



CenterONE®

Design Low Voltage MCCs

What's New in CenterONE v.3.75

CenterONE version 3.75, major changes include the following:

- The addition of E1 Plus Overload Relay Ground Fault and Jam Protection to the available options for NEMA Size 4 & 5 FVR starters and NEMA Size 4, 5, & 6 FVNR starters. Option code is 7FEE_G (where "_" represents the E1 Plus overload relay trip range code).
- The addition of 200 A, 400A, and 600 A FVNR starters using Bulletin 1102C vacuum contactors. This new offering includes the full range of overload relays, including E3 Plus. This previous starter offering which used Bulletin 1100 vacuum contactors is no longer available.
- For more details regarding these new offerings and the full range of sections, units, and options available on the MCC Quick Delivery programs, be sure to check out the CENTERLINE 2100 MCC Catalog http://literature.rockwellautomation.com/idc/groups/literature/documents/ca/2100-ca001_-en-p.pdf

Remember to periodically run the Current Program Update tool (described in the section on Version 3.73, Build 227, below) to ensure that intermediate updates which have been made are incorporated into your installation in a timely fashion.

Thanks for using CenterONE!

The balance of this document re-caps previous CenterONE Updates, going back to the release of CenterONE v.3.0 in November 2002.

CenterONE version 3.74

- The short circuit withstand ratings for NEMA Size 1 and 2 Space Saving starter units at 600V have been increased from 35,000 amperes to 42,000 amperes.
- Circuit breaker option code "CX" extra-high interrupting capacity (e.g. 100,000 amperes interrupting capacity at 480V) have been moved to the SC (Stocked Component) delivery program for orders placed in the U.S. This option was previously only available on the SC delivery program for orders placed in Canada.
- ControlLogix chassis unit processor options were expanded to include the following: Logix5561 Processor, Logix5562 Processor, Logix5563 Processor, and Logix5564 Processor. All four options include the 64 MB Industrial CompactFlash memory card.

CenterONE v.3.73 (build 229)

CenterONE version 3.73 build 229, major change is the expansion of communication options offered for SMC-Flex solid state motor controllers and PowerFlex drives as well as update necessary to support the release of the Series "C" release of the E3 electronic overload relay.

SMC-Flex controllers previously were only offered with DeviceNet or Remote I/O communication modules. We have now added Ethernet/IP and ControlNet communication modules as factory installed options.

PowerFlex 40 drives previously were only offered with DeviceNet or ControlNet communication modules. We have now added the Ethernet/IP communication module as a factory installed option.

PowerFlex 70 & 700 drives previously were only offered with DeviceNet, ControlNet or Remote I/O communication modules. We have now added the Ethernet/IP communication module as a factory installed option.

NOTE: factory installed Ethernet or ControlNet media is not available on the quick delivery program, but can be provided with an extended lead-time on the engineered delivery program.

Version 3.73 build 229 also incorporates other changes required due to updates in the latest CENTERLINE 2100 MCC catalog. The catalog which contains the full listing of products available on the quick delivery programs can be downloaded at the Rockwell Automation Literature Library.

http://literature.rockwellautomation.com/idc/groups/literature/documents/ca/2100-ca001_-en-p.pdf

CenterONE v.3.73 (build 227):

With version 3.73, CenterONE has been enabled to be updated using the "Current Program Updater." The Current Program Updater is the same tool used to keep your other Rockwell Automation configurators (such as ProposalWorks) up to date.

This means that future updates to CenterONE will be provided and installed automatically using the Current Program Updater. This will eliminate the need to run separate installation packages for CenterONE updates once an installation of version 3.73 (or later) has been made.

After installation of version 3.73 of CenterONE, the Current Program Updater can be found in the Windows Start Menu, under the group "Rockwell Automation". There are two programs: The Current Program Updater, which is the tool that actually downloads and installs updates; and the Current Updates Monitor, which can be used to have the Current Program Updater automatically check for updates and prompt you to download them. If you don't want to have the monitor running all the time, you can manually run the Current Program Updater to check for updates.

Version 3.73 also updates the Windows registry with the locations of the CenterONE AutoCAD symbol library and the user's AutoCAD executable. These locations are needed to ensure that if updates are required for the AutoCAD symbols or the AutoCAD templates for the Equipment Details drawing (Form 385) and one-line drawing, the Current Program Updater will know where to place those files.

In addition, two new input fields have been added to the "AutoCAD" tab of the "MCC Setup" dialog box (as shown below). These files will match the registry entries used by the Current Program Updater, and should be kept up to date if the AutoCAD symbol library or AutoCAD executable locations are changed. Failure to keep them up to date would result in the AutoCAD files not being updated.

