Plugs, Receptacles and Connectors for the Aviation Industry

Featuring:
Switch-Rated Plugs and Receptacles with DECONTACTOR™ Technology

Switch-Rated
High Amp
Multipin
MELTRIC’s Switch-Rated plugs and receptacles combine the safety and functionality of a switch with the convenience of a plug and receptacle. They help airports and other aviation-related facilities ensure worker safety while also reducing equipment, maintenance downtime and labor costs. They are UL and CSA rated for motor circuit and branch circuit disconnect switching and meet code requirements for ‘line of sight’ disconnects. Switch-rated plugs and receptacles eliminate the need for expensive auxiliary disconnects and enable plug and play equipment changeouts.

**DECONTACTOR™ Technology**

- **Spring Assisted Screw Terminals**: Exclusive design assures “Tighten and Forget” confidence.
- **Spring-Loaded Butt-Style Contacts**: Ensures optimal contact force and superior electrical performance over thousands of operations.
- **Lid**: Provides 4X watertightness for additional protection in harsh environments.
- **Dead Front Safety Shutter**: Assures safety by preventing user access to live parts.
- **Casing**: Fiberglass reinforced thermoplastic polyester material offers great resistance to impact, corrosion and harsh environmental conditions.
- **Silver-Nickel Contact Material**: Solid silver-nickel contact surfaces provide superior conductivity, durability and corrosion resistance.
- **Lockout-Tagout Provisions**: Allows plug to be easily locked out and tagged. Optional Padlock Pawl allows lockout/tagout of the receptacle.
- **DECONTACTOR™ Technology**
  - • Allow easy NEC, NFPA 70E and CSA Z462 code compliance
  - • Functions as a ‘line of sight’ disconnect switch
  - • Safely makes and breaks resistive or inductive loads

**DSN 20-150A (Up to 75 hp)**

- Compact, lightweight design
- Type 4X, IP66/IP67
- Up to 6 auxiliary contacts
- Polyester or metal casings
- 100kA short circuit rated

**DS 20-200A (Up to 100 hp)**

- Rugged construction
- Type 3R (4X optional)
- Up to 6 auxiliary contacts
- Polyester or Metal casings
- Short circuit rated up to 100kA

*Testing was performed with RK1 current limiting fuses sized at 400% of the highest full load motor ampacity associated with the devices hp ratings. Visit meltric.com to confirm ratings.*

**Popular Product Accessories**

**Handles**
- Poly Handle
- PH Handle
- Finger Draw Plates

**Angles and Boxes**
- Metal Junction Box
- 30° Metal Angle
- 70° Metal Angle

**Pawls**
- Padlockable Pawl

**Adapter Plates**
**Application Spotlights**

**Benefit from MELTRIC Connectors Throughout the Aviation Industry**

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**Airplane Assembly**

MELTRIC equipped power carts provide line-of-sight disconnects with lockout-tagout provisions wherever power is required.

Technicians can safely make and break electrical connections without fear of arc flash and without cumbersome PPE.

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**Jetway Connections**

MELTRIC’s Switch-Rated plugs and receptacles allow maintenance technicians to replace damaged power cords safely and with plug and play efficiency.

Mounting a MELTRIC receptacle on the disconnect switch eliminates the need for on-site hard wiring. The damaged cord is simply unplugged and the new one is plugged in.

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**Baggage and Freight Conveyors**

Downtime on critical baggage and air-freight handling conveyors can be minimized by connecting motors with MELTRIC Switch-Rated devices.

MELTRIC DS and DSN Series devices are NEC code legal motor disconnect switches with integral lockout-tagout provisions. They simplify NFPA 70E compliance on motor change-outs.

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**Gate Shore Power**

Power to large airplanes parked at the gate can be supplied safely and easily up to 400A with MELTRIC’s compact and easy to operate DR400.

