

Service Parts



Automatic Transfer Switches

Models:

SCS/SCP, SSS/SSP
SBS/SBP, SGS/SGP

Power Switching Device:
Open- and Programmed-Transition
30 to 4000 Amperes

Electrical Controls:
DXPower 1500

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Introduction

This manual lists service parts for Model SBS/SBP, SCS/SCP, SGS/SGP, and SSS/SSP automatic transfer switches with DXPower™ 1500 electrical controls.

Information in this publication represents data available at the time of print. The manufacturer of DDC/MTU Power Generation products reserves the right to change this publication and the products represented without notice and without any obligation or liability whatsoever.

Illustrations, photos, or exploded-view drawings accompany most groups in this catalog. The illustrations do not depict all details and may not show all parts. Do not use the illustrations for assembly or disassembly instructions.

The following sections provide instructions to help identify the transfer switch and locate service parts within this manual.

Nameplate

A nameplate attached to the controller cover on the inside of the enclosure door includes a model designation, a serial number, ratings, and other information about the transfer switch. See Figure 1.

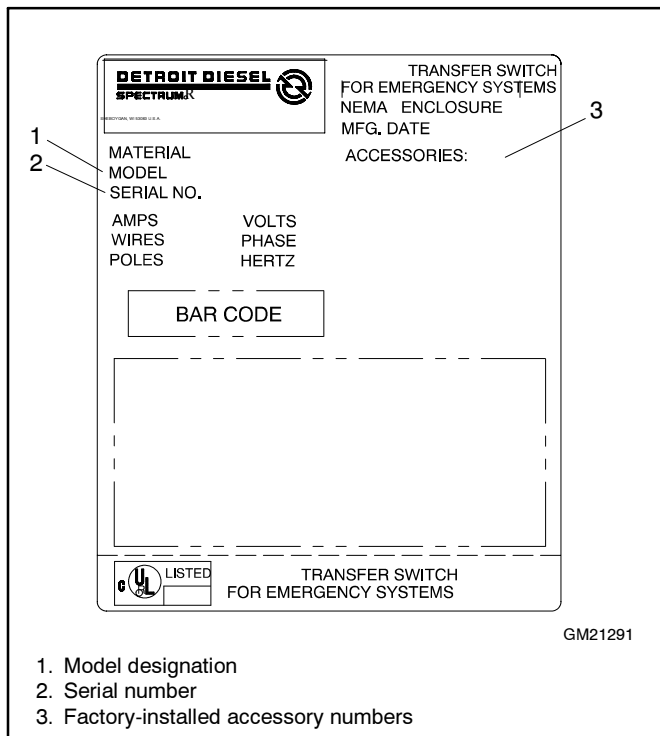


Figure 1 Typical Transfer Switch Nameplate

Model Designation Key

Copy the model designation into the spaces in Figure 2 on page 7 and use the accompanying chart to interpret the model designation.

Numbering System Significance

This manual uses the following numbering systems:

Model Designation. Defines the transfer switch characteristics and ratings as explained in the chart in Figure 2 on page 7.

Module Number. A unique number representing a parts group needed to assemble a transfer switch function.

Part Number. The part number identifies an assembly, subassembly, component, or accessory kit.

Finding Part Numbers

Parts are listed by major assembly groups or accessory part numbers. Use the following sections to locate and identify transfer switch service parts.

Enclosure, Door, Logic, and Neutral Assembly Service Parts

1. **Find the section for the assembly group that contains the part.** Use the Table of Contents at the beginning of this manual to find the major assembly groups, if necessary.
2. **Locate the part in the illustration** and note the item number or find the part description in the parts list table.
3. **Find the corresponding item number in the parts list table** to determine the part number and quantity used. Find the quantity used at the intersection of the item number row and the module part number column. A blank space at the intersection means the module does not use that part number.

Some part numbers vary according to transfer switch characteristics or ratings. When there are multiple possibilities for parts, use the following steps to determine the module number.

1. **Locate the transfer switch model designation** on the nameplate and record the characters in the boxes on the bottom of the page.

2. **Look for the Module Number Key.** The first columns list the designations. The last column lists the module number.
3. Match the characters from the model designation to the line with the matching elements and read across to the last column **to find the module number.**
4. Locate the parts list table and select **the part number that corresponds to your module number.**

Contactor Assembly Service Parts

This manual lists the part numbers of common contactor service items. Serviceable items without part numbers in the parts lists are available by contacting your supplier of DDC/MTU parts.

1. **Locate the transfer switch model designation, serial number, and contactor serial number** on the nameplates and record the numbers in the boxes on the bottom of the page.
2. **Locate the part in the illustration** and note the item number or find the part description in the parts list table.
3. **Convey the information to your supplier** of DDC/MTU parts.

Accessories

Accessory parts lists are arranged alphabetically by the accessory description.

Determine the accessory number from the transfer switch nameplate.

Leads

Fabricate replacement leads using the same type of wire as the old leads. Add terminals and lead markers at each end of the new lead.

Hardware References

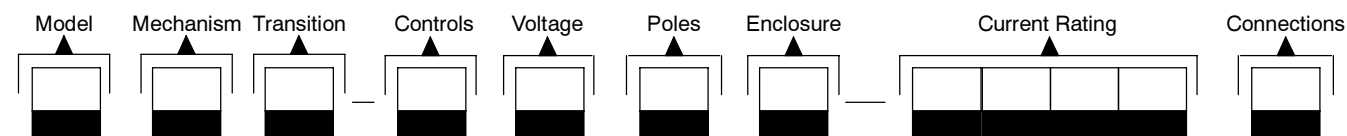
Many common hardware items do not appear in parts manuals or will appear as common hardware entries. A common hardware entry lists the size of the hardware. For example, an item that appears as "Hardware, 3/8-16" in the text means that the piece is 3/8-16 size. Obtain common hardware locally or, if contacting the factory, use the Common Hardware List in the appendix to identify the common hardware part number and specifications. See Common Hardware Application Guidelines in the appendix for mating hardware instructions.

Some hardware items require a specific size or some other characteristic. In that case, use the part number listed in the text.

When replacing hardware, do not substitute inferior grade hardware. Replacement hardware grade should be equal to or better than the grade of the manufacturer's original hardware. Use the Common Hardware List in the appendix to identify the common hardware hardness.

Transfer Switch Model Designation Key

Record the transfer switch model designation in the boxes below. The transfer switch model designation defines characteristics and ratings as indicated in the accompanying chart.



DDC/MTU Power Generation Model Designation Key

This chart translates the DDC/MTU Power Generation transfer switch model designation system. The sample model designation shown is for a Model S automatic transfer switch that uses a standard contactor with DXPower™ 1500 electrical controls rated at 220 volts, 2 poles, 3 wires, and solid neutral in a NEMA type 3R enclosure with a current rating of 400 amperes. Not all possible combinations are available.

SAMPLE MODEL DESIGNATION

SCS-DDNC-0400 S

Model

S: DDC/MTU automatic transfer switch

Mechanism

B: Bypass isolation C: Standard G: Bypass isolation
S: Specific-Breaker Rated

Transition

P: Programmed-Transition
S: Standard

Electrical Controls

D: DXPower™ 1500 (Auto) F: DXPower™ 1500 (Non-Auto)

Voltage/Frequency

C: 208/60	G: 380/50	K: 440/60	P: 380/60
D: 220/50	H: 400/50	M: 480/60	R: 220/60
F: 240/60	J: 416/50	N: 600/60	

Number of Poles/Wires

N: 2-pole, 3-wire, solid neutral	W: 4-pole, 4-wire, overlapping neutral
T: 3-pole, 4-wire, solid neutral	Z: 3-pole, 4-wire, integral solid neutral
V: 4-pole, 4-wire, switched neutral	

Enclosure

A: NEMA type 1	C: NEMA type 3R	F: NEMA 4X
B: NEMA type 12	D: NEMA 4	G: Open unit

Current Rating: Numbers indicate the current rating of the switch in amperes:

0030	0150	0800	2000
0040	0225	1000	2600
0070	0260	1200	3000
0080	0400	1600	4000
0104	0600		

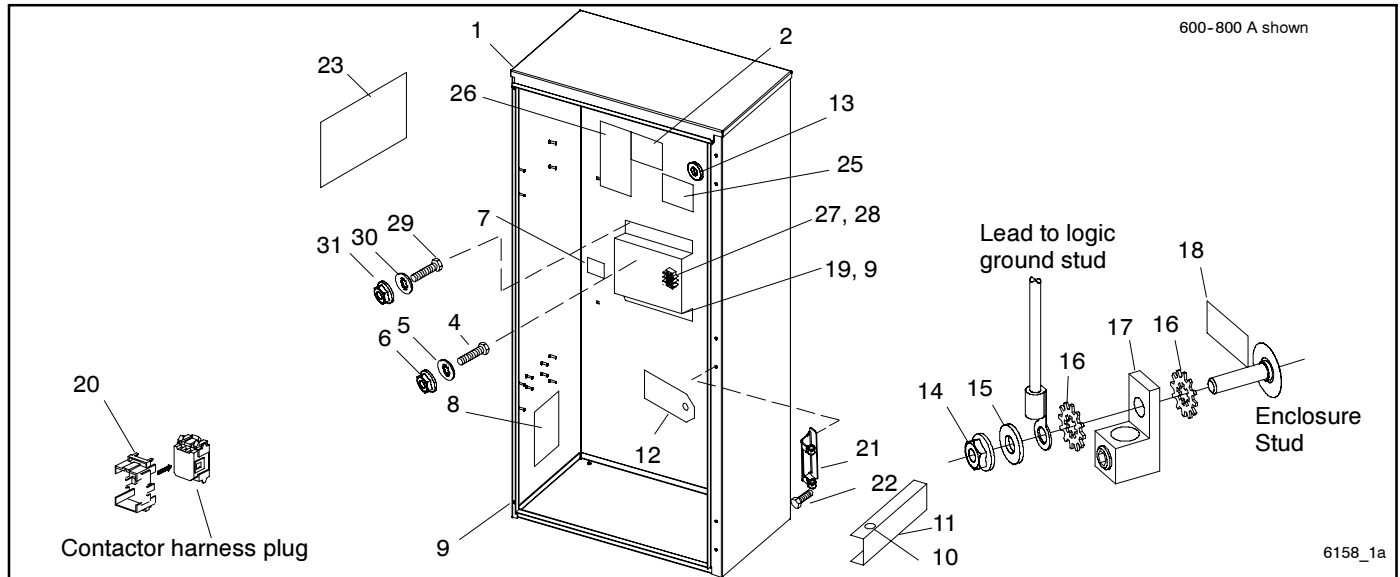
Power Connections

S: Standard
F: Front bus

Figure 2 Transfer Switch Model Designation

Enclosures, 30-800 Amp

NEMA 1 and 3R



Item	Part Number	Description	Quantity							
			Module							
			GM46725-KA1	GM46751-KA1	GM46726-KA1	GM46732-KA1	GM48130-KA1	GM48131-KA1	GM46727-KA1	GM48129-KA1
1	GM46801	Enclosure, ATS small	1			1	1	1	1	1
1	GM46802	Enclosure, ATS medium		1	1		1	1	1	1
2	294414	Decal, notice cover transfer switch	1	1	1	1	1	1	1	1
4	295023	Bolt, 1/4-20 x 3 in.			4					
4	295008	Bolt, 1/4-20 x 1 in.		4			4	4		
4	X-6224-17	Bolt, 1/2-13 x 2.25 in.							3	
4	X-125-3	Bolt, hex head								3
5	295009	Retainer		4	4		4	4		
5	295010	Retainer							3	
5	320829	Insert, threaded, 5/16-18 in.								3
5	X-25-40	Washer, plain, .281 ID x .625 in. OD		4	4		4	4		
6	X-6210-2	Nut, flange spirallock, 1/4-20	4	4	4		4	4	3	
7	GM22492	Decal, engine start terminals	1	1						
7	GM22493	Decal, engine start terminals			1					1
7	362113	Decal, engine start terminals				1	1	1	1	
8	297556	Decal, torque	1	1	1	1	1	1	1	1
9	320828	Insert, threaded, 1/4-20 in.	2	2	2	2	2	2	2	2
12	See logic section	Tag, hang (before reconnecting plug)	1	1	1	1	1	1	1	1
13	GM20990	Gasket	4	4	4	4	4	4	4	4
14	X-6210-2	Nut, flange spirallock, 1/4-20	1	1	1				1	1
15	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1				1	1
16	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2	2	2	2	2
17	X-6207-3	Lug, terminal, aluminum	1	1	1	1	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1	1	1	1	1
19	GM29981	Panel, contactor mtg.							1	1
19	GM33130	Panel, contactor mtg.					1			
20	321330	Boot, connector				1	1	1		
21	GM20572-1	Hinge, ATS enclosure	2	3	3	2	3	3	3	3
22	X-50-1	Screw, slotted pan head machine	4	6	6	4	6	6	6	6
23	GM22555	Decal, manual operating handle								
24	GM24703	Label, blank (not shown)		1	1				1	1
25	GM34998	Decal, ATS rating					1			
25	GM32650	Decal, ATS rating							1	
25	GM32651	Decal, ATS rating								1
26	GM32989	Decal, ATS connection							1	1
27	X-405-2	Terminal block							1	1
28	X-67-152	Screw, tapping							2	2
29	295008	Bolt, 1/4-20 x 1 in.							4	4
30	295009	Retainer							4	4
31	X-6210-2	X-6210-2							4	4

Enclosures, 30-800 Amp

NEMA 1 and 3R

Item	Part Number	Description	Quantity			
			Module Number			
			GM46730-KA1	GM46731-KA1	GM46728-KA1	GM46729-KA1
1	GM46805	Enclosure, ATS large	1			
1	GM46803	Enclosure, ATS		1	1	
1	GM46804	Enclosure, ATS				1
2	294414	Decal, notice cover transfer switch	1	1	1	1
4	X-6224-2	Bolt, 3/8-16 x 1.5 in.	4			
4	295008	Bolt, 1/4-20 x 1 in.		4		
4	X-6224-16	Bolt, carriage			4	
4	X-127-17	Bolt, hex head				4
5	295025	Retainer	4			
5	295009	Retainer		4	4	
5	X-25-26	Washer, plain, .531 ID x 1.062 in. OD				4
6	X-6210-9	Nut, flange spirallock, 3/8-16	4			
6	X-6210-2	Nut, flange spirallock, 1/4-20 (contractor to mounting panel)			4	
6	320832	Insert, threaded, 1/2-13 in.				4
7	362113	Decal, engine start terminals		1		1
8	297556	Decal, torque	1	1	1	1
9	320828	Insert, threaded, 1/4-20 in.	2	2	2	2
10	320831	Insert, threaded, 3/8-16 in.	4	4	4	4
11	GM21120	Channel, base	2	2	2	2
12	See logic section	Tag, hang (before reconnecting plug)	1	1	1	1
14	X-6210-2	Nut, flange spirallock, 1/4-20	1		1	1
15	X-25-40	Washer, plain, .281 ID x .625 in. OD	1		1	1
16	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2
17	X-6207-3	Lug, terminal, aluminum	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1
19	GM29986	Panel, contactor mounting				1
19	GM29495	Panel, contactor mounting		1		
20	321330	Boot, connector		1		
21	GM20572-1	Hinge, ATS enclosure	3	3	3	3
22	X-50-1	Screw, slotted pan head machine	6	6	6	6
23	GM24703	Label, blank (not shown)	1	1	1	2
25	GM32651	Decal, ATS rating				1
26	GM32989	Decal, ATS connection				1
27	X-405-2	Terminal block				1
28	X-67-152	Screw, tapping				2
29	X-6224-5	Bolt, 3/8-16 x 1 in.				4
30	295025	Retainer				4
31	X-6210-9	X-6210-2				4

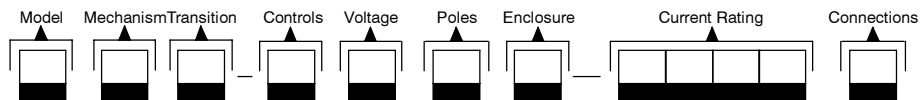
Enclosures, 30-800 Amp, NEMA 1 and 3R

Module Number Key

Model Designation Code								
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Module Number
S	C	S	D, F	all	N, T, V, W, Z	A, C	30-200	GM46725-KA1
S	C	S	D	N	N, T, V, W, Z	A, C	230	GM46726-KA1
S	C	S	D	C, D, F, G, H, J, K, M, P, R	N, T, V, W, Z	A, C	230	GM46751-KA1
S	C	S	D	all	N, T, V, W, Z	A, C	260-400	GM46726-KA1
S	C	P, S	D	all	N, T, V, W, Z	A, C	600-1000	GM46730-KA1
S	C	P	D	all	V, W, Z	A, C	150-400	GM46730-KA1
S	C	P	D	all	N, T	A, C	150-400	GM46728-KA1
S	S	S	D	all	N, T, V	A, C	40-225	GM46732-KA1
S	S	S	D	all	N, T, V	A, C	400	GM48131-KA1
S	S	S	D	all	N, T, V	A, C	600	GM46731-KA1
S	S	P	D	all	N, T, V	A, C	100/200	GM46727-KA1
S	S	S	D	all	N, T, V	A, C	260	GM48130-KA1
S	S	P	D	all	N, T, V	A, C	400	GM48129-KA1
S	S	P	D	all	N, T, V	A, C	600	GM46729-KA1

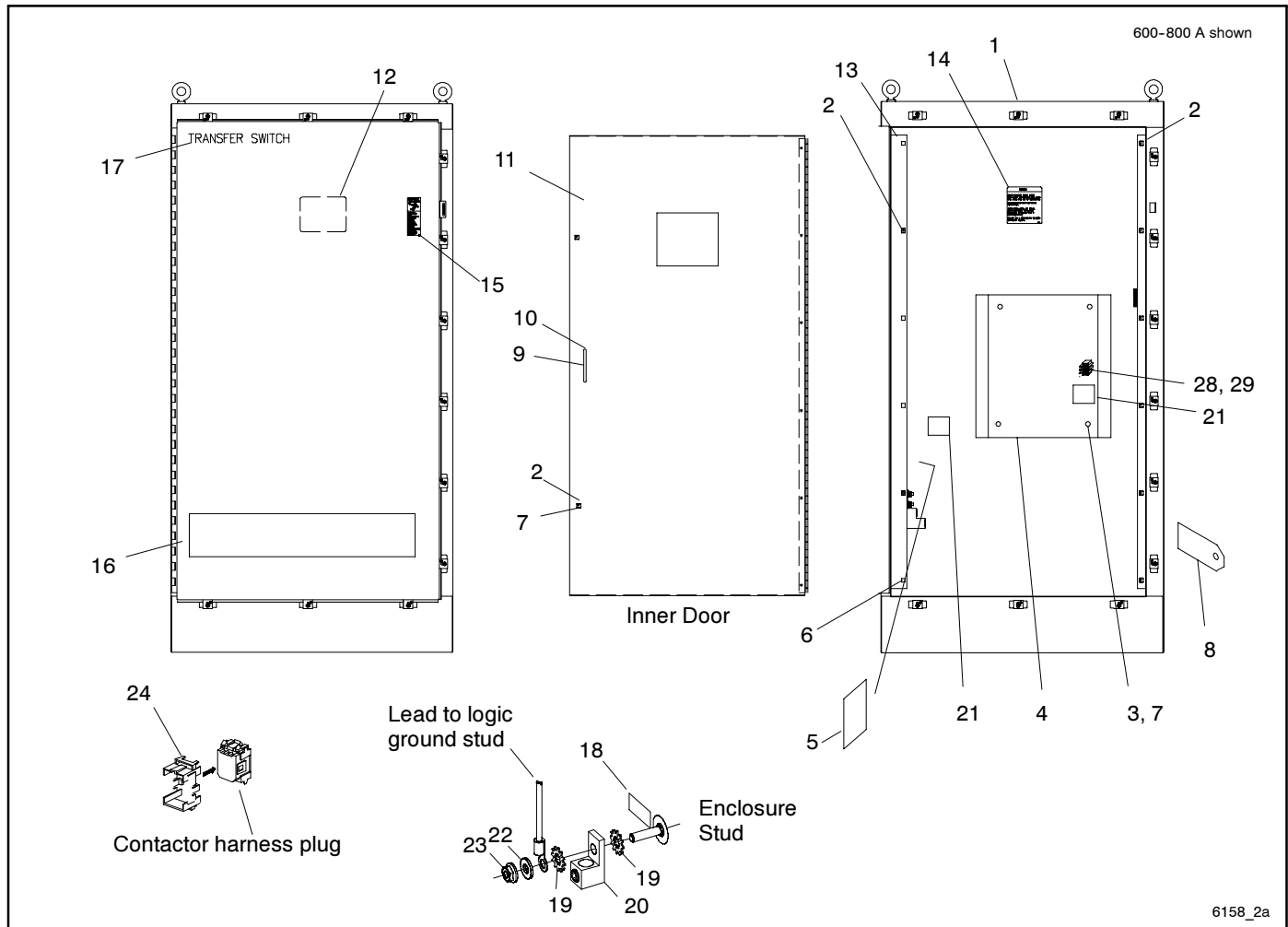
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X

Item	Part Number	Description	Quantity							
			Module							
			GM46734-KA3S	GM46734-KA1S	GM46734-KA2S	GM46735-KA1S	GM46735-KA2S	GM46735-KA3S	GM46736-KA1S	GM46736-KA2S
1	GM47826	Enclosure, NEMA 12	1					1		
1	GM47824	Enclosure, NEMA 4		1		1				
1	GM47825	Enclosure, NEMA 4X			1		1			
1	GM47827	Enclosure, NEMA 4							1	
1	GM47828	Enclosure, NEMA 4X								1
1	GM47829	Enclosure, NEMA 12								1
2	X-6204-1	Retainer, nut	8	8	8	8	8	8	8	8
4	GM33091	Panel, ATS mounting							1	1
5	297556	Decal, torque	1	1	1	1	1	1	1	1
6	X-791-2	Screw, slotted hex washer head	8	8	8	8	8	8	8	8
7	295009	Retainer	2	2	2	2	2	2	2	2
8	See logic section	Tag, hang (before reconnect. plug)	1	1	1	1	1	1	1	1
9	GM14177	Handle	1	1	1	1	1	1	1	1
10	X-50-6	Screw, slotted pan head machine	2	2	2	2	2	2	2	2
11	GM22392	Door	1	1	1	1	1	1		
11	GM22393	Door							1	1
12	297721	Decal, warning, more than one live circuit	1	1	1	1	1	1	1	1
13	GM22390	Rail, mounting	2	2	2	2	2	2		
13	GM22391	Rail, mounting							2	2
14	294414	Decal, notice cover transfer switch	1	1	1	1	1	1	1	1
15	362176	Decal, danger	1	1	1	1	1	1	1	1
16	GM23477-2	Decal, DDC/MTU logo	1	1	1	1	1	1	1	1
17	X-6303-3	Decal, Transfer Switch	1	1	1	1	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1	1	1	1	1
19	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2	2	2	2	2
20	X-6207-3	Lug, terminal, aluminum	1	1	1	1	1	1	1	1
21	GM22492	Decal, engine start terminals	1	1	1				1	1
21	362113	Decal, engine start terminals				1	1	1		
22	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1	1	1	1		
23	X-6210-2	Nut, flange spirallock, 1/4-20	1	1	1	1	1	1		
24	321330	Boot, connector				1	1	1		
25	GM24703	Label, blank (not shown)	1	1	1				1	1
26	GM47035	Plate, closure (not shown)	1	1	1	1	1	1	1	1

