

# Section 12

## Obsolete Motor Control Centers

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**Overview**

This section covers Model 4 Motor Control Center (MCC) unit availability during product obsolescence. All Model 4 orders can be completely defined by catalog type and modifications. Layout sheets and data sheets are not required for order entry.

Note the standard features of the unit. Please refer to footnotes for important information.

Model 4 structures are no longer available. Transition sections can be provided to match an existing Model 4 MCC to a Model 6 MCC.

**Model 4 to Model 6 Transition**

Provides transition from a Model 4 to a Model 6 MCC. The transition requires a 12-inch extension on the first section of the Model 6 lineup. The transition section must be ordered with at least one Model 6 section and cannot ship separately. **The Model 6 bus must be of equal or greater ampacity than the Model 4 bus.** The transition section includes all required splice bars. (Reference the Model 6 Motor Control Center Pricing Guide.)

Please supply original Model 4 factory order number, basic configuration, and Model 4 bus amperage, material, and plating at time of order.

Compatible structure depths include:

- 15-inch deep Model 6 to 14-inch deep Model 4
- 20-inch deep Model 6 to 20-inch deep Model 4

**Branch Feeder Units and Modifications**

**Table 12.1: Circuit Breaker Branch Feeder Units [1]**

No. of Poles	Trip Rating	Breaker Frame Type	Unit Type No.	Space Factor
3	15	FH	BW423	1
	20		BW424	
	30		BW425	
	40		BW429	
	50		BW428	
	60	FH	BW426	
	70		BW450	
	80		BW451	
	90		BW452	
	100		BW427	

**Table 12.2: Dual Mounted Units**

No. of Poles	Trip Rating	Breaker Frame Type	Unit Type No.	Space Factor
3	15/15	FH/FH	BW453	1-1/2
	20/20		BW454	
	30/30		BW455	
	50/50		BW456	
	60/60	FH/FH	BW457	
	100/100		BW458	

**Table 12.3: Miscellaneous Items**

Unit	Description
K401[2]	1/2 S.F. Blank Plate
K402[2]	1 S.F. Blank Plate
K404[2]	2 S.F. Blank Plate

**Table 12.4: Fusible Switch Branch Feeder Units—3-pole [3]**

Voltage	Max. Fuse Size	Unit Type No.	Space Factor
250	30	KW408	1
	60	KX409	1
	100	KY409	1
	200	KZ409	2-1/2
600	30	KW409	1
	60	KX410	1
	100	KY410	1
	200	KZ410	2-1/2

**NOTE:** Fusible branch feeders 30-200 amp using Class H fuse clips have a short circuit rating of 10,000 AIR @ 600 V. If Class R fuse clips are required, order field install kit from Digest.

**Table 12.5: Starter Unit Options**

Description	Form No.
Start-Stop PB with 1 Pilot light — Red (On)[4]	AP
Forward-Reverse-Stop PB with 2 Pilot Lights[5]	A1PP
High-Low-Stop PB with 2 Pilot Lights [6]	A2PP
Hand-Off-Auto SS with 1 Pilot Light — Red (On)[4]	CP
1 Pilot Light only — Red (On)[4]	P
2 Pilot Lights — Red (On)[5]	PP

**Table 12.6: Miscellaneous Units**

MT Units (Undrilled Panel and Hinged Door)		
Unit Type No.	Space Factors	Panel Dimensions[7]
MT414	1	11-3/4 in. H x 13-5/8 in. W
MT415	2	22-1/3 in. H x 13-5/8 in. W

[1] All branch circuit breakers are thermal magnetic with high interrupting Form Y532.  
 [2] Unit support pan included.  
 [3] Fuses not included.  
 [4] Full Voltage Non-Reversing units only.  
 [5] Reversing units only.  
 [6] Two-Speed units only.  
 [7] Dimensions are in inches — Depth from door to panel is 7.50 inches.

