Product Change Announcement

Revised Keying and Part Numbering for 120V and 208V DSN20s and DXN20s

Issue date: 3 February 2021

Product Change

Effective 29 January 2021, the standard keying position for 120 volt, 208 volt, and 120/208 dual voltage DSN20s and DXN20s has been changed from position 16 to position 12. As discussed below, this change revises the physical location of the phase and neutral contacts within the device, requires new part numbering, and creates compatibility concerns with the existing installed base of 120, 208, and 120/208 volt devices keyed at position 16.

This change is being made in response to recent field issues in which users were able to mistakenly connect a single phase 120 volt plug keyed at position 16 into a three phase 480 volt receptacle keyed at position 04. While the voltage mismatch does not negatively affect the plug or receptacle and is not a safety issue for the user making the improper connection, it creates an overvoltage condition that may damage connected equipment.

After evaluation of several potential design modifications, it was determined that rekeying the 120, 208, and 120/208 volt devices was the most effective means of eliminating the possibility of this improper connection.

Affected Part Numbers

This change affects 120 volt and 208 volt DSN20 and DXN20 devices, which are currently identified by the keying position 16 indicator in the part number, as shown by red text in this example: 63-14165. The affected base part numbers are indicated in the following tables along with the new part numbers that will be replacing them.

Affected DSN20 Part Numbers*						
Receptacles				Inlets		
Old		New		Old		New
63-14162	\rightarrow	63-14122-K16		63-18162	\rightarrow	63-18122-K16
63-14163	\rightarrow	63-14123-K16		63-18163	\rightarrow	63-18123-K16
63-14165	\rightarrow	63-14125-K16		63-18165	\rightarrow	63-18125-K16
63-14166	\rightarrow	63-14126-K16		63-18166	\rightarrow	63-18126-K16
63-14167	\rightarrow	63-14127-K16		63-18167	\rightarrow	63-18127-K16

Affected DXN20 Part Numbers*						
Receptacles					Inlets	
Old		New		Old		New
22-14162	\rightarrow	22-14122-K16		22-18162	\rightarrow	22-18122-K16
22-14163	\rightarrow	22-14123-K16		22-18163	\rightarrow	22-18123-K16
22-14165	\rightarrow	22-14125-K16		22-18165	\rightarrow	22-18125-K16
22-14166	\rightarrow	22-14126-K16		22-18166	\rightarrow	22-18126-K16
22-14167	\rightarrow	22-14127-K16		22-18167	\rightarrow	22-18127-K16

^{*} The change affects all part numbers that include these base numbers. For example, 63-14165-843-NC becomes 63-14125-K16-843-NC

The online PDF catalog has been updated to reflect these changes, and copies of both affected product pages are included at the end of this document. There will also be some changes to power distribution, phase rotation meters, and other assemblies using the affected part numbers.



Physical Changes to the Product

As illustrated in the 120 volt single phase inlet example below, the rekeying of the 120, 208, and 120/208 volt devices from position 16 to position 12 changes the orientation of the contacts within the device. This change is what prevents the potential for the improper connection.





Inlet notched/keyed at position 16

Inlet notched/keyed at position 12

While eliminating the potential for improper connection, the revised orientation of the contacts creates a compatibility issue with already installed product that must be addressed on new customer orders.

Communication to Users

It is necessary to communicate this issue to all current users of 120, 208 and 120/208, volt DSN20 and DXN20 devices, so they can assess if they have the potential for the improper connection of a 120 volt plug into a 480 volt receptacle in their operation. They contact MELTRIC to work out a program to replace existing devices as required to address the issue and avoid compatibility issues between new devices and their existing installed base of position 16 devices.

In order to help start this communication process, we ask all our Sales Reps to forward this bulletin to their MELTRIC Distributors and to have the distributors forward it to all of their customers who have purchased 120, 208, or 120/208 volt DSN20 or DXN20 devices with any of the "old" part numbers indicated in the tables above.

Resolution Plans for Existing Customers

As indicated above, customers with existing 120, 208 or 120/208, volt DSN20 or DXN20 devices should contact MELTRIC. This can be done through their local MELTRIC Sales Representative, by contacting the company directly at position16@meltric.com, or by calling 414-433-2700 and asking for the **Position16 Coordinator**. MELTRIC will work with each customer on an individual basis to develop product replacement or other resolution plans appropriate for their situation as required, to eliminate concerns related to the potential for improper connections.