The screenshot shows the "MCC Setup Sheet" dialog box with the "AutoCAD" tab selected. The dialog box has a title bar with a close button (X). The main area is divided into several sections:

- DeviceNet Information** (top left)
- Structure Modifications** (top right)
- IntelliCENTER® Shipping Information** (second row left)
- IntelliCENTER® Software Registration** (second row right)
- Customer Information** | **Wiring and Enclosure** | **Incoming Power** | **Bus Work** | **Misc MCC Specs** (third row)
- Unit Specifications** | **Common Unit Options** | **AutoCAD®** | **MCC User Notes** (fourth row)

The "AutoCAD® Information" section contains the following fields:

- Workup By: [Text Box]
- Customer: [Text Box]
- C.O. Number: [Text Box]
- Project: [Text Box]
- MCC No.: [Text Box]
- Sales Rep.: [Text Box]
- Sales Office: [Text Box]
- Engineer: [Text Box]

Below these fields are two checkboxes: IEC Drawings and Kilowatt data, followed by a Language dropdown menu set to "English".

The "Folder Paths (used by Current Updater tool to locate and update appropriate files when needed)" section contains:

- AutoCAD® symbols: [Text Box] C:\Program Files\RAISE\Center1\AutoCAD\Symbols\ [Browse...]
- AutoCAD® executable: [Text Box] C:\Program Files\AutoCAD 2008\ [Browse...]

At the bottom of the dialog box are four buttons: OK, Cancel, Apply, and Help.

CenterONE v.3.72:

Due to the successful introduction of Allen-Bradley brand circuit breakers in the Allen-Bradley Industrial Control product portfolio, CENTERLINE® 2100 MCCs have begun using Allen-Bradley 150A, 250A and 400A frame circuit breakers (Bulletin 140U, I-Frame, JD-Frame, and K-Frame) and 150A, 250A, 400A and 600A frame motor circuit protectors (Bulletin 140M, I-Frame, JD-Frame, K-Frame, and Q-frame) in CENTERLINE 2100 MCC units.

The significant updates in CenterONE version 3.72 are updates to support this transition to Allen-Bradley circuit breakers and motor circuit protectors. CenterONE reports in version 3.72 will now detail the Allen-Bradley circuit breaker or motor circuit protector being used in a unit.

Additional information can be found in the CENTERLINE 2100 Technical Data publications for combination controllers using motor circuit protectors or circuit breakers

Combination Controllers with Instantaneous Trip Motor Circuit Protectors

This publication can be found on the internet at

http://literature.rockwellautomation.com/idc/groups/literature/documents/td/2100-td001_-en-p.pdf

Combination Controllers with Inverse-Time Circuit Breakers

This publication can be found on the internet at

http://literature.rockwellautomation.com/idc/groups/literature/documents/td/2100-td002_-en-p.pdf

A "Check for Updates" option has also been added to CenterONE. Access it from the "Help" menu. This option will still require the update to be manually downloaded and updated, but will be quicker than going to the CenterONE website.

In addition, support has been added for scrolling up and down on the Spreadsheet View using the mouse wheel!!!

CenterONE v.3.71:

Significant updates in CenterONE version 3.71 include various updates related to the release of the latest CENTERLINE 2100 Motor Control Center Catalog, publication 2100-CA001E-EN-P.

This publication can be found on the internet at

http://literature.rockwellautomation.com/idc/groups/literature/documents/ca/2100-ca001_-en-p.pdf

The updates include:

Full Voltage Reversing starter units - E1 Plus and E3 Plus electronic overload relays quick delivery offering extended from NEMA Size 1, 2, and 3 to now include NEMA Size 4 and 5

PowerFlex drive units - Human Interface Module (HIM) option codes 14HA2 and 14HBA2 (digital keypad) have been removed from the product offering. The recommended alternative is option code 14HA3 or 14HBA3 (full numeric keypad).

Circuit Breakers - The standard interrupting capacity 150 A frame circuit breaker (suffix "CT", "FDB" frame, 14 kA @ 480V) has been removed from the product offering. The recommended alternative is the medium interrupting capacity 150 A frame circuit breaker (suffix "CB", "FD" frame, 35 kA @480V).

CenterONE v.3.70:

- **New Requirement for Power System Configuration type**
 - The "Incoming Power" tab of "MCC Setup" now includes a required selection for the power system configuration of the power system that will be feeding the MCC.
 - The type of power system configuration will be used by CenterONE to help ensure proper selections of units and options.
 - For example, if a surge suppressor unit is selected, it is important to select the unit which is suitable for the power system. If using a 4-wire system, the suppressor for a 3-wire system should not be allowed to be selected.

- **Changes for neutral bus options**
 - Horizontal neutral bus will now be allowed to be selected for up to four sections. Horizontal neutral bus may still be selected for all sections. This new capability allows more flexibility when an MCC will be used on a 4-wire power system, especially if neutral bus in all sections is not required.
 - Sections which are to contain horizontal neutral bus will now be marked using the "Specify" menu in the "Layout View" or by right-clicking a section and selecting "Horizontal Neutral Bus."
 - Incoming neutral connection plate is now only available for main incoming units rated 400A or lower (400A frame or smaller for circuit breakers).
 - Incoming neutral bus must be used for main incoming units rated 600A or higher (600A frame or larger for circuit breakers), when a 4-wire power system is used.
 - If neutral loads will be served, then at least one outgoing neutral connection plate or vertical neutral bus will be required in order to provide a user connection for neutral load cables.

