# Global MCC solutions to meet your application needs
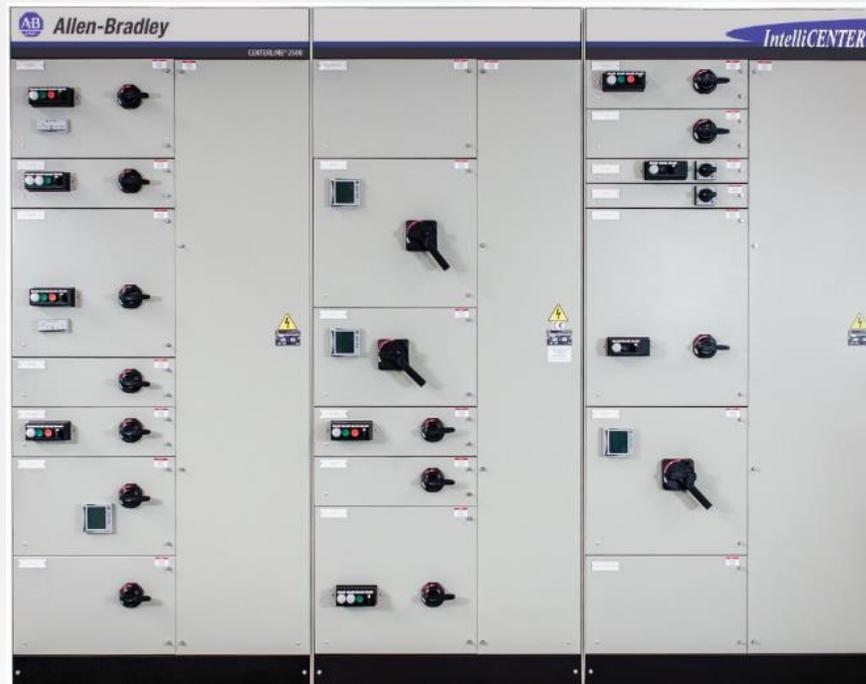
**NEMA CENTERLINE 2100**

480…600V

**IEC CENTERLINE 2500**

380…690V

**CENTERLINE 1500**

2400…7200V

# CENTERLINE MCC Design Strategy

Globally consistent IEC and NEMA MCC solutions to meet your regional manufacturing needs.

## Proven CENTERLINE bus design

- Improved heat dissipation
- Easier installation and maintenance
- Increased current carrying capacity
- Lower operating cost

## Intelligent motor control components

- Drives, soft starters, electronic overload relays

## IntelliCENTER® / Integrated Architecture® platform

- Enhances the intelligence of your MCC using built-in EtherNet/IP to capture information used for predictive maintenance, process monitoring and advanced diagnostics

## Safety

- Provides enhanced safety features as part of the standard offering
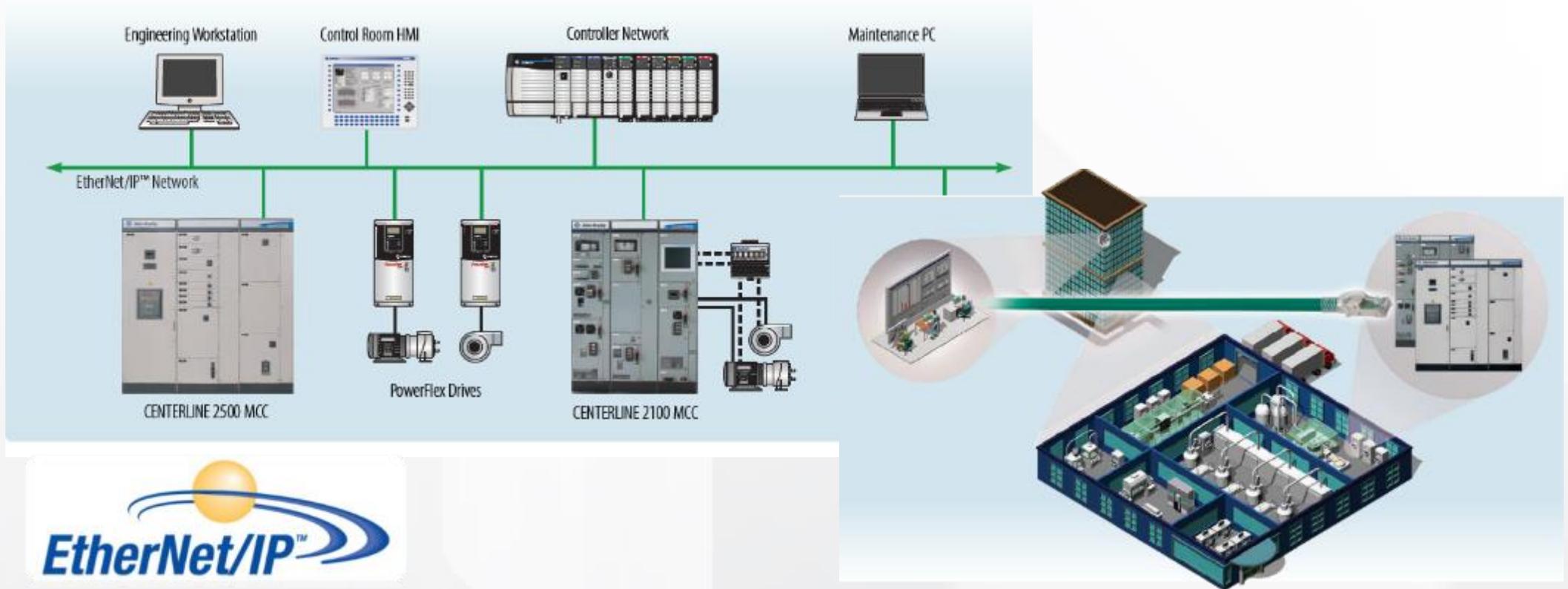