**1B Wiring and 1 N.O. and 1 N.C. Auxiliary Interlock (Standard)**

**Table 12.7: Full Voltage Non-Reversing**

Maximum Horsepower At				NEMA Starter Size	C/B Amp	Unit Type No.	Space Factor	No. of Thermal Units Required <sup>[8]</sup>
208 V	240 V	480 V	600 V					
1/4-1/3	1/3	1	1/4-1	1	3	EC403	1	3
1/2-1	1	3	1-1/2-3		7	EC404		
1-1/2-3	3	7-1/2	5-10		15	EC405		
5	7-1/2	10	—		30	EC406		
1-1/2-3	3	7-1/2	5-10	1	15	EC409	1-1/2 <sup>[9]</sup>	3
5	7-1/2	10	—		30	EC410		
5	7-1/2	15	15-20	2	30	ED402	1	3
7-1/2-10	10	25	25		50	ED403		
—	15	—	—		100	ED404		
5	7-1/2	15	15-20		30	ED405		
7-1/2-10	10	25	25	2	50	ED406	1-1/2 <sup>[9]</sup>	3
—	15	—	—		100	ED407		
10	10	25	25-30	3	50	EE404	1-1/2	3
15-25	30	50	40-50		100	EE405		
30	40	—	—	4	225	EF406	2	3
40	—	75	100		225	EF407		
—	50	100	—		225	EF408		
—	—	—	—		—	—		

**Table 12.8: Full Voltage Reversing**

Maximum Horsepower At				NEMA Starter Size	C/B Amp	Unit Type No.	Space Factor	No. of Thermal Units Required <sup>[8]</sup>
208 V	240 V	480 V	600 V					
1/4-1/3	1/3	1	1/4-1	1	3	FC408	1-1/2	3
1/2-1	1	3	1-1/2-3		7	FC409		
1-1/2-3	3	7-1/2	5-10		15	FC410		
5	7-1/2	10	—		30	FC411		
5	7-1/2	15	15-20	2	30	FD402	2	3
7-1/2-10	10	25	25		50	FD403		
—	15	—	—		100	FD404		

**Table 12.9: Two-Speed, Constant Hp, Full Voltage Non-Reversing**

Maximum Horsepower At				NEMA Starter Size	C/B Amp	One Winding (Consequent Pole)		Two Winding (Separate Winding)		No. of Thermal Units Required <sup>[8]</sup>
208 V	240 V	480 V	600 V			Unit Type No.	Space Factor	Unit Type No.	Space Factor	
—	—	1/2	1/4-3/4	1	3	HC415	2	HC419	2	6
1/4-3/4	3/4	2	1-2		7	HC416		HC420		
1-2	2	5	3-5		15	HC417		HC421		
3-5	5	7-1/2	7-1/2		30	HC418		HC422		
—	—	10	10-15	2	30	HC411	2	HD413	2	6
7-1/2	10	20	20		50	HC412		HD414		

**Table 12.10: Two-Speed, Constant or Variable Torque, Full Voltage Non-Reversing**

Maximum Horsepower At				NEMA Starter Size	C/B Amp	One Winding (Consequent Pole)		Two Winding (Separate Winding)		No. of Thermal Units Required <sup>[8]</sup>
208 V	240 V	480 V	600 V			Unit Type No.	Space Factor	Unit Type No.	Space Factor	
1/4-1/3	1/3	1	1/4-1	1	3	HC407	2	HC411	2	6
1/2-1	1	3	1-1/2-3		7	HC408		HC412		
1-1/2-3	3	7-1/2	5-10		15	HC409		HC413		
5	7-1/2	10	—		30	HC410		HC414		
5	7-1/2	15	15-20	2	30	HD405	2	HD408	2	6
7-1/2-10	10	25	25		50	HD406		HD409		
—	15	—	—		100	HD407		HD410		

**NOTE:** Units are wired for 480 V unless 240 V is stated on order. The 480 V control circuit transformer is reconnectable for 240 V. For 240 V and 480 V, form FT is used. For other voltages, form SY74 must be used.

To get NEMA 12, add form N12 to unit.

Mag-Gard™ circuit breaker combination starter units through Size 4 are UL Listed for 22,000 AIR @ 600 V.