For more information regarding power system configurations and their influence on unit and option selections, please refer to Publication 2100-AT003 "Power System Considerations for Product Selection".

It is available at the Rockwell Automation Literature website. [Click this link.](#)

CenterONE v.3.69

Significant updates in CenterONE version 3.69 included:

- **E1 Plus Overload Relays with Ground Fault/Jam Protection**

Now available for NEMA Size 1, 2, and 3, full-voltage reversing (FVR) and full-voltage non-reversing (FVNR) starters.

Option code 7FEE*G (* is overload relay trip range code)

- 110 to 240 V AC control voltage
 - transformer, separate, or line-to-neutral control only
- 7FEE_G is mutually exclusive with
 - unit ammeter(-85AA)
 - unit current transformer (-85XA)
 - current transducers (-700TC, 700TC2, 700TC4, 700TC5)
- Not available for dual mounted units
- Traditional NEMA Size 1, 0.5 space factor with 7FEE*G
 - Mutually exclusive with DSA option (11DSA2 or 11DSA3)
- Traditional NEMA Size 3
 - Must be NEMA Type B wiring (e.g. 2113B, not 2113A)
 - Omit power terminal blocks option (-106) not available
- Space Saving NEMA Size 2, without extra space option,
 - 1.0 space factor minimum
- Space Saving NEMA Size 2, with extra space option (-15)
 - 1.5 space factor minimum
- Pilot device legend plates with Spanish translations are now available (option code 860S)

CenterONE version 3.68

Significant updates in CenterONE version 3.68 included:

Quick Delivery Program support for up to five DeviceNet Networks in a single MCC!

Previously only available on the Engineered Delivery Program.

Now Available on SC-II and PE-II Quick Delivery Programs!

- Multiple networks are useful when:
 - The MCC has more than 17 sections.
 - More than 50 nodes are needed at 500kbaud.
 - More than 35 nodes are needed at 250kbaud.
 - There are separate processes being controlled within a single MCC
- More Information and Configuration Rules for Multiple DeviceNet networks can be found at the end of this document; to jump there, click this [link](#).
- 600V Short Circuit Withstand Ratings for Main and Feeder Circuit Breaker units which use 400 A frame KDC, 800 A frame NDC, and 1200 A frame NDC circuit breakers have been increased from 50kA to 65kA.
- Support for SMP-1 and SMP-2 overload relays has been removed due to obsolescence of the SMP overload relays.

CenterONE version 3.67

CenterONE version 3.67 primarily addressed various bug fixes; however, users will also notice:

- Improved category descriptions on CenterONE reports as well as improvements to the unit and option descriptions (most notably for overload relays)
- IntelliCENTER software CD quantity input fields will allow the entry of zero values in the event that the CD items do not need to be supplied
- Addition of input field on Incoming Power tab of MCC Setup dialog box to allow a starting section number other than 1 for front mounted MCCs; useful for additions to existing MCCs
- Some dialog boxes have been made wider to accommodate longer option descriptions
- Note: the Equipment Details AutoCAD template file has been revised to remove an inconsistency in the columns for Manufacturing Location versus Customer Location (the Customer Location column heading only appears when that Customer Location data has been entered into CenterONE). The first page of unit data had the Manufacturing Location Column first; the second page of the unit data had the Manufacturing Location Column located second. It will be necessary to recreate any existing script files using CenterONE version 3.67 to avoid the Manufacturing location data from being placed in the wrong column on the 2nd page of unit data when using the new template.
 - If recreating the script files is not practical, the previous template file (dated 8/11/2006) can be used, just be sure to reload the new template (dated 10/11/2006) when running script files created with CenterONE version 3.67

CenterONE v.3.66

New and updated pre-engineered product offerings that are now included in CenterONE v.3.66 are as follows:

- E1 Plus Overload Relay Jam Protection Module
 - Learn more about the module here [Click this link](#)
- Unit Nameplate options, added "None-Nameplate Screws only" for those users who prefer to provide their own nameplates
- Option added to factory configure PowerFlex drive units for use on power systems which are ungrounded or resistance grounded
- Allow HMCP circuit breakers to be used with SMC 3 and SMC-Flex 108 A and 135 A units
- Allow Device Starter Auxiliary Module for feeder or main circuit breakers which have current limiters
- Delivery program changed to Pre-Engineered for SMP 1 overload relays
 - For shorter lead-time consider using E1 Plus Overload Relays
- Delivery program changed to Pre-Engineered for all 1336 Plus II drive units
 - For shorter lead-time, consider using PowerFlex drive units
- Delivery program changed to Engineered for Reduced Voltage Autotransformer (RVAT) starters
 - For shorter lead-time consider using SMC-3 or SMC-Flex soft starter units for reduced voltage start applications

CenterONE v.3.60 – v.3.65

Space Saving NEMA Starter Units Provide Alternative

Do you have applications for which you need to minimize the footprint of your MCCs while requiring NEMA ratings for the starter applications? Have you ever considered using MCCs with Space Saving NEMA starters?