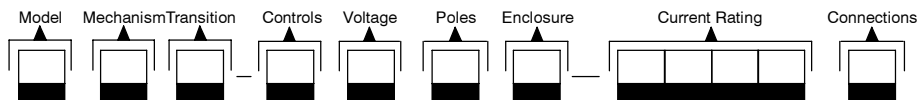
Enclosures, 30-800 Amp, NEMA 12, 4, 4X

Module Number Key

Model Designation Code								Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	
S	C	S	D	all	N, T, V, W, Z	D	30-200	GM46734-KA1S
S	C	S	D	all	N, T, V, W, Z	F	30-200	GM46734-KA2S
S	C	S	D	all	N, T, V, W, Z	B	30-200	GM46734-KA3S
S	C	S	D	N	N, T, V, W, Z	D	230	GM46737-KA1S
S	C	S	D	N	N, T, V, W, Z	F	230	GM46737-KA2S
S	C	S	D	N	N, T, V, W, Z	B	230	GM46737-KA3S
S	S	S	D	all	N, T, V	D	40-225	GM46735-KA1S
S	S	S	D	all	N, T, V	F	40-225	GM46735-KA2S
S	S	S	D	all	N, T, V	B	40-225	GM46735-KA3S
S	S	S	D	all	N, T, V	D	260	GM46738-KA1S
S	S	S	D	all	N, T, V	F	260	GM46738-KA2S
S	S	S	D	all	N, T, V	B	260	GM46738-KA3S
S	C	S	D	C,D,F,G,H,J,K,M,P,R	N, T, V, W, Z	D	230	GM46736-KA1S
S	C	S	D	C,D,F,G,H,J,K,M,P,R	N, T, V, W, Z	F	230	GM46736-KA2S
S	C	S	D	C,D,F,G,H,J,K,M,P,R	N, T, V, W, Z	B	230	GM46736-KA3S

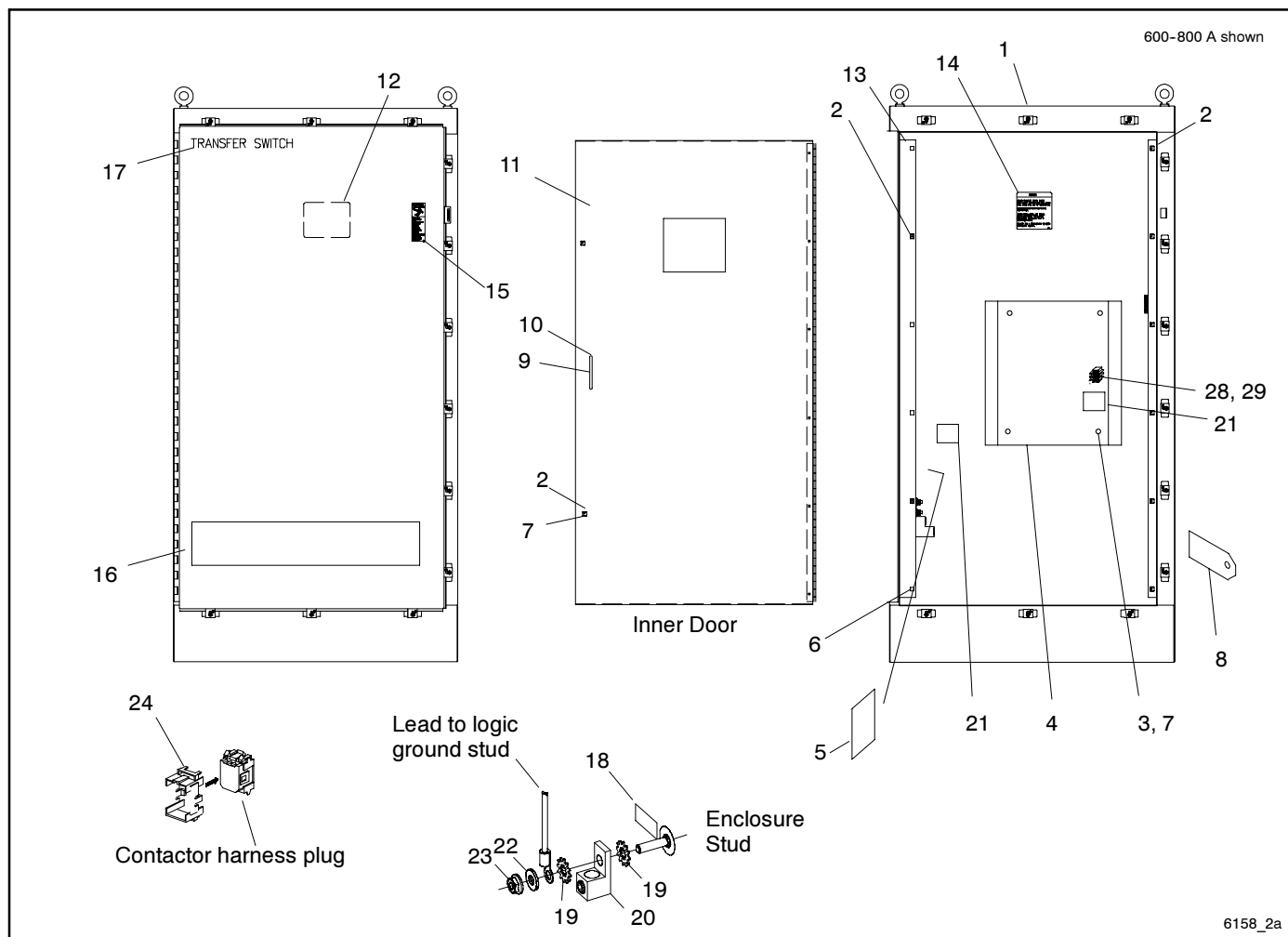
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued



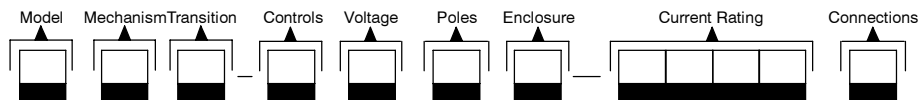
Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued

Item	Part Number	Description	Quantity													
			Module													
			GM46737-KA3S	GM46737-KA1S	GM46737-KA2S	GM46745-KA3S	GM46745-KA1S	GM46738-KA1S	GM46738-KA2S	GM46738-KA3S	GM46739-KA1S	GM46739-KA2S	GM46739-KA3S	GM46743-KA1S	GM46743-KA2S	GM46743-KA3S
1	GM47828	Enclosure, NEMA 4X			1				1			1				
1	GM47827	Enclosure, NEMA 4		1				1								
1	GM47829	Enclosure, NEMA 12	1							1			1			
1	GM47838	Enclosure, NEMA 12				1										
1	GM47836	Enclosure, NEMA 4					1									
1	GM47830	Enclosure, NEMA 4												1		
1	GM47831	Enclosure, NEMA 4X													1	
1	GM47832	Enclosure, NEMA 12														1
2	X-6204-1	Retainer, nut	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	295023	Bolt, 1/4-20 x 3 in.	4	4	4				4	4	4	4	4			
3	295008	Bolt, 1/4-20 x 1 in.						4	4	4		4	4			
4	GM22399	Panel, ATS mounting	1	1	1						1	1	1			
4	GM29495	Plate, contactor mounting						1	1	1				1	1	1
4	GM33130	Plate, contactor mounting						1	1	1				1	1	1
5	297556	Decal, torque	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	X-791-2	Screw, slotted hex washer head	8	8	8	8	8	8	8	8	8	8	8	8	8	8
7	295009	Retainer	6	6	6	2	2	2	2	2	2	2	2	2	2	2
8	See logic section	Tag, hang (before reconnect. plug)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	GM14177	Handle	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	X-50-6	Screw, slotted pan head machine	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	GM22393	Door	1	1	1			1	1	1	1	1	1	1	1	1
11	GM22733	Door				1	1									
12	297721	Decal, warning, more than one live circuit	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	GM22391	Rail, mounting	2	2	2			2	2	2	2	2	2	2	2	2
13	GM22734	Rail, mounting				2	2									
14	294414	Decal, notice cover transfer switch	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	362176	Decal, danger	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	GM23477-5	Decal, DDC/MTU logo				1	1									
16	GM23477-2	Decal, DDC/MTU logo	1	1	1			1	1	1	1	1	1	1	1	1
17	X-6301-1	Decal, Transfer Switch				1	1									
17	X-6303-3	Decal, Transfer Switch	1	1	1			1	1	1	1	1	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	X-6207-3	Lug, terminal, aluminum	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	GM22493	Decal, engine start terminals	1	1	1			1	1	1	1	1	1	1	1	1
21	362113	Decal, engine start terminals						1	1	1	1	1	1	1	1	1
22	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	X-6210-2	Nut, flange spirallock, 1/4-20	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	321330	Boot, connector						1	1	1	1	1	1	1	1	1
25	GM24703	Label, blank (not shown)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	GM47035	Plate, closure (not shown)	1	1	1	1	1	1	1	1	1	1	1	1	1	1

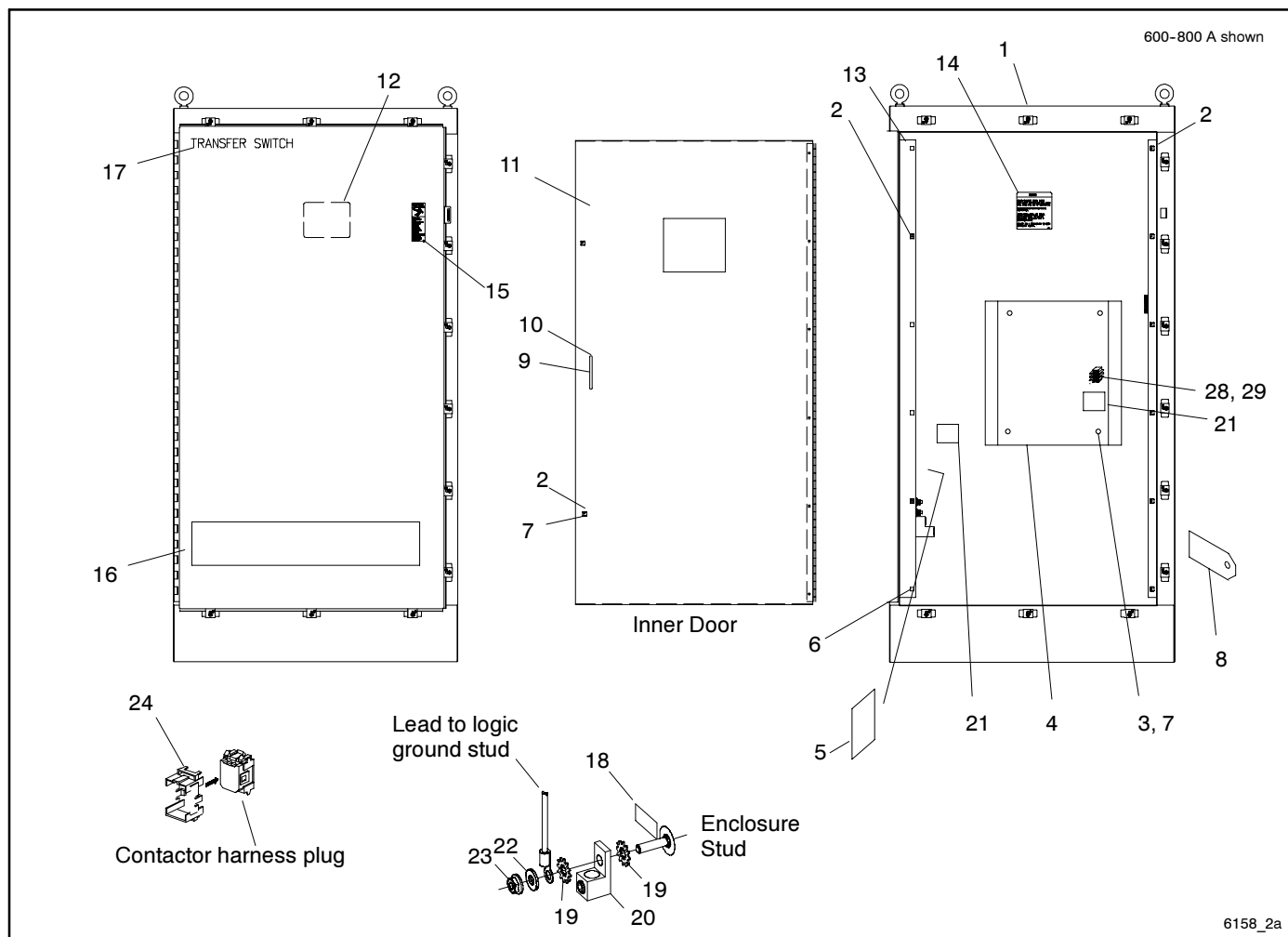
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued

Item	Part Number	Description	Quantity			
			Module Number			
			GM46745-KA2S	GM46742-KA3S	GM46742-KA1S	GM46742-KA2S
1	GM47837	Enclosure, NEMA 4X	1			
1	GM47832	Enclosure, NEMA 12		1		
1	GM47830	Enclosure, NEMA 4			1	
1	GM47831	Enclosure, NEMA 4X				1
2	X-6204-1	Retainer, nut	8	8	8	8
5	297556	Decal, torque	1	1	1	1
6	X-791-2	Screw, slotted hex washer head	8	8	8	8
7	295009	Retainer	2	2	2	2
8	See logic section	Tag, hang (before reconnect. plug)	1			
9	GM14177	Handle	1	1	1	1
10	X-50-6	Screw, slotted pan head machine	2	2	2	2
11	GM22733	Door	1			
11	GM33114	Door		1	1	1
12	297721	Decal, warning	1	1	1	1
13	GM22734	Rail, mounting	2			
13	GM33116	Rail, mounting		2	2	2
14	294414	Decal, notice cover transfer switch	1	1	1	1
15	362176	Decal, danger	1	1	1	1
16	GM23477-5	Decal, DDC/MTU logo	1			
16	GM23477-2	Decal, DDC/MTU logo		1	1	1
17	X-6303-3	Decal, Transfer Switch	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1
19	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2
20	X-6207-3	Lug, terminal, aluminum	1	1	1	1
22	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1	1
23	X-6210-2	Nut, flange spirallock, 1/4-20	1	1	1	1
25	GM24703	Label, blank (not shown)	1	1	1	1
26	GM47035	Plate, closure (not shown)	1	1	1	1

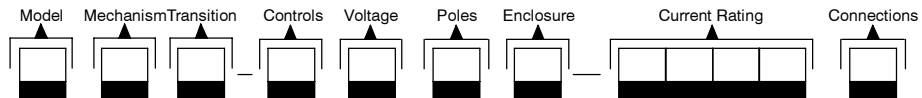
Enclosures, 30-800 Amp, NEMA 12, 4, 4X

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	S	D	all	N, T, V, W, Z	D	30-200	S	GM46734-KA1S
S	C	S	D	all	N, T, V, W, Z	F	30-200	S	GM46734-KA2S
S	C	S	D	all	N, T, V, W, Z	B	30-200	S	GM46734-KA3S
S	S	S	D	all	N, T, V	D	40-225	S	GM46735-KA1S
S	S	S	D	all	N, T, V	F	40-225	S	GM46735-KA2S
S	S	S	D	all	N, T, V	B	40-225	S	GM46735-KA3S
S	C	S	D	all	N, T, V, W, Z	D	260-400	S	GM46737-KA1S
S	C	S	D	all	N, T, V, W, Z	F	260-400	S	GM46737-KA2S
S	C	S	D	all	N, T, V, W, Z	B	260-400	S	GM46737-KA3S
S	C	P, S	D	all	N, T, V, W, Z	D	600-1000	S	GM46745-KA1S
S	C	P, S	D	all	N, T, V, W, Z	F	600-1000	S	GM46745-KA2S
S	C	P, S	D	all	N, T, V, W, Z	B	600-1000	S	GM46745-KA3S
S	C	P	D	all	V, W, Z	D	150-400	S	GM46745-KA1S
S	C	P	D	all	V, W, Z	F	150-400	S	GM46745-KA2S
S	C	P	D	all	V, W, Z	B	150-400	S	GM46745-KA3S
S	C	P	D	all	N, T	D	150-400	S	GM46742-KA1S
S	C	P	D	all	N, T	F	150-400	S	GM46742-KA2S
S	C	P	D	all	N, T	B	150-400	S	GM46742-KA3S
S	S	P	D	all	N, T, V	D	260-400	S	GM46741-KA1S
S	S	P	D	all	N, T, V	F	260-400	S	GM46741-KA2S
S	S	P	D	all	N, T, V	B	260-400	S	GM46741-KA3S
S	S	S	D	all	N, T, V	D	600	S	GM46743-KA1S
S	S	S	D	all	N, T, V	F	600	S	GM46743-KA2S
S	S	S	D	all	N, T, V	B	600	S	GM46743-KA3S

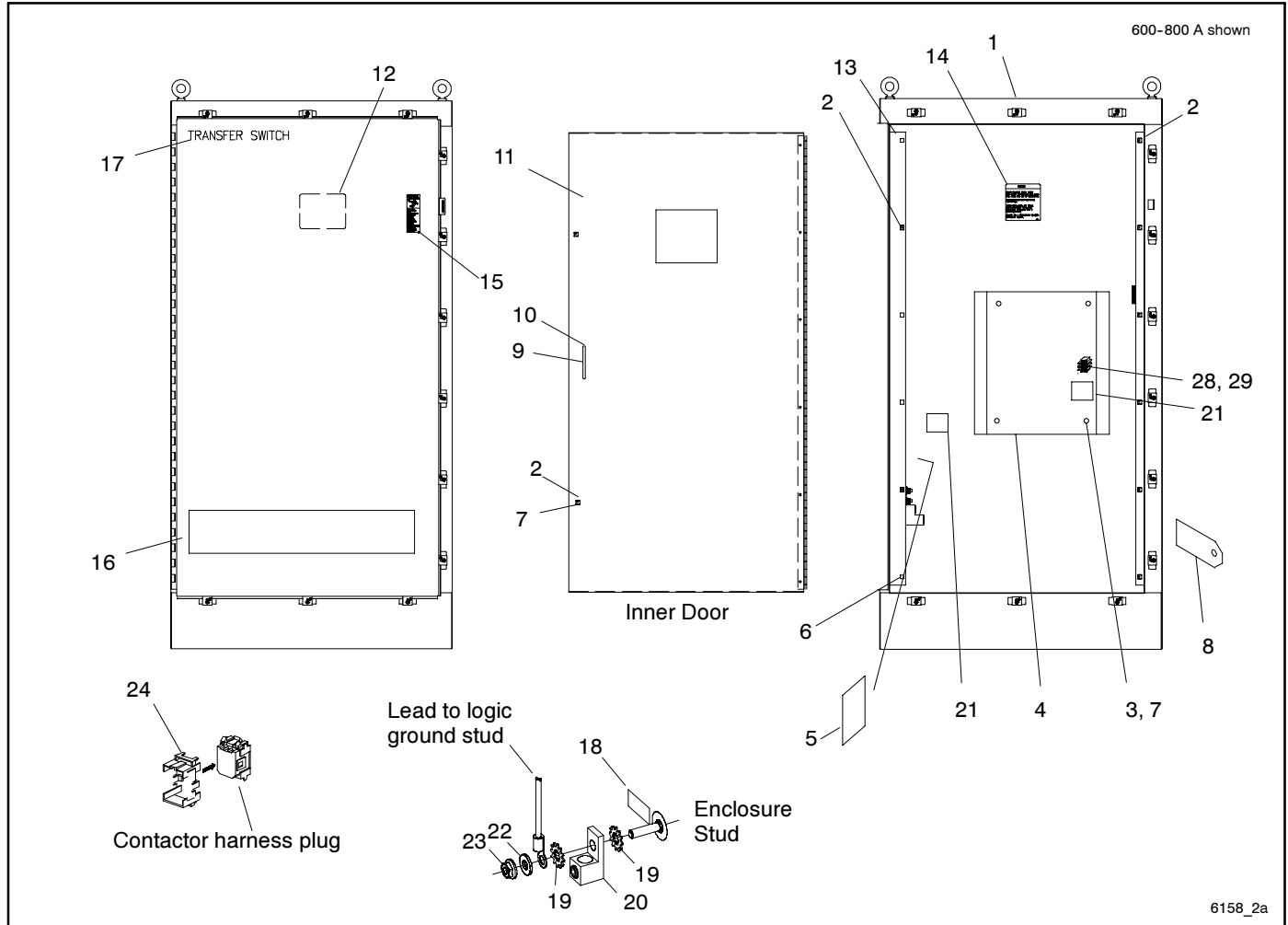
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued



