MELTRIC® Corporation

Engineered for Safety. Built for Reliability.

At MELTRIC Corporation, our only business is electrical plugs and receptacles. We are focused on providing our customers with the best overall value by offering the safest, highest quality, and most reliable plugs and receptacles. We back them with outstanding service and support.

Product Technology and Safety

The technology behind MELTRIC products was developed specifically to address the shortcomings and safety hazards that occur with the use of traditional plugs and receptacles. In 1952, following the observation of an accident with a pin and sleeve device, Gilles Marechal devised a product that combines silver-nickel, butt-style contacts and the load making and breaking capabilities of a switch in the convenience of a plug and receptacle. MELTRIC licensed this technology in the early 1980s and has been supplying its products to North American customers ever since.

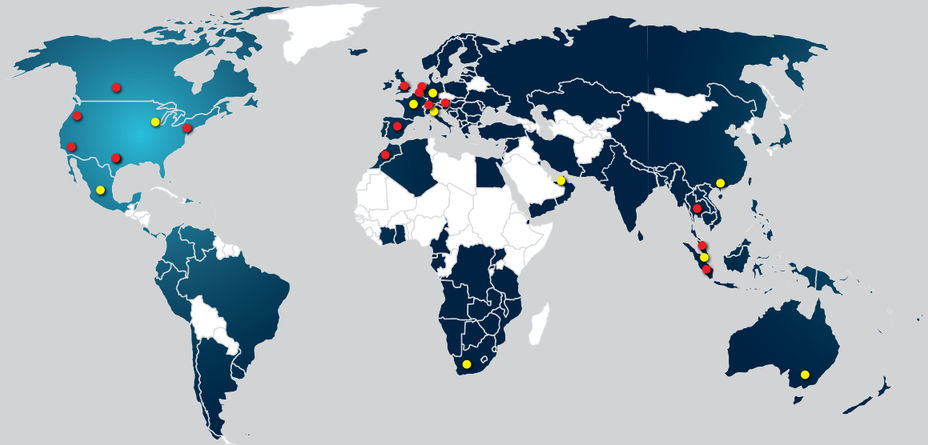
Value

With their unique features and capabilities, MELTRIC products provide users with a safer, more reliable electical connection device. MELTRIC butt-style contacts provide longer operating lives, help users reduce equipment costs and remove arcing hazards caused by live contacts or wrongful disconnection. These advantages, together with competitive pricing, short lead times, and 5-year warranty on electrical contacts make MELTRIC products the best overall value in the plug and receptacle/connector market.

Worldwide Availability

MELTRIC supplies product directly from its factory in Franklin, Wisconsin to customers in the United States, Canada, and Mexico. We can supply outside of North America using our parent company, Marechal Electric Group. Marechal Technology products are manufactured in North America, Europe, South Africa, and Australia.

MARECHAL ELECTRIC
MARECHAL® TECHNOR® MELTRIC®



- SALES OFFICES & MANUFACTURING PLANTS
- COMPANY SALES PRESENCE
- SALES AGENTS & DISTRIBUTORS

Service and Support

MELTRIC backs its superior products with outstanding service and support. A network of over 150 sales associates and over 2,000 distributor locations throughout the US, Canada, and Mexico makes purchasing MELTRIC product simple.

MELTRIC's Customer Service group is trained to answer your questions, and is located at our manufacturing facility to help streamline the order fulfillment process. Our engineering team stands ready to provide both application support and custom design solutions incorporating MELTRIC products tailored to meet your needs. Friendly and personal assistance is only a call away at **800-433-7642**. The efficient order handling by Customer Service, and engineering help-line allows MELTRIC to provide the fastest answers and shortest lead times in the industry.

Quality

Quality is not just an inspection function at MELTRIC, it starts with intelligent designs, robust materials, clear procedures, process measurement and controls, as well as effective communications. The MELTRIC mission is completed through the care, commitment, and involvement of each of its employees.