If you answered "yes" to either of these questions, CenterONE v.3.6 may have a solution for you.

Space Saving NEMA FVNR and FVR starter units offer space saving alternatives for those applications requiring reduced MCC footprints while meeting NEMA standards.

Typical Space Saving NEMA FVNR Size 1 and 2 starters require only 0.5 space factor compared to 1.0 space factor for comparable traditional NEMA starter units. Similar space savings can be achieved with Space Saving NEMA FVR starter units.

Applications such as commercial, water, wastewater and off-shore oil platforms can benefit by using Space Saving NEMA starter units when minimizing the MCC footprint is critical.

Space Saving NEMA starter unit designs with cUL US Listing are available in CenterONE v.3.63 as follows:

- Space Saving NEMA FVNR starter units with Circuit Breaker
 - Size 1 and 2 - in 0.5 space factors
 - Size 3 – in 1.0 space factors
- Space Saving NEMA FVNR starter units w/Fused Disconnect Switch
 - Size 1 - in 0.5 space factors
- Space Saving NEMA FVR starter units with Circuit Breaker
 - Size 1 - in 0.5 space factors
 - Size 2 - in 1.0 space factors
 - Size 3 - in 1.5 space factors
- Space Saving NEMA FVR starter units w/Fused Disconnect Switch
 - Size 1 - in 0.5 space factors

New and updated pre-engineered product offerings that are now included in CenterONE v.3.65 are as follows:

- Space Saving NEMA Size 4 Full Voltage Non-Reversing starter units with Circuit Breaker disconnect – in as little as 1.0 Space Factor
- SMC-3 soft starter units rated 108A-135A
- Optimization of space factors for SMC-Flex soft starter units rated 108A-135A
- Changes to allow the selection of normal or heavy duty sizing for PowerFlex 70 drive units
- Changes to allow the selection of normal or heavy duty sizing for PowerFlex 700 drive units

CenterONE v.3.63 Supports New and Expanded Product Offerings

New products and options that can be configured in CenterONE v.3.63 include:

- PowerFlex 70 Variable Frequency Drive Units (Bulletin 2162Q and 2163Q) with expanded ratings. New ratings include 18.5-37 kW at 380-415V and 25-50 HP at 480V and at 600V.
- The available ratings for the Bulletin 2154J and 2155J SMC-Flex soft starter units on the quick delivery program have been extended to include 05-85A.
- Control Station Housing (option -2D) Four hole control station is available for four Bulletin 800t/800F pilot devices, for Bulletin 2154H and 2155H SMC-3.
- Unwired Control Relay option -89HA33 Bulletin 700HA 3PDT relay is available for Bulletins 2106, 2107, 2112 and 2113 Space Saving NEMA starters.
- Redundant DeviceNet Power Supply Unit (option -767C.) Two power supplies provide back-up for DeviceNet System.
- E1 Plus overload relay, with or without DeviceNet module option.

Enhanced Support in CenterONE v.3.60 for pre-engineered Customer Specific offerings

The LVMCC Business of Rockwell Automation has a long history of providing pre-engineered support for motor control center requirements that are regularly ordered by any specific customer, even when those requirements are uniquely needed by that customer alone. The mutual benefits of doing this are easy to see and undeniable. They include but are not limited to, the inherent consistency of product designs for which pre-engineered bills of material have been developed, and improved lead times that are also inherent in not having to specially engineer those products every time they are needed.

Past releases of CenterONE have supported the configuring of Customer Specific Products (CSP) but with the release of version 3.6, the configuration of CSP in CenterONE is much improved and easier to use. It allows access to the customer specific catalog numbers by putting in the 3 letter customer code and a password on the MCC Setup Sheet Customer Information Tab. In fact, there is no need to have the list of the string numbers for your CSP at hand to type in the catalog number; with this new feature you only have to select the units from a list. Doing this will let you obtain the correct units specifications including description, space factors and wiring diagrams.

If your company's recurring MCC product needs are already served by the Customer Specific program in CenterONE, or if you simply would like to explore this option for your company, contact your local Rockwell Automation representative or distributor for more information.

Pre-Engineered Support Discontinued for Bulletin 2400 units, with the release of CenterONE v.3.60

The LVMCC Business has discontinued pre-engineered support in CenterONE, for MCC units with IEC contactors and starters. This includes Bulletins 2402, 2403, 2406, 2407, 2412 and 2413. These devices with IEC contactors and starters will still be available on the special Engineered lead time program. For quick shipment consider using the new Space Saving NEMA starter offerings that are now available to be configured in CenterONE v.3.6, as described above.

Other Recent Changes and Updates in CenterONE include the following:

To keep pace with the fast growing, fast shipment offerings in the CENTERLINE[®] motor control center family, CenterONE has been going through a significant growth cycle for some time. Many new products and product options are now supported on the CENTERLINE fast shipment programs and all of them are able to be configured in CenterONE. Also, the reports and other documentation now available for CenterONE workups have been vastly improved.