Enclosures, 30-800 Amp, continued

NEMA 12, 4, 4X, continued

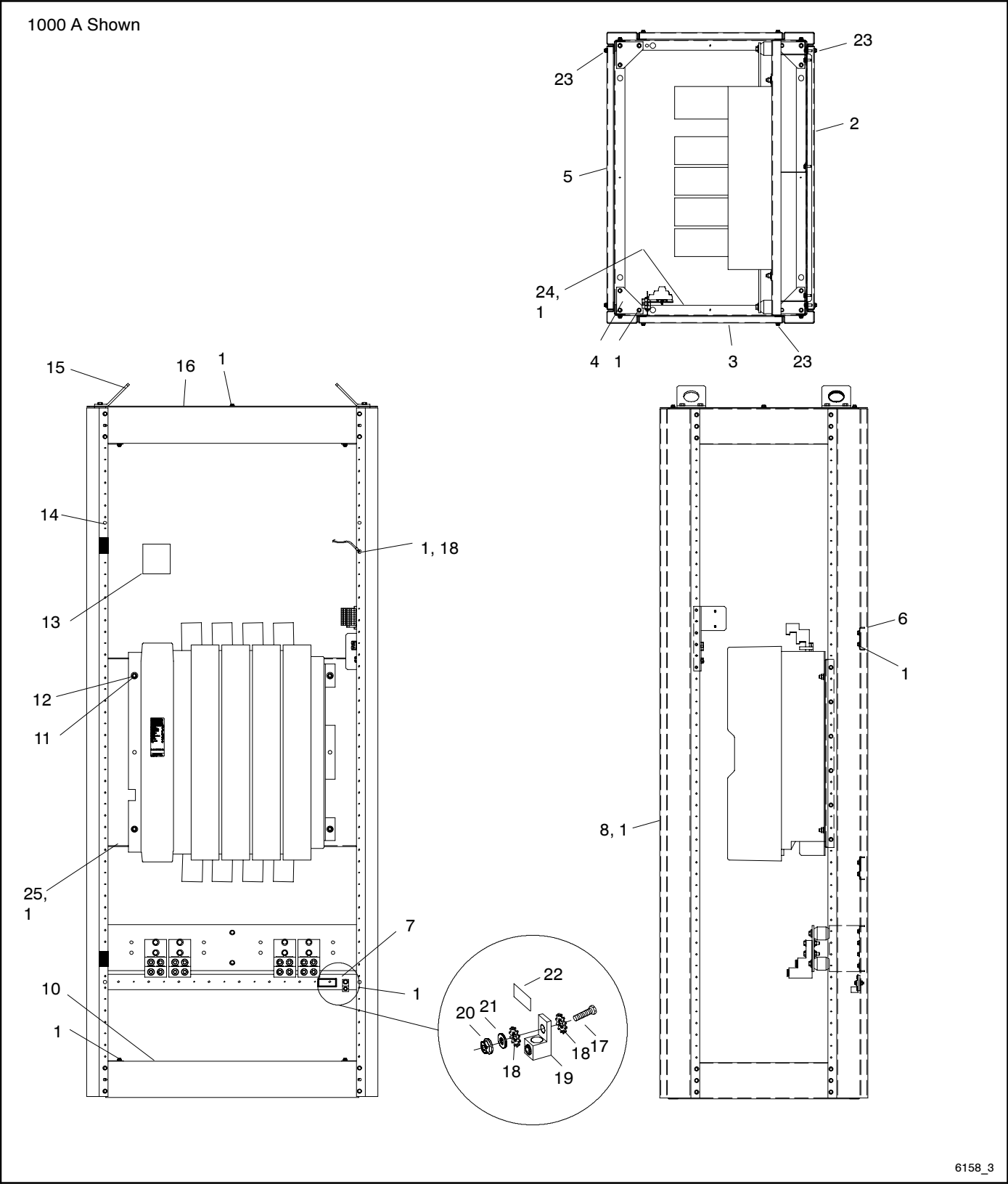
Item	Part Number	Description	Quantity							
			Module							
			GM46740-KA3S	GM46740-KA1S	GM46740-KA2S	GM46741-KA3S	GM46741-KA1S	GM46741-KA2S	GM46744-KA3S	GM46744-KA1S
1	GM47827	Enclosure, NEMA 4		1			1			
1	GM47829	Enclosure, NEMA 12	1			1				
1	GM47828	Enclosure, NEMA 4X			1			1		
1	GM47835	Enclosure, NEMA 12							1	
1	GM47833	Enclosure, NEMA 4								1
1	GM47834	Enclosure, NEMA 4X								1
2	X-6204-1	Retainer, nut	8	8	8	8	8	8	8	8
3	X-6224-17	Bolt, 1/4-20 x 3 in.	3	3	3					
3	X-125-3	Bolt, hex cap				3	3	3		
3	X-129-17	Bolt, hex cap							4	4
4	GM29986	Plate, contactor mounting							1	1
4	GM30535	Plate, contactor mounting	1	1	1	1	1	1		
5	297556	Decal, torque	1	1	1	1	1	1	1	1
6	X-791-2	Screw, slotted hex washer head	2	2	2	2	2	2	2	2
7	295009	Retainer	2	2	2	2	2	2	2	2
8	See logic section	Tag, hang (before reconnect. plug)	1	1	1	1	1	1	1	1
9	GM14177	Handle	1	1	1	1	1	1	1	1
10	X-50-6	Screw, slotted pan head machine	2	2	2	2	2	2	2	2
11	GM22393	Door, ATS inner	1	1	1	1	1	1		
11	GM33114	Door, ATS inner							1	1
12	297721	Decal, warning, more than one live circuit	1	1	1	1	1	1	1	1
13	GM22391	Rail, mounting	2	2	2	2	2	2		
13	GM33116	Rail, mounting							2	2
14	294414	Decal, notice cover transfer switch	1	1	1	1	1	1	1	1
15	362176	Decal, danger	1	1	1	1	1	1	1	1
16	GM23477-2	Decal, DDC/MTU	1	1	1	1	1	1	1	1
17	X-6303-3	Decal, transfer switch, DDC/MTU	1	1	1	1	1	1	1	1
18	344295	Decal, equipment ground	1	1	1	1	1	1	1	1
19	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2	2	2	2	2
20	X-6207-3	Lug, terminal, aluminum	1	1	1	1	1	1	1	1
21	362113	Decal, engine start terminals	1	1	1	1	1	1	1	1
22	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1	1	1	1	1	1
23	X-6210-2	Nut, flange spiralock, 1/4-20	1	1	1	1	1	1	1	1
24	295010	Retainer	3	3	3					
24	320829	Insert, threaded, 5/16-18 in.				3	3	3		
24	320832	Insert, threaded, 1/2-13 in.							4	4
25	GM24703	Label, blank (not shown)	1	1	1	1	1	1	1	1
26	GM32650	Decal, ATS rating	1	1	1					
26	GM32651	Decal, ATS rating				1	1	1	1	1
27	GM32989	Decal, ATS connection	1	1	1	1	1	1	1	1
28	X-405-2	Terminal strip	1	1	1	1	1	1	1	1
29	X-67-152	Screw, tapping	2	2	2	2	2	2	2	2
30	GM47035	Plate, closure (not shown)	1	1	1	1	1	1	1	1

Enclosures, 30-800 Amp, NEMA 12, 4, 4X

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	S	P	D	all	N, T, V	D	100/200	S	GM46740-KA1S
S	S	P	D	all	N, T, V	F	100/200	S	GM46740-KA2S
S	S	P	D	all	N, T, V	B	100/200	S	GM46740-KA3S
S	S	P	D	all	N, T, V	D	400	S	GM46741-KA1S
S	S	P	D	all	N, T, V	F	400	S	GM46741-KA2S
S	S	P	D	all	N, T, V	B	400	S	GM46741-KA3S
S	S	P	D	all	N, T, V	D	600	S	GM46744-KA1S
S	S	P	D	all	N, T, V	F	600	S	GM46744-KA2S
S	S	P	D	all	N, T, V	B	600	S	GM46744-KA3S

Enclosures, 1000-1200 Amp and 1600 Amp Front-Mounted NEMA 1



Enclosures, 1000-1200 A and 1600 Amp Front-Mounted

NEMA 1

Item	Part Number	Description	Quantity	
			Module Number	
			GM21072-KA1	GM21298-KA1
1	X-67-114	Screw, hex washer, thread-forming	152	152
2	GM14052	Panel, back	3	3
3	GM14050	Panel, side	2	2
4	GM12568	Bracket, corner	8	8
5	GM20949	Panel, front	2	2
6	GM14049	Channel, back closure	2	2
7	GM14057	Bus, ground	1	1
8	GM12561	Channel, corner	4	4
10	GM14044	Channel, top and bottom	4	4
11	X-6210-9	Nut, flange spirallock, 3/8-16	4	4
12	X-25-37	Washer, plain, .406 ID x .812 in. OD	4	4
13	294414	Decal, notice cover transfer switch	1	1
14	320828	Insert, threaded, 1/4-20 in.	2	2
15	GM12595	Bracket, lifting	4	4
16	GM14039	Panel, top	1	1
17	X-465-8	Bolt hex cap	1	
17	X-6238-4	Bolt, hex cap		1
18	X-22-12	Washer, lock, .262 ID x .743 in. OD	6	5
19	X-6207-5	Lug, terminal, aluminum		1
19	X-6207-7	Lug, terminal, aluminum	1	
20	X-6210-2	Nut, flange spirallock, 1/4-20	1	
20	X-83-7	Nut, hex, 3/8-16, zinc		1
21	X-25-118	Washer, plain, .406 ID x 1 in. OD		2
21	X-6086-6	Washer, spring, .39 ID x .81 in. OD		1
22	344295	Decal, equipment ground	1	1
23	X-67-148	Screw, hex washer, thread-forming	44	44
24	GM14046	Channel, top and bottom	4	4
25	GM20951	Panel, contactor mounting	1	
25	GM21319	Panel, contactor mounting		1
26	GM24703	Label, blank (not shown)	1	1

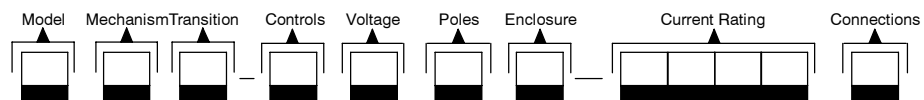
Enclosures, 1000-1200 Amp and 1600 Amp Front-Mounted

Module Number Key

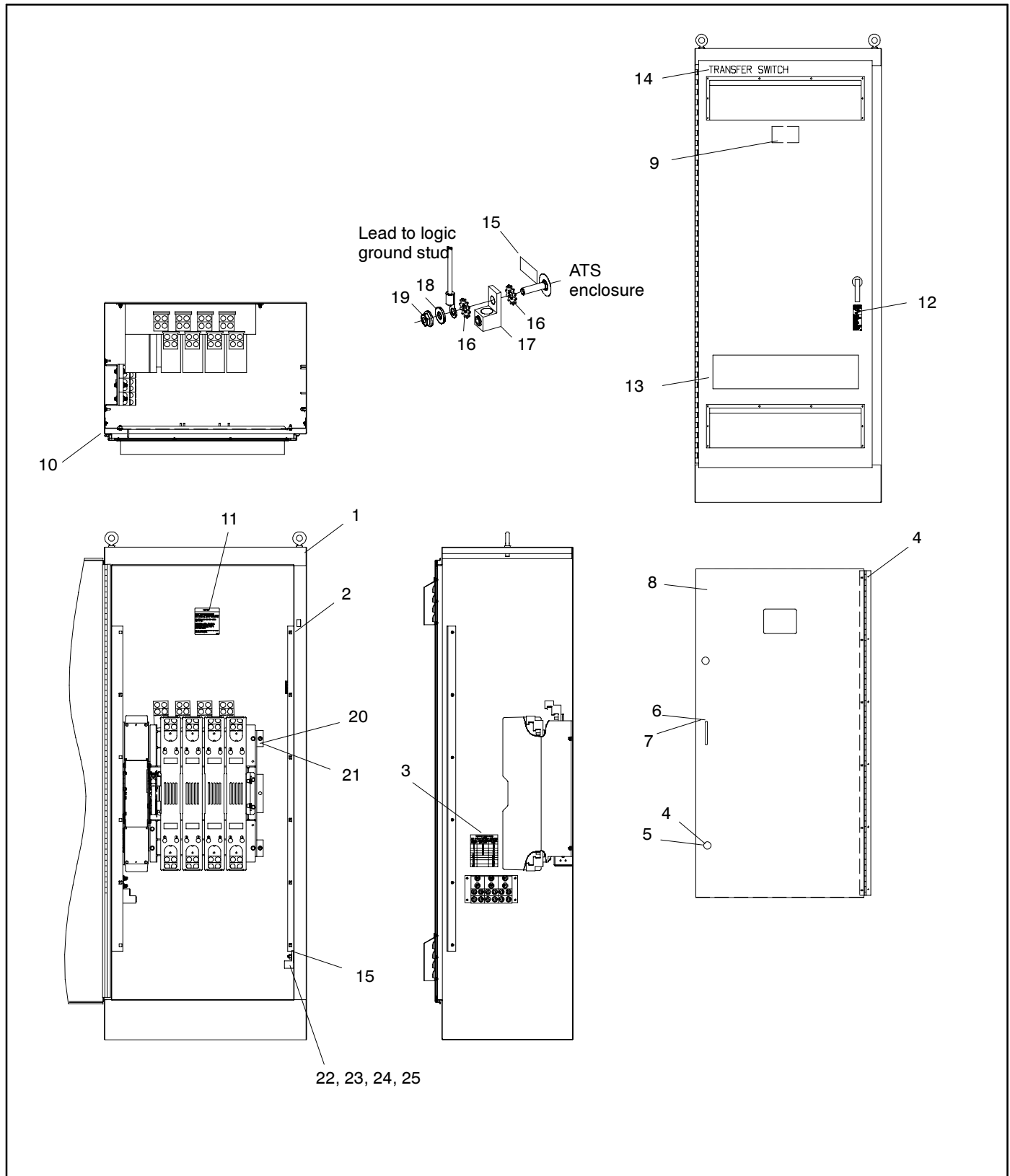
Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	S, P	D	all	N, T, V, W, Z	A	1200	S	GM21072-KA1
S	C	S, P	D	all	N, T, V, W, Z	A	1600-2000	F	GM21298-KA1

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 1200 Amp and 1600-2000 Front-Mounted NEMA 3R, 4, 4X, 12



Enclosures, 1200 Amp and 1600-2000 Front-Mounted

NEMA 3R, 4, 4X, 12

Item	Part Number	Description	Quantity				
			Module				
			GM46746-KA1S	GM46748-KA1S	GM46747-KA1S	GM46747-KA2S	GM46747-KA3S
1	GM48052	Enclosure, NEMA 3R	1				
1	GM48053	Enclosure, NEMA 3R		1			
1	GM47839	Enclosure, NEMA 4			1		
1	GM47840	Enclosure, NEMA 4X				1	
1	GM47841	Enclosure, NEMA 12					1
2	X-6204-1	Retainer, nut	8	8	8	8	8
3	297556	Decal, torque	1	1	1	1	1
4	X-791-2	Screw, slotted hex washer head	8	8	8	8	8
5	295009	Retainer	2	2	2	2	2
6	GM14177	Handle	1	1	1	1	1
7	X-50-6	Screw, slotted pan head machine	2	2	2	2	2
8	GM31240	Door, ATS inner	1	1	1	1	1
9	297721	Decal, warning	1	1	1	1	1
10	GM22734	Rail, mounting	2				
10	GM31242	Rail, mounting		2	2	2	2
11	294414	Decal, notice cover transfer switch	1	1	1	1	1
12	362176	Decal, danger	1	1	1	1	1
13	GM23477-5	Decal, DDC/MTU logo	1	1	1	1	1
14	X-6303-1	Decal, Transfer Switch	1	1	1	1	1
15	344295	Decal, equipment ground	1	2	1	1	1
16	X-22-12	Washer, lock, .262 ID x .743 in. OD	2	2	2	2	2
17	X-6207-3	Lug, terminal, aluminum	1	1	1	1	1
18	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1	1	1	1
19	X-6210-2	Nut, flange spirallock, 1/4-20	1	1	1	1	1
20	X-25-37	Washer	4	6	4	4	4
21	X-6210-9	Nut, flange spirallock, 3/8-16	4	6	4	4	4
22	X-6207-5	Lug, terminal, aluminum	1	1	1	1	1
23	X-25-118	Washer, plain, .406 ID x 1 in.		1			
24	X-6086-6	Washer, spring, .39 ID x .81 in. OD		1			
25	X-83-7	Nut, hex, 3/8-16, zinc		1			
26	GM47035	Plate, closure (not shown)	1	1	1	1	1

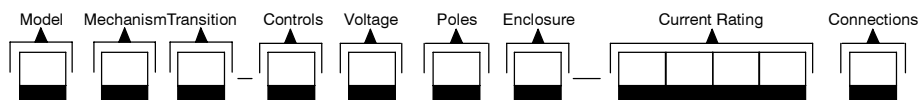
Enclosures, 1000-1200 A and 1600 Amp Front-Mounted

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	P, S	D	all	N, T, V, W, Z	C	1200	S	GM46746-KA1S
S	C	P, S	D	all	N, T, V, W, Z	D	1200	S	GM46747-KA1S
S	C	P, S	D	all	N, T, V, W, Z	F	1200	S	GM46747-KA2S
S	C	P, S	D	all	N, T, V, W, Z	B	1200	S	GM46747-KA3S
S	C	P, S	D	all	N, T, V, W, Z	C	1600-2000	F	GM46748-KA1S

Please refer to instructions on page 5 for an explanation of how to use this table.

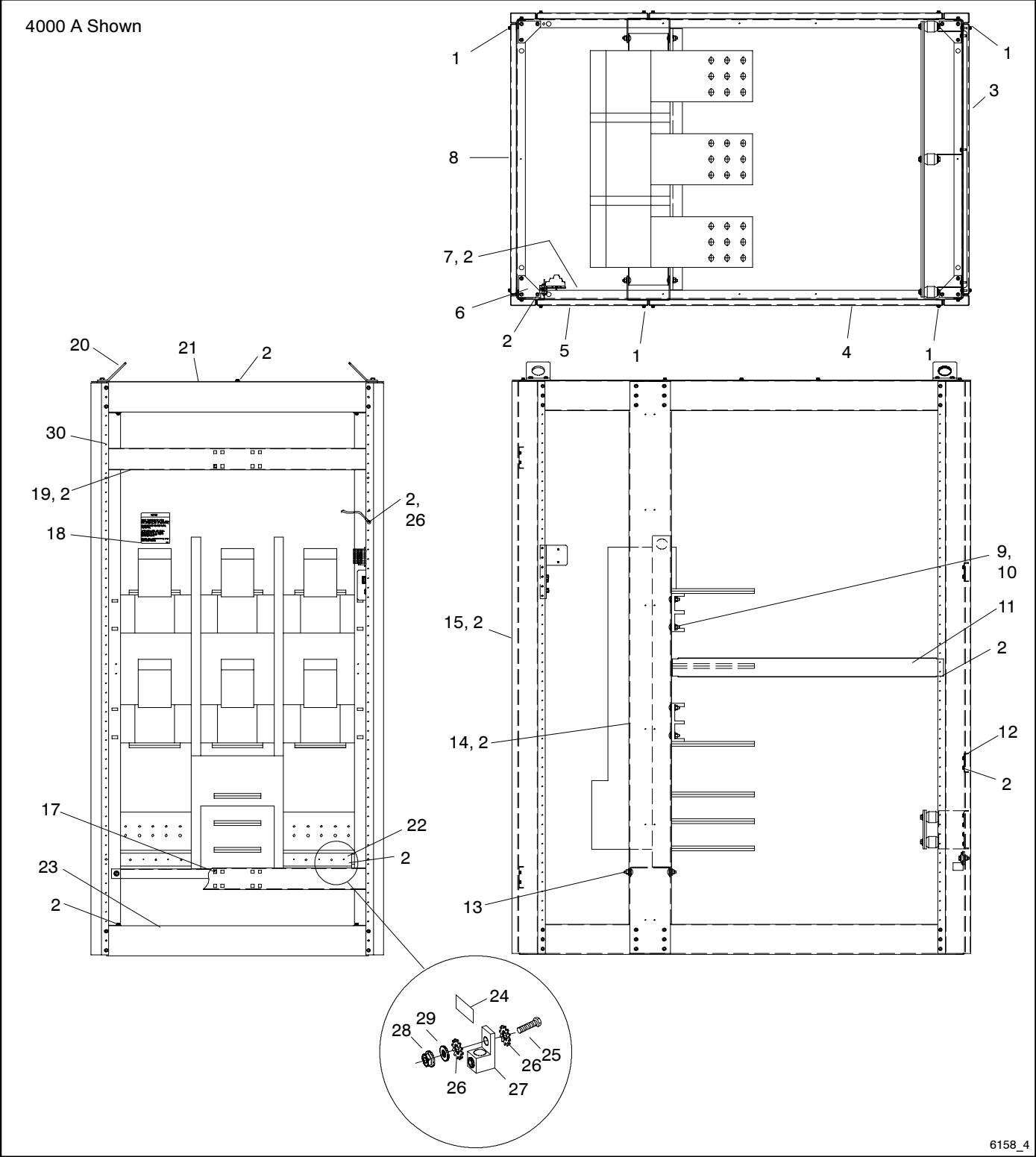
Model Designation



Enclosures, 1600-4000 Amp

NEMA 1

4000 A Shown



6158_4

Enclosures, 1600-4000 Amp

NEMA 1

Item	Part Number	Description	Quantity		
			Module Number		
			GM21073-KA1	GM21074-KA1	GM21075-KA1
1	X-67-148	Screw, hex washer, thread-forming	68	68	68
2	X-67-114	Screw, hex washer, thread-forming	176	165	184
3	GM14052	Panel, back	3	3	
3	GM12581	Panel, back			3
4	GM12574	Panel, side, back	4		
4	GM14050	Panel, side		2	
4	GM12575	Panel, side, back			4
5	GM12573	Panel, side, front	2	2	
5	GM21017	Panel, side			2
6	GM12568	Bracket, corner	8	8	8
7	GM21014	Channel, top and bottom, side	4		
7	GM14045	Channel, top and bottom		4	
7	GM21021	Channel, top and bottom, side			4
8	GM20949	Panel, front	2	2	
8	GM20996	Panel, front			2
9	X-6224-5	Bolt, 3/8-16 x .75 in.			16
10	X-6210-9	Nut, flange spiralock, 3/8-16			8
11	GM21016	Channel, back closure	2		
11	GM21023	Channel, back closure			2
12	GM14049	Channel, back closure	2	2	
12	GM12578	Channel, back closure			2
13	GM49667	Channel, spreader			2
14	GM20952	Channel, contactor mounting	2	2	
14	GM21018	Channel, contactor mounting			2
15	GM12561	Channel, corner	4	4	4
17	X-6204-1	Retainer, nut			2
18	294414	Decal, notice cover transfer switch	1	1	1
19	GM21034	Channel, door closure			2
20	GM12595	Bracket, lifting	4	4	4
21	GM14041	Panel, top	1		
21	GM14040	Panel, top		1	
21	GM14042	Panel, top			1
22	GM14057	Bus, ground	1	1	
22	GM21024	Bus, ground			1
23	GM14044	Channel, top and bottom	4	4	
23	GM12567	Channel, top and bottom, front/back			4
24	344295	Decal, equipment ground	1	1	1
25	X-6238-4	Bolt, hex cap	1	1	1
26	X-22-12	Washer, lock, .262 ID x .743 in. OD	5	5	5
27	X-6207-5	Lug, terminal, aluminum	1	1	1
28	X-83-7	Nut, hex, 3/8-16, zinc	1	1	
29	X-25-118	Washer, plain, .406 ID x 1 in. OD	2	2	2
29	X-6086-6	Washer, spring, .39 ID x .81 in. OD	1	1	1
30	320828	Insert, threaded, 1/4-20 in.	2	2	2
31	GM24703	Label, blank (not shown)	1	1	1

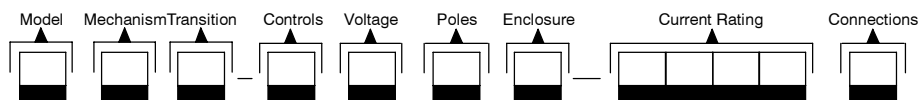
Enclosures, 1600-4000 Amp

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	P, S	D	all	N, T, V, W, Z	A	1600-2000	S	GM21073-KA1
S	C	P, S	D	all	N, T, V, W, Z	C	1600-2000	S	GM46749-KA1
S	C	P, S	D	all	N, T, V, W, Z	A	2600-3000	S	GM21074-KA1
S	C	P, S	D	all	N, T, V, W, Z	C	2600-3000	S	GM46750-KA1
S	C	P, S	D	all	N, T, V, W, Z	A	4000	S	GM21075-KA1