MELTRIC is dedicated to the continuous improvement of its critical production and support processes and is ISO 9001:2015 certified. MELTRIC designs and manufactures its products to exceed the requirements of applicable UL, CSA, and IEC standards.

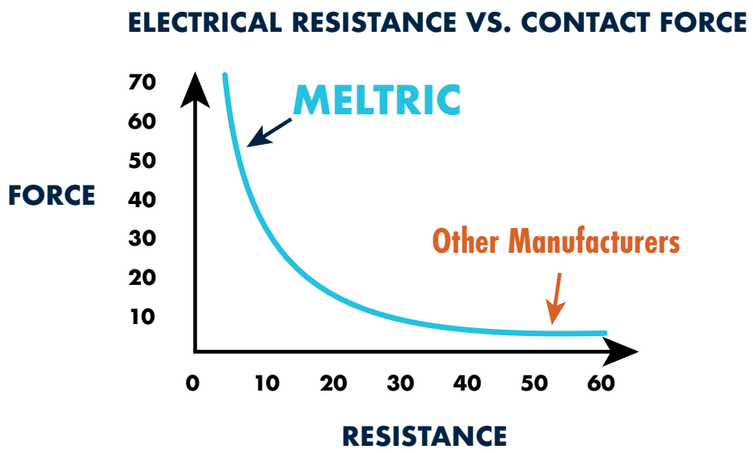
MELTRIC® PRODUCT FEATURES...

Spring-Loaded, Butt-Style Contacts

MELTRIC products feature unique spring-loaded, butt-style contacts. These help improve electrical performance and user safety. Butt-style contacts ensure a consistent connection. The spring loading of these contacts provides a high contact force that remains consistent over thousands of operations reducing the chance of hazard caused by wear and tear.

As the accompanying chart demonstrates, contact resistance increases as contact force is reduced. Higher contact resistance generates more heat and oxidation, both of which contribute to the deterioration of the contact. Spring-loaded, butt-style contacts reduce this hazard with their strong contact force. Other forms of contacts present hazards because their contact force varies due to wear caused by normal use and cannot compensate for manufacturing variances.

In conjunction with the ejection springs used on many MELTRIC products, the spring-loaded contacts ensure a quick breaking of the connection. This disconnection style serves as a safety feature arresting arcs and reducing hazards independent of personnel input. The operator will simply push the red button for disconnection.



...AND BENEFITS

Silver-Nickel Contact Material

MELTRIC uses solid silver-nickel (85%/15%) contacts. The silver-nickel alloy has significant advantages over the brass contacts commonly used on competitive devices.

Silver has very low initial contact resistance and is not negatively affected by oxidation. This helps to give it excellent electrical properties that are maintained even at high temperatures and after tarnishing. Nickel is used to provide hardness and improve mechanical properties.
This combination results in a contact material that has superior electrical capabilities and excellent resistance to wear. Silver-nickel also withstands arcing better than alternative materials.

MELTRIC provides added safety and reliability by providing an arc, wear, and tarnish resistant silver-nickel contact that will stand up in the most demanding of environments.

By contrast, the brass material used in most competitive plug and receptacles has a much higher initial contact resistance and is negatively affected by oxidation. In an oxidized state, the contact resistance of brass is more than 20 times higher than that of silver-nickel. In addition, brass is a soft material that wears rapidly. As the oxidation and wear induced reductions in contact force occur on the brass, contact resistance increases. This increases operating temperature, which causes further oxidation and wear, perpetuating a vicious cycle of degradation. Brass is not arc resistant and is not suitable for making and breaking under load.

Dead-Front Construction

Most MELTRIC products feature dead-front construction, which greatly enhances safety by eliminating access to live parts. On most MELTRIC products, the dead-front is accomplished using a safety shutter that closes upon disconnection and can be opened only by an appropriate mating plug. This ensures the live contacts can only be accessed after the plug is inserted into the receptacle.