The highlights of several recent CenterONE releases and updates going back as far as version 3.0 are included in this document. These are listed in approximately reverse chronological order of their release dates.

CenterONE Space Saving Updates

Version 3.57 – One of the most significant benefits associated with an MCC is the efficient use of space. The LV MCC Business of Rockwell Automation continuously investigates methods to reduce the space requirements of MCC units, thus reducing the MCC footprint. The latest space reduction efforts impact the Bulletin 2162Q and 2163Q PowerFlex[®] 70 drive units and the Bulletin 2107 and 2113 Size 3 starter units.

- **PowerFlex 70 drive unit space factor reductions** – The standard offering of NEMA 1/1G PowerFlex 70 drives rated 1.3 – 8.7A @ 380 – 414V, 5.0 – 8.0A @ 480V and 3.9 – 6.1A @ 600V will no longer need to be increased to 2.0 space factors when specifying a door mounted HIM and pilot devices (control station).
- **NEMA Size 3 FVNR and FVR space factor reductions** – The standard Bulletin 2107 FVR starter units for Size 3 applications has been redesigned to more efficiently utilize the space within the unit, reducing that unit to 2.5 space factors.

The Bulletin 2113 FVNR starter unit for Size 3 applications with E3/E3 Plus overload relays (option -7FEC__) has been redesigned to more efficiently utilize the space within the unit, reducing that unit to 1.5 space factors.

These redesign efforts reduced each of these units by 0.5 space factor, providing significant opportunity to reduce the section count of MCCs with Size 3 FVR and FVNR starters.

Other CenterONE Support for New and Expanded Products

Version 3.50 – New products and options that can be configured in CenterONE now include:

- PowerFlex 40 Variable Frequency Drive Units (Bulletin 2162T and 2163T), 0.5-15 HP at 380-480V and 1.0-15HP at 600V
- Ethernet to DeviceNet Linking Device (Bulletin 1788) in MCC units
- The available ratings for the Bulletin 2154H and 2155H SMC-3 soft starter units on the quick delivery program have been extended to include 43-85A.
- Reduced space factor Control and Lighting Transformer with Fusible or Circuit Breaker disconnect Units (Bulletin 2196Z and 2197Z)
- ControlNet Communications Card for PowerFlex 7 Family
- 24V Encoder Feedback option is available on PowerFlex 700 Drives and 700 Drives with manual bypass.

Version 3.0 through v.3.17 – These recent earlier releases of CenterONE added support for the following new products and options:

- ControlNet option for PowerFlex drives (PF70 and PF700) in MCC
- Encoder option for PowerFlex 700 drive units
- Unit Space Factor size reductions - Full Voltage Non-reversing (Bulletin 2112) NEMA Size 3-5 units with Class J fuse clips and Size 4 units with Class HRCII-C fuse clips have been redesigned to more efficiently utilize space. The redesign effort reduced each unit by 0.5 space factor. This change provides a significant opportunity to reduce the section count of a MCC with larger horsepower starters.
- SMC-Flex soft starter units (Bulletin 2154J and 2155J) units are available in NEMA Type 1, Type 1 with gasket and Type 12 unit designs. Time delay fuses provide branch circuit protection for the Bulletin 2154J units. Instantaneous or a variety of thermal magnetic circuit breakers provide branch circuit protection for the Bulletin 2155J units. Options such as isolation contactors, protective modules, auxiliary contacts, pilot devices, network communications, are available to meet a wide variety of needs.
- PowerFlex 70 (Bulletins 2162Q and 2163Q) 0.5-20HP @ 240V, 380 - 480V, and 600V
- PowerFlex 70 w/ Manual Bypass (Bulletins 2164Q and 2165Q) 0.5-20HP @ 480V and 600V
- PowerFlex 700 (Bulletins 2162R and 2163R) 0.5-150HP @ 380 - 480V and 600V
- PowerFlex 700 w/ Manual Bypass (Bulletins 2164R and 2165R) 0.5-150HP @ 480V and 600V

