RENEWAL PARTS BULLETIN

Evolution series E9000

Low voltage motor control center

GE legacy product
documentation

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The Evolution series E9000 low voltage motor control center has been designed and manufactured to give long and satisfactory service. This Renewal Parts Bulletin contains items which, through normal use, may require periodic maintenance and replacement. Other items may never need service or replacement during the useful life of the equipment.

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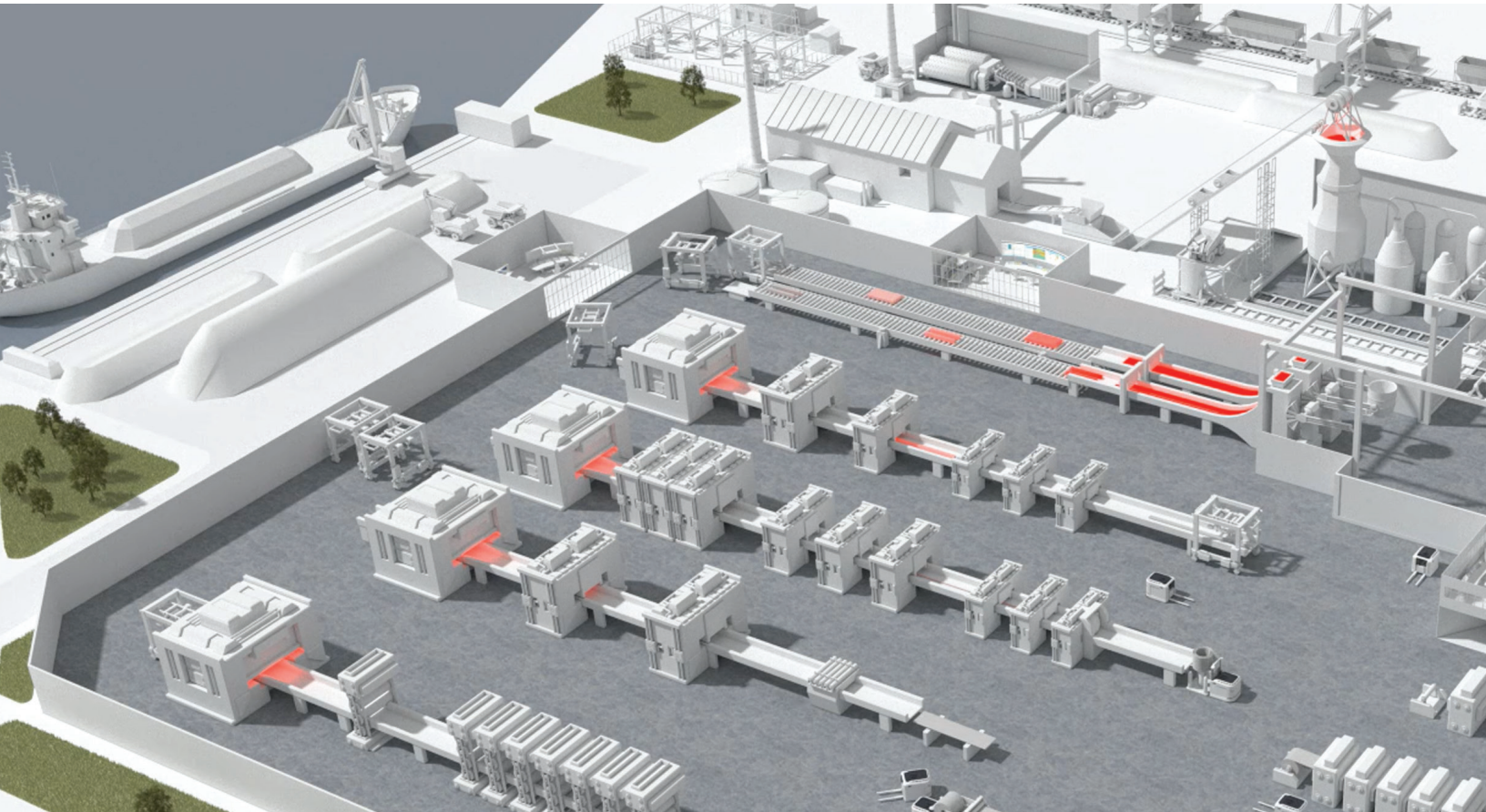
Introduction

The E9000-Line motor control center has been designed and manufactured to give long and satisfactory service.

This Renewal Parts Bulletin contains items which, through normal use, may require periodic maintenance and replacement. Other items may never need service or replacement during the useful life of the equipment.

We feel that you are in the best position to determine your investment in Renewal Parts, taking into consideration the total amount of E9000-Line motor control centers at your facility, your proximity to ABB distributors, and the importance of minimizing equipment downtime.
For identifying and ordering replacement parts not included in this publication, refer to the “Spares Recommendation” and “Parts List” section of the renewal parts quotation for your motor control center. If this is not available, identify the equipment as follows before contacting your local distributor or ABB sales office:

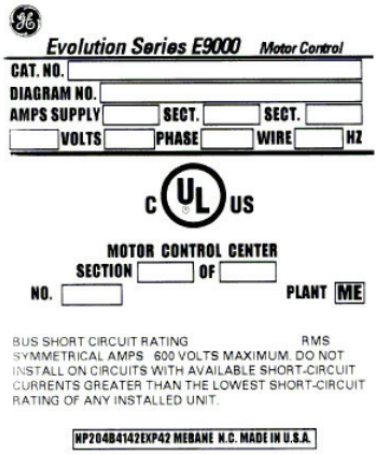
1. Equipment ABB Evolution Series E9000 motor control center.
2. Complete vertical section nameplate information (for structural and bus parts)
3. Complete plug-in unit nameplate information (for individual unit parts)



Ordering Instructions

The ordering of renewal parts will be simplified by referencing the data provided on the E9000 motor control center section nameplate and, if required, unit nameplate.

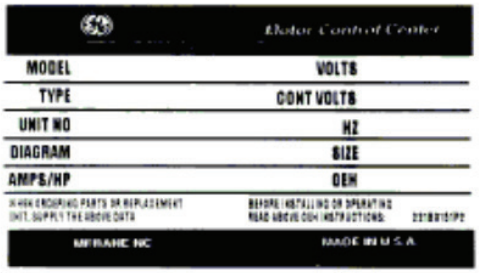
Section Nameplate — (located on the front of each UL listed section, near the upper right-hand corner):



- ***CAT. NO.:** The ABB, Mebane, N.C., factory catalog number
- ***DIAGRAM NO.:** The outline summary sheet (often referred to as "record drawings") for this section
- **AMPS-SUPPLY:** The main (i.e. horizontal) bus rating
- **AMPS-SECTION:** The vertical bus rating

When ordering replacement parts not identified in this bulletin, both the "CAT. NO." and "DIAGRAM NO." must be referenced, accompanied by a complete description of the replacement part(s) desired.