The design of the product also ensures that the contacts are de-energized prior to the user removing the plug from the receptacle. On competitive devices access to live receptacle contacts is possible, and on some devices the plug contacts may be accessible, while live, when the plug is being removed. MELTRIC eliminates the risk of contact with live contacts by providing the Dead-front Shutter.

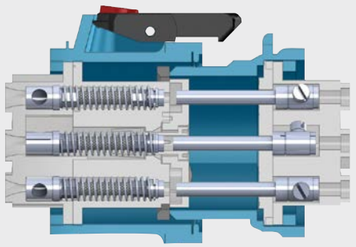
MELTRIC PRODUCT FEATURES...

Push-Button Circuit Disconnection

To disconnect most MELTRIC products, the user simply needs to press the red circle located on the pawl. This automatically disconnects the circuit and ejects the plug to its rest (off) position in the receptacle. If desired, the user can then remove the plug from the receptacle by rotating it slightly then withdrawing it. This mode of operation ensures that it is only possible to remove the plug after its contacts have been de-energized, reducing risk of arc flash and electric shock.

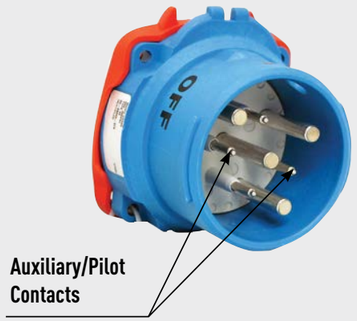
Enclosed Arc Chambers

The contacts on most MELTRIC products make and break within enclosed arc chambers. This ensures that the arcing, which normally occurs during the making and breaking of the contacts, is contained inside the MELTRIC device. This greatly enhances safety and avoids potential injury to users and/or harm to the outside environment.



Optional Auxiliary/Pilot Contacts

Many MELTRIC products are available with optional auxiliary/pilot contacts. These integral pilot contacts allow users the convenience and flexibility of controlling auxiliary equipment, monitoring parameters (such as motor temperature), and/or communicating alarms through the same plug and receptacle used to supply power to the equipment. Because the pilot contacts are integral, they also facilitate the rapid change-out or reconfiguration of equipment by eliminating the need for hardwiring or multiple plug connections. Saving both time and effort for monitoring and replacement of equipment.



Automatic Watertightness

MELTRIC DS and DSN Series Switch-Rated plugs and receptacles offer Type 4X/IP69/IP69K watertightness as soon as the plug is latched to the receptacle, or the receptacle lid is closed. These devices provide automatic and enhanced protection against windblown dust or rain, splashing water, and hose-directed water.

Most pin and sleeve devices require a user to tighten an additional plastic ring to achieve rated weathertightness. Users frequently fail to do this, resulting in leakage.

...AND BENEFITS

Spring-Assisted Terminals

The loosening of terminal screws is a common cause for failure on standard plugs and receptacles. MELTRIC provides a more secure and reliable connection with its unique and patented spring-assisted terminal design.

As the terminal screw is tightened against the conductor, the associated pressure expands the split terminal body, causing the spring ring surrounding the terminal to deform into an elliptical shape. The natural tendency for the spring ring to return to its original size and shape ensures that a constant pressure is maintained on the conductor. This allows the terminal to effectively provide superior resistance to vibration, shock, strand settlement, material creep, and thermal cycling, reducing the chance for unwanted disconnection during use.

Lockout/Tagout Capability

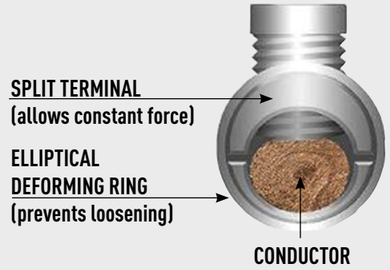
Most MELTRIC plugs and receptacles facilitate compliance with OSHA Lockout/Tagout requirements. Only a lock or lockout hasp and tag are needed to ensure that the plug is properly locked out and tagged out. Because the lockout provisions are integrated into the device – it is always available when you need it. On most models, the lockout provision is a simple 5/16" hole in the inlet shroud, this facilitates the insertion of a lockout hasp which prevents the mating of inlet and receptacle.