[8] Melting alloy overload relay included; thermal units must be ordered separately.  
 [9] Includes extra 1/2 space factor (additional space only).

1B Wiring and 1 N.O. and 1 N.C. Auxiliary Interlock (Standard)

Table 12.11: Full Voltage Non-Reversing

Maximum Horsepower At				NEMA Starter Size	Switch Amp Rating	Unit Type No.	Space Factor	No. of Thermal Units Required <sup>[10]</sup>
208 V	240 V	480 V	600 V					
5	5	—	—	1	30	NC413	1	3
—	—	10	10		30	NC414		
7-1/2	7-1/2	—	—		60	NC415		
—	—	10	10	1	60	NC416	1-1/2 <sup>[11]</sup>	3
7-1/2	7-1/2	—	—		30	NC417		
10	15	—	—	2	60	ND411	1	3
—	—	25	25		60	ND412		
10	15	—	—	2	60	ND413	1-1/2 <sup>[11]</sup>	3
—	—	25	25		60	ND414		
20	25	—	—	3	100	NE416	1-1/2	3
25	30	—	—		200	NE417	3	
—	—	50	50		100	NE418	1-1/2	
40	50	—	—	4	200	NF409	3-1/2	3
—	—	100	100		200	NF410		

Table 12.12: Full Voltage Reversing

Maximum Horsepower At				NEMA Starter Size	Switch Ampere Rating	Unit Type No.	Space Factor	No. of Thermal Units Required <sup>[10]</sup>
208 V	240 V	480 V	600 V					
5	5	—	—	1	30	OC417	1-1/2	3
7-1/2	7-1/2	—	—		60	OC418		
—	—	10	10		30	OC419		
10	10	—	—	2	60	OD409	2	3
—	—	25	25		60	OD410		

Table 12.13: Two-Speed, Constant Hp, Full Voltage Non-Reversing

Maximum Horsepower At				NEMA Starter Size	Switch Amp Rating	One Winding (Consequent Pole)		Two Winding (Separate Winding)		No. of Thermal Units Required <sup>[10]</sup>
208 V	240 V	480 V	600 V			Unit Type No.	Space Factor	Unit Type No.	Space Factor	
5	5	—	—	1	30	QC447	2	QC450	2	6
5	5	—	—		60	QC448		QC450		
—	—	7-1/2	7-1/2		30	QC449		QC452		
7-1/2	10	—	—	2	60	QD437	2	QD439	2	6
—	—	20	20		60	QD438		QD440		

Table 12.14: Two-Speed, Constant or Variable Torque, Full Voltage Non-Reversing

Maximum Horsepower At				NEMA Starter Size	Switch Amp Rating	One Winding (Consequent Pole)		Two Winding (Separate Winding)		No. of Thermal Units Required <sup>[10]</sup>
208 V	240 V	480 V	600 V			Unit Type No.	Space Factor	Unit Type No.	Space Factor	
7-1/2	7-1/2	—	—	1	30	QC441	2	QC444	2	6
7-1/2	7-1/2	—	—		60	QC442		QC445		
—	—	10	10		30	QC443		QC446		
10	15	—	—	2	60	QD433	2	QD435	2	6
—	—	25	25		60	QD434		QD436		

**NOTE:** Units are wired for 480 V unless 240 V is stated on order. The 480 V control circuit transformer is reconnectable for 240 V. For 240 V and 480 V, form FT is used. For other voltages, form SY74 must be used.

Refer to catalog to get NEMA 12, add form N12 to unit.

Fusible starters Sizes 1–3 using Class H fuse clips have a short circuit rating of 5,000 AIR @ 600 V. Size 4 starters using Class H are rated 10 kAIR @ 600 V. If Class R fuse clips are required, order field installable kit from Digest. Fuses are not included.

[10] Melting alloy overload relay included; thermal units must be ordered separately.

[11] Includes extra 1/2 space factor (additional space only).

## Overview

This section covers Series 5600 Motor Control Center availability during product obsolescence. All Series 5600 orders can be completely defined by price, catalog type, and modifications. Layout sheets and data sheets are not required for order entry.