Unit Nameplate — plug-in units; located on the right-hand vertical side barrier; bolt-in units; located near the branch circuit overcurrent



protective device):

- **MODEL:** Type of motor control center design
- **VOLTS TYPE:** Unit power supply voltage unit function (as listed on outline summary sheet)
- ***CONT. VOLTS:** Unit control voltage.
- **UNIT NO.:** The factory catalog number. This identifies the section and unit location within that section.
- **DIAGRAM:** The outline summary sheet and page number which contains the wiring elementary diagram for this unit.
- **SIZE AMPS/HP:** The NEMA size rating of the starter. The ampere rating of the circuit breaker or fusible switch (for feeder unit), or horsepower rating (for combination starter units).

When ordering a complete replacement unit or replacement parts not identified in this bulletin, the "MODEL", "UNIT NO.", and "DIAGRAM" must be referenced, accompanied by a complete description of the replacement part(s) desired.

* — This information must be included in the order form.

Structural parts

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1	Rear Cover	6
2	Side Case Assembly	6
3	Case Sill (Figure 3)	6
4	Rodent Barrier	6
5	Front Top Cover Plate	7
6	Floor Plate	7
7	Mullions, Wireway (Figure 7)	7
8	Full Width Mullions (Figure 8)	7
9	Side Enclosure Cover	7
10	Lifting Angle	7
11	Floor Sill	7
12	Elevated Rear Roof Cover	7

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Item 1 – Rear Cover

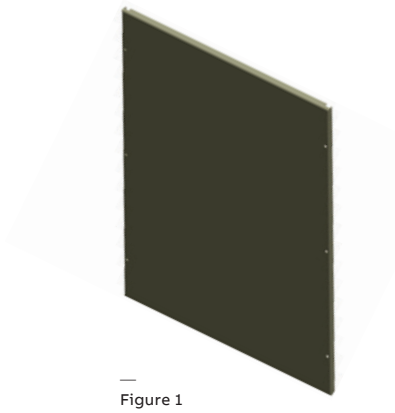

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Figure 1

Product	Code
33 x 20	190B1007P1
33 x 24	190B1007P2
33 x 30	190B1007P3
33 x 36	190B1007P4
39 x 20	190B1007P5
39 x 24	190B1007P6
39 x 30	190B1007P7
39 x 36	190B1007P8
45 x 20	190B1007P9
45 x 24	190B1007P10
45 x 30	190B1007P11
45 x 36	190B1007P12
24 x 20	190B1007P13
Screw, Steel T-Roll 10-24 x 3/4 (6)	
Real hinge door top only	110C1466G9
Rear hinge door bottom only	110C1466G21
Rear hinge mounting bracket (2 per section)	110C1464P1

Item 2 – Side Case Assembly

Side case assemblies are not available as spare parts. Since this component supports the main horizontal bus, contact ELDS Service Sales for service or replacement.

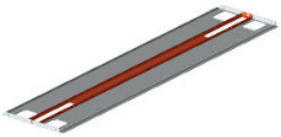

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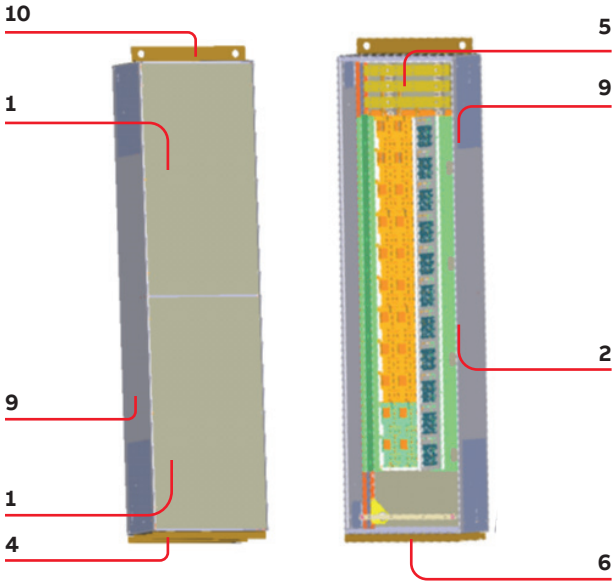
Figure 2



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Item 3 – Case Sills

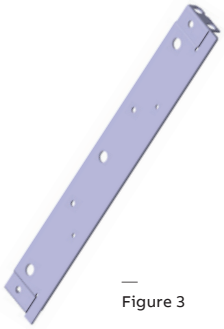

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Figure 3

Product	Code
Case Sill 20 In	190B1009P1
Case Sill 34 In	190B1009P2
Case Sill 30 IN	190B1009P3
Case Sill 36 IN	190B1009P4
Case Rear Sill 20 IN	190B2752P1
Case Rear Sill 24 IN	190B2752P2
Case Rear Sill 30 IN	190B2752P3
Case Rear Sill 36 IN	190B2752P4

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Item 4 – Rodent Barrier

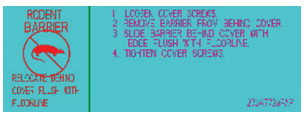

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Figure 4

Product	Code
Barrier, Rodent 13D 3IN	190B2177G1
Barrier, Rodent 20D 3IN	190B2177G2
Barrier, Rodent 22D 5IN	190B2177G3
Barrier, Rodent 30D 3IN	190B2177G4
Barrier, Rodent 13D 3IN	190B2177G1
Screw, Steel T-Roll 1/4-20 X 3/8 (1)	

Item 5 – Front Top Cover Plate

Figure 5

Product	Code
20 x 8	190B1060P1
24 x 8	190B1060P2
30 x 8	190B1060P3
36 x 8	190B1060P4
20 x 18	190B1060P5
24 x 18	190B1060P6
30 x 18	190B1060P7
36 x 18	190B1060P8
Screw, Steel T-Roll 1/4-20 X 3/8 (8)	

Item 6 – Floor Plate

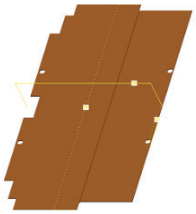

Figure 6a (front)

Figure 6b (back)

