750 VAC
Frequency	50-400 Hz
Environmental	IP65
Temperature	min -13°F/max 140°F* (DX1/DX3) Min -15°F/Max 140°F* (DX6/DX9)

NOM listing available. Contact Engineering for more information.

Highlighted Feature

Dead-front



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

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.



Now that the circuit is safely de-energized, continue pressing the pawl while withdrawing the plug from the receptacle.



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.

DX Certifications

Hazardous Duty Certification

ATEX and IECEx

Ex II 2 G/D Ex de IIC tD A21

- 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.
- Ex de** – Protection method for gas atmospheres indicating 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.
- tD** – Protection method for dust atmospheres indicating that explosion protection is provided by the type of enclosure (casing) used.
- A21** – Indicates a dust tight enclosure (IP6x) is used to achieve a Zone 21 rating.

ATEX & IECEx certification was performed by LCIE.

* Temperature ratings vary depending on product and ambient temperature. See specific product section for temperature ratings.

Electrical Performance Testing

Key Performance Tests Passed				
Model	Mechanical Endurance	Electrical Endurance ¹	Overload Testing ²	Dielectric Test
DX1	-	5000 Operations	50 Operations	2 x V (rated) + 1000 V
DX3	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000 V
DX6	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000 V
DX9	1000 Cycles	1000 Operations	50 Operations	2 x V (rated) + 1000 V

¹ @ 100% of rated current and voltage and 0.6 power factor.

² @ 125% of rated current, 110% of rated voltage, & 0.6 power factor.

DX complies with	
ATEX	2014/35/EV Directive
IEC/EN	60079-0
	60079-1
	60079-7
	60079-31

DX Operation

Connection

1



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.

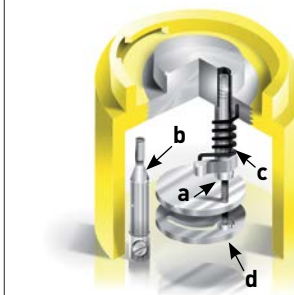
Disconnection



After depressing the pawl, the plug is rotated in a counterclockwise 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

DX1 Hazardous Location - 20 A

DX3 Hazardous Location - 32 A

Ratings

- **Max Amperage & Voltage**
20 A, 750 VAC
- **Environmental Ratings**
IP65
- **Temperature Range**
Min -13°F/Max 140°F
See pg 254 for temperatures outside this range.
- **Wiring Capacity**
Based on THHN wire sizes.
Min 14 AWG Max 8 AWG
- **Applicable Standards**
ATEX, IECEx
- **Hazardous Location Ratings**
MARECHAL ELECTRIC MAROMME
II2 G/D Ex de IIC tD A21
-25°C ≤ Ta ≤ +60°C T5 T84°C
-25°C ≤ Ta ≤ +50°C T6 T74°C
IECEx LCI 09.0014/LCIE 05 ATEX 6127

Devices rated for hazardous locations are not returnable.

Plug (male inlet w/handle) or **Inlet w/Cap on Box** (male)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL
120 V	1P+N+G	2621165	2626165
125 V	1P+N+G	2621075	2626075
208 V	2P+G	2621162	2626162
208 V	3P+G	2621163	2626163
208 V	3P+N+G	2621167	2626167
250 V	2P+G	2621072	2626072
250 V	3P+G	2621073	2626073
250 V	2P+N+G	2621076	2626076
277 V	1P+N+G	2621045	2626045
480 V	2P+G	2621042	2626042
480 V	3P+G	2621043	2626043
480 V	3P+N+G	2621047	2626047
600 V	3P+G	2621143	2626143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Handle Cable Range

SUFFIX	CABLE RANGE SIZE
None	.31" - .51"
-25M	.35" - .63"
-32M	.47" - .83"

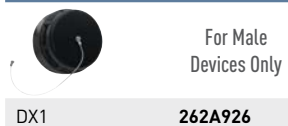
Box Size

SUFFIX	NPT THREAD SIZE
-12	1/2"
-34	3/4"
None	1"