CENTERLINE 2500 IEC MCC
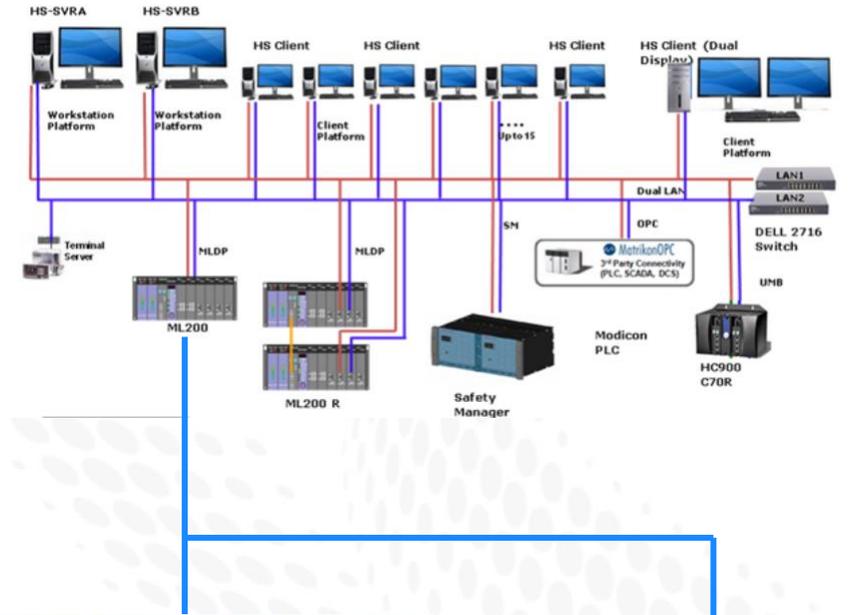


CENTERLINE 2100  NEMA MCC

# IntelliCENTER Technology



- A single network for all automation and process control equipment
- Seamlessly linked to the front office for increased access to information
- Common package for both CENTERLINE 2100 NEMA and CENTERLINE 2500 IEC MCCs

# Modbus TCP/IP within LVMCC

✓ Solution includes premium drives, soft starters, and now fixed speed starters for both CENTERLINE 2100 and 2500 offerings

✓ Aligns with the needs of customers within key industries such as oil and gas and other heavy industries

✓ Reduces hardware costs required to integrate an LVMCC into a third-party PLC or DCS

# Powerful Diagnostic Tools with IntelliCENTER Software

IntelliCENTER Software provides intuitive tools that are available anywhere, anytime
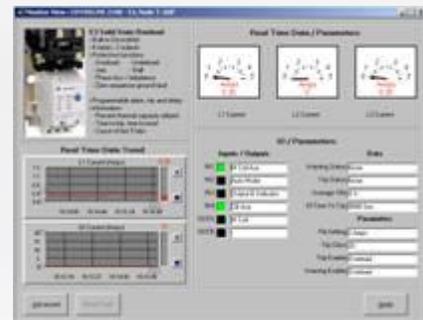
## Identifies potential faults

- Crucial feedback from your motors helps minimize downtime
- Recording process data allows comparison over time and verifies consistent performance

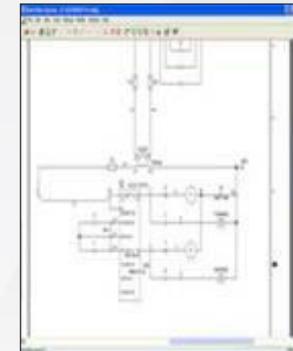## Facilitates quick repair with direct access to critical component documentation