Product	Code
Front 20 x 20/30	110C1030P1
Front 20 x 22	110C1030P2
Front 24 x 20/30	110C1030P3
Front 24 x 22	110C1030P4
Front 20 x 25	110C1030P10
Front 24 x 25	110C1030P11
Rear 20 x 20	110C1060P1
Rear 20 x 22	110C1060P2
Rear 24 x 20	110C1060P4
Rear 24 x 22	110C1060P5
Rear 20 x 25	110C1060P1
Rear 24 x 25	110C1060P4
Screw, Steel T-Roll 1/4 –20 X 5/8 (4)	

Item 7 – Mullions, Wireway

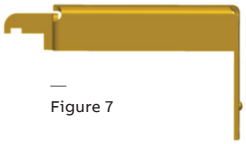

Figure 7

Product	Code
4 IN Case Width 20 IN	190B1255P1
9 IN Case Width 24 IN	190B1255P2
15 IN Case Width 30 IN	190B1255P3

Item 8 – Full Width Mullions

Figure 8

Product	Code
Top 20W	190B1238P1
Top 24W	190B1238P2
Top 30W	190B1238P3
Top 36W	190B1238P4

Item 9 – Side Door Cover

Figure 9

Product	Code
Cover, Side Enclosure 20/30 In 3-inch Vertical	110C1029G1
Cover, Side Enclosure 22/30 In 5-inch Vertical	110C1029G2
Cover, Side Enclosure 13-Inch 3-Inch Vertical	110C1029G3
Cover, Side Enclosure 25-Inch BTB	110C1029G11
Cover, Side Enclosure 30-Inch Bus Class 1.5 Sheetmetal	270A1988P1
Cover, Side Enclosure 30-Inch Bus Class 1.5 Barrier	270A1987P1
Screw, Steel T-Roll 1/4-20 X 1/2 (4)	

Item 10 – Lifting Angle

Figure 10

Product	Code
Angle, Lifting ASM 20	110C1044G1
Angle, Lifting ASM 20 x 20	110C1044G2
Angle, Lifting ASM 20 x 20 x 20	110C1044G5
Includes Bolting Hardware	

Item 11 – Floor Sill

Figure 11

Product	Code
Floor Sill - 20"	110C1043G1
Floor Sill - 20" - 20"	110C1043G2
Floor Sill - 20" - 20" - 20"	110C1043G6

Item 12 – Elevated Rear Roof Cover

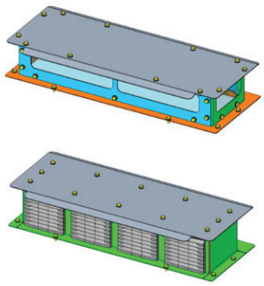

Figure 12

Product	Code
Elevated rear roof cover 20 IN	270A2108G1
Elevated rear roof cover 24 IN	270A2108G2
Elevated rear roof cover 30 IN	270A2108G3
Elevated rear roof cover 36 IN	270A2108G4
Elevated rear roof cover 20 IN T12	270A2259G1
Elevated rear roof cover 24 IN T12	270A2259G2
Elevated rear roof cover 30 IN T12	270A2259G3
Elevated rear roof cover 36 IN T12	270A2259G4

Vertical and Main Bus Parts

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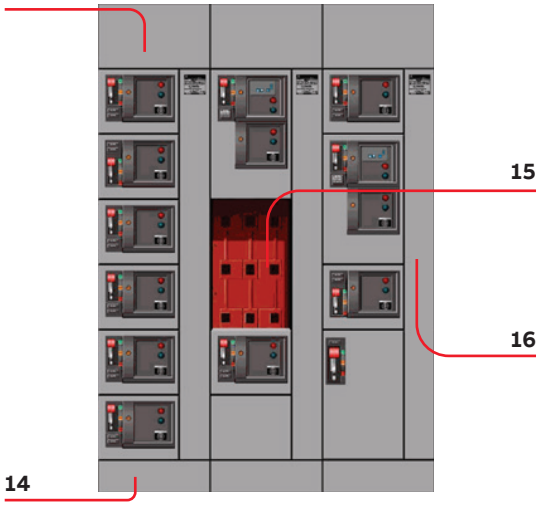
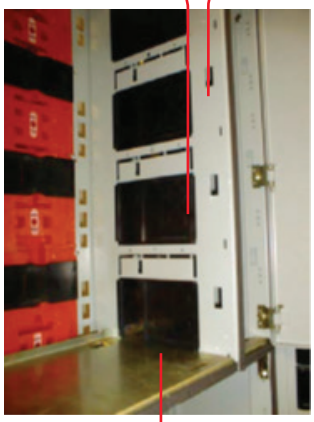
14	Bottom Wireway Door	9
15	Vertical Bus Accessories	9
16	Vertical Wireway Door Assembly	9

Item	Description	Page
17	Ladder Assembly	10
18	Ladder Assembly Cut Out	10
19	Shelf Assembly	10
20	Blank Unit Door Assembly (Figure 18)	10
21	Filler Kits (Not Shown)	11

Note regarding main horizontal bus: Main bus components are not available directly as spare parts. For main bus repair, please contact ELDS Service Sales.





Item 13 – Top Wireway Door

Figure 13

Product	Code
Standard Top Wireway Door	
DOOR, ASSEMBLY, TOP WIRE WAY, 20 X 12	110C1440G1
DOOR, ASSEMBLY, TOP WIRE WAY, 20 X 18	110C1440G2
DOOR, ASSEMBLY, TOP WIRE WAY, 24 X 12	110C1440G6
DOOR, ASSEMBLY, TOP WIRE WAY, 24 X 18	110C1440G7
DOOR, ASSEMBLY, TOP WIRE WAY, 30 X 12	110C1440G14
DOOR, ASSEMBLY, TOP WIRE WAY, 30 X 18	110C1440G15
Elevated rear roof cover 30 IN T12	270A2259G3
Elevated rear roof cover 36 IN T12	270A2259G4
Type 12 Vented Wireway Doors	
DOOR, TOP WW, 20X12, T12, RITTAL FILTERS	270A2180G1WC
DOOR, TOP WW, 24X12, T12, RITTAL FILTERS	270A2180G2WC
DOOR, TOP WW, 30X12, T12, RITTAL FILTERS	270A2180G3WC
DOOR, TOP WW, 36X12, T12, RITTAL FILTERS	270A2180G4WC
DOOR, TOP WW, 20X12, Ventilated	270A2178G1
DOOR, TOP WW, 24X12, Ventilated	270A2178G2
DOOR, TOP WW, 30X12, Ventilated	270A2178G3
DOOR, TOP WW, 36X12, Ventilated	270A2178G4
Includes Door Hinges, Latch Assembly, Case Side Hinges, Door Pin, and Split Pin	