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

Accessories

PROTECTIVE CAP



METAL WALL BOX

NPT	PART #
1/2"	262A02312
3/4"	262A02334
1"	262A0231

Connector (female recept w/handle) or **Receptacle on Box** (female) or **Receptacle** (female)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL	PART # METAL
120 V	1P+N+G	2623165	2620165	2624165
125 V	1P+N+G	2623075	2620075	2624075
208 V	2P+G	2623162	2620162	2624162
208 V	3P+G	2623163	2620163	2624163
208 V	3P+N+G	2623167	2620167	2624167
250 V	2P+G	2623072	2620072	2624072
250 V	3P+G	2623073	2620073	2624073
250 V	2P+N+G	2623076	2620076	2624076
277 V	1P+N+G	2623045	2620045	2624045
480 V	2P+G	2623042	2620042	2624042
480 V	3P+G	2623043	2620043	2624043
480 V	3P+N+G	2623047	2620047	2624047
600 V	3P+G	2623143	2620143	2624143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Devices rated for hazardous locations are not returnable.

Plug (male inlet w/handle) or **Inlet w/Cap on Box** (male)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL
120 V	1P+N+G	2631165	2636165
125 V	1P+N+G	2631075	2636075
208 V	2P+G	2631162	2636162
208 V	3P+G	2631163	2636163
208 V	3P+N+G	2631167	2636167
250 V	2P+G	2631072	2636072
250 V	3P+G	2631073	2636073
250 V	2P+N+G	2631076	2636076
277 V	1P+N+G	2631045	2636045
480 V	2P+G	2631042	2636042
480 V	3P+G	2631043	2636043
480 V	3P+N+G	2631047	2636047
600 V	3P+G	2631143	2636143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Connector (female recept w/handle) or **Receptacle on Box** (female) or **Receptacle** (female)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL	PART # METAL
120 V	1P+N+G	2633165	2630165	2634165
125 V	1P+N+G	2633075	2630075	2634075
208 V	2P+G	2633162	2630162	2634162
208 V	3P+G	2633163	2630163	2634163
208 V	3P+N+G	2633167	2630167	2634167
250 V	2P+G	2633072	2630072	2634072
250 V	3P+G	2633073	2630073	2634073
250 V	2P+N+G	2633076	2630076	2634076
277 V	1P+N+G	2633045	2630045	2634045
480 V	2P+G	2633042	2630042	2634042
480 V	3P+G	2633043	2630043	2634043
480 V	3P+N+G	2633047	2630047	2634047
600 V	3P+G	2633143	2630143	2634143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Ratings

- **Max Amperage & Voltage**
32 A, 750 VAC
- **Environmental Ratings**
IP65
- **Temperature Range**
Min -13°F/Max 140°F
See pg 254 for temperatures outside this range.
- **Wiring Capacity**
Based on THHN wire sizes.
Min 14 AWG Max 8 AWG
- **Applicable Standards**
ATEX, IECEx
- **Hazardous Location Ratings**
MARECHAL ELECTRIC MAROMME
II2 G/D Ex de IIC tD A21
-25°C ≤ Ta ≤ +60°C T5 T84°C
-25°C ≤ Ta ≤ +50°C T6 T74°C
IECEx LCI 09.0014/LCIE 05 ATEX 6127

Handle Cable Range

SUFFIX	CABLE RANGE SIZE
-20M	.31" - .51"
None	.35" - .63"
-32M	.47" - .83"

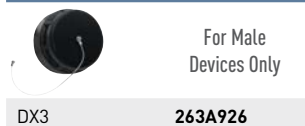
Box Size

SUFFIX	NPT THREAD SIZE
-12	1/2"
-34	3/4"
None	1"