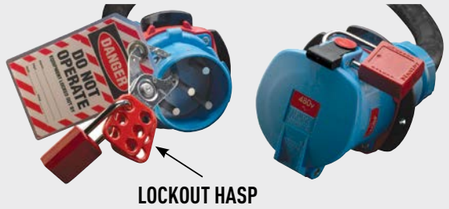
An optional provision for locking out MELTRIC receptacles is also available. In most cases this is accomplished via a specially machined hole in the receptacle pawl which allows insertion of a padlock to secure the receptacle lid in a closed position. This same optional provision can be used to prevent removal of the plug if desired.

By comparison, to lock out most competitive devices, an additional third-party 'lockout shield or 'plug cap' is required. These devices can be expensive and are often lost, broken, or not available when you need them. MELTRIC makes your lockout tagout provisions easier to perform with integrated lockout provisions located on the electrical device close to the work area.

Engineered Solutions

At MELTRIC, our products are ordered and assembled to meet precise use and installation requirements. This dedication ensures that you benefit from The MELTRIC Advantage, offering versatility, efficiency, and functionality often overlooked by other manufacturers. Once you select male inlets, female receptacles, and matching accessories, our skilled team gathers the components, shipping them in as little as two days. With MELTRIC, modular thinking is key. This approach allows us to build devices tailored to your specifications and deliver them in record time.





MELTRIC PART NUMBERING...

First seven (7) digits for a basic inlet or receptacle part number

One (1) to six (6) suffixes for special features

6	3	—	3	4	0	4	3		X	X	X	—	Y	Y	Y

MELTRIC Product Line Type and Casing Material

PN/PN7c
01 = Blue Poly
09 = Blue Metal

PN12c
03 = Blue Poly
07 = Blue Metal

PXN12c
06 = Black Metal

PNCX
06 = Black Poly

RETTBOX
15 = Blue Poly

DN
19 = Blue Metal

DXN
22 = Black Poly

DXA1
28 = Black Metal

DX
26 = Black Metal

DS
33 = Blue Poly
35 = Black Poly
36 = Black Metal (HazLoc)
37 = Blue Metal

DXN25/37c
36 = Black Metal

DR
31 = Blue Poly
35 = Black Poly
36 = Black Metal (HazLoc)
39 = Blue Metal

SPeX
42 = Black Poly

CS1000/SP
44 = Black Poly

DSP
31 = Blue Poly

PFQ
47 = Gray Metal

PF
49 = Gray Metal

DSN
63 = Blue Poly
65 = Black Poly
66 = Black Metal (HazLoc)
69 = Blue Metal

AMP (A) Rating

DSN
1 = 20
3 = 30
6 = 60
8 = 100
9 = 150

DS
1 = 20
3 = 30
6 = 60
9 = 100
2 = 200*

DR
1 = 30
3 = 50
6 = 100
9 = 150
2 = 250*
4 = 400*

PN20
N = 20 (IP66/IP

PNCX
E = 5

PNHT
2 = 20

DXN
1 = 20
3 = 30
6 = 60

DXA1
1 = 20

DX
2 = 20*
3 = 32*
6 = 63*
9 = 125*

PF
3 = 300*
4 = 400*
6 = 600*

PFQ
3 = 300*

DN
1 = 20*(DN9)
6 = 20*(DN20)

* Available in metal only.