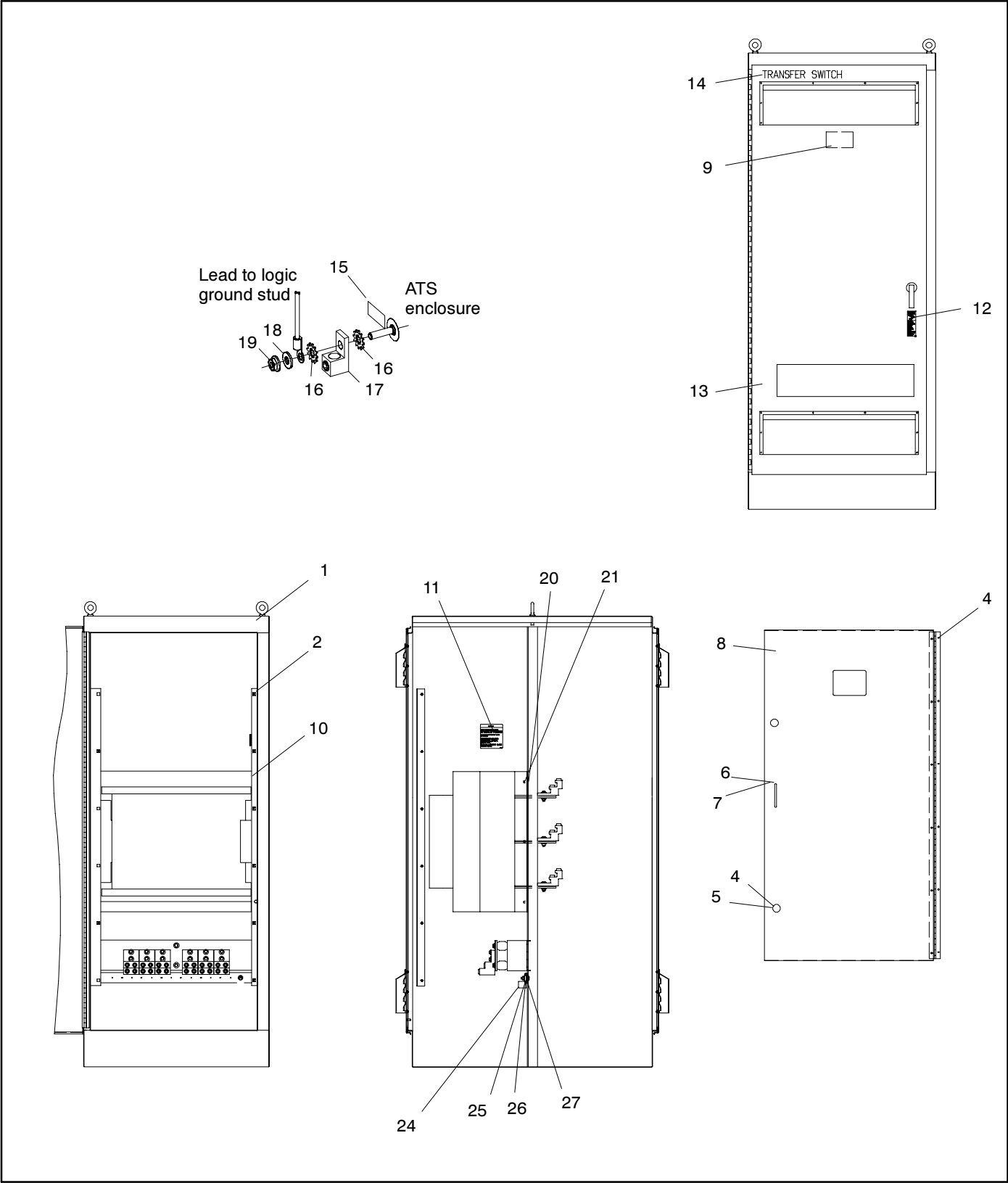
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, 1600-3000 Amp

NEMA 3R



Enclosures, 1600-3000 Amp

NEMA 3R

Item	Part Number	Description	Quantity	
			Module Number	
			GM46749-KA1S	GM46750-KA1S
1	GM48054	Enclosure, NEMA 3R	1	
1	GM48055	Enclosure, NEMA 3R		1
2	X-6204-1	Retainer, nut	8	8
3	297556	Decal, torque (not shown)	1	1
4	X-791-2	Screw, slotted hex washer head	8	8
5	295009	Retainer	2	2
6	GM14177	Handle	1	1
7	X-50-6	Screw, slotted pan head machine	2	2
8	GM31240	Door, ATS inner	1	1
9	297721	Decal, warning	1	1
10	GM31242	Rail, mounting	2	2
11	294414	Decal, notice cover transfer switch	1	1
12	362176	Decal, danger	1	1
13	GM23477-5	Decal, DDC/MTU logo	1	1
14	X-6303-1	Decal, Transfer Switch	1	1
15	344295	Decal, equipment ground	1	1
16	X-22-12	Washer, lock, .262 ID x .743 in. OD	6	6
17	X-6207-3	Lug, terminal, aluminum	1	1
18	X-25-40	Washer, plain, .281 ID x .625 in. OD	1	1
19	X-6210-2	Nut, flange spiralock, 1/4-20	1	1
20	X-25-37	Washer	6	6
21	X-6210-9	Nut, flange spiralock, 3/8-16	6	6
22	GM14057	Bus, ground	1	1
23	X-67-144	Screw, hex washer, thread-forming	4	4
24	X-6207-5	Lug, terminal, aluminum	1	1
25	X-83-7	Nut, hex, 3/8-16	1	1
26	X-25-118	Washer, plain, .406 ID x 1 in. OD	2	2
27	X-6086-6	Washer, spring, .39 ID x .81 OD	1	1
28	GM47035	Plate, closure (not shown)	1	1

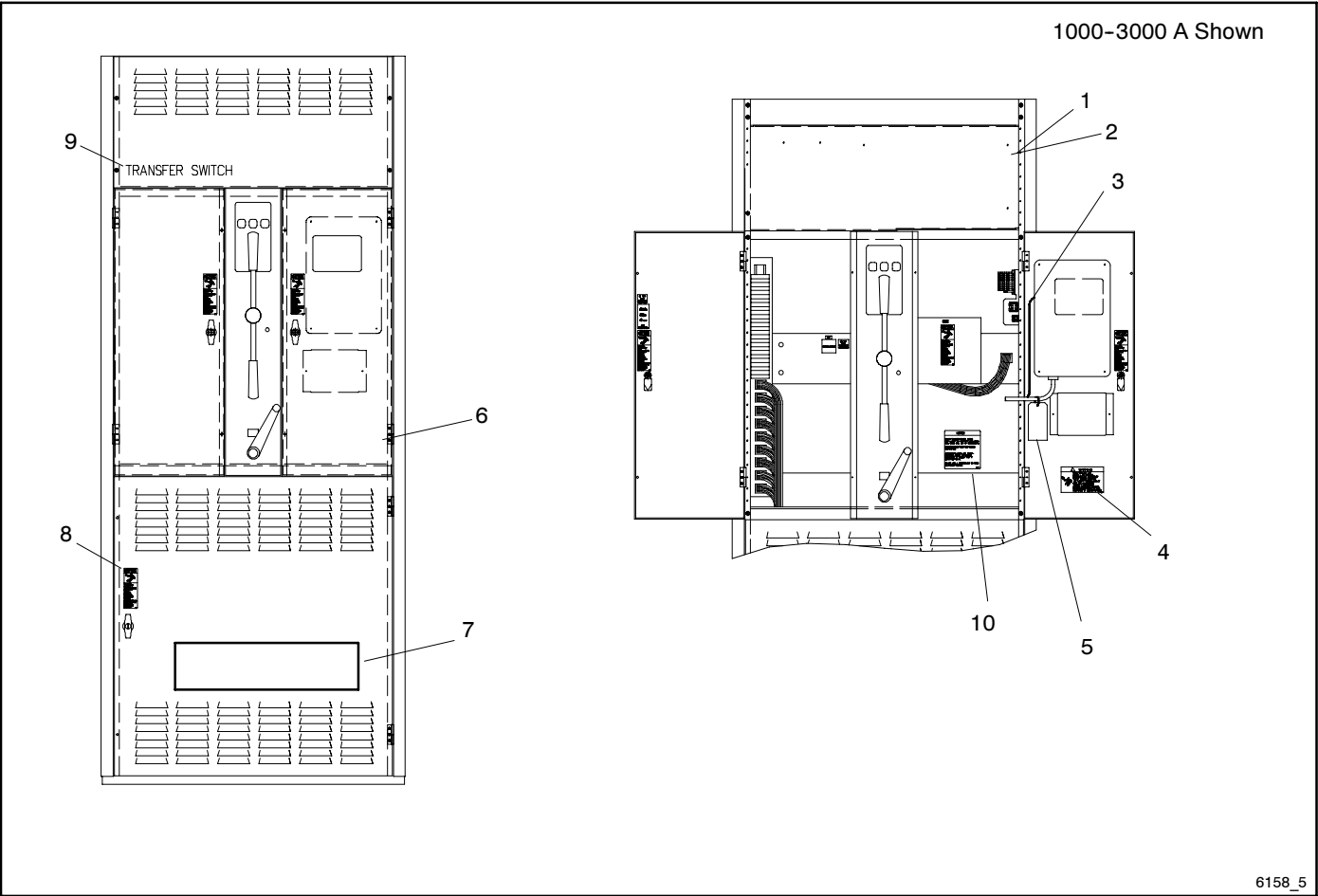
Enclosures, 1600-4000 Amp

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	P, S	D	all	N, T, V, W, Z	A	1600-2000	S	GM21073-KA1
S	C	P, S	D	all	N, T, V, W, Z	C	1600-2000	S	GM46749-KA1
S	C	P, S	D	all	N, T, V, W, Z	A	2600-3000	S	GM21074-KA1
S	C	P, S	D	all	N, T, V, W, Z	C	2600-3000	S	GM46750-KA1
S	C	P, S	D	all	N, T, V, W, Z	A	4000	S	GM21075-KA1

Please refer to instructions on page 5 for an explanation of how to use this table.

Enclosures, Bypass Isolation (SB_)



Enclosures, Bypass Isolation (SB_)

Item	Part Number	Description	Quantity
			Module Number GM22373-KA1S
1	GM21365	Pan, mounting	1
2	X-67-114	Screw, hex washer, thread-forming	6
3	GM23503	Harness, bypass	1
4	297721	Decal, warning	1
5	See logic section	Tag, hang (before reconnecting plug)	1
6	GM21045	Door, left bypass switch	1
6	GM21046	Door, right bypass switch	1
7	GM23477-5	Decal, DDC/MTU logo	1
8	362176	Decal, danger	2
9	X-6303-1	Decal, Transfer Switch	1
10	294414	Decal, notice cover transfer switch	1
11	GM24703	Label, blank	1

Item	Part Number	Description	Quantity		
			Module Number GM22536-KA1S	Module Number GM22537-KA1S	Module Number GM22540-KA1S
3	GM23503	Harness, bypass	1	1	1
4	297721	Decal, warning	1	1	1
5	See logic section	Tag, hang (before reconnect. plug)	1	1	1
6	GM21051	Door, bypass switch	1		
6	GM21050	Door, bypass switch		1	
6	GM21053	Door, bypass switch			1
7	GM23477-3	Decal, DDC/MTU logo	1	1	1
8	362176	Decal, danger	1	1	2
9	X-6303-1	Decal, Transfer Switch	1	1	1
10	294414	Decal, notice cover transfer switch	1	1	1
11	GM24703	Label, blank (not shown)	1	1	1

Item	Part Number	Description	Quantity
			Module Number GM34924-KA1S
3	GM23503	Harness, bypass	1
4	297721	Decal, warning	1
5	See logic section	Tag, hang (before reconnect. plug)	1
6	GM34926	Door, bypass switch	1
7	GM23477-3	Decal, DDC/MTU logo	1
8	362176	Decal, danger	2
9	X-6303-1	Decal, Transfer Switch	1
10	294414	Decal, notice cover transfer switch	1
11	GM24703	Label, blank (not shown)	1

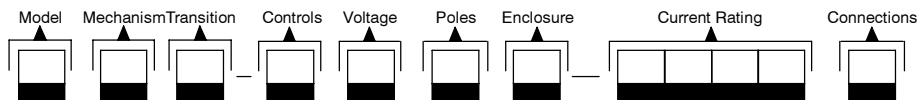
Enclosures, Bypass Isolation

Module Number Key

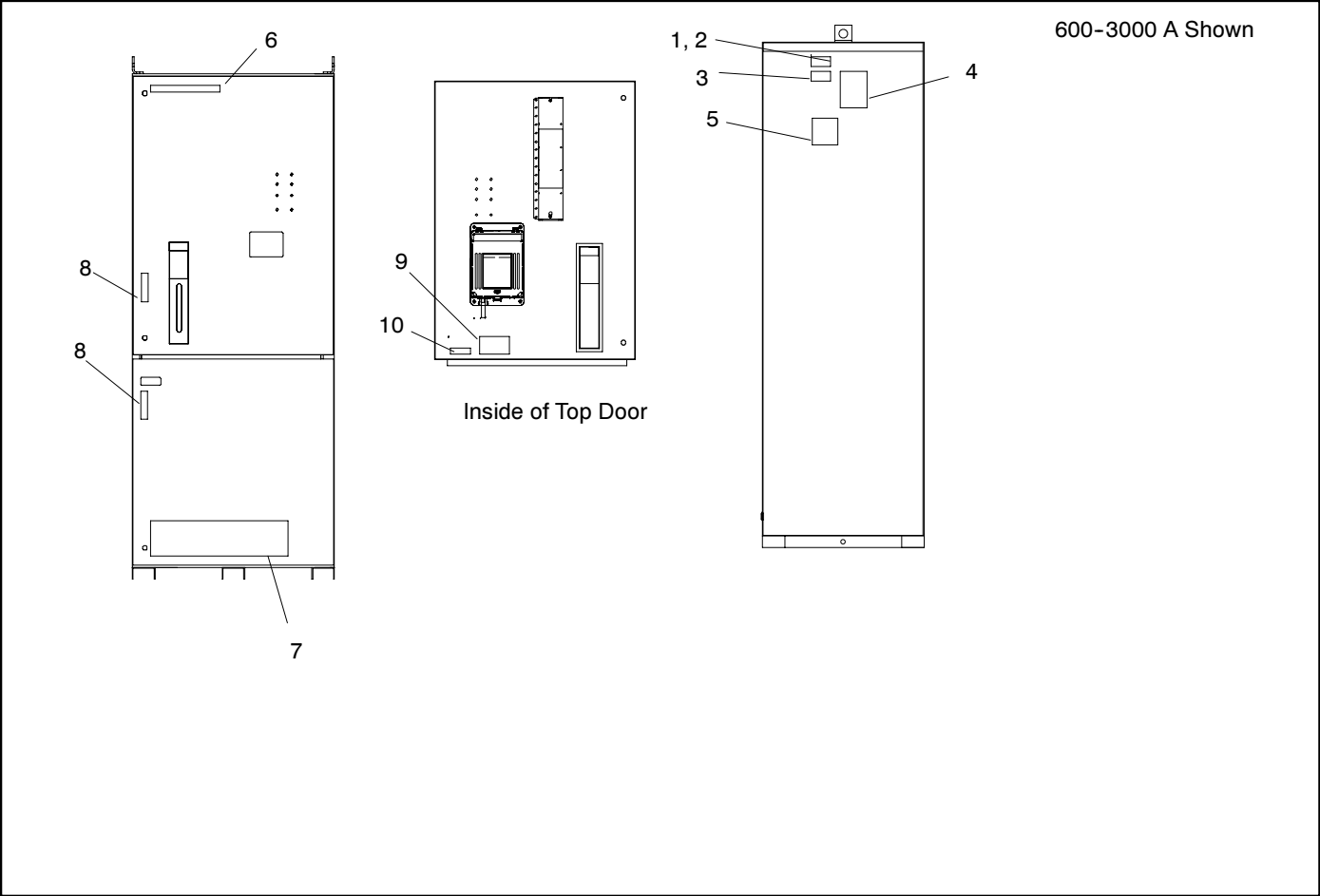
Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	B	P	D	all	N, T, V, W, Z	A	150-400	S	GM22536-KA1S
S	B	S	D	all	N, T, Z	A	150-400	S	GM22537-KA1S
S	B	P	D	all	V, W	A	150-400	S	GM34924-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	600-1200	S	GM34924-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	1600-3000	S	GM22373-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	4000	S	GM22540-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	150-400	S	GM46721-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	600-1200	S	GM46722-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	1600-3000	S	GM46723-KA1S

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Enclosures, Bypass Isolation (SG_)



Enclosures, Bypass Isolation (SG_)

Item	Part Number	Description	Quantity		
			Module Number		
			GM46721-KA1S	GM46722-KA1S	GM46723-KA1S
1	X-22-12	Washer, lock, .262 ID x .732 in. OD	1	1	
2	X-6207-3	Lug, terminal, aluminum	1	1	
3	344295	Decal, equipment grd.	1	1	1
4	297556	Decal, torque	1	1	
5	294414	Decal, notice	1	1	1
6	X-6303-1	Decal, transfer switch	1	1	1
7	GM23477-3	Decal, DDC/MTU	1	1	1
8	362176	Decal, danger	2	2	2
9	297721	Decal, CSA	1	1	
10	GM24703	Label, blank	2	2	2

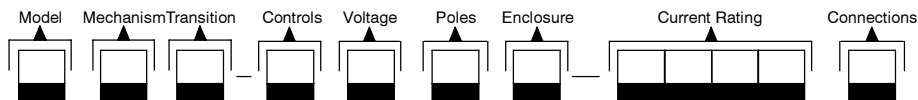
Enclosures, Bypass Isolation

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	B	P	D	all	N, T, V, W, Z	A	150-400	S	GM22536-KA1S
S	B	S	D	all	N, T, Z	A	150-400	S	GM22537-KA1S
S	B	P	D	all	V, W	A	150-400	S	GM34924-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	600-1200	S	GM34924-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	1600-3000	S	GM22373-KA1S
S	B	P, S	D	all	N, T, V, W, Z	A	4000	S	GM22540-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	150-400	S	GM46721-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	600-1200	S	GM46722-KA1S
S	G	P, S	D	all	N, T, V, W, Z	A	1600-3000	S	GM46723-KA1S

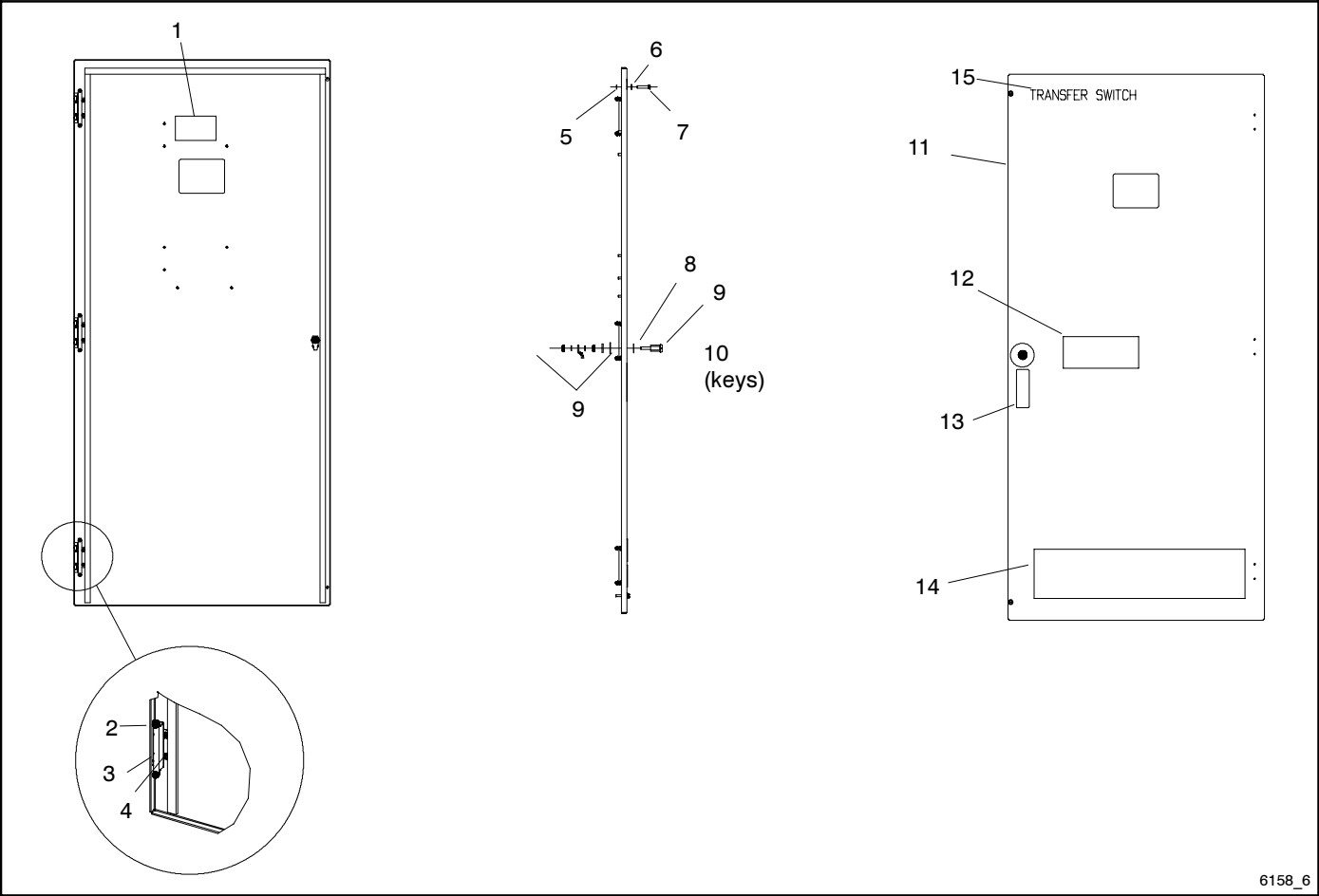
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Door

NEMA 1 and 3R



6158_6

Item	Part Number	Description	Quantity	
			Module Number	
			GM21076-KA1S	GM21077-KA1S
1	297721	Decal, warning	1	1
2	295098	Screw, flat countersunk, head machine	16	32
3	GM20572	Hinge, ATS enclosure	4	
3	297600	Hinge, split	4	4
3	297601	Hinge, split, left		4
5	295009	Retainer	2	2
7	X-791-3	Screw, slotted hex washer head, machine	2	
7	X-791-2	Screw, slotted hex washer head, machine		2
9	GM20885	Latch, compression, T-handle, locking	1	1
11	GM12602	Door, enclosure, left		1
11	GM14047	Door, enclosure, right		1
11	GM20950	Door, enclosure	1	
13	362176	Decal, danger	1	1

Door

NEMA 1 and 3R

Item	Part Number	Description	Quantity						
			Module						
			GM21069-KA1S	GM21069-KA2S	GM21292-KA1S	GM21292-KA2S	GM21293-KA1S	GM21293-KA2S	GM28764-KA1S
1	297721	Decal, warning	1	1	1	1	1	1	1
2	X-50-1	Screw, slotted pan head machine	4	4	3	3	6	6	6
3	GM20572	Hinge, ATS enclosure	2	2	6	6	3	3	3
4	X-22-9	Washer, lock, .20 ID x .373 in. OD	4	4	6	6	6	6	6
4	X-70-3	Nut, hex machine screw, 10-32	4	4	2	2	6	6	6
5	295009	Retainer	2	2	2	2	2	2	2
6	X-25-40	Washer, plain, .281 ID x .625 in. OD	2	2	2	2	2	2	2
7	X-791-3	Screw, slotted hex washer head, machine	2	2	1	1	2	2	2
8	GM20575	Gasket, compression latch	1	1	1	1	1	1	1
9	GM20573	Latch, compression	1	1	2	2	1	1	1
10	GM20574	Key, compression latch	2	2	1	1	2	1	2
11	GM20166	Door, enclosure, 600-800 A					1	1	
11	GM28763	Door, enclosure							1
11	GM20162	Door, 30-200 A, NEMA 1	1						
11	GM20163	Door, 30-200 A, NEMA 3R		1					
11	GM20164	Door, 225-400 A			1				
11	GM20165	Door, 225-400 A				1			
13	362176	Decal, danger	1	1	1	1	1	1	1
14	GM23477-5	Decal, DDC/MTU logo					1	1	
14	GM23477-1	Decal, DDC/MTU logo	1	1	1	1			
14	GM23477-2	Decal, DDC/MTU logo							1
15	X-6303-1	Decal, transfer switch					1	1	
15	X-6303-3	Decal, transfer switch	1	1	1	1	1	1	1
16	GM22555	Decal, manual operating handle						1	