MELTRIC Customer Service will contact any customers placing orders for position 16 DSN20 and DXN20 devices to advise them of the issue, the keying position change, and the lack of compatibility between existing position 16 devices and new position 12 devices so that part numbers can be adjusted as needed and appropriate plans for addressing the compatibility issues can be initiated.



Answers to Possible Questions

Does the possibility for the improper connection of a position 16 keyed plug and position 04 keyed receptacle also affect other DSN or DXN products?

No. It is specific to the DSN20 and DXN20 due to their smaller size.

Are there ways for users of existing 20A 120V DSN or DXN plugs and 20A 480V DSN or DXN receptacles to identify that they are not intended to connect?

Yes. In addition to the different part numbers, there are also color-coded voltage labels and device gaskets that identify the different voltages. The 120V plugs have yellow voltage labels and device gaskets, while the 480V receptacles have red voltage labels and device gaskets.





DSN20 480V Receptacle

DSN20 120V Inlet

Does this change affect pricing or lead times of the product?

No. Pricing of the new position 12 devices will be the same as the position 16 configurations they are replacing. The factory is prepared to support the change, so there should be no impact on production lead-times.



DSN20 Switch-Rated Plugs & Receptacles – 20 A

UL/CSA Ratings

- Max Amperage & Voltage 20 A, 600 VAC
- Switch-Rating (AC Only)
 Branch Circuit & Motor Circuit
 Disconnect Switching
- Horsepower Ratings

120V	ΙW	./b lip
240V	1Ø	2 hp
208V	3Ø	3 hp
240V	3Ø	3 hp
480V	3Ø	7.5 hp
600V	3Ø	7.5 hp

Short Circuit Rating
 100kA Close & Withstand
 Testing was performed with 35 A RK1 non-time delay Mersen fuses.

10kA Close & Withstand Testing was performed with 50 A RK1 non-time delay Mersen fuses.

- Environmental Ratings
 Type 4X/IP69/IP69K*
- * Also meets IP66/IP67 requirements
- Temperature Range
 Min -40°F/Max 140°F
 See pg 258 for temps below -15°F.
- Wiring Capacity
 Min 14 AWG Max 12 AWG
 Aux Contacts 18 AWG prewired
- Certifications
 UL 2682, UL 1682, CSA 182.1

Receptacle (female)



Inlet (male)



Don't forget to add installation accessories to your order

North American UL/CSA Configurations

Valtage	Polarity	Part #	Part #	
Voltage	Polarity	Poly	Poly	
120V	1P+N+G	63-14125-K16**	63-18125-K16**	
120 208V	3P+N+G	63-14127-K16**	63-18127-K16**	
125V	1P+N+G	63-14075	63-18075	
125 250V	2P+N+G	63-14076	63-18076	
208V	2P+G	63-14122-K16**	63-18122-K16**	
208V	3P+G	63-14123-K16**	63-18123-K16**	
250V	2P+G	63-14072	63-18072	
250V	3P+G	63-14073	63-18073	
277V	1P+N+G	63-14045	63-18045	
277 480V	3P+N+G	63-14047	63-18047	
347 600V	3P+N+G	63-14147	63-18147	
480V	2P+G	63-14042	63-18042	
480V	3P+G	63-14043	63-18043	
600V	600V 2P+G 63-14142		63-18142	
600V	3P+G	63-14143	63-18143	

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

Main Options Suffix # Suffix # **Receptacle Options Inlet Options** With 2 Auxiliary/Pilot Contacts Recept # -972+ Self-Ejecting Plug Release Inlet # -338 Mushroom Straight Insertion Recept # -352 With No Lockout Hole Inlet # -A155 Self-Ejecting Connector Release Recept # -354 Mushroom Pawl Recept # -375 **Product has changed and will not mate with prior 63-1416x and Padlock Pawl Recept # -843 63-1816x 120V and 208V configurations. Please contact customer service Padlock Pawl Padlockable Mushroom Pawl Recept # -375-843 if product will be used with devices purchased prior to January 31, 2021. Metal Pawl Recept # -824 **Closed Lid** Closed Lid Configuration Recept # -NC Configuration **Notes:** † Unlike other DSN & DS products, the DSN20 pilots are only on the receptacle side and create a continuity loop that is completed when a plug is connected to the receptacle.