The DR400’s locking pawl helps to avoid unintended disconnections and its pilot contacts can be used to control the power circuit.
De-Icing Fluid Recovery

MELTRIC's Switch-Rated devices allow for safe, plug-and-play connections on submersible pumps to recover De-Icing fluid collected in sumps after spraying the aircraft.

Maintenance Hangars

Switch-Rated plug and receptacles provide safe and convenient power distribution to maintenance and test equipment.

Welding Machine Connections

MELTRIC’s Switch-Rated devices allow workers to safely connect and disconnect welding machines, even in overload conditions.

Retrofit Applications

Adapter plates made it simple for aviation maintenance facilities to convert their existing pin and sleeve receptacles to Switch-Rated devices.

De-Icing Fluid Recovery

Designed for durability in harsh conditions, MELTRIC’s plugs and receptacles are rated for use in temperatures to -40°F.

Maintenance Hangars

Switch ratings and dead front design ensure safe connection/disconnection even under load and on in-line extension cord connections.

Welding Machine Connections

MELTRIC’s Switch-Rated devices reduce costs by eliminating the need for interlocks and auxiliary disconnects.

Retrofit Applications

Adapter plates are available in a variety of sizes and configurations.

Contact MELTRIC for approval

-40°F

Contact MELTRIC for approval

140°F

Normal Operating Temp
Application Spotlights
Benefit from MELTRIC Connectors Throughout the Aviation Industry

Power Conversion Carts Simplify NEC 513 Compliance

Portable connections above 18 inches eliminate the need for explosion proof plugs and offer safety, convenience, and portability.

NEC Article 513 classifies locations where fueled aircraft may be serviced as hazardous or non-hazardous based on proximity to the ground. Areas below or within 18” of the ground are classified as hazardous locations, while areas more than 18” above ground are non-hazardous. Thus, users can avoid the need for special haz-loc equipment and safety procedures by using MELTRIC’s Switch-Rated devices on mobile power carts designed to ensure that connections are made above the 18” level. Optional pilot contacts can be used to control the power circuit and de-energize the connector when it is disconnected from the power cart.

Hydraulic Fluid Pumps

MELTRIC Switch-Rated plugs and receptacles are ideal for connecting pump motors. They maintain superior performance even when exposed to hydraulic fluid spills.

Reinforced casings provide excellent impact resistance as well as protection against most harsh chemicals.

Multipin and Self-Ejecting Connections

MELTRIC self-ejecting devices automatically release the plug or receptacle when tension is detected. They protect both equipment and workers.

MELTRIC multipin connections can provide both power and control. One DN20 can power up to six 3 hp motors for automated trailer unloading.

Disclaimer: The user is responsible for interpreting and following all national and local electrical codes. Consult NEC 513 for all code requirements in hangar areas. Consult the MELTRIC catalog for specific device ratings.
Other MELTRIC Product Lines for the Aviation Industry

High Amperage Connections

The DR400 Series (up to 400A, 600V) features a safety shutter that protects users from live parts and an easy closing mechanism that mates the plug to the receptacle with ease. The PF/PFQ Series (up to 600A, 600V) utilizes silver pressure contacts that maximize performance in dirty environments. A mechanical locking system ensures safety and watertightness.

Power Distribution

MELTRIC can provide a wide range of power distribution packages built specifically to aviation customer needs. Rubber boxes provide a compact, durable solution for portable power distribution needs and custom configurations can be provided for almost any application.

Hazardous Location Connections

MELTRIC offers a range of hazardous duty rated devices for use in power supply and control applications. Each device features MELTRICs butt-style contact technology that maximizes durability and performance. Depending on the application’s needs, most devices, can be configured for use in in-line and wall mounted applications. DXN Series plugs and receptacles are CSA rated for use in Class I Zone 1, Class I Division 2 and Class II Division 2 environments. Hp ratings make the DXN ideal for motor connections.

For even more plugs and receptacles from MELTRIC, visit meltric.com or view the MELTRIC catalog.