All unit prices are shown as NEMA 1. Note the standard features of the unit. Please refer to footnotes for important information.

### Notes:

1. All units are circuit breaker type.
2. All starter units use Square D™ brand Type S starters and contactors.

## Telemecanique™ Series 5600 History

The Series 5600 MCC was in production for more than 20 years. In 1970 it was first sold under the ITE Circuit Breaker/ITE Imperial name. In 1976 ITE Imperial merged with Gould Inc. The MCC was then sold with the Gould ITE name and later the Gould name. In 1985 the Industrial Controls Division of Gould Inc. was sold to Telemecanique Inc., and the MCC was renamed the Telemecanique Series 5600 MCC. Telemecanique, Inc., was acquired by Groupe Schneider in 1988, and in 1991 Square D Company was purchased by Groupe Schneider.

## Transition Sections From Telemecanique Series 5600 To Square D™ Brand Model 6

Provides transition from Telemecanique Series 5600 MCC to Square D™ brand Model 6 MCC. The transition requires an extension on the first section of the Model 6 lineup. The transition section must be ordered with at least one Model 6 section, and cannot ship separately. **The ampacity of the Model 6 bus will be equal to or greater than that of the Series 5600 bus.** 20 in. deep Model 6 can be spliced to 20 in. deep Series 5600. 15 in. deep Model 6 can be spliced to 15 in. deep Series 5600. 20 in. deep Model 6 can be spliced to 20 in. deep back-to-back Series 5600 (units mounted both front and back), with front only unit mounting on the Model 6 section(s). The transition section includes all required splice bars. (Reference Model 6 Motor Control Center Pricing Guide.)

**NOTE:** Not Available In NEMA Type 3R Construction.

The Model 6 to Series 5600 transition section is available in two basic configurations:

1. Model 6 on right spliced to Series 5600 on left
2. Model 6 on left spliced to Series 5600 on right

The following information must be provided when ordering a Model 6 to Series 5600 transition section:

1. Basic configuration (Model 6 Right/Series 5600 Left or Model 6 Left/Series 5600 Right)
2. Series 5600 bus amperage, material, plating, and dimensions
3. Model 6 bus amperage, material, and plating
4. Original Series 5600 factory order number

Please contact your local Schneider Electric sales office for price and availability of transition sections.

Branch Feeder and Circuit Breaker Type Combination Starter Units

Notes:

- On starter units, the last digits of the unit catalog number represent the horsepower.
- All units are NEMA 1 enclosure.
- All units include a control power transformer and are wired for 120 V control.
- All starter units are rated for 100 k AIR at 480 V.
- All starter units are supplied with 1B wiring, 1 N.O. auxiliary interlock, and 1 N.C. auxiliary interlock.

Table 12.15: Full Voltage Non-Reversing Starters

Unit Catalog No.				NEMA Size	C/B Amps	Space Factor
208 V	240 V	480 V	600 V			
1TA.33	2TA.33	TA1	6TA1	1	3	1
1TA1	2TA1	TA3	6TA3		7	
1TA3	2TA3	TA7.5	6TA10		15	
1TA5	2TA7.5	TA10	—		30	
1TA10	2TA10	TA25	6TA25	2	50	1
1TA25	2TA30	TA50	6TA50	3	100	2

Table 12.16: Full Voltage Reversing Starters

Unit Catalog No.				NEMA Size	C/B Amps	Space Factor
208 V	240 V	480 V	600 V			
1TC.33	2TC.33	TC1	6TC1	1	3	1.5
1TC1	2TC1	TC3	6TC3		7	
1TC3	2TC3	TC7.5	6TC7.5		15	
1TC5	2TC7.5	TC10	6TC10		30	
1TC10	2TC10	TC25	6TC25	2	50	1.5