**Elevation View**
*Quick status overview of your MCC*



**Monitor View**
*Detailed unit status information and real time trending*



**Maintenance Information**
*Manuals and drawings*



**Engineering Drawings**
*Created specifically for your MCC*

**Allen-Bradley**
by ROCKWELL AUTOMATION

Air Circuit Breakers

Molded Case Circuit Breakers

Motor Protection Circuit Breakers

Disconnect Switches

Contactor

Electronic Overload Relays

Soft Starters

Variable Frequency Drives

Programmable Automation Controllers

# ArcShield™ Options

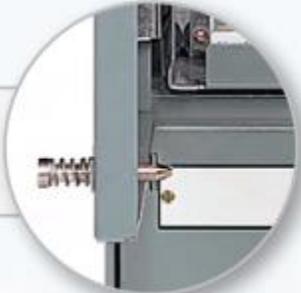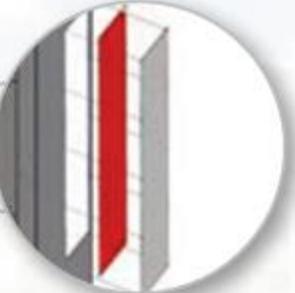| CENTERLINE 2100 with ArcShield | | |
|---|---|---|
| Arc Resistant Rating | Device Limited | Duration Limited (100 ms) |
| Rated Voltage | Up to 600V | Up to 480V |
| Available Fault Current | Up to 65 kA | Up to 65 kA |
| Horizontal Bus Current Rating | 600…1200 A | 600…3000 A |
| *Top-plate Pressure Relief System (Requires 12" minimum clearance above MCC) | Not Required | Required |
| Vertical Wireway Baffle | Not Required | Required |
| Arc Containment Latches | 2 Latches/Door | All Latches |
| Unit Support Pans | Bolted | Bolted |
| Vented Units Allowed | Yes (Arc Resistant Baffles) | No |
| Door Mounted Devices Allowed (Control stations, HIMs, viewing widows, etc.) | Yes | Yes |



* Pressure relief system



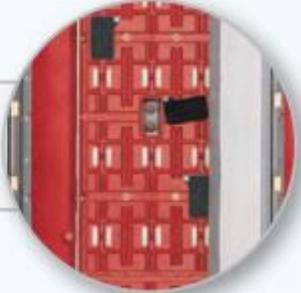Horizontal ground bus at top and/or bottom



Arc-resistant latches on all doors



Reinforced back plates and end plates



Automatic shutters

# ArcShield – Device Limited and 100ms Arc Duration Limited Labels
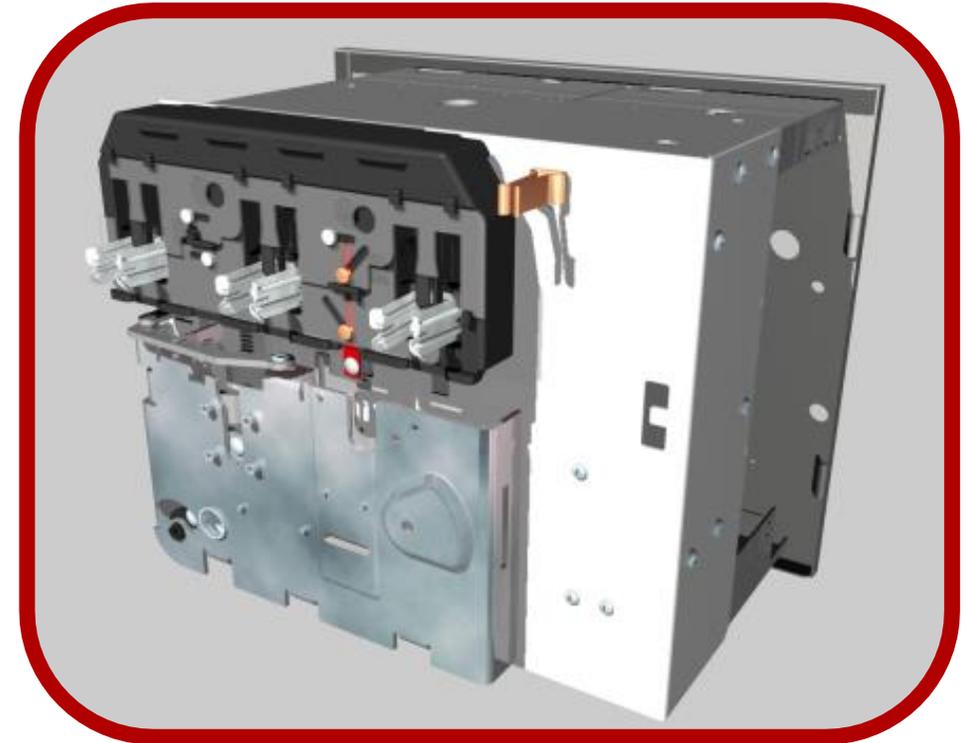
## Device Limited Rating Label