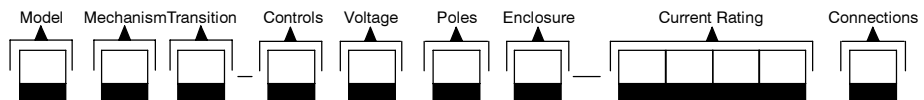
Door, NEMA1 and 3R

Module Number Key

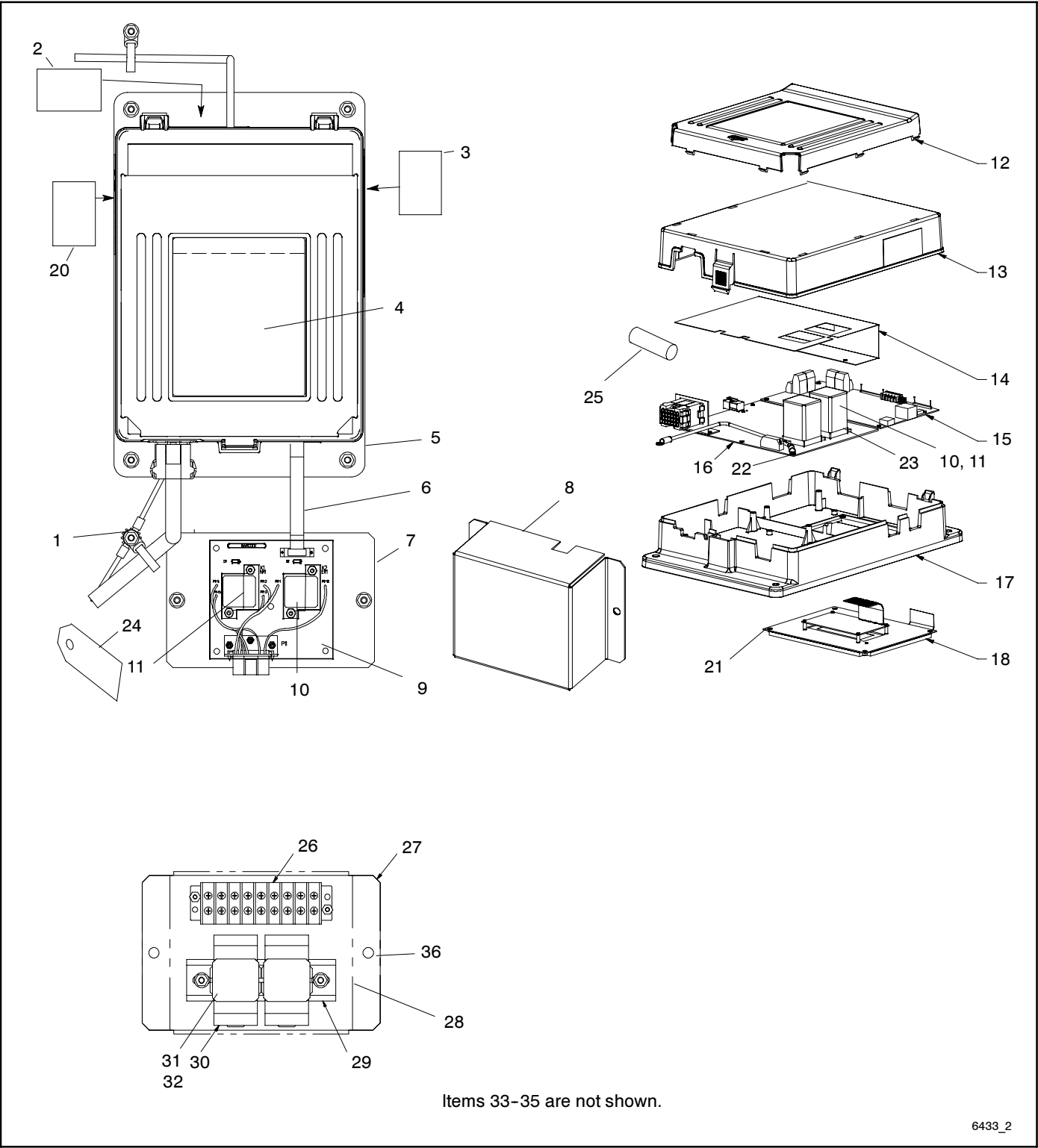
Model Designation Code								Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	
S	C	S	D	all	N, T, V, W, Z	A	30-200	GM21069-KA1S
S	C	S	D	all	N, T, V, W, Z	C	30-200	GM21069-KA2S
S	C	S	D	all	N, T, V, W, Z	A	230-400	GM21292-KA1S
S	C	S	D	all	N, T, V, W, Z	C	230-400	GM21292-KA2S
S	S	S	D	all	N, T, V, W, Z	A	100-400	GM21292-KA1S
S	S	S	D	all	N, T, V, W, Z	C	100-400	GM21292-KA2S
S	C	P	D	all	N, T, Z	A, C	150-400	GM28764-KA1S
S	C	P	D	all	V, W	A, C	150-400	GM21293-KA1S
S	C	P, S	D	all	N, T, V, W, Z	A, C	600-1000	GM21293-KA1S
S	C	S	F	all	N, T, V, W, Z	A	600-1000	GM21293-KA2S
S	C	P, S	D	all	N, T, V, W, Z	A	1200-3000	GM21076-KA1S
S	C	P, S	D	all	N, T, V, W, Z	A	4000	GM21077-KA1S
S	S	P, S	D	all	N, T, V	A, C	600	GM28764-KA1S

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Logic



Logic

Item	Part Number	Description	Quantity			
			Module			
			GM46257-MA1	GM46257-MA3	GM46257-MA5	GM49013-KA1
1	X-22-12	Washer, lock, .262 ID x .743 in. OD	1	1	1	
2	GM40574	Decal, Modbus	1	1	1	
3	GM40572	Decal, comm ports	1	1	1	
4	GM21291	Decal, nameplate	1	1	1	
5	GM46733-1	Logic assembly (includes items 2, 3, 10-23)	1	1		
5	GM46733-2	Logic assembly (includes items 2, 3, 12-22)			1	
6	GM21340	Ribbon cable assembly		1		
7	GM21391	Plate, mounting		1		
8	GM21392	Cover, PT		1		
9	GM21268	PCB assembly, PTIB-T340		1		
10	295253	Relay, 12VDC, 10A	2	4	2	
11	269972	Clip, relay	2	4	2	
12	GM21358	Holder, literature	1	1	1	
13	GM21357	Cover, logic	1	1	1	
14	GM46752	Insulation, power PCB	1	1	1	
15	GM46715	PCB assembly, main logic board	1	1	1	
16	GM46324-1	PCB assembly, power board	1	1		
16	GM46975-1	PCB assembly, power board			1	
17	GM46580	Carrier, logic	1	1	1	
18	GM46892	Display/membrane switch	1	1	1	
19	GM47162	Cable assembly, ribbon, 40-pos.	1	1	1	
20	GM40573	Decal, programmable I/O	1	1	1	
21	GM21374	Screw, plastic tapping, flat head, 12.7 mm	4	4	4	
22	GM23307	Screw, plastic tapping, round head, 9.53 mm	10	10	11	
23	GM23312	Screw, plastic tapping, round head, 12.7 mm			4	
24	297949	Tag, hang ("Before reconnecting plug...")	1	1	1	
25	GM47057	Battery, backup main logic board (4.1V)	1	1	1	
36	GM49358	Service kit, DXPower 1500 (includes items 1, 5, and instructions)	1	1		
36	GM49359	Service kit, DXPower 1500 (includes items 1, 5, and instructions)			1	
26	295313	Terminal block				1
27	GM49014	Plate, relay mounting				1
28	GM49015	Cover, relay assembly				1
29	GM41099	Rail, DIN				1
30	X-6124-4	Socket				2
31	295253	Relay, 12VDC, 10A				2
32	X-6124-5	Strap, holddown				2
33	GM49016	Harness, wiring PT1P				1
34	GM49180	Harness, wiring PT1				1
35	GM49185	Harness, wiring PT2				1
36	295009	Retainer				2

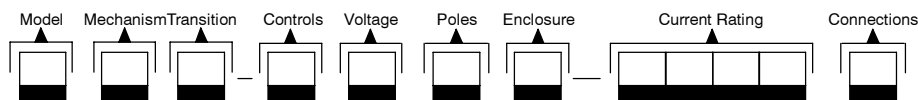
Logic

Module Number Key

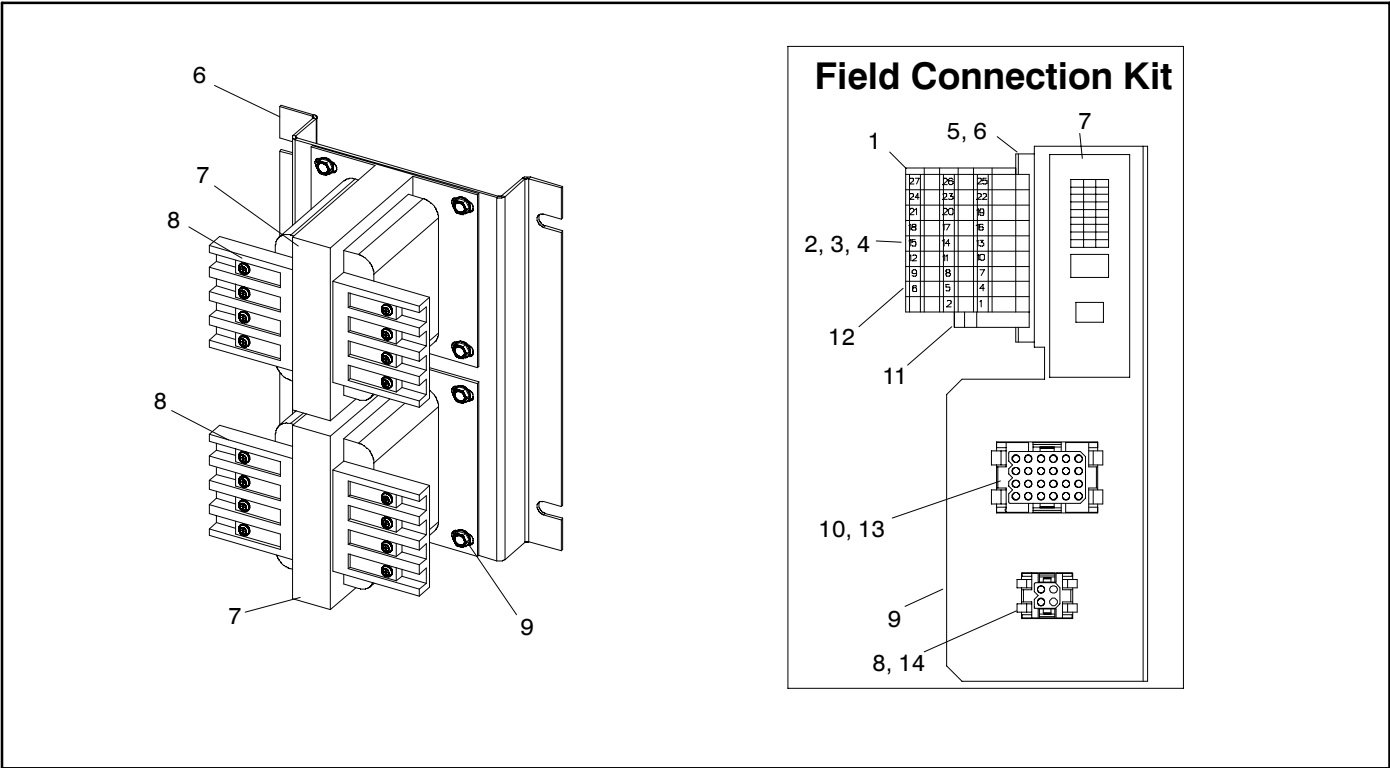
Model Designation Code								Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	
S	B, C, S	S	D	all	all	all	all	GM46257-KA1
S	B, C, S	P	D	all	all	all	all	GM46257-KA3
S	G	P, S	D	all	all	all	all	GM46257-KA5
S	G	P	D	all	all	all	150-400	GM49013-KA1

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Transformers and Field Connection Block



Field Connection Block

Item	Part Number	Description	Quantity	
			Module Number	
			GM21311-KA1	GM21311-KA2
1	GM21315	End section	1	1
2	GM22883	Strip, marker (1-10)	1	1
3	GM22884	Strip, marker (11-20)	1	1
4	GM22885	Strip, marker (21-30)	1	
5	GM21339	Rail, DIN	1	1
6	X-67-113	Screw, hex washer, thread-forming	2	2
7	GM22491	Decal	1	
7	GM49198	Decal, field connection "G" bypass		1
8	GM21312	Connector, 4-position	1	
9	GM21338	Bracket, field connection kit	1	1
10	295145	Connector, 24-position	1	1
11	321025	Stop, end	1	1
12	GM21313	Block, terminal	9	5
13	GM21317	Harness	1	1
14	GM21318	Harness	1	

Transformers and Field Connection Block

Transformer, Series-Rated Programmed-Transition

Item	Part Number	Description	Quantity							
			Module							
			GM29904-KA1	GM29904-KA2	GM29904-KA3	GM29904-KA4	GM29904-KA5	GM29904-KA6	GM29904-KA7	GM29904-KA8
6	GM30000	Bracket, transformer mounting	1	1	1	1	1	1	1	1
7	GM29213	Transformer (480 V primary, 240 V secondary)	2							
7	GM29214	Transformer (480 V primary, 240 V secondary)		2						
7	GM29215	Transformer (480 V primary, 240 V secondary)			2					
7	GM29216	Transformer (480 V primary, 240 V secondary)				2				
7	GM29217	Transformer (380 V primary, 240 V secondary)					2			
7	GM29218	Transformer (380 V primary, 240 V secondary)						2		
7	GM29219	Transformer (380 V primary, 240 V secondary)							2	
7	GM29220	Transformer (380 V primary, 240 V secondary)								2
8	GM26856	Guard, terminal	2				2			
8	GM29221	Guard, terminal		2	2	2		2	2	2
9	X-67-113	Screw, hex washer, thread-forming	8	8	8	8	8	8	8	8

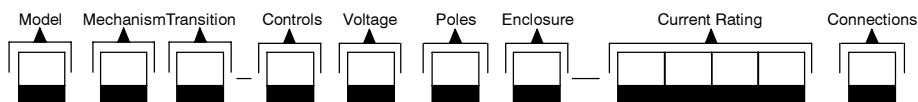
Field Connection Block and Transformers

Module Number Key

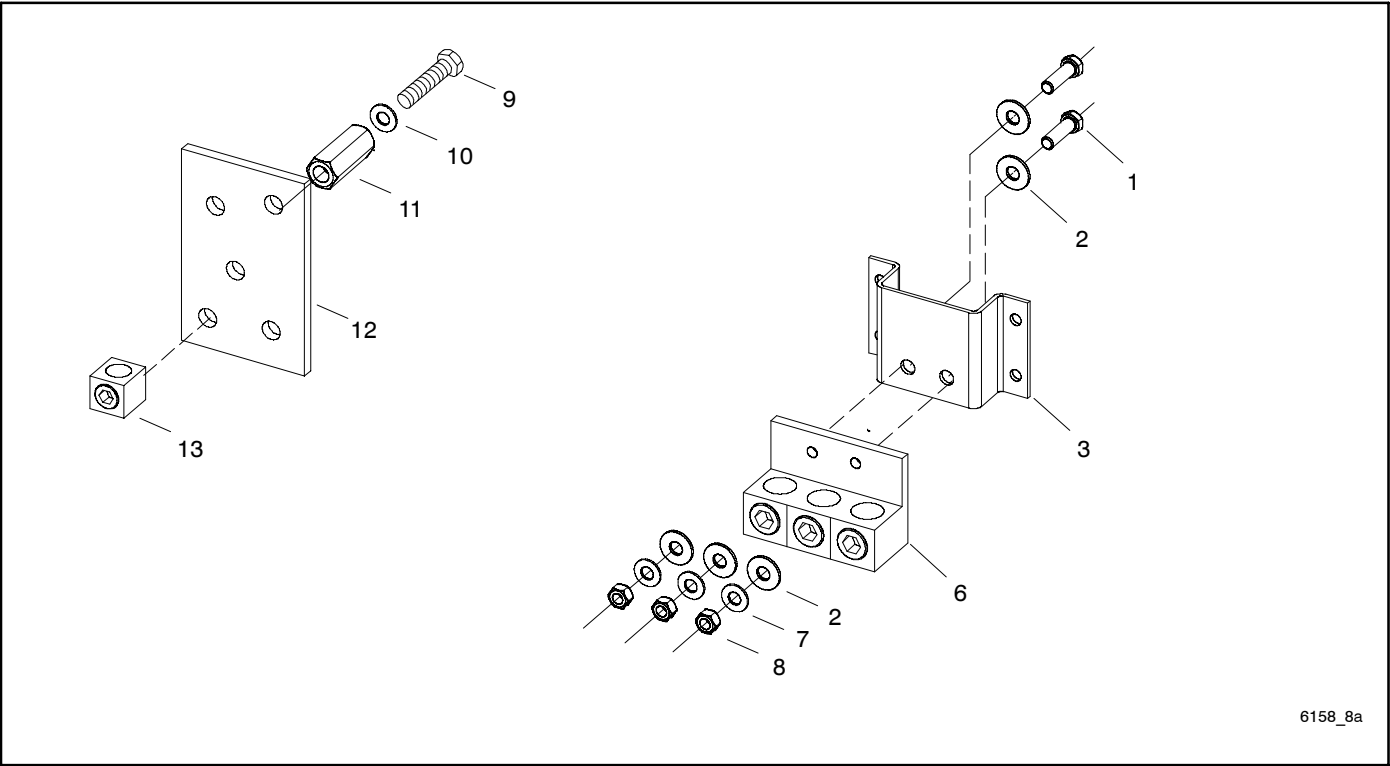
Model Designation Code								Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	
S	C	S	D, F	all	all	all	600-4000	GM21311-KA1
S	C	P	D, F	all	all	all	150-4000	GM21311-KA1
S	B	P, S	D, F	all	all	all	150-4000	GM21311-KA1
S	G	P, S	D, F	all	all	all	150-4000	GM21311-KA2
S	S	P	D, F	K, M	N, T	all	100	GM29904-KA1
S	S	P	D, F	K, M	V	all	100	GM29904-KA2
S	S	P	D, F	K, M	N, T	all	200/400	GM29904-KA2
S	S	P	D, F	K, M	V	all	200	GM29904-KA3
S	S	P	D, F	K, M	V	all	400	GM29904-KA4
S	S	P	D, F	K, M	N, T, V	all	600	GM29904-KA4
S	S	P	D, F	G, H, J	N, T	all	100	GM29904-KA5
S	S	P	D, F	G, H, J	V	all	100	GM29904-KA6
S	S	P	D, F	G, H, J	N, T	all	200/400	GM29904-KA6
S	S	P	D, F	G, H, J	V	all	200	GM29904-KA7
S	S	P	D, F	G, H, J	V	all	400	GM29904-KA8
S	S	P	D, F	G, H, J	N, T, V	all	600	GM29904-KA8

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Neutral Assembly, 30-400 Amp



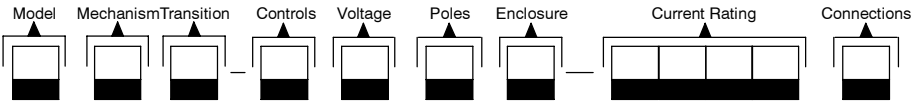
Item	Part Number	Description	Quantity		
			Module Number		
			GM21070-KA1	GM21071-KA1	GM26317-KA1
1	X-6238-4	Bolt, hex cap	2	2	
2	X-25-118	Washer, plain, .406 ID x 1 in. OD	4	4	
3	GM20991	Bracket, neutral mounting, 30-400 A	1		
3	GM25826	Bracket, neutral mounting 225-400 A		1	
6	X-6207-12	Lug, terminal	1		
6	X-6207-14	Lug, terminal, aluminum		1	
7	X-6086-6	Washer, spring, .39 ID x .81 in. OD	2	2	
8	X-83-7	Nut, hex, 3/8-16, zinc	2	2	
9	X-465-6	Bolt, hex cap			7
10	X-6086-16	Washer, spring, .281 Id x .875 OD			7
11	X-6128-30	Standoff, insulator, 1/4-20 x 1 in.			2
12	GM28294	Bus, neutral			1
13	297712	Lug, terminal			3

Neutral Assembly, 30-400 Amp
Module Number Key

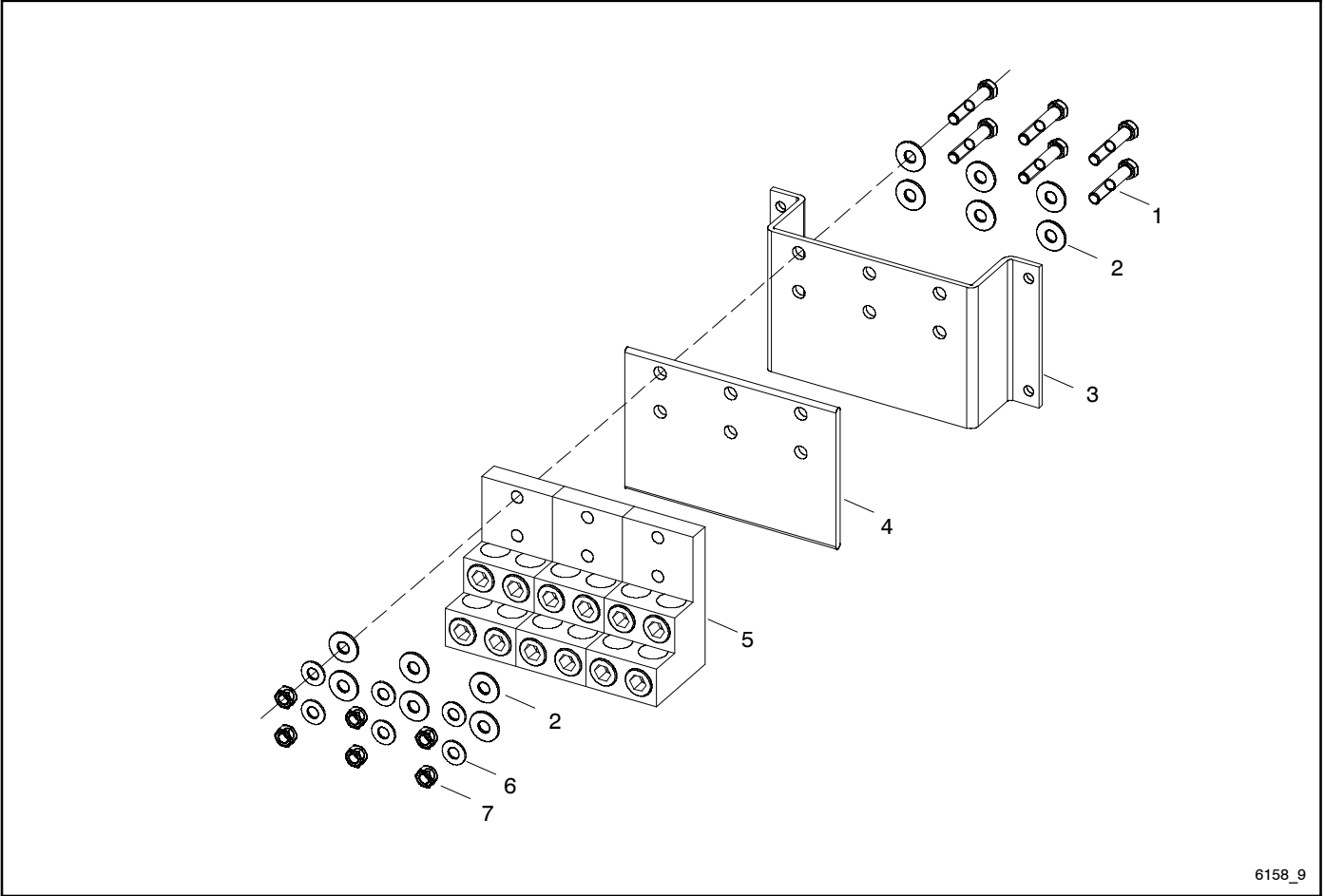
Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	S	D, F	all	N, T	all	30-200	S	GM26317-KA1
S	S	S	D, F	all	N, T	all	40-150	S	GM21070-KA1
S	C	P, S	D, F	all	N, T	all	150-400	S	GM21071-KA1
S	S	P	D, F	all	N, T	all	100	S	GM21071-KA1
S	S	P, S	D, F	all	N, T	all	200-400	S	GM21071-KA1