Table 12.19: Single Branch Circuit Breaker Feeder Units

Unit Type	Trip Rating	Frame Type	Space Factor
TW15	15	FD	1
TW20	20		
TW30	30		
TW40	40		
TW50	50		
TW60	60		
TW70	70		
TW80	80		
TW90	90		
TW100	100		
TW125	125	FD	1.5
TW150	150		
TW175	175	JD	1.5
TW200	200		
TW225	225		
TW250	250		

Table 12.17: 2 Speed 1 Winding Starters

Constant Hp				Constant or Variable Torque				NEMA Size	C/B Amps	Space Factor
Unit Catalog No.				Unit Catalog No.						
208 V	240 V	480 V	600 V	208 V	240 V	480 V	600 V	1	3	2
—	—	TH.5	6TH.75	1TE.33	2TE.33	TE1	6TE1			
1TH.75	2TH.75	TH2	6TH2	1TE1	2TE1	TE3	6TE3			
1TH2	2TH2	TH5	6TH5	1TE3	2TE3	TE7.5	6TE7.5			
1TH5	2TH5	TH7.5	6TH7.5	1TE5	2TE7.5	TE10	6TE10	2	50	2
1TH7.5	2TH10	TH20	6TH20	1TE10	2TE10	TE25	6TE25			

Table 12.18: 2 Speed 2 Winding Starters

Constant Hp				Constant or Variable Torque				NEMA Size	C/B Amps	Space Factor
Unit Catalog No.				Unit Catalog No.						
208 V	240 V	480 V	600 V	208 V	240 V	480 V	600 V	1	3	2
—	—	TI.5	6TI.75	1TG.33	2TG.33	TG1	6TG1			
1TI.75	2TI.75	TI2	6TI2	1TG1	2TG1	TG3	6TG3			
1TI2	2TI2	TI5	6TI5	1TG3	2TG3	TG7.5	6TG7.5			
1TI5	2TI5	TI7.5	6TI7.5	1TG5	2TG7.5	TG10	6TG10	2	50	2
1TI7.5	2TI10	TI20	6TI20	1TG10	2TG10	TG25	6TG25			

Table 12.20: Dual Mounted Branch Circuit Breaker Feeder Units

Unit Type	Trip Rating	Frame Type	Space Factor
TW415	15/15	FD/FD	1
TW420	20/20		
TW430	30/30		
TW450	50/50		
TW460	60/60		
TW4100	100/100		

NOTE: All circuit breaker branch feeder units are rated for 25 k AIR at 480 V.

Table 12.21: Starter Unit Options

Description <sup>[1]</sup>	Form No.
Start-Stop PB with 1 Pilot Light—Red (On) <sup>[2]</sup>	AP
Forward-Reverse-Stop PB with 2 Pilot Lights <sup>[3]</sup>	A1PP
High-Low-Stop PB with 2 Pilot Lights <sup>[4]</sup>	A2PP
Hand-Off-Auto SS with 1 Pilot Light—Red (On) <sup>[2]</sup>	CP
1 Pilot Light Only—Red (On) <sup>[2]</sup>	P
2 Pilot Lights—Red (On) <sup>[3][4]</sup>	PP

Table 12.22: Misc. Units—Empty Mounting Units

Description	Unit Type
1 Space Factor	TMT1
2 Space Factor	TMT2

NOTE: Undrilled panel and hinged door.

Table 12.23: Miscellaneous Items

Description	Unit Type
½ Space Factor Blank Door	TBD.5
1 Space Factor Blank Door	TBD1
2 Space Factor Blank Door	TBD2
Ground Stab Kit	TGSK
1 Space Factor Unit Gasketing Kit	TGAS12
1.5 Space Factor Unit Gasketing Kit	TGAS18
2 Space Factor Unit Gasketing Kit	TGAS24

- All units are NEMA 1 enclosure.
- All operators and pilot lights are 22 mm.
- 1 space factor = 12 inches.
- The ground stab kit is field installed and available for all units.

[1] To order a unit with any of the options listed, add the form number as a suffix to the unit type number. Only listed combinations of options are available. Choose only one form number option per starter unit.  
 [2] Full Voltage Non-Reversing units only.  
 [3] Reversing units only.  
 [4] Two-speed units only.