Item 14 – Bottom Wireway Door

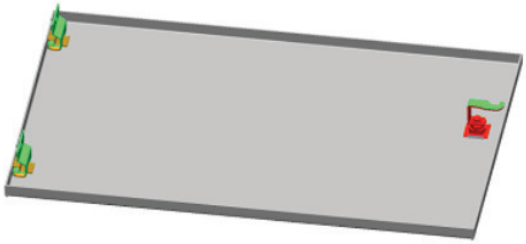


Figure 14a - Door

Figure 14b - Vents

Product	Code
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 12	110C1450G1
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 18	110C1450G2
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 12	110C1450G6
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 18	110C1450G7
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 6	110C1450G11
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 6	110C1450G12
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 12	110C1450G16
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 6	110C1450G54
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 18	110C1450G59
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 12, VENT	110C1450G97
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 12 VENT	110C1450G98
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 12 VENT	110C1450G99
DOOR, ASSEMBLY, BOTTOM WIREWAY, 36 X 12 VENT	110C1450G100
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 6 VENT	110C1450G140
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 6 VENT	110C1450G141
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 6 VENT	110C1450G142
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 12, T12 RITTAL FILTERS	270A2186G1
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 12 T12 RITTAL FILTERS	270A2186G2
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 12 T12 RITTAL FILTERS	270A2186G3
DOOR, ASSEMBLY, BOTTOM WIREWAY, 36 X 12 T12 RITTAL FILTERS	270A2186G4
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 6 T12 RITTAL FILTERS	270A2186G5
DOOR, ASSEMBLY, BOTTOM WIREWAY, 24 X 6 T12 RITTAL FILTERS	270A2186G6
DOOR, ASSEMBLY, BOTTOM WIREWAY, 30 X 6 T12 RITTAL FILTERS	270A2186G7
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 12	110C1450G1
DOOR, ASSEMBLY, BOTTOM WIREWAY, 20 X 18	110C1450G2

Includes Door Hinges, Latch Assembly, Case Side Hinges, Door Pin, and Split Pin

Item 15 – Vertical Bus Accessories

Figure 15a - Stab Opening Cover

Figure 15b - Bottom Vertical Bus Barrier

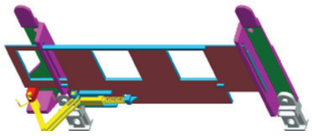


Figure 15c - Vertical Bus Shutter

Product	Code
Stab Opening Cover	190B1215P1
Bottom Vertical Bus Barrier	190B1549G1
Vertical Bus Shutter ASM At Top	110C1783G1
Vertical Bus Shutter ASM At Middle	110C1783G2
Vertical Bus Shutter ASM At Bottom	110C1783G3
Standard shelf	110C1059P1
Shelf grounding bracket	270A1343G1
Shelf support – 72” high	110C1010G11
Gasket, UL 50E, 0.19T X 0.50W, 50 Foot Roll	270A2626P2

Item 16 – Vertical Wireway Door Assembly

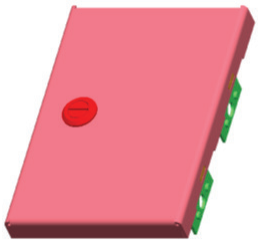


Figure 16

Product	Code
20” Wide Section	
5W 6H	110C1163G1
5W 12H	110C1163G2
5W 18H	110C1163G3
5W 24H	110C1163G4
5W 30H	110C1163G5
5W 36H	110C1163G6
5W 42H	110C1163G7
5W 48H	110C1163G8
5W 54H	110C1163G9
5W 60H	110C1163G10
5W 66H	110C1163G11
5W 72H	110C1163G12
24” Wide Section	
9W 6H	110C1163G13
9W 12H	110C1163G14
9W 18H	110C1163G15
9W 24H	110C1163G16
9W 30H	110C1163G17
9W 36H	110C1163G18
9W 42H	110C1163G19
9W 48H	110C1163G20
9W 54H	110C1163G21
9W 60H	110C1163G22
9W 66H	110C1163G23
9W 72H	110C1163G24

Item 17 – Ladder Assembly

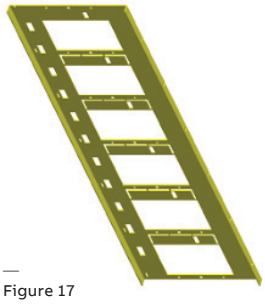


Figure 17

Product	Code
36 IN	110C1010P1
30 IN	110C1010P2
24 IN	110C1010P3
18 IN	110C1010P4
12 IN	110C1010P5
42 IN	110C1010P6
48 IN	110C1010P7
54 IN	110C1010P8
60 IN	110C1010P9
66 IN	110C1010P10
72 IN	110C1010P11
6 IN	110C1010P12

Item 18 – Wireway Knockout Plate

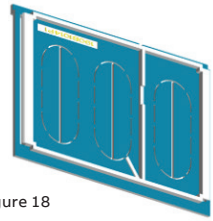


Figure 18

Product	Code
Wireway knockout plate	190B1014P1
1 used every 6”	

Item 19 – Shelf Assembly

Figure 19

Product	Code
Shelf and Bracket Assembly	110C1850P1

Item 20 – Blank Unit Door Assembly

Figure 20

Product	Code
15 x 6	110C1240KKG1
15 x 12	110C1240KKG2
15 x 18	110C1240KKG3
15 x 24	110C1240KKG4
15 x 30	110C1240KKG5
15 x 36	110C1240KKG6
15 x 42	110C1240KKG7
15 x 48	110C1240KKG8
20 x 6	110C1240KKG9
20 x 12	110C1240KKG10
20 x 18	110C1240KKG11
20 x 24	110C1240KKG12
20 x 30	110C1240KKG13
20 x 36	110C1240KKG14
20 x 42	110C1240KKG15
20 x 48	110C1240KKG16
20 x 54	110C1240KKG17
20 x 60	110C1240KKG18
20 x 66 FOR 90 CASE HEIGHT	110C1240KKG19
20 x 72	110C1240KKG20
24 x 6	110C1240KKG21
24 x 12	110C1240KKG22
24 x 18	110C1240KKG23
24 x 24	110C1240KKG24
24 x 30	110C1240KKG25
24 x 36	110C1240KKG26
24 x 42	110C1240KKG27
24 x 48	110C1240KKG28
24 x 54	110C1240KKG29
24 x 60	110C1240KKG30
24 x 66 FOR 90 CASE HEIGHT	110C1240KKG31
24 x 72	110C1240KKG32
30 x 6	110C1240KKG33
30 x 12	110C1240KKG34
30 x 18	110C1240KKG35
30 x 24	110C1240KKG36
30 x 30	110C1240KKG37
30 x 36	110C1240KKG38
30 x 42	110C1240KKG39
30 x 48	110C1240KKG40
30 x 54	110C1240KKG41
30 x 60	110C1240KKG42
30 x 66 FOR 90 CASE HEIGHT	110C1240KKG43
30 x 72	110C1240KKG44
36 x 60	110C1240KKG45
36 x 66 FOR 90 CASE HEIGHT	110C1240KKG46
20 x 90	110C1240KKG47
24 x 90	110C1240KKG48
20 x 24 (PULL BOX)	110C1240KKG49
20 x 30 (PULL BOX)	110C1240KKG50
24 x 24 (PULL BOX)	110C1240KKG51
24 x 30 (PULL BOX)	110C1240KKG52
15 x 54	110C1240KKG53
15 x 60	110C1240KKG54
15 x 66	110C1240KKG55
15 x 72	110C1240KKG56