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Neutral Assembly, 600-1000 Amp



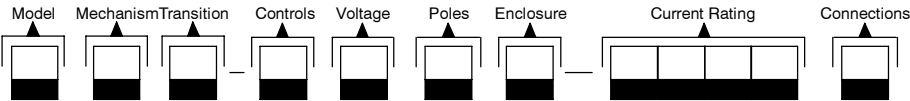
Item	Part Number	Description	Quantity	
			Module Number	
			GM21294-KA1	GM29496-KA1
1	X-6238-6	Bolt, hex cap	6	4
2	X-25-118	Washer, plain, .406 ID x 1 in. OD	12	8
3	GM20992	Bracket, neutral mounting	1	1
4	GM21010	Bus, neutral, 600-1200 A	1	1
5	297582	Lug, terminal, aluminum	3	
5	295296	Lug, terminal, aluminum		2
6	X-6086-6	Washer, spring, .39 ID x .81 in. OD	6	4
7	X-83-7	Nut, hex, 3/8-16, zinc	6	4

Neutral Assembly, 600-1000 Amp
Module Number Key

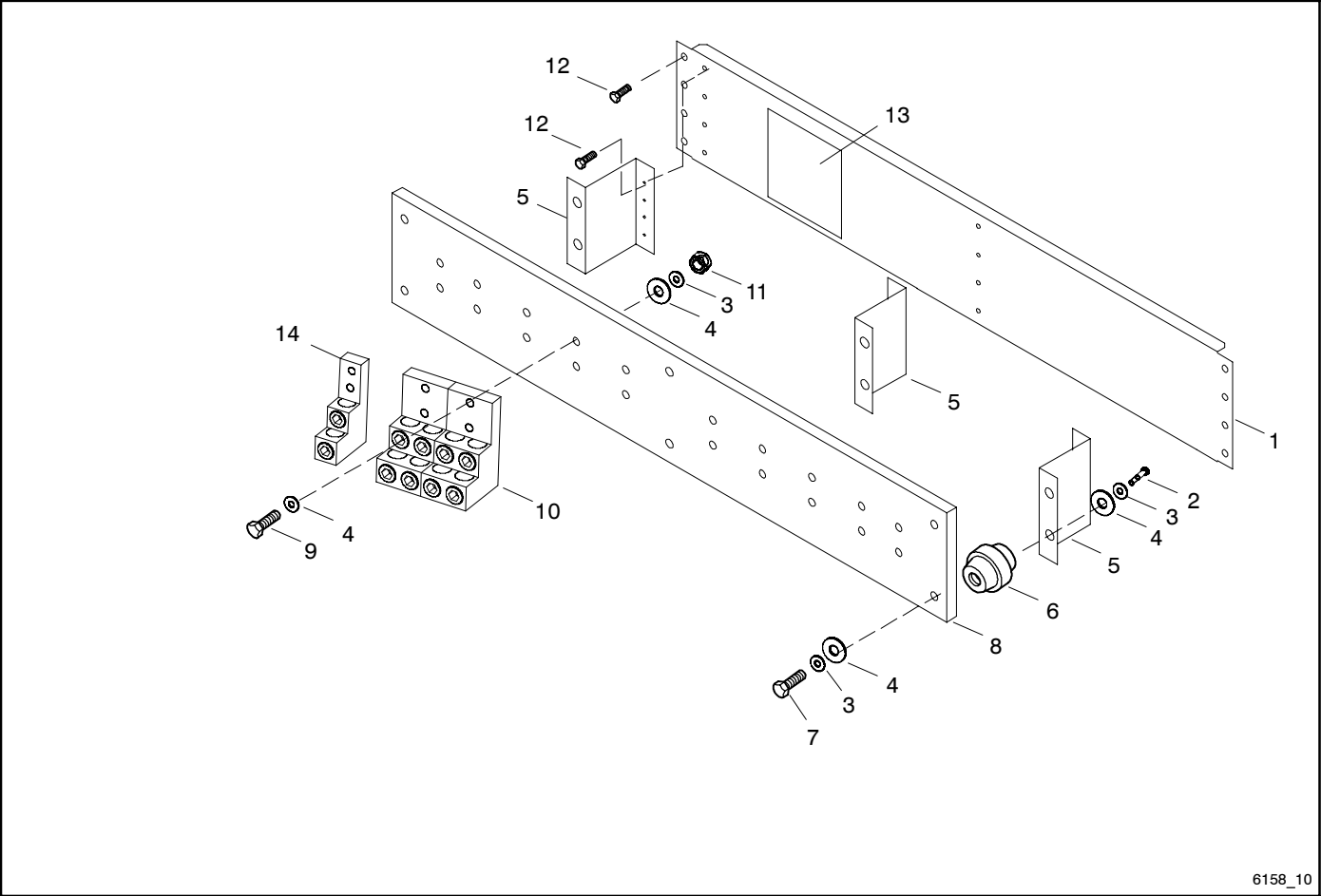
Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	P, S	D, F	all	all	all	600-1000	S	GM21294-KA1
S	S	P, S	D, F	all	all	all	600	S	GM29496-KA1

Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation



Neutral Assembly, 1200-4000 Amp



6158_10

Neutral Assembly, 1200-4000 Amp

Item	Part Number	Description	Quantity		
			Module Number		
			GM21078-KA1	GM21078-KA2	GM21078-KA3
1	GM12588	Channel, neutral support			1
1	GM14054	Channel, neutral support	1	1	
2	X-6238-10	Bolt, hex cap	6	6	6
3	X-6086-6	Washer, spring, .39 ID x .81 in. OD	12	12	12
4	X-25-118	Washer, plain, .406 ID x 1 in. OD	12	12	12
5	GM12589	Bracket, neutral bus support	3	3	3
6	X-6128-29	Standoff insulator, 3/8-16 x 2 in.	6	6	6
7	X-6238-11	Bolt, hex cap	6		
7	X-6238-4	Bolt, hex cap		6	
7	X-6238-5	Bolt, hex cap			6
8	GM14055	Bus, neutral	1	2	
8	GM20995	Bus, neutral			3
12	X-67-114	Screw, hex washer, thread-forming	18	18	18
13	297556	Decal, torque	1	1	1

Item	Part Number	Description	Quantity			
			Module Number			
			GM21565-KA1	GM21565-KA2	GM21565-KA3	GM21565-KA6
1	GM14054	Channel, neutral support	1	1	1	1
2	X-6238-10	Bolt, hex cap	6	6	6	6
3	X-6086-6	Washer, spring, .39 ID x .81 in. OD	20	24	32	32
4	X-25-118	Washer, plain, .406 ID x 1 in. OD	28	36	52	52
5	GM12589	Bracket, neutral bus support	3	3	3	
5	GM12588	Bracket, neutral bus support				3
6	X-6128-29	Standoff insulator, 3/8-16 x 2 in.	6	6	6	6
7	X-6238-11	Bolt, hex cap	6			
7	X-6238-4	Bolt, hex cap		6	6	6
8	GM21310	Bus, neutral	1	2	2	
8	GM42809	Bus, neutral				3
9	X-6238-1	Bolt, hex cap	8			
9	X-6238-6	Bolt, hex cap		12	12	12
10	297605	Lug, terminal, aluminum	4	6	8	8
11	X-83-7	Nut, hex, 3/8-16, zinc	8	12	20	20
12	X-67-114	Screw, hex washer, thread-forming	18	18	18	18
13	297556	Decal, torque	1	1	1	1
14	353354	Lug, terminal			2	2

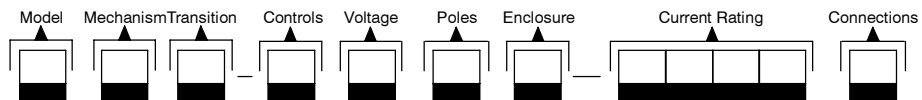
Neutral Assembly, 1000-4000 Amp

Module Number Key

Model Designation Code									Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections	
S	C	P, S	D, F	all	all	all	1200	S	GM21565-KA1
S	G	P, S	D, F	all	all	all	1600	S	GM48923-KA1
S	C	P, S	D, F	all	all	all	1600-2000	F, S	GM21565-KA2
S	C	P, S	D, F	all	all	C	1600-2000	F	GM29799-KA1
S	C	P, S	D, F	all	all	all	2600-3000	S	GM21565-KA3
S	G	P, S	D, F	all	all	all	2000-3000	S	GM48923-KA2
S	B, C, G	P, S	D, F	all	all	all	4000	S	GM21565-KA6

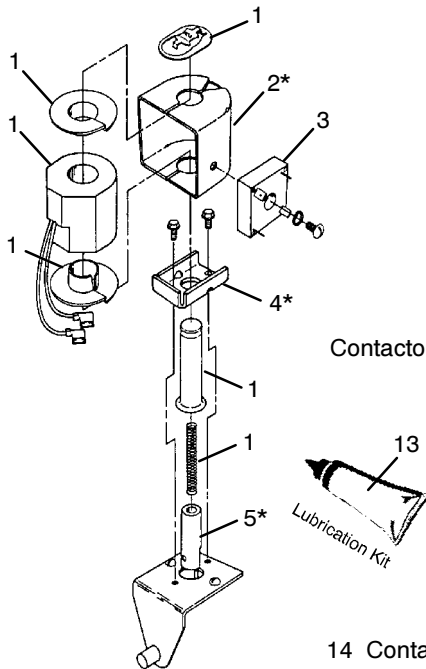
Please refer to instructions on page 5 for an explanation of how to use this table.

Model Designation

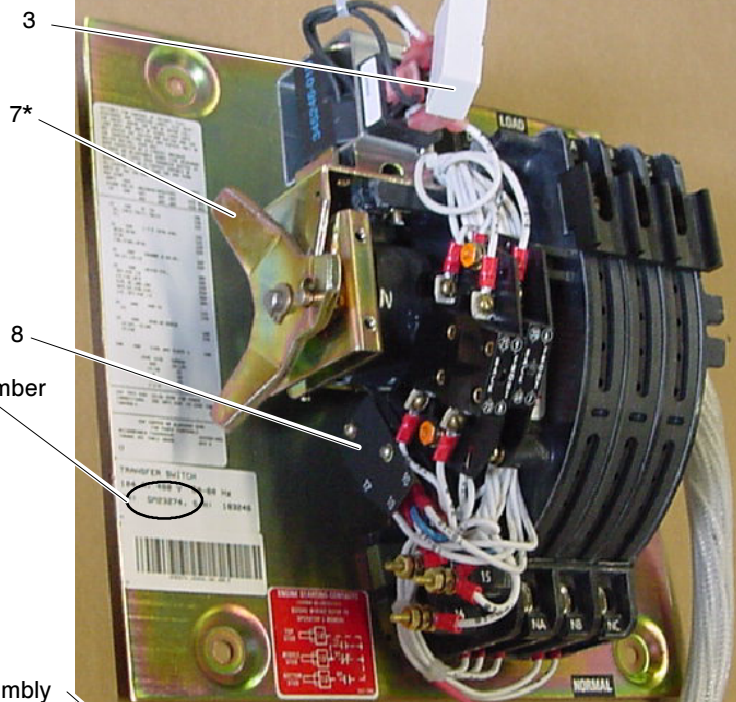


Contactor, Model SCS 30-104 Amp

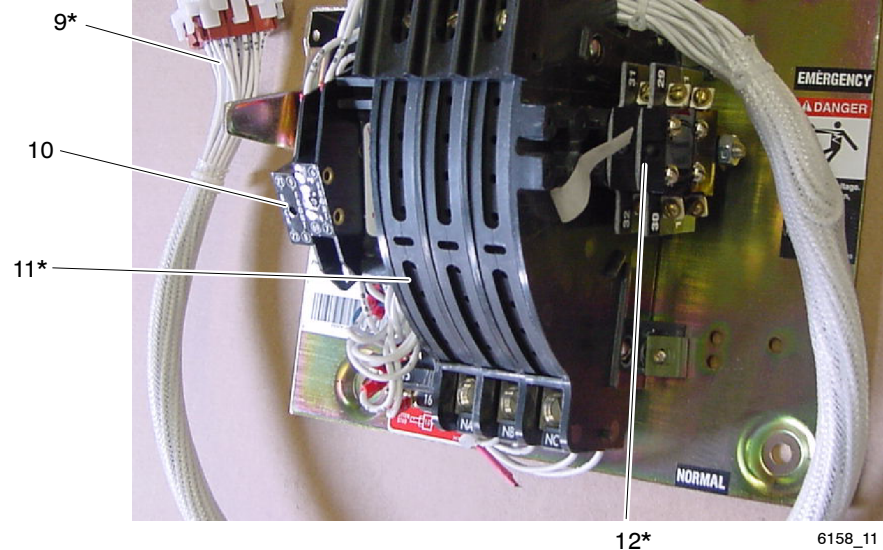
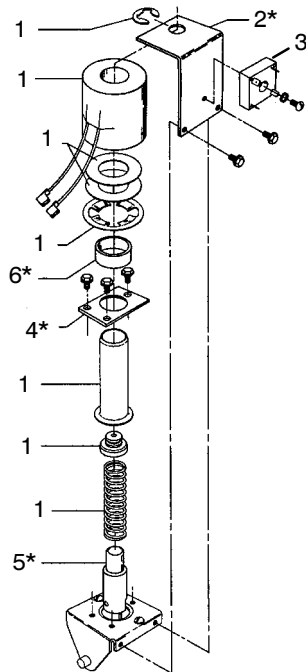
30-104 Amp Shown P/N GM23274



Contactor Part Number



14 Contactor Assembly



12*

6158_11

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Contactor, Model SCS

30-104 Amp

Item	Part Number	Description
1	See chart below	Kit, coil
2	*	Yoke, 30-104 A
2	*	L-bracket, 150 A
3	294544	Rectifier (snubber no longer required because of improved rectifier)
4	*	Retainer, core tube
5	*	Core
6	*	Ring, spacer
7	*	Handle, manual operating
8	GM24251	Switch, miniature
9	*	Harness, contactor
10	GM24239	Contacts, coil control
11	*	Chute, arc
12	GM24252	Contact, auxiliary
13	GM24237	Lubrication kit, coil core tube
14	See chart below	Contactor assembly

30-104 Amp Contactor and Coil Kit Replacement Part Numbers

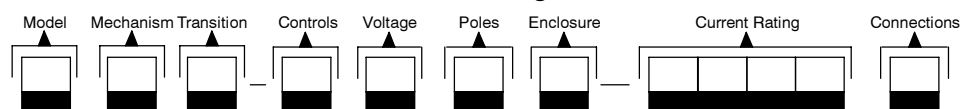
Poles/Wires Code(s)	Poles/Wires	Voltage Codes(s)	Voltage	Part Number	
				Contactor Assembly	Coil Kit
N	2	C	208	GM26237	GM24276
N	2	D, F	220-240	GM26238	GM24277
N	2	G, H, J	380-416	GM26239	GM24278
N	2	K, M	440-480	GM26240	GM24279
N	2	N	600	GM26241	GM24280
T	3/4 solid neutral	C	208	GM26242	GM24281
T	3/4 solid neutral	D, F	220-240	GM26243	GM24282
T	3/4 solid neutral	G, H, J	380-416	GM26244	GM24283
T	3/4 solid neutral	K, M	440-480	GM26245	GM24284
T	3/4 solid neutral	N	600	GM26246	GM24285
V	4/4 switched neutral	C	208	GM26247	GM24281
V	4/4 switched neutral	D, F	220-240	GM26248	GM24282
V	4/4 switched neutral	G, H, J	380-416	GM26249	GM24283
V	4/4 switched neutral	K, M	440-480	GM26250	GM24284
V	4/4 switched neutral	N	600	GM26251	GM24285
W	4/4 overlapping neutral	C	208	GM26252	GM24281
W	4/4 overlapping neutral	D, F	220-240	GM26253	GM24282
W	4/4 overlapping neutral	G, H, J	380-416	GM26254	GM24283
W	4/4 overlapping neutral	K, M	440-480	GM26255	GM24284
W	4/4 overlapping neutral	N	600	GM26256	GM24285

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

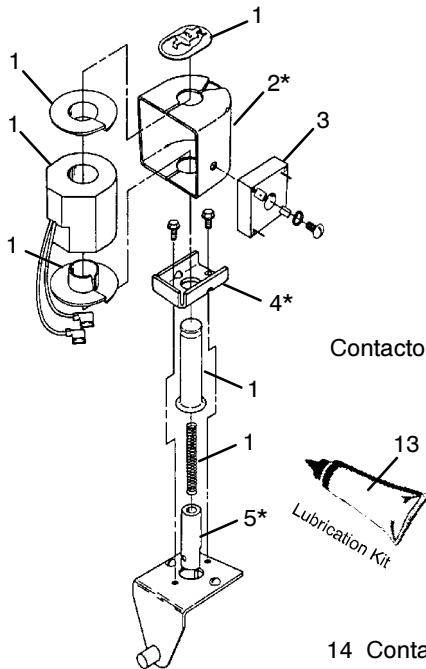
Contactor Serial Number

Model Designation

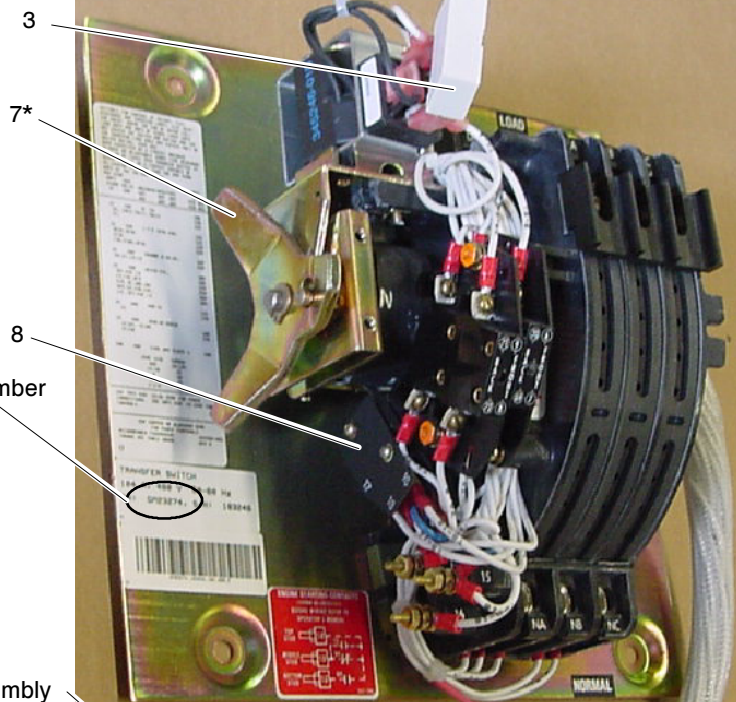


150-200 Amp

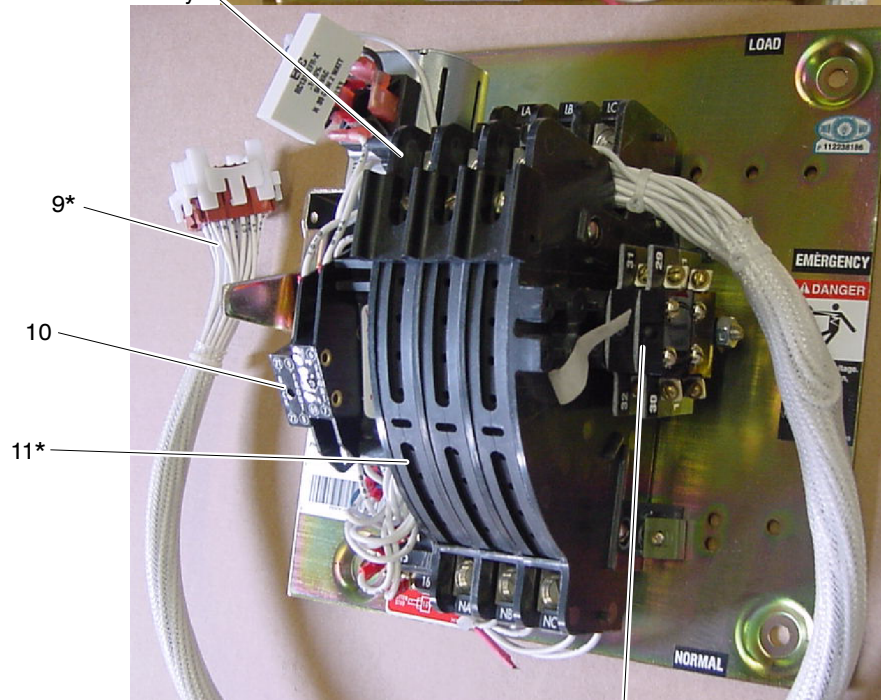
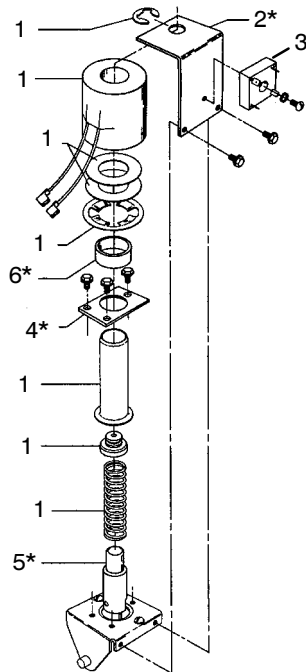
30-104 Amp Shown P/N GM23274