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

Accessories

PROTECTIVE CAP



METAL WALL BOX

NPT	PART #
1/2"	263A02312
3/4"	263A02334
1"	263A0231

DX6 Hazardous Location - 63 A

DX9 Hazardous Location - 125 A

Ratings

- **Max Amperage & Voltage**
63 A, 750 VAC
- **Environmental Ratings**
IP65/IP66
- **Temperature Range**
Min -15°F/Max 140°F
See pg 254 for temperatures outside this range.
- **Wiring Capacity**
Based on THHN wire sizes.
Min 6 AWG Max 1/0 AWG
- **Applicable Standards**
ATEX, IECEx
- **Hazardous Location Ratings**
MARECHAL ELECTRIC MAROMME
II2 G/D Ex de IIC tD A21
-40°C ≤ Ta ≤ +60°C T5 T90°C
-40°C ≤ Ta ≤ +50°C T6 T80°C
IECEX LCI 09.0015/LCIE 04 ATEX 6038

Handle Cable Range

SUFFIX	CABLE RANGE SIZE
None	.47" - .83"
-40M	.63" - 1.06"
-50M	.91" - 1.38"
-63M	1.42 - 1.89"

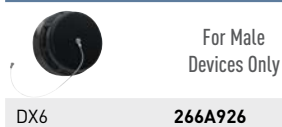
Box Size

SUFFIX	NPT THREAD SIZE
-1	1"
None	1 1/4"
-112	1 1/2"
-2	2"

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

Accessories

PROTECTIVE CAP



METAL WALL BOX

NPT	PART #
1"	266A0231
1 1/4"	266A023114
1 1/2"	266A023112
2"	266A0232

Devices rated for hazardous locations are not returnable.

Plug (male inlet w/handle) or **Inlet w/Cap on Box** (male)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL
120 V	1P+N+G	2661165	2666165
125 V	1P+N+G	2661075	2666075
208 V	2P+G	2661162	2666162
208 V	3P+G	2661163	2666163
208 V	3P+N+G	2661167	2666167
250 V	2P+G	2661072	2666072
250 V	3P+G	2661073	2666073
250 V	2P+N+G	2661076	2666076
277 V	1P+N+G	2661045	2666045
480 V	2P+G	2661042	2666042
480 V	3P+G	2661043	2666043
480 V	3P+N+G	2661047	2666047
600 V	3P+G	2661143	2666143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Connector (female recept w/handle) or **Receptacle on Box** (female) or **Receptacle** (female)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL	PART # METAL
120 V	1P+N+G	2663165	2660165	2664165
125 V	1P+N+G	2663075	2660075	2664075
208 V	2P+G	2663162	2660162	2664162
208 V	3P+G	2663163	2660163	2664163
208 V	3P+N+G	2663167	2660167	2664167
250 V	2P+G	2663072	2660072	2664072
250 V	3P+G	2663073	2660073	2664073
250 V	2P+N+G	2663076	2660076	2664076
277 V	1P+N+G	2663045	2660045	2664045
480 V	2P+G	2663042	2660042	2664042
480 V	3P+G	2663043	2660043	2664043
480 V	3P+N+G	2663047	2660047	2664047
600 V	3P+G	2663143	2660143	2664143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Devices rated for hazardous locations are not returnable.

Plug (male inlet w/handle) or **Inlet w/Cap on Box** (male)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL
120 V	1P+N+G	2691165	2696165
125 V	1P+N+G	2691075	2696075
208 V	2P+G	2691162	2696162
208 V	3P+G	2691163	2696163
208 V	3P+N+G	2691167	2696167
250 V	2P+G	2691072	2696072
250 V	3P+G	2691073	2696073
250 V	2P+N+G	2691076	2696076
277 V	1P+N+G	2691045	2696045
480 V	2P+G	2691042	2696042
480 V	3P+G	2691043	2696043
480 V	3P+N+G	2691047	2696047
600 V	3P+G	2691143	2696143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Connector (female recept w/handle) or **Receptacle on Box** (female) or **Receptacle** (female)



North American Configurations

VOLTAGE	POLARITY	PART # METAL	PART # METAL	PART # METAL
120 V	1P+N+G	2693165	2690165	2694165
125 V	1P+N+G	2693075	2690075	2694075
208 V	2P+G	2693162	2690162	2694162
208 V	3P+G	2693163	2690163	2694163
208 V	3P+N+G	2693167	2690167	2694167
250 V	2P+G	2693072	2690072	2694072
250 V	3P+G	2693073	2690073	2694073
250 V	2P+N+G	2693076	2690076	2694076
277 V	1P+N+G	2693045	2690045	2694045
480 V	2P+G	2693042	2690042	2694042
480 V	3P+G	2693043	2690043	2694043
480 V	3P+N+G	2693047	2690047	26-94047
600 V	3P+G	2693143	2690143	2694143

For international configurations (IEC/CE) visit meltric.com/international-catalog or contact Customer Service at 800-433-7642.