Includes Door Hinges, Latch Assembly, Case Side Hinges, Door Pins, Nameplate, and Canoe Clips

Item 21 – Filler Kits and Doors

Figure 21

Product	Code
6" Filler kit	EK06
12" Filler kit	EK12
18" Filler kit	EK18
24" Filler kit	EK24
30" Filler kit	EK30
36" Filler kit	EK36
42" Filler kit	EK42
48" Filler kit	EK48
Door - Size 1 - 6"	110C1540BAG1
Door - Size 1 & 2 w/ P/B cutout - 12"	110C1540AAG11
Door - Size 3 w/ P/B cutout - 18"	110C1540AAG12
Door - Size 4 w/ P/B cutout - 24"	110C1540AZG13
Door - Size 4 w/ P/B cutout - 30"	110C1540AZG14
Door - Size 4 w/ P/B cutout - 36"	110C1540AZG15
Door - Sz 1 & 2 w/o P/B cutout - 12"	110C1540AAG1
Door - Size 3 w/o P/B cutout - 18"	110C1540ABG2
Door - Size 4 w/o P/B cutout - 24"	110C1540AZG3
Door - Size 4 w/o P/B cutout - 30"	110C1540AZG4
Door - Size 4 w/o P/B cutout - 36"	110C1540AZG5
6" Feeder Door	110C1540DAG2
12" Feeder Door	110C1540AAG41
Door Hinge	
Cabinet Side Hinge	190B1013P1
Hinge Pin	190B1080P1

22

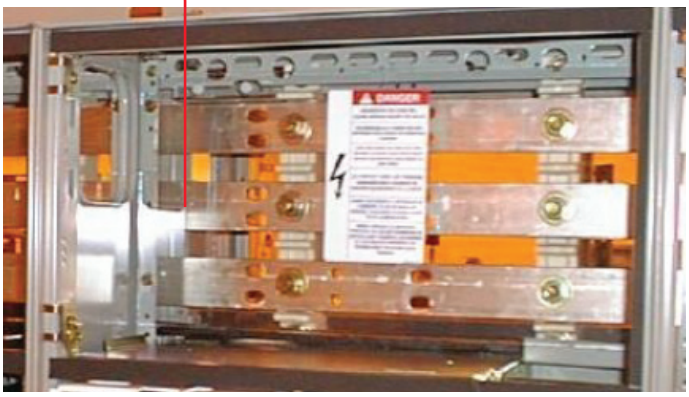


Figure 22

Figure 22d - Cable Support

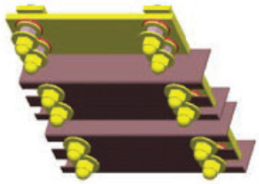


Figure 22e - Main Bus Splice Kit

Item 22 – Main Bus Structural Parts

Note regarding main horizontal bus: Main bus components are not available directly as spare parts. For main bus repair, please contact ELDS Service Sales.

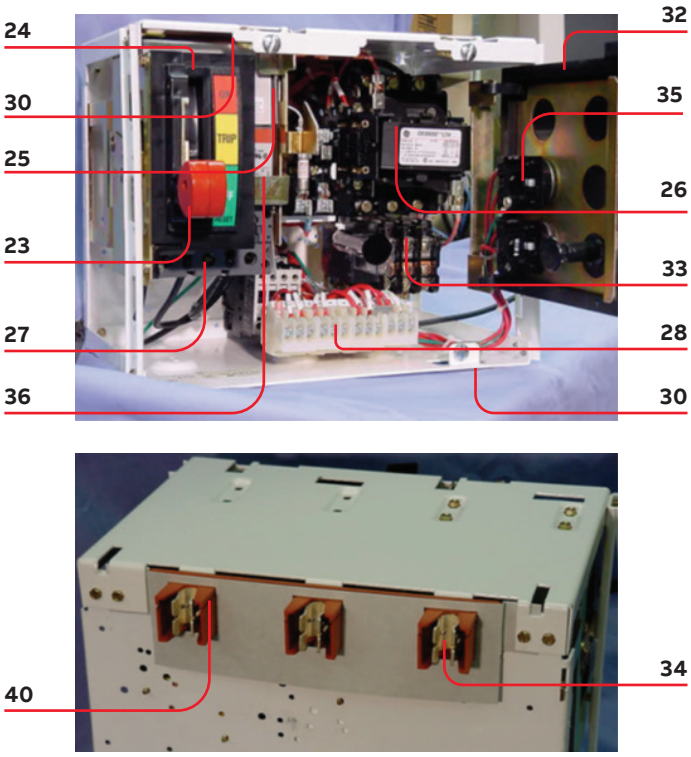
Figure 22a - Clear Horizontal Bus Barrier