**ARC RESISTANT EQUIPMENT**

PER IEEE C37.20.7 2007

ACCESSIBILITY: TYPE 2
ARC SHORT CIRCUIT CURRENT: ≤ 65 kA
ARC DURATION: DEVICE LIMITED
PROTECTIVE DEVICE:
    UL LISTED FUSES
    CLASS L – ANY FUSE ≤ 1200 A
    CLASS R – ANY FUSE ≤ 600 A
    CLASS J – ANY FUSE ≤ 600 A
    UL LISTED MOLDED CASE CIRCUIT BREAKERS
    ALLEN-BRADLEY – BULLETIN 140G, FRAME G, H, J, K, M, or N
    ALLEN-BRADLEY – BULLETIN 140U, FRAME I, JD, or K
    CUTLER-HAMMER – SERIES C, FRAME F, J, K, L, M, or N
    SQUARE D - POWERPACT FRAME M (480V AC ONLY)
NOTE: 140G-N MUST HAVE INSTANTANEOUS TRIP FUNCTION
        ON AND SET NO HIGHER THAN 12,000A

**⚠ WARNING**

ARC FLASH HAZARD

THE ARC CONTAINMENT CAPABILITY OF THE MOTOR
CONTROL CENTER IS DEPENDENT UPON THE MAIN
PROTECTIVE DEVICE. PROTECT ONLY WITH UL LISTED
PROTECTIVE DEVICE SPECIFIED ABOVE.

DOORS AND COVERS MUST BE PROPERLY CLOSED,
LATCHED, AND SECURED. EQUIPMENT MUST BE INSTALLED
PER MANUFACTURER'S INSTRUCTIONS.
REFER TO PUBLICATION 2100-IN012.

EQUIPMENT WILL NOT FUNCTION AS ARC RESISTANT IF
ABOVE GUIDELINES ARE NOT FOLLOWED.

FAILURE TO FOLLOW THESE GUIDELINES COULD RESULT IN
SEVERE INJURY OR DEATH.

PN-240698

## 100 ms Arc Duration Label

**ARC RESISTANT EQUIPMENT**

PER IEEE C37.20.7-2007

ACCESSIBILITY: TYPE 2
ARC SHORT CIRCUIT CURRENT: ≤ 65 kA
ARC DURATION: ≤ 100 ms
OPERATIONAL VOLTAGE: ≤ 480 V

**⚠ WARNING**

ARC FLASH HAZARD

DOORS AND COVERS MUST BE PROPERLY
CLOSED, LATCHED, AND SECURED.

EQUIPMENT MUST BE INSTALLED PER
MANUFACTURER'S INSTRUCTIONS. REFER TO
PUBLICATION 2100-IN012.

ONLY INSTALL ArcShield 100ms / 480V / 65kA
RATED UNITS IN THIS STRUCTURE.

EQUIPMENT WILL NOT FUNCTION AS
ARC RESISTANT IF ABOVE GUIDLINES
ARE NOT FOLLOWED.

FAILURE TO FOLLOW THESE GUIDELINES COULD
RESULT IN SEVERE INJURY OR DEATH.

41006-402-01 (1)

# SecureConnect™ Overview

- Personnel safety feature that allows operators to disconnect power from a MCC plug-in unit without opening the enclosure door or being in the arc flash boundary[1]

- Address the growing concern of working inside the arc flash boundary on live equipment

- Proactively address known hazards identified by major safety organizations and standards

  - NEC / NFPA 70

  - NFPA 70E

  - IEEE 1584

  - IEEE C37.20.7



[1] Use of safety features varies depending on MCC design

# SecureConnect Remote Operator System

Previously, the SecureConnect operation could only be accomplished by using a manual ¼" Hex Driver and Socket Wrench.

Today, the new SecureConnect Remote Operator allows remote operation of the SecureConnect unit further strengthening *Personnel Safety.*



Remote Operator Available as: Wired Only (Std.) or Wired & Wireless (Optional)

Wired Pendant Control (Std.)

SecureConnect MCC Unit

Optional Status Indicator

Wireless Control

# CENTERLINE 2100 Safety Portfolio