

Decontactors Simplify Code Compliance

Decontactor Series switch rated plugs and receptacles allow qualified workers to change-out a motor or other electrical equipment without needing...



Flash Hazard Analysis
as required in NFPA 70E and CSA Z462



Arc Flash Boundaries
as required in NFPA 70E and CSA Z462



Voltage Testing
as required in NFPA 70E and CSA Z462



Cumbersome PPE
as required in NFPA 70E and CSA Z462



Auxiliary Disconnect Switches
as required in NEC 430.102 and CEC



Mechanical Interlocks
as required for use with non-hp rated plugs and receptacles

Presented by Meltric and:



Simplify NFPA 70E/CSA Z462 Code Compliance with...

Meltric
DECONTACTOR™ Series
Plugs, Receptacles
and Electrical
Connectors



NFPA 70E/CSA Z462

This OSHA consensus standard covers electrical safety related work practices and procedures for employees who work on or near energized electrical conductors or circuit parts. Relevant requirements include:

The power must be proven to be off before work can be performed. This includes:

- ▼ *The safe interruption of the load & opening of the disconnect*
- ▼ *Visual verification/voltage testing to ensure deenergization*

The potential electrical hazard must be identified and documented.

- ▼ *Flash hazard analysis must be performed*
- ▼ *Flash protection boundaries must be determined*

Appropriate steps must be taken to protect persons working near live parts or within the flash protection boundary.

- ▼ *Personal Protective Equipment must be provided based on the relevant incident energy exposure levels (cal/cm²)*
- ▼ *Only properly qualified persons shall be allowed to perform work*

See published NFPA 70E standard for complete safety requirements.

Wiring and connection systems utilizing conventional switches and/or pin and sleeve devices would typically require all of the above listed protective measures to comply with NFPA 70E/CSA Z462.

In contrast, by using Meltric's DECONTACTOR™ Series plugs & receptacles to connect equipment, users can avoid **ALL** these requirements and procedures.

DECONTACTOR™ Series Plugs & Receptacles

Meltric Decontactors are switch rated plugs and receptacles. All Decontactors feature spring-loaded, silver-nickel butt contacts, dead front construction, enclosed arc chambers and short-circuit make and withstand ratings of at least 65kA. They are UL and CSA approved for use as a Motor Circuit Disconnect Switch or a Branch Circuit Disconnect Switch and thus can be used to connect and disconnect resistive or inductive loads.

Decontactors unique features allow users to safely and quickly change-out equipment without the need for NFPA 70E required work procedures and cumbersome PPE.

- ▼ Switch ratings ensure safe load interruption.
- ▼ Removing the plug provides positive visual verification of deenergization without voltage testing.
- ▼ Dead front construction prevents exposure to live parts and maintains **NFPA 70E hazard risk category = 0**.
- ▼ Plug & play simplicity allows qualified mechanics to quickly change-out motors. Electrical personnel are not required at the job site.

Simple and Safe

Push Button Switch Operation



Pressing the pawl (DSN & DS series) breaks the circuit. The plug is ejected to its rest position.



The plug and the receptacle can then be separated. The safety shutter prevents access to live parts.

Motor Change-out Process Comparison

Motor Hard-Wired to a Bladed Disconnect Switch

CUMBERSOME



After throwing the disconnect switch, a worker still needs to verify deenergization. Exposure to live parts is inevitable, so PPE is required.

1. Switch disconnect to OFF
2. Apply lockout/tagout
3. Perform Hazard Analysis
4. Obtain permit for energized electrical work
5. Suit up with appropriate PPE
6. Voltage test to verify deenergization
7. Disconnect motor
8. Remove old/install new motor
9. Connect new motor to hard-wiring
10. Jog the motor to ensure proper rotation

Motor Connected with a Meltric Motor Plug

QUICK & EASY



Mechanics can quickly and safely make and break electrical connections, without special PPE.

1. Switch receptacle to OFF position
2. Remove plug
3. Apply lockout/tagout
4. Remove old/install new motor
5. Insert plug into receptacle



Using Meltric's DECONTACTOR™ Series Motor Plugs to connect motors and other electrical equipment instead of hard-wiring can help reduce change-out and downtime costs by as much as **50%**!