Ratings

- **Max Amperage & Voltage**
125 A, 750 VAC
- **Environmental Ratings**
IP65/IP66
- **Temperature Range**
Min -15°F/Max 140°F
See pg 254 for temperatures outside this range.
- **Wiring Capacity**
Based on THHN wire sizes.
Min 2 AWG Max 2/0 AWG
- **Applicable Standards**
ATEX, IECEx
- **Hazardous Location Ratings**
MARECHAL ELECTRIC MAROMME
II2 G/D Ex de IIC tD A21
-40°C ≤ Ta ≤ +60°C T5 T90°C
-40°C ≤ Ta ≤ +50°C T6 T80°C
IECEX LCI 09.0015/LCIE 04 ATEX 6038

Handle Cable Range

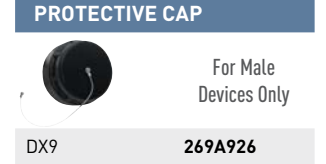
SUFFIX	CABLE RANGE SIZE
-32M	.47" - .83"
None	.63" - 1.06"
-50M	.91" - 1.38"
-63M	1.42" - 1.89"

Box Size

SUFFIX	NPT THREAD SIZE
-1	1"
None	1 1/4"
-112	1 1/2"
-2	2"

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

Accessories



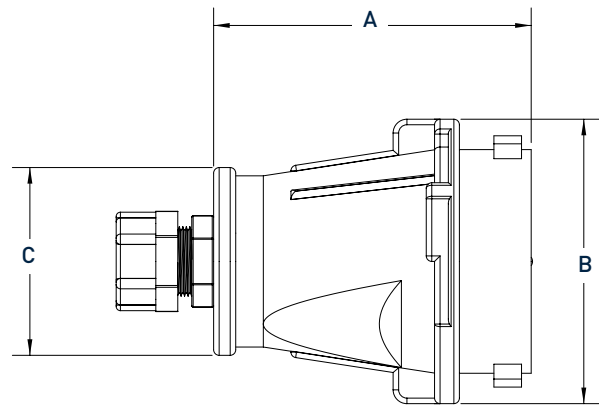
METAL WALL BOX

NPT	PART #
1"	269A0231
1 1/4"	269A023114
1 1/2"	269A023112
2"	269A0232



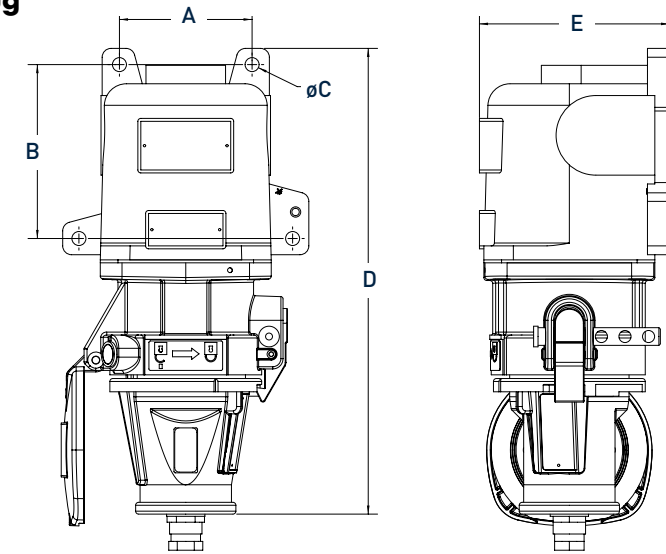
Dimensions are for reference only and may change depending on accessories used. For precise dimensions contact MELTRIC Engineering.