- Vector Control I/O boards in PF Drives, options -14DA1C (24VDC) and -14DA1D (120VAC) - *options -14DA1A (24VDC) and -14DA1B (120VAC) Standard Control boards are obsolete*
- NEMA 1/1G, door mounted HIMs on PF drives, options, -14HBA0 (Blank HIM), -14HBA2 (LCD, Digital keypad), -14HBA3 (LCD, Full Num.), -14HBA4 (LCD, Analog Pot.), -14HBA5 (Prog. only).
- Expanded offerings of E3 Basic & E3 Plus solid-state overload relays.
- PowerFlex 70 variable frequency AC drive units and accessories (all Hp, kW, and current ratings @ 240, 380-415, 480, 600VAC).
- PowerFlex 700 variable frequency AC drive units and accessories rated 37A, 43A, 56A, 72A, 105A (18.5kW, 22kW, 30kW, 37kW, 45-55kW) @380-415VAC and 34A, 40A, and 52A, 65A, 96A, 125A (25HP, 30HP, 40HP, 50HP, 75HP, 100HP) @480VAC.
- Manual Isolated Drive Bypass with PF70 variable frequency AC drive units rated 0.9A - 27A (0.5 - 20Hp) @ 480VAC.
- Manual Isolated Drive Bypass for PowerFlex 700 variable frequency AC drives rated 34A, 40A and 52A (25Hp, 30Hp & 40Hp) @ 480VAC.
- SMC-3 units rated 3A - 37A for 240V, 480V, and 600V.
- Additional support for new Bulletin 150 SMC-3 combination solid-state controller units (Bul. 2154H and Bul. 2155H.)
- Bulletin 1404-M5 Powermonitor 3000. (Replaces Bull. 1404-M4.)
- Ethernet communication platform available on Bulletin 1404-M5 and 1404-M6 Powermonitor 3000 metering units.
- ControlLogix processor upgrades from Bulletin 1756-L and 1756-LM to Bulletin 1756-L55M.
- Full section blank mounting plates with or without horizontal power bus with either no disconnecting means, fusible disconnect, or circuit breaker as units in an assembled motor control center.

CenterONE Support Discontinued for the following Products, with the release of v.3.50

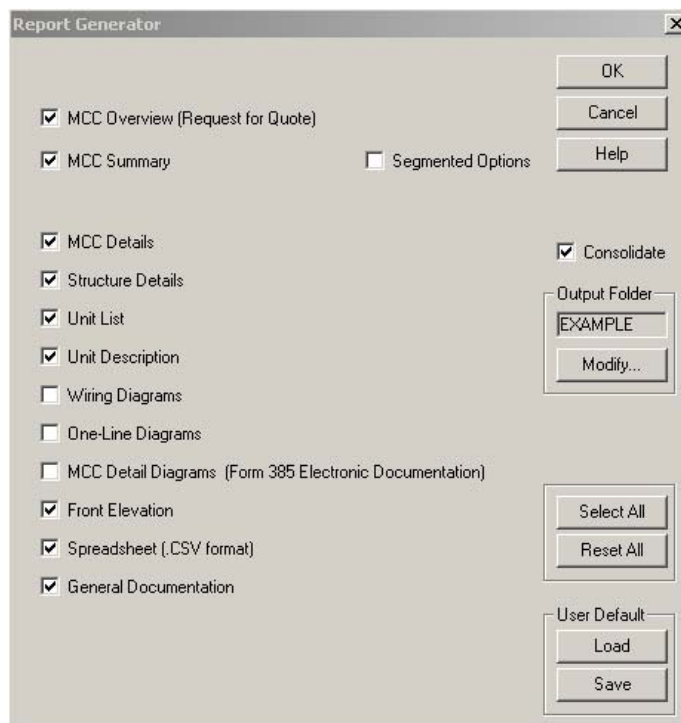
The LV MCC Business has discontinued its support of SMC-2 soft starter and SMP-3 overload relay (and the corresponding communication module options) beginning in the Version 3.50 release of CenterONE. The SMC-2 and SMP-3 have been very popular offerings in past years, but now with the availability of the SMC-3 soft starter and the E3/E3Plus overload relays volumes have shifted almost exclusively to the newer offerings.

Report Generator – Introduction and Refinements

One of the most exciting recent enhancements in CenterONE was first introduced in v.3.0. It is greatly improved reporting, via a Report Generator dialog that you will find in the drop down menu under Reports from the CenterONE command bar.

As can be seen in the following Dialog Illustration #1, about a dozen reports, or MCC proposal components, can be sent to an Output Folder. Unless re-directed by you, that Output Folder, named for your MCC workup, will be placed in a Reports folder location that also will be created in the new CenterONE folder under your My Documents.

Dialog Illustration #1



Note: Because Rockwell Automation sales representatives and Distributor MCC Specialists also use CenterONE to help them assemble proposals for MCC projects, a couple of proposal-specific tools are included for them that are not illustrated here.

However, **all** standard quick shipment product offerings are supported in your CenterONE software.

The majority of the CenterONE Report Generator outputs can be edited by CenterONE users. They are saved as Word for Windows documents, or in

the case of the Spreadsheet view, in a *.csv spreadsheet format.

If you select multiple Report Generator outputs and you prefer to consolidate those that save as Word documents into a single report, you have that option. This requires that you select the Proposal Cover Page and at least one other report that saves as a .doc (the MCC Overview, for instance) and then check the Consolidate box on the right side of the Report Generator dialog before you OK your report outputs.

Note that some of the Report Generator outputs do need to be processed further by other application software. Examples are the *.scr formatted script files for producing one-line diagrams or to make the MCC Details drawings that will include all the details about your motor control center, from a front elevation through the splicing and conduit entry data specific to your MCC workup.