Figure 22b - Space Heater Assembly

Figure 22c - Thermostat Assembly

Product	Code
Clear Horizontal Bus Barriers	
2" HORZ MAIN BUS BARRIER ASM, 20	110C1147G1
2" HORZ MAIN BUS BARRIER ASM, 24	110C1147G2
2" HORZ MAIN BUS BARRIER ASM, 30	110C1147G3
2" HORZ MAIN BUS BARRIER ASM, 36	110C1147G4
Bus barrier upper 20W 2500A/3200A	270A1971P4
Bus barrier upper 24W 2500A/3200A	270A1971P3
Bus barrier upper 30W 2500A/3200A	270A1971P2
Bus barrier upper 36W 2500A/3200A	270A1971P1
Space Header Assembly	
Space Htr Asm - 12" Bottom - 20"	190B2643G1
Space Htr Asm - 12" Bottom - 24"	190B2643G2
Space Htr Asm - 12" Bottom - 30"	190B2643G3
Space Htr Asm - 6" Bottom - 20"	190B2643G9
Space Htr Asm - 6" Bottom - 24"	190B2643G10
Space Htr Asm - 6" Bottom - 30"	190B2643G11
Thermostat Assembly	
Thermostat Assembly	190B2375G1
Cable Support	
Cable Support	204B4135P1
Main Bus Splice Kit	
600A - 2" - Tin plated	110C1735G1SM
600A - 2" - Silver plated	110C1735G1KT
800A - 2" - Tin plated	110C1735G4SM
800A - 2" - Silver plated	110C1735G4KT
1000/1200A - 2" - Tin plated	110C1735G7SM
1000/1200A - 2" - Silver plated	110C1735G7KT
1600A - 4" - Tin plated	110C1735G10SM
1600A - 4" - Silver plated	110C1735G10KT
2000A - 2" - Tin plated	110C1735G12SM
2000A - 2" - Silver plated	110C1735G12KT
2500A - 2" - Tin Plated	110C1735G13SM
2500A - 2" - Silver Plated	110C1735G13KT
600A - 2" - Tin plated - for NEMA 3	110C1735G14SM
600A - 2" - Silver plated - for NEMA 3	110C1735G14KT
800A - 2" - Tin plated - for NEMA 3	110C1735G15SM
800A - 2" - Silver plated - for NEMA 3	110C1735G15KT
1000/1200A - 2" - Tin plated - for NEMA 3	110C1735G16SM
1000/1200A - 2" - Silver plated - for NEMA 3	110C1735G16KT
2500/3200A 4" SPLICE TO LEFT / RIGHT - Tin plated	110C1735G38SM
2500/3200A 4" SPLICE TO LEFT / RIGHT - Silver plated	110C1735G38KT
2500/3200A 4" SPLICE TO LEFT / RIGHT FOR NEMA 3 - Tin plated	110C1735G39SM
2500/3200A 4" SPLICE TO LEFT / RIGHT FOR NEMA 3 - Silver plated	110C1735G39KT

Unit Parts



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Item 23 – Combination Starter Handles

Handle (Only)" includes plastic handle with egg shaped knob; "Handle assembly" includes handle, egg shaped knob, escutcheon, and steel linkage to mount on unit.

	Product	Code
	Handle Assemblies	
	Escutcheon ASM, SZ1-4, SE, SF Horizontal	190B1704G1
	Escutcheon ASM, SZ1-4, ½ XSE Vertical	190B1704G2
	Escutcheon ASM, 30/60/100 A QMW Horizontal	190B1704G5
	G-Frame Handle Assembly – Size 5 Starter	110C1130G1
	QMW, 200A Handle Assembly	110C1130G2
	K-Frame Handle Assembly – Sz 6 Starter	110C1725G1
	K-Frame Handle Assembly – Feeder / Main	110C1734G1

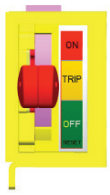

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Figure 23a - Vertical

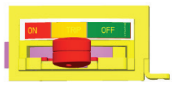

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Figure 23b - Horizontal

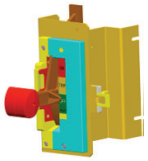

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Figure 23C – Spectra G or Tmax XT5

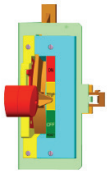

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Figure 23D – Spectra K or Tmax XT7

—
Item 24 – Handle Actuator Assembly
Includes metal actuator, top hat, and door defeater as shown below.

	Product	Code
	SE-BREAKER OPERATOR SUB-ASM	110C1032G1
	E-BREAKER OPERATOR SUB-ASM	110C1032G2
	1/2X SE-BREAKER STARTER/FEEDER SUB-ASM	110C1032G3
	1/2X E-BREAKER STARTER/FEEDER SUB-ASM	110C1032G4
	DUAL FEEDER SUB-ASM	110C1032G5
	DUAL FEEDER SUB-ASM WITH LOCK PROVISION	110C1032G6
	F-FRAME ACTUATOR	110C1034G1

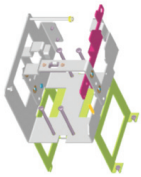

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Figure 24

Item 25 – Branch Over-current Protective Devices

Circuit Breaker: E9000-Line motor control centers utilize ABB circuit breakers in combination starters, feeder tap units, and main disconnect units. Replacement circuit breakers may be purchased through ABB Mebane, NC 27302. Order by the catalog number as it appears on the devices itself.

Fusible Disconnect: Modified versions of QMR and QMW switches are utilized in E9000 motor control centers. When selecting the proper replacement switch, consideration must be given to the following:

1. Type of switch (QMR or QMW)
2. Size of starter, feeder tap, or main
3. Fuse amperage and type of clip
4. Power supply voltage

Complete fusible disconnect switches consists of switch assembly, fuse clip base or base (as required), plus other factory modifications. Order by complete catalog number as listed in the tables on the following pages.

Does not include fuses.

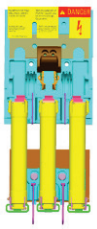

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Figure 25A – 110C1718G9M

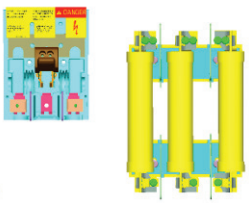

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Figure 25B – 110C1719GSM

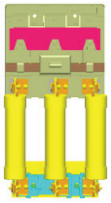

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Figure 25C – 110C01720G9M

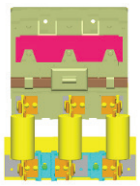

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Figure 25D – 110C1720G10M

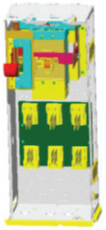

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Figure 25D – 110C1040GVG14

—

Fusible Disconnect Switches for E9000 Starter Units (All functions except part winding)

NEMA Size	Ref Figure	Switch Rating (Amps)	Fuse Clips Type	Fuse Clips Rating (Amps)	Part Number
1	23A	30	R	0-30	110C1718G9M
	23A		J		110C1718G1M
2	23A	60	R	31-60	110C1718G11M
	23A		J		110C1718G4M
3	23B	100	R	61-100	110C1719G5M
	23B		R (Bottom Mount)		110C1719G13M
	23B		J		110C1719G1M
	23B		J (Bottom Mount)		110C1719G9M
4	23C	200	R	101-200	110C1719G7M
	23D		J		110C1719G2M