Order Example: 480V DSN20 with padlock pawl

DSN20 Receptacle 3P+G = 63-14043**-843**

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DXN20 Hazardous Location Plugs & Receptacles — 20 A

Devices rated for hazardous locations are not returnable.

Receptacles & Inlets must be mounted to a DXN handle

angle or wall box

cCSAus Certifications DXN20

- Max Amperage & Voltage 20 A, 600 VAC, 60 Hz
- Current Interruption Capability
 For current interrupting (AC)
- Horsepower Ratings
 10 75 harmonic results from the second results fro

120V	10	.75 hp
240V	1Ø	2 hp
208V	3Ø	3 hp
240V	3Ø	3 hp
480V	3Ø	7.5 hp
600V	3Ø	7.5 hp

• Short Circuit Rating

25kA Close & Withstand

Testing was performed with RK1 30 A fuse sized at 400% of the highest full load motor ampacity associated with the devices hp rating.

Note: Consult NEC for Short Circuit limits.

- Environmental Ratings IP66/IP67
- Wiring Capacity
 Min 16 AWG Max 10 AWG
- * Based on THHN wire sizes
- Applicable Standards CSA C22.2 No. 182.1
- Hazardous Location Ratings

-40°C ≤Ta ≤+60°C Ex de IIC T5 6b Ex tb IIIC T90°C Db Class I Zone1 AEx de IIC T5 Gb Zone 21 AEx tD T90°C Db Class I Div 2 Gr A,B,C,D Class II Div 2 Gr E,F,G

Receptacle (female)

Inlet (male)





North American cCSAus Configurations

W. H	Balantin	Part #	Part #
Voltage	Polarity	Poly	Poly
4001/	1P+N+G	22-14125-K16**	22-18125-K16**
120V			22-18125-K16**
125V	1P+N+G	22-14075	22-18075
208V	2P+G	22-14122-K16**	22-18122-K16**
208V	3P+G	22-14123-K16**	22-18123-K16**
208V	3P+N+G	22-14127-K16**	22-18127-K16**
250V	2P+G	22-14072	22-18072
250V	3P+G	22-14073	22-18073
250V	2P+N+G	22-14076	22-18076
277V	1P+N+G	22-14045	22-18045
480V	2P+G	22-14042	22-18042
480V	3P+G	22-14043	22-18043
480V	3P+N+G	22-14047	22-18047
600V	2P+G	22-14142	22-18142
600V	3P+G	22-14143	22-18143
600V	3P+N+G	22-14147	22-18147

Receptacle Options	Suffix #	Inlet Options	Suffix #
Padlock Pawl	Recept # - 843	With No Lockout Hole	Inlet # - A155
		With No Lockout Hote	intet # - A199
Metal Pawl on Poly Receptacle Recept # - 924 Closed Lid Configuration Recept # - R		**Product has changed and will not mate with prior 22-1416x and 22-1816x 120V and 208V configurations. Please contact customer service if	

ATEX/IECEx Certifications DXN1

- Max Amperage & Voltage
 20 A, 550 VAC, 50 Hz
- Environmental IP66/IP67
- Ambient Temp -40°C to +60°C
- Hazardous Location Ratings ATEX/IECEx Zones 1 & 2, 21 & 22

See MELTRIC's International Catalog (online) for additional product information.

Receptacle

Inlet

IEC/CE Configurations (ATEX/IECEx)

Voltage	Polarity	Part # Poly	Part # Poly
20 - 24 V	2P	25-1408A	25-1808A
190 - 230 V	3P+E	25-14033	25-18033
220 - 250 V	1P+N+E	25-14015	25-18015
380 - 440 V	3P+E	25-14013	25-18013
380 - 440 V	3P+N+E	25-14017	25-18017
480 - 500 V	3P+E	25-14093	25-18093
480 - 500 V	3P+N+E	25-14097	25-18097

Receptacle Options	Suffix #	Receptacle Options	Suffix #
Padlock Pawl w/shaft for 2 locks	Recept # + 843	Self-returning Lid	Recept # + R
180° Lid Opening	Recept # + 10	180° Opening & Self-returning Lid	Recept # + 18

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