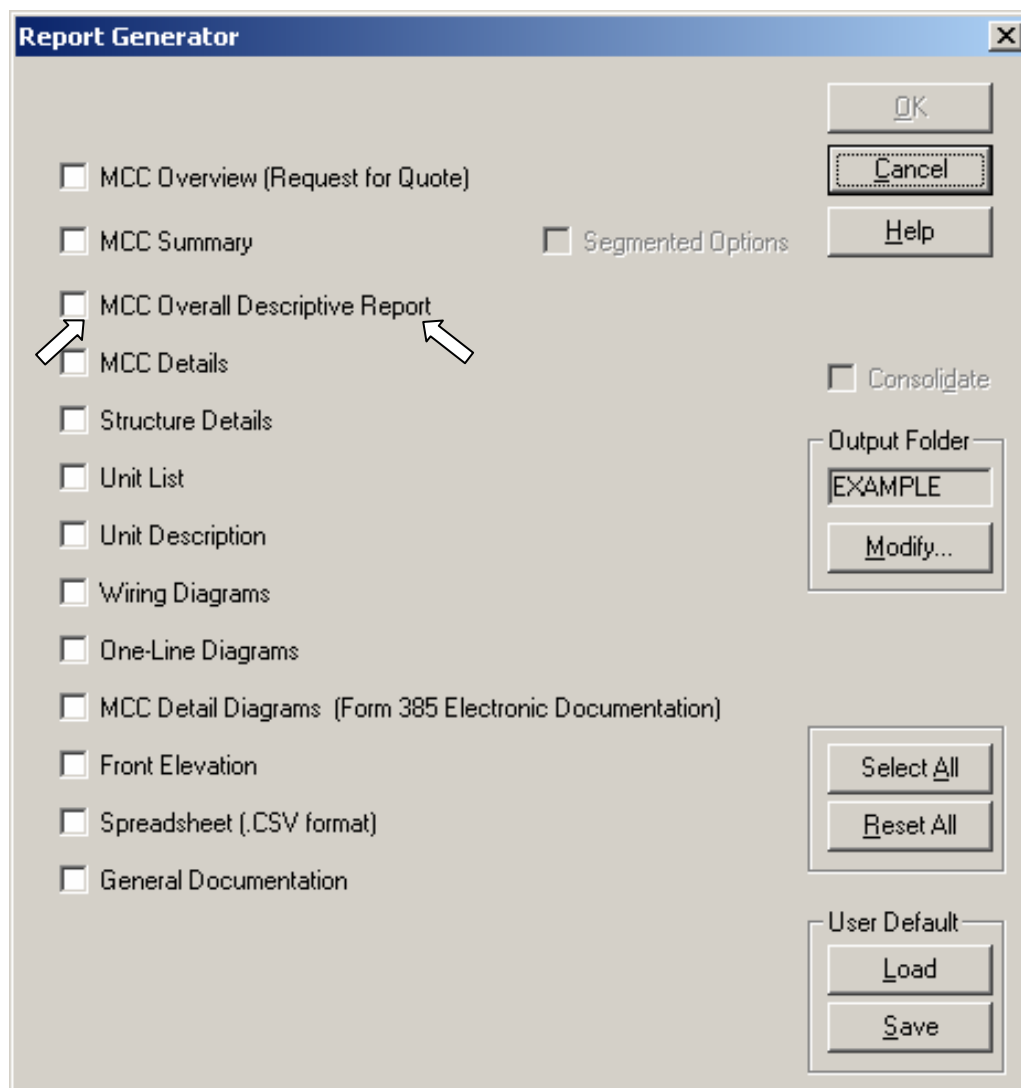
It is still true that you need AutoCAD® to run those scripts, and your AutoCAD still needs to be set up and configured as instructed in the ACAD.chm Help document you can find in your Center1 application software folder. This document can also be accessed via the Help Index as you run your CenterONE software, as the AutoCAD Help File.

Due to the 32 bit-style default naming conventions now being employed for these scripts, and also because of their default location within your My Documents folder, you will find that only AutoCAD Release 14 or newer is now recommended for use in running these scripts.

NEW from the CenterONE v.3.50 Report Generator

Adding to the already broad array of the original Report Generator outputs is the new Overall Descriptive report. You can choose the elements of the Overall Descriptive report that you consider are pertinent to your workup. Therefore, this is where you can get a plain language description of your MCC structure and bus system and of your units. And it is where you can get lists of the unit nameplates data that you filled in, or of the heater element selections you and CenterONE made. And this is where you can get a list of the DeviceNet network number, baud rate and individual node number assignments that you and CenterONE have done for your DeviceNet-equipped MCC workup.

Dialog Illustration #2



Catalog Specific Wiring Diagram Retrieval

Another exciting recent enhancement to the CenterONE software is a new Wiring Diagram retrieval tool. Wiring diagrams specific to the standard units you configure into your MCC workups can now be retrieved from our Server on the Internet.

The wiring diagrams can be requested for all the units in your motor control center workup by checking that selection on the Report Generator dialog as shown in Dialog Illustration #1 or #2 above. Alternatively, from the Spreadsheet window within your CenterONE workup, you can request the unit wiring diagrams be retrieved for one, for some, or for all of your units.