—

Fusible Disconnect Switches for E9000 Feeder Units (All functions except part winding)

Switch Size (Amps)	Ref Figure	Door Height (Inches)	Fuse Clips	Fuse Clips Rating (Amps)	Part Number
30	23A	12	R	0-30	110C1718G13M
	23A		J		110C1718G1M
60	23A	12	R	31-60	110C1718G15M
	23A		J		110C1718G4M
100	23B	12	R	61-100	110C1719G5M
	23B		R (Bottom Mount)		110C1719G13M
	23B		J		110C1719G1M
	23B		J (Bottom Mount)		110C1719G9M
200	23C	24	R	101-200	110C1719G9M
	23D		J		110C1719G10M

—

Fusible Disconnect Switches for E9000 Part Winding Starter Units Only (See Notes Below)

NEMA Size	Ref Figure	Switch Rating (Amps)	Fuse Clips Type	Fuse Clips Rating (Amps)	Part Number
1	23A	30	R	0-30	110C1718G9M
	23A		J		110C1718G1M
1 or 2	23A	60	R	31-60	110C1718G11M
	23A		J		110C1718G4M
3	23B	100	R	61-100	110C1719G5M
	23B		J		110C1719G1M
3 or 4	23C	200	R	101-200	110C1720G7M
	23D		J		110C1720G2M

—

Fusible Disconnect Switches for E9000 Part Winding Starter Units Only (See Notes Below)

Switch Size (Amps)	Ref Figure	Door Height (Inches)	Fuse Clips	Fuse Clips Rating (Amps)	Part Number
200	23C	30	R	101-200	110C1720G9M
	23D		J		110C1720G10M

—

Item 26 – Starter / Contactor

Refer to Spare Recommendations and Parts List for your motor control center. If none is available, refer to catalog number as it appears on the device itself before ordering replacement parts.

—

Item 27 – Control Power Transformer
(120 Volt Secondary 60 Hz)

CPT	480V Primary	600V Primary
Size 1 60VA	30213600YDP1	30213600YDP25
Size 1 / 2 150VA	30213600YDP300	30213600YDP301
Size 3	30213600YDP7	30213600YDP30
Size 4	30213600YDP7	30213600YDP30
1/2X Size 1 Micron Transformer	MIC#B100-2989-5	-

—

Item 28 – Terminal Boards

—
Figure 28a - 190B1692G1

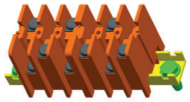

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Figure 28b - 190B1631G1

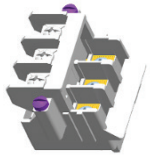

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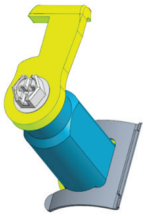
Figure 28C

Type	Description	Part
Control Terminal Blocks		
Pull Apart	HD 3PT	190B1692G1
Stationary	Single 3-point T/B	190B1627P1
Stationary	Stationary HD 6PT	190B1631G1
Stationary	HD 12PT	190B1631G2
Stationary	HD 18PT	190B1631G3
Power Terminal Blocks		
	Power terminal Block	190B1691G1
	Terminal block Din rail assembly 18 points max	190B2070G6
	Terminal block Din rail assembly 18 points max w/ TB	190B0270G12

—

Item 29 – Door Latch (1/4 Turn)



—
Figure 29

Type	Description
LATCH, PR RLVG, RH, STD DR	270A2452G1
LATCH, PR RLVG, RH, HEX DR	270A2452G2
LATCH, PR RLVG, RH, TRI DR	270A2452G3
LATCH, PR RLVG, LH, STD DR	270A2452G4
LATCH, PR RLVG, LH, HEX DR	270A2452G5
LATCH, PR RLVG, LH, TRI DR	270A2452G6
LATCH, PR RLVG, RH, STD DR, NN	270A2452G7
LATCH, PR RLVG, RH, HEX DR, NN	270A2452G8
LATCH, PR RLVG, RH, TRI DR, NN	270A2452G9
LATCH, PR RLVG, LH, STD DR, NN	270A2452G10
LATCH, PR RLVG, LH, HEX DR, NN	270A2452G11
LATCH, PR RLVG, LH, TRI DR, NN	270A2452G12

Item 30 – Unit Frame Latch Assembly (1/4 Turn)

Type	Description
Unit Frame Latch Assembly (1/4 turn)	110C1572G1

Figure 30

Item 31 – Wire Trough Door Latch Assembly (1/4 Turn)

Type	Description
Wire Trough Door Latch Assembly (1/4-turn)	110C2976G1

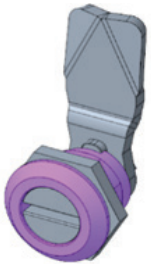


Figure 31

Item 32 – Pilot Device Bracket Escutcheon

Type	Description
6-unit device plate, blank (No Holes)	110C1039P100
3-unit device plate, blank (No Holes)	110C1089P100
6-unit device plate, 6 hole	110C1039P1
Plug Button Assembly (Black)	272A5650UWG2
Plug Button Assembly (Gray)	272A5650UWG4
PB Mounting Bracket	190B1662P1
Case Side PB Mounting Bracket	190B2255P1

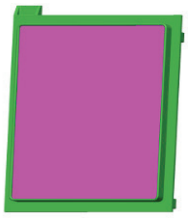


Figure 32a - Blank

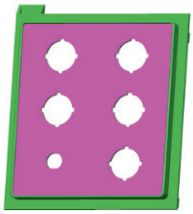


Figure 32b - 6 hole

Item 33 – Overload Relay Reset Assembly

Figure 33a - 190B1048G1

Figure 33b - 190B1048G2

Figure 33c - 190B1421G1

Figure 33d - 190B1418G1

Product	Code
Door Mounted Reset	
Reset Button Assembly Bimetal Size 1, 3, & 4	190B1048G1
Reset Button Assembly Bimetal Size 2 & 5	190B1048G2
Reset Button Assembly Electronic Size 1	190B1048G1
Reset Button Assembly Electronic Size 2, 3, 4, & 5	190B1048G2
DOOR BUTTON FOR OL RESET (Need P/N!)	270A2380P1
RUBBER PLUG FOR OL RESET HOLE	270A2386P1
Clear Plastic OL Adapter	
OLR Reset Button Adapter Bimetal Size 1, 2, & 5	190B1421G1
OLR Reset Button Adapter Bimetal Size 3 & 4	190B1421G2
OLR Reset Button Adapter Electronic Size 1 thru 5	190B1418G1
O/L Reset Assembly	
Size 1 standard O/L	9000RSG1
Size 1 electronic O/L	9000RSG2
Size 2,5 standard O/L	9000RSG3
Size 2,5 electronic O/L	9000RSG4
Size 3,4 standard O/L	9000RSG5
Size 3,4 electronic O/O	9000RSG6

Item 34 – Vertical Ground Bus Stab Finger

Type	Description
Part Number	270A1032G1

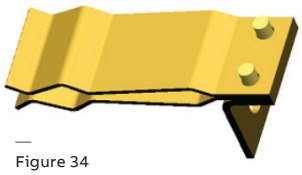


Figure 34

Item 35 – Pilot Devices (Type CR104P)

Refer to Spare Recommendations furnished with your motor control center.