Contactor Part Number



14 Contactor Assembly



12*

6158 11

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Contactor, Model SCS

150-200 Amp

150-200 Amp Contactor and Coil Kit Replacement Part Numbers

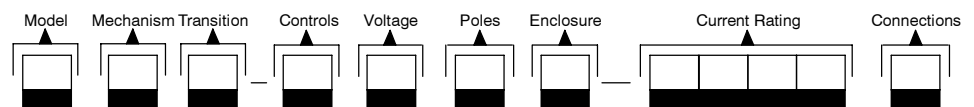
Amps	Poles/Wires Code(s)	Poles/Wires	Voltage Codes(s)	Voltage	Part Number	
					Contactor Assembly	Coil Kit
150	N	2	C	208	GM26257	GM24276
150	N	2	D, F	220-240	GM26258	GM24277
150	N	2	G, H, J	380-416	GM26259	GM24278
150	N	2	K, M	440-480	GM26260	GM24279
150	N	2	N	600	GM26261	GM24280
150	T	3/4 solid neutral	C	208	GM26262	GM24281
150	T	3/4 solid neutral	D, F	220-240	GM26263	GM24282
150	T	3/4 solid neutral	G, H, J	380-416	GM26264	GM24283
150	T	3/4 solid neutral	K, M	440-480	GM26265	GM24284
150	T	3/4 solid neutral	N	600	GM26266	GM24285
150	V	4/4 switched neutral	C	208	GM26272	GM24281
150	V	4/4 switched neutral	D, F	220-240	GM26273	GM24282
150	V	4/4 switched neutral	G, H, J	380-416	GM26274	GM24283
150	V	4/4 switched neutral	K, M	440-480	GM26275	GM24284
150	V	4/4 switched neutral	N	600	GM26276	GM24285
150	W	4/4 overlapping neutral	C	208	GM26282	GM24281
150	W	4/4 overlapping neutral	D, F	220-240	GM26283	GM24282
150	W	4/4 overlapping neutral	G, H, J	380-416	GM26284	GM24283
150	W	4/4 overlapping neutral	K, M	440-480	GM26285	GM24284
150	W	4/4 overlapping neutral	N	600	GM26286	GM24285
200	N	2	C	208	GM26287	GM24276
200	N	2	D, F	220-240	GM26288	GM24277
200	N	2	G, H, J	380-416	GM32226	GM24278
200	N	2	K, M	440-480	GM32228	GM24279
200	T	3/4 solid neutral	C	208	GM26289	GM24281
200	T	3/4 solid neutral	D, F	220-240	GM26290	GM24282
200	T	3/4 solid neutral	G, H, J	380-416	GM32227	GM24283
200	T	3/4 solid neutral	K, M	440-480	GM32229	GM24284
200	W	4/4 overlapping neutral	C	208	GM32284	GM24281
200	W	4/4 overlapping neutral	D, F	220-240	GM32375	GM24282
200	W	4/4 overlapping neutral	G, H, J	380-416	GM32376	GM24283
200	W	4/4 overlapping neutral	K, M	440-480	GM32377	GM24284

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

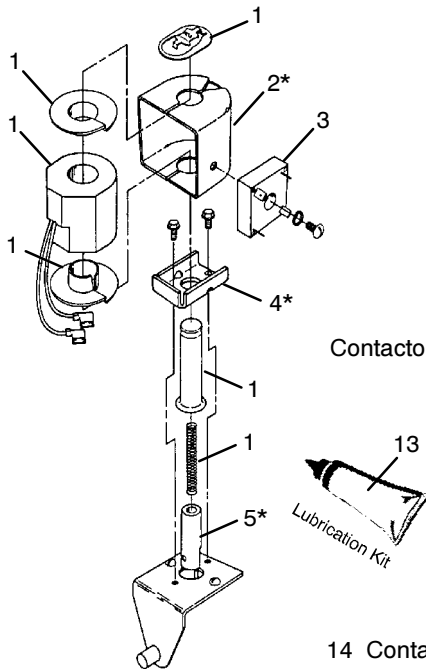
Contactor Serial Number

Model Designation

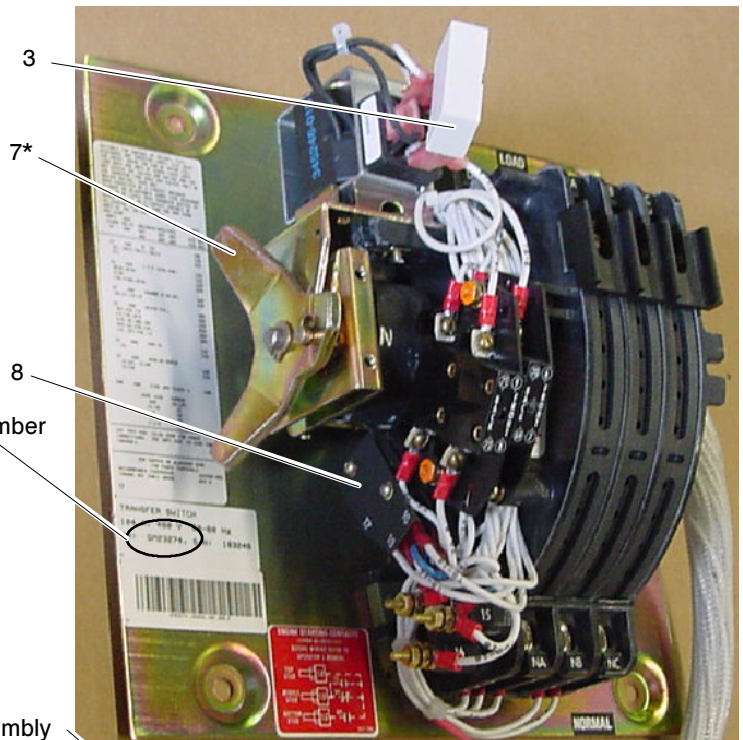
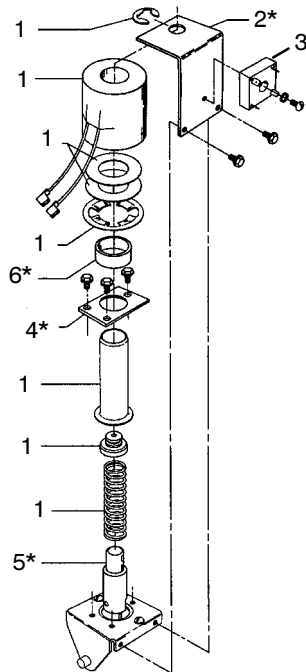


Contactor, Model SCS 230 Amp

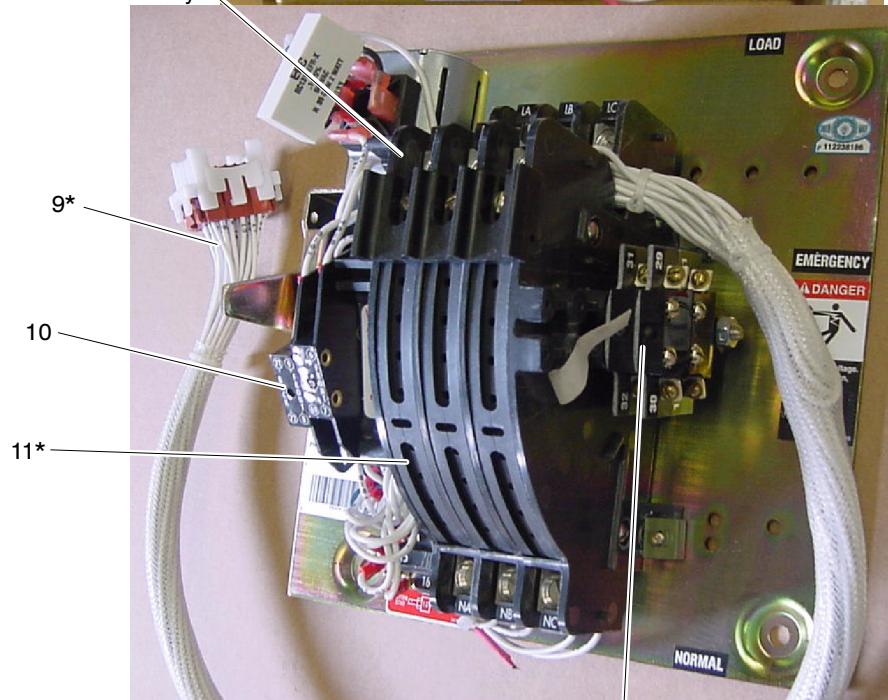
30-104 Amp Shown P/N GM23274



Contactor Part Number



14 Contactor Assembly



12*

6158_11

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Contactor, Model SCS

230 Amp

Item	Part Number	Description
1	See chart below	Kit, coil
2	*	Yoke, 30-104 A
2	*	L-bracket, 150 A
3	294544	Rectifier (snubber no longer required because of improved rectifier)
4	*	Retainer, core tube
5	*	Core
6	*	Ring, spacer
7	*	Handle, manual operating
8	GM24251	Switch, miniature
9	*	Harness, contactor
10	GM24239	Contacts, coil control
11	*	Chute, arc
12	GM24252	Contact, auxiliary
13	GM24237	Lubrication kit, coil core tube
14	See chart below	Contactor assembly

230 Amp Contactor and Coil Kit Replacement Part Numbers

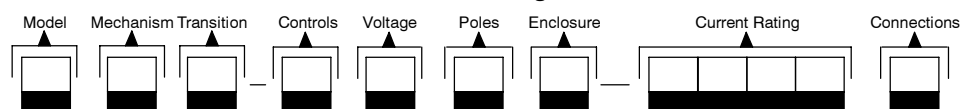
Amps	Poles/Wires Code	Poles/Wires	Voltage Code(s)	Voltage	Contact Part Number	Coil Kit Part Number
230	N	2	C	208	GM32263	GM24276
230	N	2	D, F	220-240	GM32264	GM24277
230	N	2	G, H, J	380-416	GM32265	GM24278
230	N	2	K, M	440-480	GM32266	GM24279
230	T	3	C	208	GM32268	GM24281
230	T	3	D, F	220-240	GM32269	GM24282
230	T	3	G, H, J	380-416	GM32270	GM24283
230	T	3	K, M	440-480	GM32271	GM24284
230	V	4/4 switched neutral	C	208	GM32278	GM24281
230	V	4/4 switched neutral	D, F	220-240	GM32279	GM24282
230	V	4/4 switched neutral	G, H, J	380-416	GM32280	GM24283
230	V	4/4 switched neutral	K, M	440-480	GM32281	GM24284
230	W	4/4 overlapping neutral	C	208	GM32259	GM24281
230	W	4/4 overlapping neutral	D, F	220-240	GM32260	GM24282
230	W	4/4 overlapping neutral	G, H, J	380-416	GM32261	GM24283
230	W	4/4 overlapping neutral	K, M	440-480	GM32262	GM24284

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

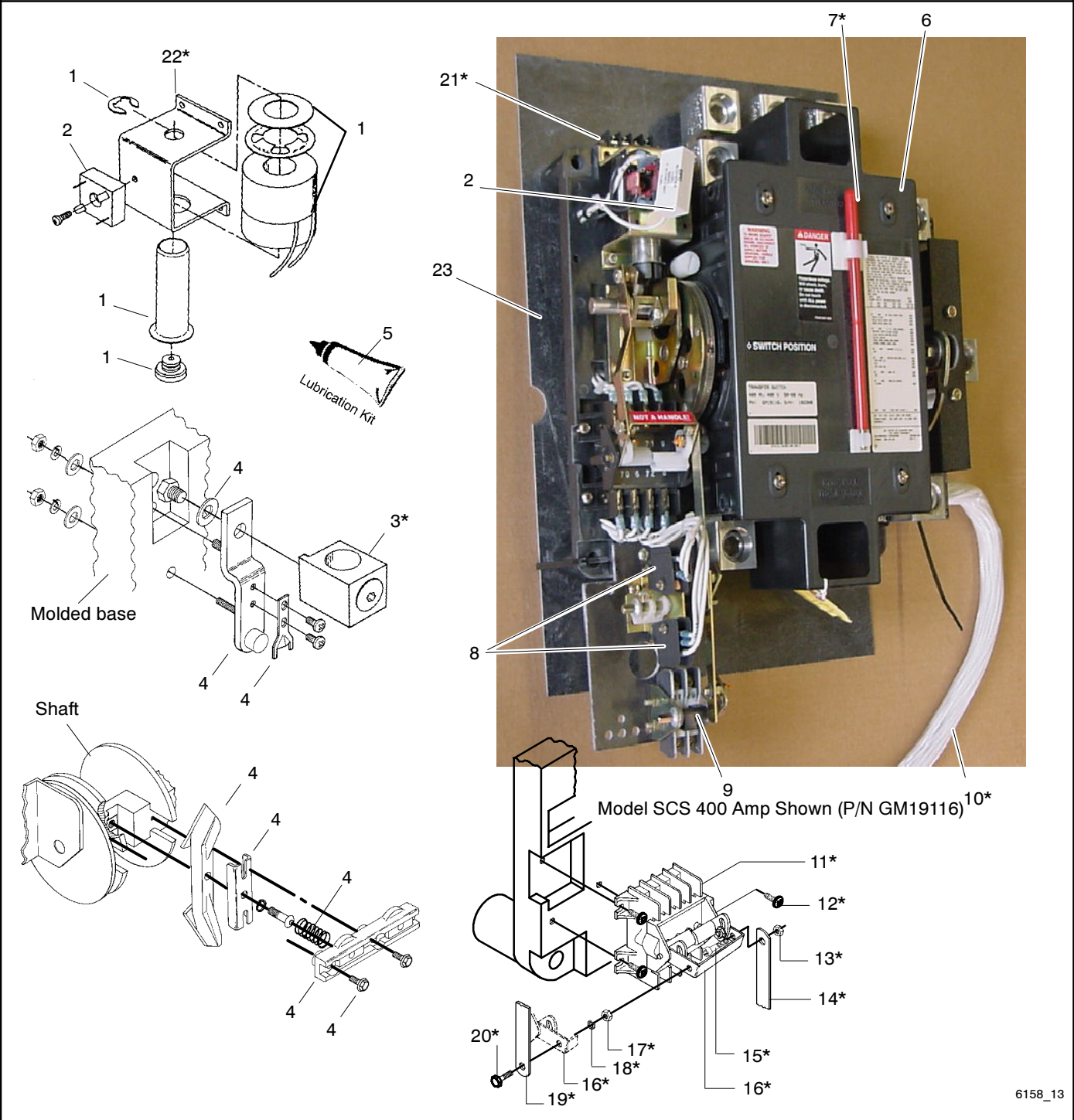
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SCS & SCP **150-400 Amp (2-, 3-pole SCP)** **225, 260, 400 Amp (SCS)**



Transfer Switch Serial Number

Contactor Serial Number

Model

Mechanism

Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

Contactor, Model SCS & SCP

150-400 Amp (2-, 3-pole SCP)

225, 260, 400 Amp (SCS)

Item	Part Number	Description
1	See chart	Kit, coil
2	294544	Rectifier (snubber no longer required because of improved rectifier)
3	*	Lug
4	See chart	Contact kit
5	GM24237	Lubrication kit, coil core tube
6	GM24240	Barrier
7	*	Handle, manual operating
8	321992	Switch, miniature
9	GM24250	Contact, auxiliary
10	*	Harness, contactor
11	*	Contacts, coil control
12	*	Screw, Phillips self-tapping
13	*	Locknut, #10-32
14	*	Link, lower drive
15	*	Screw, #10-32 Allen head
16	*	Bracket, drive
17	*	Nut, hex
18	*	Washer, lock
19	*	Link, upper drive
20	*	Screw, #10-32 shoulder screw
21	*	Terminal, engine start
22	*	Frame
23	See next page	Contactor assembly

Item 1, Coil Kit

Transition	Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
P, S	C	208	N	2	225, 260, 400	GM24261
P, S	D, F	220-240	N	2	225, 260, 400	GM24262
P, S	G, H, J	380-416	N	2	225, 260, 400	GM24263
P, S	M	460-480	N	2	225, 260, 400	GM24264
P, S	N	600	N	2	225, 230, 260, 400	GM24265
P, S	C	208	T	3	225, 260, 400	GM24266
P, S	D, F	220-240	T	3	225, 260, 400	GM24267
P, S	G, H, J	380-416	T	3	225, 260, 400	GM24268
P, S	M	460-480	T	3	225, 260, 400	GM24269
P, S	N	600	T	3	225, 230, 260, 400	GM24270
S	C	208	V, W	4	225, 260, 400	GM24271
S	D, F	220-240	V, W	4	225, 260, 400	GM24272
S	G, H, J	380-416	V, W	4	225, 260, 400	GM24273
S	M	460-480	V, W	4	225, 260, 400	GM24274
S	N	600	V, W	4	225, 260, 400	GM24275

Item 4, Contact Kit

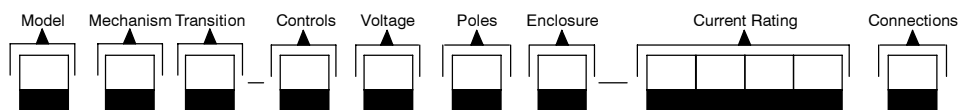
Poles/Wires Code	Poles/Wires	Amps	Part Number
N	2	225/260	GM24241
T	3	225/260	GM24242
N	2	400	GM24243
T	3	400	GM24244

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

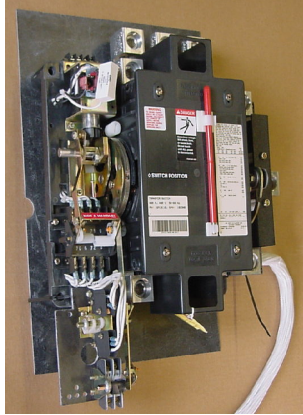


Contactor, Model SCS & SCP

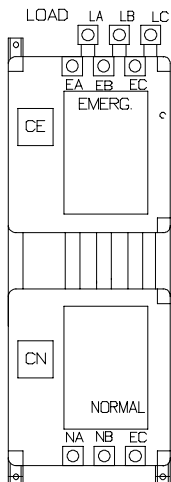
150-400 Amp (2-, 3-pole SCP)

225, 260, 400 Amp (SCS)

Item 23 Contactor Assembly



Model SCS
225, 230 (600 V), 260, 400 Amp



Model SCP
150-400 Amp (2-, 3-pole)

Use this table to identify the switch's contactor part number.

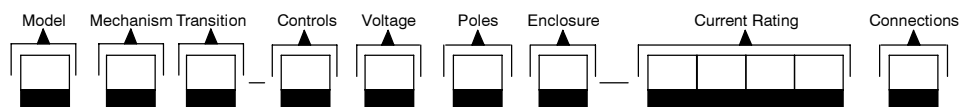
Contactor Part Numbers						
Transition	Amps	Poles/Wires Code	Poles/Wires	Voltage Code(s)	Voltage	Part Number
P	150	N	2	C	208	GM17899
P	150	N	2	D, F	220-240	GM17905
P	150	N	2	G, H, J	380-416	GM17911
P	150	N	2	K, M	440-480	GM17917
P	150	N	2	N	600	GM17923
P	150	T	3	C	208	GM17929
P	150	T	3	D, F	220-240	GM17935
P	150	T	3	G, H, J	380-416	GM17941
P	150	T	3	K, M	440-480	GM17947
P	150	T	3	N	600	GM17953
P	225	N	2	C	208	GM22587
P	225	N	2	D, F	220-240	GM22588
P	225	N	2	G, H, J	380-416	GM22589
P	225	N	2	K, M	440-480	GM22590
P	225	N	2	N	600	GM22591
P	225	T	3	C	208	GM22592
P	225	T	3	D, F	220-240	GM22593
P	225	T	3	G, H, J	380-416	GM22594
P	225	T	3	K, M	440-480	GM22595
P	225	T	3	N	600	GM22596
P	260	N	2	C	208	GM18079
P	260	N	2	D, F	220-240	GM18085
P	260	N	2	G, H, J	380-416	GM18091
P	260	N	2	K, M	440-480	GM18098
P	260	N	2	N	600	GM18099
P	260	T	3	C	208	GM18100
P	260	T	3	D, F	220-240	GM18101
P	260	T	3	G, H, J	380-416	GM18102
P	260	T	3	K, M	440-480	GM18103
P	260	T	3	N	600	GM18104
P	400	N	2	C	208	GM18110
P	400	N	2	D, F	220-240	GM19111
P	400	N	2	G, H, J	380-416	GM18112
P	400	N	2	K, M	440-480	GM18113
P	400	N	2	N	600	GM18114
P	400	T	3	C	208	GM18115
P	400	T	3	D, F	220-240	GM18116
P	400	T	3	G, H, J	380-416	GM18117
P	400	T	3	K, M	440-480	GM18118
P	400	T	3	N	600	GM18119

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SCS & SCP

150-400 Amp (2-, 3-pole SCP)

225, 260, 400 Amp (SCS)

Use this table to identify the switch's contactor part number.