Plug



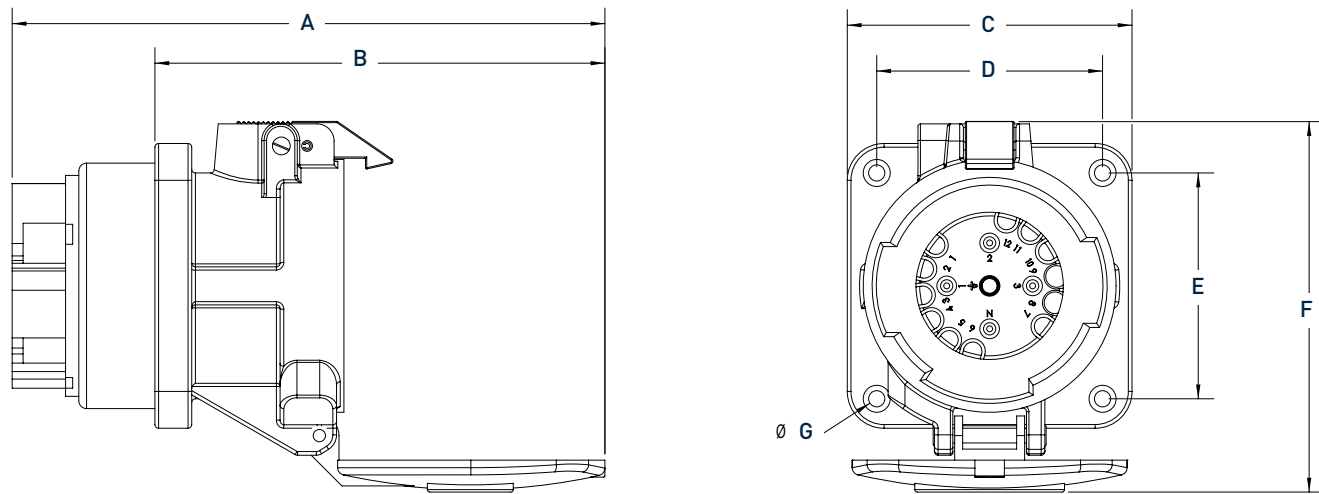
PRODUCT	A	B	C
DX1/DX3	4.53	4.06	2.68
DX6/DX9	8.66	5.75	3.94

Wall Box/Receptacle/Plug



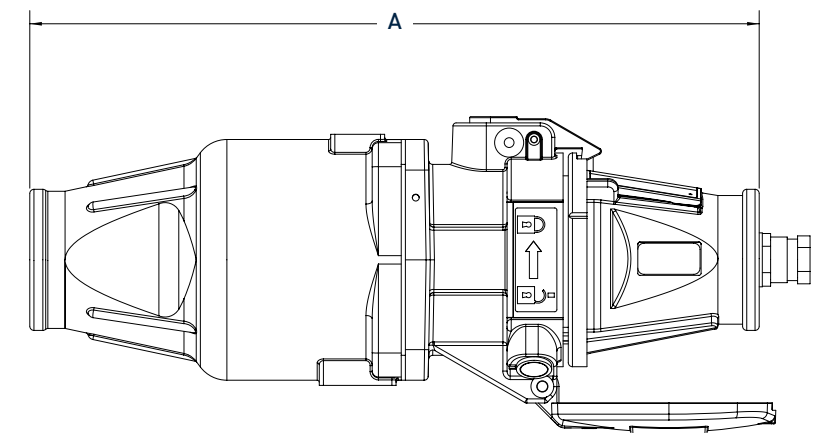
PRODUCT	A	B	øC	D	E
DX1/DX3	3.54	4.65	0.37	12.44	5.08
DX6/DX9	5.12	6.81	0.39	19.06	6.50

Receptacle



PRODUCT	A	B	C	D	E	F	øG
DX1/DX3	9.51	7.22	4.57	3.62	3.62	5.94	0.26
DX6/DX9	15.30	11.67	6.30	4.80	4.80	7.95	0.35

Plug/Connector



PRODUCT	A
DX1/DX3	13.84
DX6/DX9	21.14