



## Deconnectors Simplify Code Compliance

Deconnector 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  
**DECONNECTOR™ 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/cm<sup>2</sup>)*
- ▼ *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%**!