- Type CR104P Standard

Item 36 – Fuse Block

Type	Description
1-Pole In Line	CSC#FEC-11-11
1-Pole Midget	CSC#30311
1-Pole CC	CSC#30311R
2-Pole Class CC	CSC#30312R
3-Pole Class CC	CSC#30313R
1-Pole CC Pull Out Din Rail Mtg	CSC#23302-G
2-Pole CC Pull Out Din Rail Mtg	CSC#23312-G
3-Pole CC Pull Out Din Rail Mtg	CSC#23314-G
Fast Acting Fuse, Class T, 600Vac, 15 A	4600286393P
Fast Acting Fuse, Class T, 600Vac, 30 A	4600286394P
Fast Acting Fuse, Class T, 600Vac, 40 A	4600286395P
Fast Acting Fuse, Class T, 600Vac, 60 A	4600286397P
Fast Acting Fuse, Class T, 600Vac, 80 A	4600286398P
Fast Acting Fuse, Class T, 600Vac, 100 A	4600286402P
Fast Acting Fuse, Class T, 600Vac, 110 A	4600286403P
Fast Acting Fuse, Class T, 600Vac, 150 A	4600286404P
Fast Acting Fuse, Class T, 600Vac, 200 A	4600286405P
Fast Acting Fuse, Class T, 600Vac, 225 A	4600286475P
Fast Acting Fuse, Class T, 600Vac, 250 A	4600286406P
Fast Acting Fuse, Class T, 600Vac, 300 A	4600286407P
Fast Acting Fuse, Class T, 600Vac, 350 A	4600286476P
Fast Acting Fuse, Class T, 600Vac, 400 A	4600286477P
Fast Acting Fuse, Class T, 600Vac, 500 A	4600286478P
Fast Acting Fuse, Class T, 600Vac, 600 A	4600286479P
Fast Acting Fuse, Class L, 600Vac, 800 A	4600286494P
Fast Acting Fuse, Class L, 600Vac, 900 A	4600286495P

Item 37 – Fuses

Type	Description
Optional semiconductor soft start fuses	
50Amp	CSC#A50QS50
60Amp	CSC#A50QS60
80Amp	CSC#A50QS80
100Amp	CSC#A50QS100
200Amp	CSC#A50QS200
225Amp	CSC#A50QS225
250Amp	CSC#A50QS350

Item 40 – Stab Power Harness

Includes harness and stab fingers.
Combination Starter Units:

Function	NEMA Size	Breaker Part Number Tin	Breaker Part Number Silver
FVNR, FVR and 2S1W or 2S2W	1	E9000L8G2	E9000L8G4
	2	E9000L8G2	E9000L8G4
	3	E9000L4G2	E9000L4G8
	4	E9000L4G15	E9000L4G16
	4 (F-Frame)	E9000L4G10	E9000L4G4

Function	NEMA Size	Breaker Part Number Tin	Breaker Part Number Silver
FVNR, FVR and 2S1W or 2S2W	1	E9000L8G7	E9000L8G8
	2	E9000L8G7	E9000L8G8
	3	E9000L4G17	E9000L4G18
	4	E9000L4G10	E9000L4G4

	Product	Code
Common Screws		
¼ - 20 Thread Rolling screws – pack of 5	204B4139AAG11	E9000 & RG
10-32 Thread Rolling screws – pack of 5	204B4139AAG15	E9000 & RG
Rivets		
Plastic Nameplate rivets – pack of 6	204B4139AAG5	E9000 & RG
Blank Nameplate – Small – 6" Bucket 1" x 3"		
Black face	273A7916P3FC	
White Face	273A7916P3EC	
Blank Nameplate – Large – 12" Bucket & Larger .5" x 2.3"		
Black face	273A7916P3F3.5/2.3	
White Face	273A7916P3E3.5/2.3	
Joint Compound		
4oz. Tube	302A3747P3	
Bucket Removal Tool		
Bucket Removal Tool	270A1581G1	

Figure 40a - Bucket removal tool

Item 41 – Fans and Filters

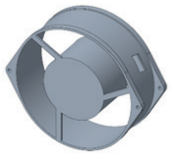


Figure 39

Type	Description
AC Fan, 115Vac, 230 CFM, Type 1	273A7844CWP7
AC Fan, 115Vac, 330 CFM, Type 1	AK1781HB-AW
AC Fan, 115Vac, 71 CFM, Type 12	4600292137P
AC Fan, 115Vac, 147 CFM, Type 12	4600292140P
AC Fan, 115Vac, 453 CFM, Type 12	4600292141P
Muffin fan 120V only	MUFFINFANG1
Tarzan fan only	RMC#020169
Case fan assembly	110C1556G1
N3R fan assemblies	Refer to Factory
Spare filter mat for SK 3239.200 Rittal filter	3239066
Spare filter mat for SK 3237.200 Rittal filter	3237066
N3R Door Filter	75C143964P102

Torque Table Values

Bolt Size	Copper Joint Ft-lb	Copper Joint N-m	Aluminum Joint Ft-lb	Aluminum Joint N-m
5/16 – 18	5 – 9	7 – 12	6.5 – 9	9 – 12
3/8 – 16	12 – 16	16 – 22	10 – 15	14 – 20
½ - 13	30 – 39	41 – 53	25 – 35	34 – 47
5/8 – 11	65 – 80	88 – 108	35 – 45	47 – 61
¾ - 10	125 - 150	169 - 203	50 - 75	68 - 102

NOTE: Above harnesses utilize standard ABB type THW (flamenol) wire/cable. Do not order above catalog numbers if your motor control center was ordered with special type power wire/cable.

ABB Inc.
Electrification Service
305 Gregson Drive
Cary, NC 27511 USA

For further information, please visit:
www.electrification.us.abb.com/services

For service, call:
1-888-434-7378 (US)
1-540-387-8617 (International)

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