After you do that, the wiring diagram number will reside in a column of your MCC workup Spreadsheet view. That diagram number will be color coded...green to indicate if it is available for retrieval from our Internet-based Server, and red if it is not immediately retrievable.

About the color code green diagrams...if you are connected to the Internet at the time you request the diagram(s) be retrieved (i.e., that they be Refreshed from the Server) color-coded-green wiring diagrams will be downloaded into a Wiring Diagrams folder at the My Documents\CenterONE location on your computer. They will be saved there in native AutoCAD format, as *.dwg files.

To simply view or print those wiring diagrams, you will not need to have the complete AutoCAD application software. A DWG viewer like AutoDesk's DWG TrueView® will suffice. A DWG viewer is not included with the CenterONE software, but DWG TrueView is available for download from AutoDesk's website at <http://www.autodesk.com/dwgtrueview>

Next, about the color-coded-red wiring diagram numbers...these may be of the form CS12345678. In this form the 'CS' stands for Catalog Specific, and this indicates the diagram **will** be created and made available as a standard retrievable unit wiring diagram as described above. But at the time of your initial request, if the CS# is color coded red, that wiring diagram is not yet available. However if you wait for at least 24 hours, and you again open your CenterONE workup, you will then be able to go to the Spreadsheet window and request that wiring diagram to be retrieved from the Internet Server.

Multiple DeviceNet Networks in a single MCC

Previously only available on the Engineered Delivery Program.
Now Available on SC-II and PE-II Quick Delivery Programs!

Reasons to use multiple DeviceNet networks in a single MCC include:

- want to use a single MCC, with one source of main incoming power, but want to use separate networks for configuration, control, and monitoring of different groups of units within the MCC.
- need more than 17 sections in an MCC networked with DeviceNet.
- the limit of number of nodes is reached:
 - 500 kbaud, recommended limit of 50 nodes.
 - 250 kbaud, recommended limit of 35 nodes.

A network termination kit will be provided for each network in an MCC. Network cable length and current draw will be calculated for each network independently of other networks in the same MCC.

Configuration Rules

These rules are for Quick Delivery Program MCCs. It may be possible to configure an MCC outside the bounds of these rules for an MCC processed on our Engineered Delivery Program. Contact your local Rockwell Automation Distributor if you have needs beyond what is outlined below.

Network Number Assignment

- Up to five networks can be specified.
- All sections must be assigned to a network; even sections with only blank doors or non-DeviceNet capable units.
- Single section networks are allowed as long as they are in their own shipping block. It may be desirable to group "spare" sections together into their own network so that their DeviceNet cable lengths are not included in the cable length calculations for other networks.
- Each section can only contain one network.
- Networks are allowed to extend through many adjacent sections, to a limit of 17 sections.
- Each shipping block can only contain one network.
- Networks are allowed to extend through many adjacent shipping blocks.
- For the purposes of the shipping block rule, the sections on the back side of a back-to-back MCC are considered as separate shipping blocks from the front sections. This allows the front side of the MCC to be one network and the back side to be a different network.
- Network numbers can only change at a shipping split.

Unit Node Number and Network Assignment

- All units with a DeviceNet capable device or option must be assigned a node number and network number.
- Second node and network data is only allowed for and is required for:
 - Two-speed starters with DSA module or E1 Plus DeviceNet Module
 - SMC-Flex soft starter units with communication and DSA module
 - Drive with isolated bypass units with communication and DSA module
 - ControlLogix chassis with more than one scanner module
- DeviceNet power supply unit only requires a network number; unless it is provided with an optional DeviceNet System Auxiliary module.
- When multiple DeviceNet networks are specified, node and network numbers must be assigned manually.
- Network number for a node must match the network assigned to the section which contains the unit.
- Node 00 is reserved for scanner modules and is the default node number for network linking devices.
- Node 62 (programming terminal) & 63 (new device) are not available for assignment in the MCC.

DeviceNet power supplies

DeviceNet power supply units will only be connected to the network assigned to the section in which it is installed. In other words, use one power supply unit per network. This allows one network to be taken out of service without affecting other networks. Only one power supply is allowed per network.

DeviceNet network linking device units

Multiple linking devices are allowed in a network, but require unique node numbers.

The following linking device units are available:

- ControlNet to DeviceNet, Bulletin 2100-C2D
- Ethernet to DeviceNet, Bulletin 2100-E2D

DeviceNet scanners are available in MCC I/O chassis units

- PLC (Bulletin 218_E) and SLC (Bulletin 218_J) units
 - DeviceNet scanner is option -12SDN01
 - Only one allowed per unit.
- ControlLogix (Bulletin 218_L) units
 - DeviceNet scanner is option -12DN_
 - Any number allowed, up to the number of slots in the chassis.
 - Entry of node and network information is only available for the first two scanner modules.
 - Only one scanner will be factory connected to the MCC; the scanner with the network number which matches the network number assigned to the section where the chassis is located.