Form and Mounting

Female
4 = Receptacle

Male
8 = Inlet

DX, DXN37c, PXN12c, SPeX Only

Female
0 = Receptacle on box
3 = Connector
4 = Receptacle

Male
1 = Plug
6 = Inlet on Box

Voltage Polarization

Position		Voltage	Hz
01	=	220 - 250 / 380 - 440	50
02	=	20 - 24	60
03	=	110 - 130 / 190 - 230	50
04	=	255 - 277 / 440 - 480	60
06	=	25 - 28	50
07	=	110 - 125 / 220 - 250	60
08	=	20 - 24	50
09	=	480 - 500	50
10	=	110 - 130	DC
11	=	115 - 127 / 200 - 220	400
12	=	115 - 127 / 200 - 220	200
13	=	40 - 48	50
14	=	347 - 600	60
16	=	120 - 127 / 208 - 220	60
17*	=	110 - 125 / 220 - 250	60
18*	=	347 - 600	60
19	=	380 - 440 / 660 - 690	50
20	=	220 - 250	DC
22	=	577/1000	50
23*	=	120 - 127 / 208 - 220	60
24*	=	255 - 277 / 440 - 480	60

* For DR devices.

Phasing

AC
2 = 2P+G
3 = 3P+G
5 = 1P+N+G
6 = 2P+N+G
7 = 3P+N+G
A+ = 2P
B+ = 3P
C+ = 3P+N
D+ = 1P+N
G+ = 2P+N

DC
8++ = 2P+G
9 = 2P+G
Z+ = 2P
P = 2P+2P+G

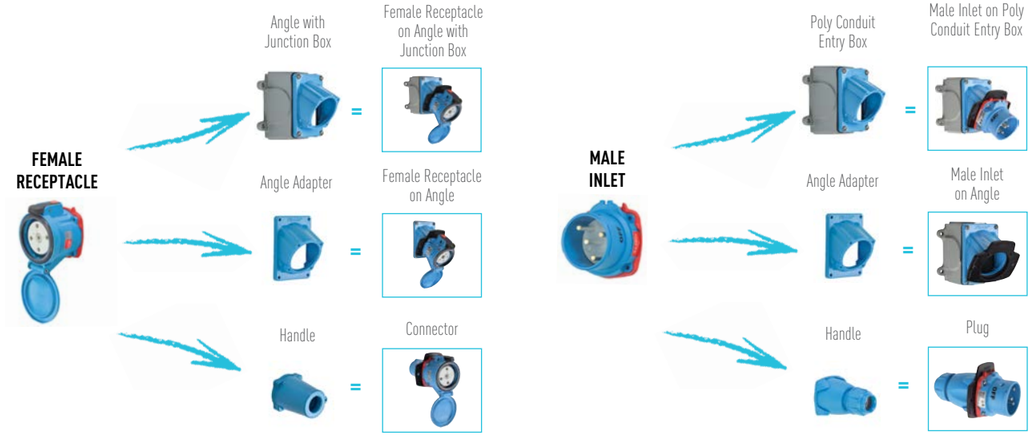
+ For 50V or less only.
++ Includes jumpers.

Notes:
- On metal devices, inlets are not painted, receptacles are painted.
- This is the Keying Standard for MELTRIC products. Suffixes are available to accommodate non-interchangeable devices of the same size at the same voltage. Please ask for more details.

...AND ORDERING GUIDE

A MODULAR SYSTEM

MELTRIC products are ordered and assembled in a modular fashion. Customers should select the desired male inlet and female receptacle part numbers. Then matching accessories such as handles, angles, and junction boxes should be identified and added to the order to create plugs, connectors, or other configurations. This modular system allows MELTRIC to build and ship product to customer specifications in a very short time.



EXAMPLE

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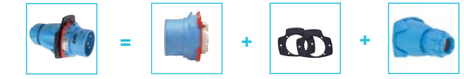

TYPICAL ORDER

	63-34047	Female Receptacle
	512M3	Angle Adapter for Female
	63-38047	Male Inlet
	61-3A346	Finger Drawplates
	512P0D21	Handle for Male