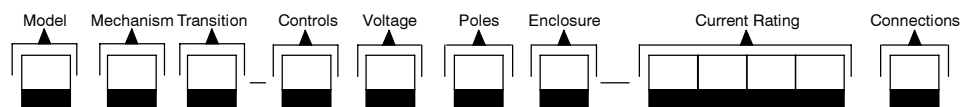
Contactor Part Numbers						
Transition	Amps	Poles/Wires Code	Poles/Wires	Voltage Code(s)	Voltage	Part Number
S	225	N	2	C	208	GM22567
S	225	N	2	D, F	220-240	GM22568
S	225	N	2	G, H, J	380-416	GM22569
S	225	N	2	K, M	440-480	GM22570
S	225	N	2	N	600	GM22571
S	225	T	3	C	208	GM22572
S	225	T	3	D, F	220-240	GM22573
S	225	T	3	G, H, J	380-416	GM22574
S	225	T	3	K, M	440-480	GM22575
S	225	T	3	N	600	GM22576
S	225	V	4/4 switched neutral	C	208	GM22582
S	225	V	4/4 switched neutral	D, F	220-240	GM22583
S	225	V	4/4 switched neutral	G, H, J	380-416	GM22584
S	225	V	4/4 switched neutral	K, M	440-480	GM22585
S	225	V	4/4 switched neutral	N	600	GM22586
S	225	W	4/4 overlapping neutral	C	208	GM22563
S	225	W	4/4 overlapping neutral	D, F	220-240	GM22564
S	225	W	4/4 overlapping neutral	G, H, J	380-416	GM22565
S	225	W	4/4 overlapping neutral	K, M	440-480	GM22566
S	225	W	4/4 overlapping neutral	N	600	GM22682
S	230	N	2	N	600	GM17940
S	230	T	3	N	600	GM17946
S	230	W	4/4 overlapping neutral	N	600	GM19112
S	260	N	2	C	208	GM17936
S	260	N	2	D, F	220-240	GM17937
S	260	N	2	G, H, J	380-416	GM17938
S	260	N	2	K, M	440-480	GM17939
S	260	N	2	N	600	GM17940
S	260	T	3	C	208	GM17942
S	260	T	3	D, F	220-240	GM17943
S	260	T	3	G, H, J	380-416	GM17944
S	260	T	3	K, M	440-480	GM17945
S	260	T	3	N	600	GM17946
S	260	W	4/4 overlapping neutral	C	208	GM19108
S	260	W	4/4 overlapping neutral	D, F	220-240	GM19109
S	260	W	4/4 overlapping neutral	G, H, J	380-416	GM19110
S	260	W	4/4 overlapping neutral	K, M	440-480	GM19111
S	260	W	4/4 overlapping neutral	N	600	GM19112
S	400	N	2	C	208	GM17954
S	400	N	2	D, F	220-240	GM17955
S	400	N	2	G, H, J	380-416	GM17956
S	400	N	2	K, M	440-480	GM17957
S	400	N	2	N	600	GM17958
S	400	T	3	C	208	GM17960
S	400	T	3	D, F	220-240	GM17961
S	400	T	3	G, H, J	380-416	GM17962
S	400	T	3	K, M	440-480	GM17963
S	400	T	3	N	600	GM17964
S	400	W	4/4 overlapping neutral	C	208	GM19113
S	400	W	4/4 overlapping neutral	D, F	220-240	GM19114
S	400	W	4/4 overlapping neutral	G, H, J	380-416	GM19115
S	400	W	4/4 overlapping neutral	K, M	440-480	GM19116
S	400	W	4/4 overlapping neutral	N	600	GM19117

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

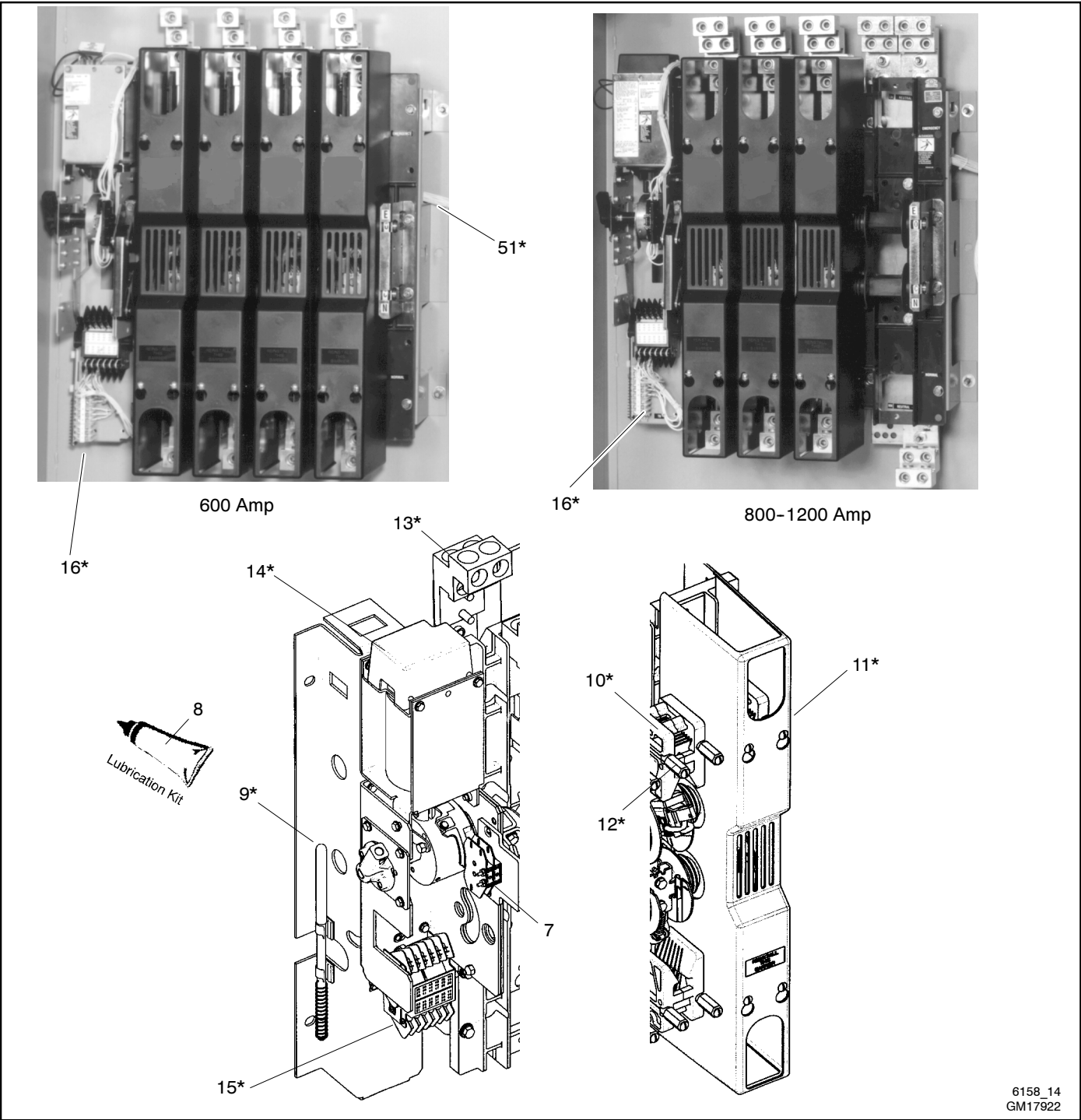
Model Designation



Contactor, Model SCS & SCP

150-400 Amp (4-pole SCP)

600-1200 Amp (SCS)



6158_14
GM17922

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number

Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SCS & SCP

150-400 Amp (4-pole SCP)

600-1200 Amp (SCS)

Item	Part Number	Description
1	See chart	Kit, coil
2	See chart	Solenoid assembly (includes coil kit)
3	GM24312	Contact, moveable arcing
4	GM24313	Contact assembly, moveable arcing and main
5	GM24314	Contact kit, stationary arcing
6	GM24311	Contact assembly, stationary
7	GM24320	Contact, coil control
8	GM24237	Lubrication kit
9	*	Handle, manual operating
10	*	Chute, arc
11	*	Barrier
12	*	Nut, insulator
13	*	Lug
14	*	Cover, rectifier
15	*	Switch, miniature
16	*	Terminal, engine start
17	*	Screw, shunt
18	*	Bracket, spring
19	*	Retainer, spring
20	*	Spring, arcing contact
21	*	Pin, pivot
22	*	Pin, cotter
23	*	Contact assembly, moveable arcing contact
24	*	Cover, contact
25	*	Bolt, hex head
26	*	Washer, lock
27	*	Clamp, shaft

Item	Part Number	Description
28	*	Insulator, shaft
29	*	Washer, flat
30	*	Washer, disc
31	*	Nut, hex
32	*	Screw, 1/4-20 x 3/8 in.
33	*	Contact, arcing
34	*	Nut, hex
35	*	Washer, disc
36	*	Washer, flat
37	*	Plate, terminal
38	*	Bracket, arc chute mounting
39	*	Block, contact
40	*	Pin, clevis
41	*	Screw, drive link
42	294544	Rectifier (snubber no longer required because of improved rectifier)
43	*	Bracket, solenoid retaining
44	*	Frame, solenoid
45	*	Screw, rectifier cover
46	*	Cover, rectifier
47	*	Screw, mounting
48	*	Screw, contact mounting
49	*	Washer, lock
50	*	Washer, flat
51	*	Harness, contactor

Item 1, Coil Kit

Transition	Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
P	C	208	V, W, Z	4	150-400	GM24306
P	D, F	220-240	V, W, Z	4	150-400	GM24307
P	G, H, J	380-416	V, W, Z	4	150-400	GM24308
P	M	460-480	V, W, Z	4	150-400	GM24309
P	N	600	V, W, Z	4	150-400	GM24310
P, S	C	208	N, T, V	2, 3, 4	600-1200	GM24306
P, S	D, F	220-240	N, T, V	2, 3, 4	600-1200	GM24307
P, S	G, H, J	380-416	N, T, V	2, 3, 4	600-1200	GM24308
P, S	M	460-480	N, T, V	2, 3, 4	600-1200	GM24309
P, S	N	600	N, T, V	2, 3, 4	600-1200	GM24310

Item 2, Solenoid Assembly (Includes Coil Kit)

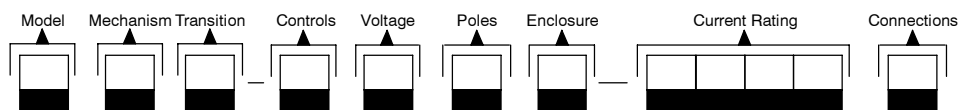
Transition	Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
P	C	208	V, W, Z	4	150-400	GM24315
P	D, F	220-240	V, W, Z	4	150-400	GM24316
P	G, H, J	380-416	V, W, Z	4	150-400	GM24317
P	M	460-480	V, W, Z	4	150-400	GM24318
P	N	600	V, W, Z	4	150-400	GM24319
P, S	C	208	N, T, V	2, 3, 4	600-1200	GM24315
P, S	D, F	220-240	N, T, V	2, 3, 4	600-1200	GM24316
P, S	G, H, J	380-416	N, T, V	2, 3, 4	600-1200	GM24317
P, S	M	460-480	N, T, V	2, 3, 4	600-1200	GM24318
P, S	N	600	N, T, V	2, 3, 4	600-1200	GM24319

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

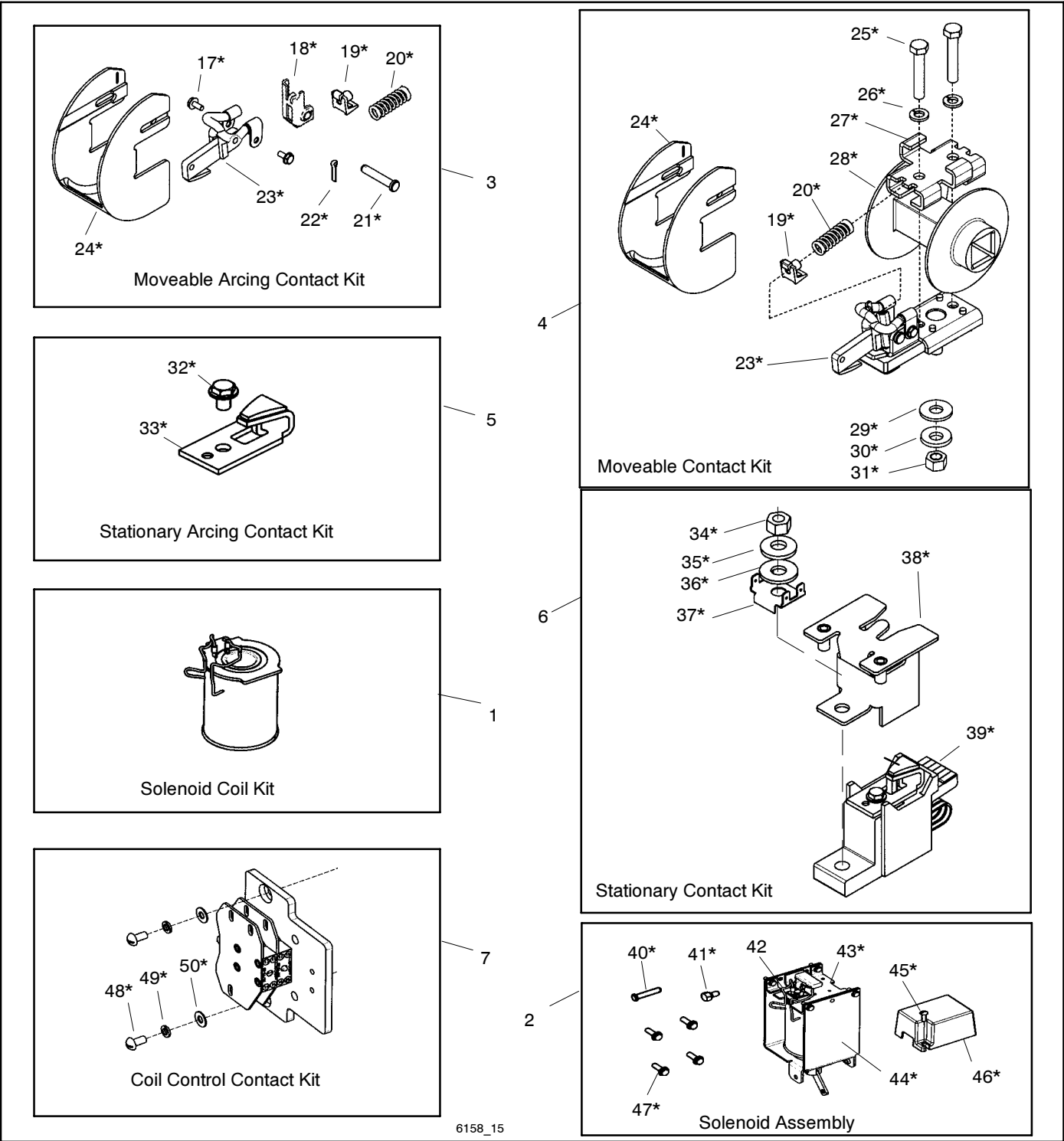
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SCS & SCP **150-400 Amp (4-pole SCP)** **600-1200 Amp (SCS)**



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number	Model Designation								
Contactor Serial Number	Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SCS & SCP

150-400 Amp (4-pole SCP)

600-1200 Amp (SCS)

Item	Part Number	Description	Item	Part Number	Description
1	See chart	Kit, coil	28	*	Insulator, shaft
2	See chart	Solenoid assembly (includes coil kit)	29	*	Washer, flat
3	GM24312	Contact, moveable arcing	30	*	Washer, disc
4	GM24313	Contact assembly, moveable arcing and main	31	*	Nut, hex
5	GM24314	Contact kit, stationary arcing	32	*	Screw, 1/4-20 x 3/8 in.
6	GM24311	Contact assembly, stationary	33	*	Contact, arcing
7	GM24320	Contact, coil control	34	*	Nut, hex
8	GM24237	Lubrication kit	35	*	Washer, disc
9	*	Handle, manual operating	36	*	Washer, flat
10	*	Chute, arc	37	*	Plate, terminal
11	*	Barrier	38	*	Bracket, arc chute mounting
12	*	Nut, insulator	39	*	Block, contact
13	*	Lug	40	*	Pin, clevis
14	*	Cover, rectifier	41	*	Screw, drive link
15	*	Switch, miniature	42	294544	Rectifier (snubber no longer required because of improved rectifier)
16	*	Terminal, engine start	43	*	Bracket, solenoid retaining
17	*	Screw, shunt	44	*	Frame, solenoid
18	*	Bracket, spring	45	*	Screw, rectifier cover
19	*	Retainer, spring	46	*	Cover, rectifier
20	*	Spring, arcing contact	47	*	Screw, mounting
21	*	Pin, pivot	48	*	Screw, contact mounting
22	*	Pin, cotter	49	*	Washer, lock
23	*	Contact assembly, moveable arcing contact	50	*	Washer, flat
24	*	Cover, contact	51	*	Harness, contactor
25	*	Bolt, hex head			
26	*	Washer, lock			
27	*	Clamp, shaft			

Item 1, Coil Kit

Transition	Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
P	C	208	V, W, Z	4	150-400	GM24306
P	D, F	220-240	V, W, Z	4	150-400	GM24307
P	G, H, J	380-416	V, W, Z	4	150-400	GM24308
P	M	460-480	V, W, Z	4	150-400	GM24309
P	N	600	V, W, Z	4	150-400	GM24310
P, S	C	208	N, T, V	2, 3, 4	600-1200	GM24306
P, S	D, F	220-240	N, T, V	2, 3, 4	600-1200	GM24307
P, S	G, H, J	380-416	N, T, V	2, 3, 4	600-1200	GM24308
P, S	M	460-480	N, T, V	2, 3, 4	600-1200	GM24309
P, S	N	600	N, T, V	2, 3, 4	600-1200	GM24310

Item 2, Solenoid Assembly (Includes Coil Kit)

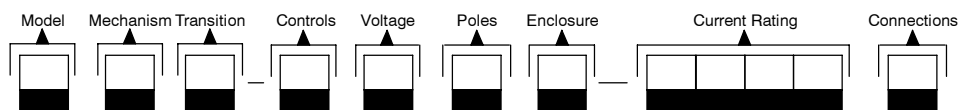
Transition	Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
P	C	208	V, W, Z	4	150-400	GM24315
P	D, F	220-240	V, W, Z	4	150-400	GM24316
P	G, H, J	380-416	V, W, Z	4	150-400	GM24317
P	M	460-480	V, W, Z	4	150-400	GM24318
P	N	600	V, W, Z	4	150-400	GM24319
P, S	C	208	N, T, V	2, 3, 4	600-1200	GM24315
P, S	D, F	220-240	N, T, V	2, 3, 4	600-1200	GM24316
P, S	G, H, J	380-416	N, T, V	2, 3, 4	600-1200	GM24317
P, S	M	460-480	N, T, V	2, 3, 4	600-1200	GM24318
P, S	N	600	N, T, V	2, 3, 4	600-1200	GM24319

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

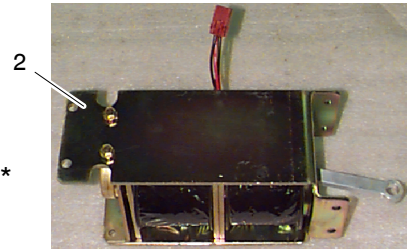
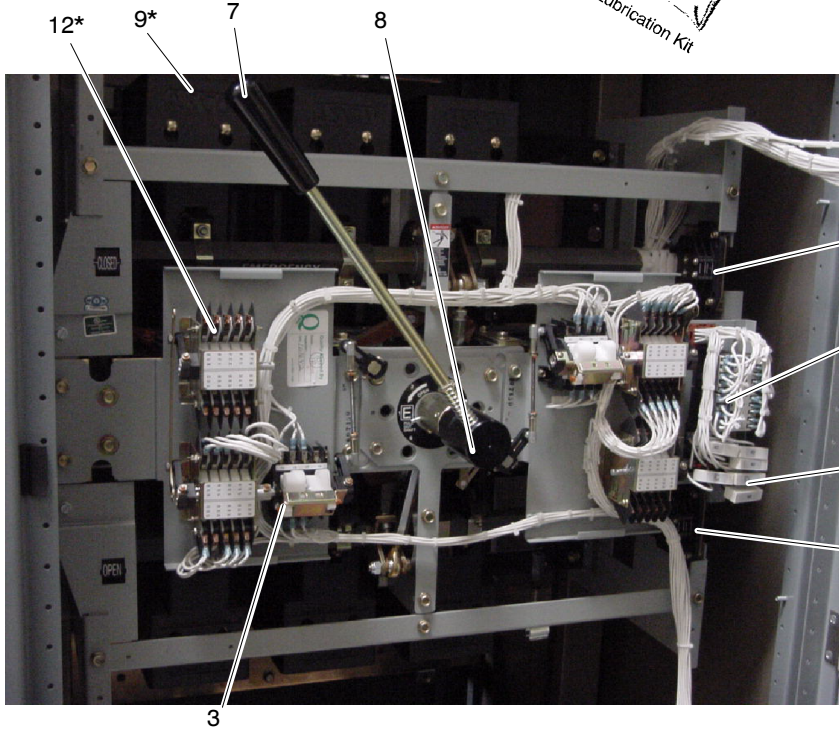
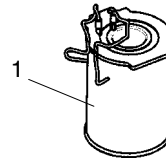
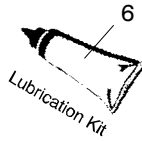
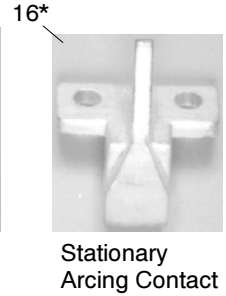
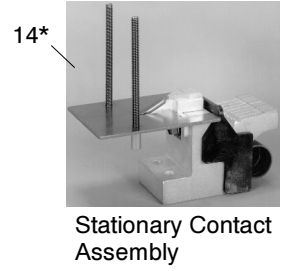
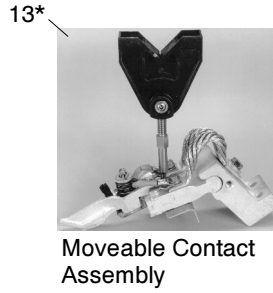
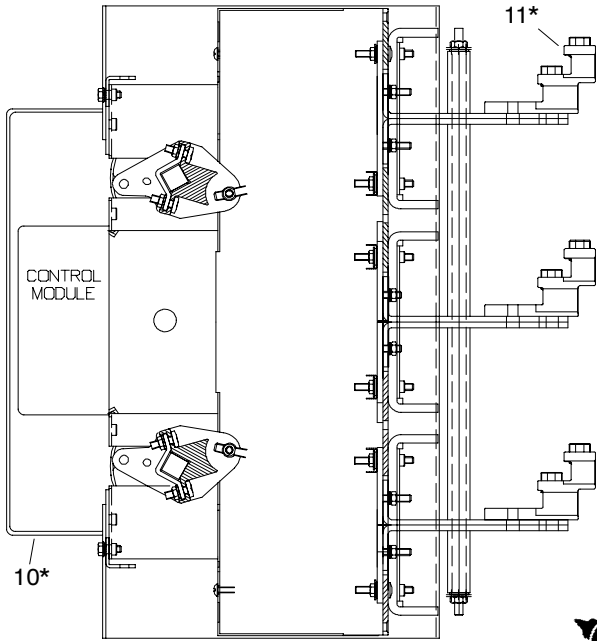
Contactor Serial Number

Model Designation

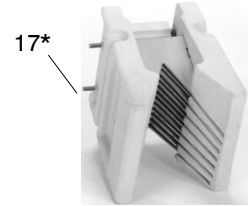


Contactor, Model SCS & SCP 1600-3000 Amp

P/N GM20394 1600 Amp Shown



Solenoid Assembly
(includes entire solenoid with
frame, coils, core tube, core
spring, core and link)



Replacement Arc Chutes

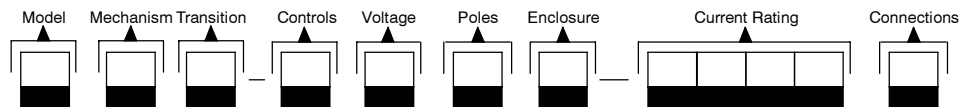
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* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

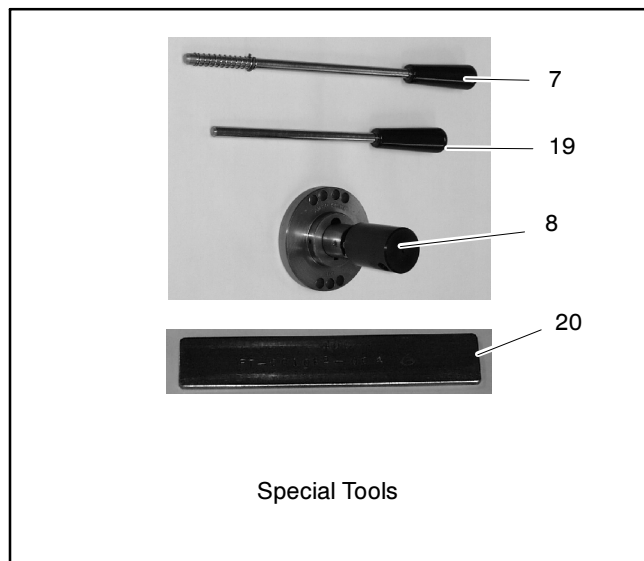
Contactor Serial Number

Model Designation



Contactor, Model SCS & SCP

1600-3000 Amp



Item	Part Number	Description
1	See chart	Kit, coil
2	See chart	Solenoid assembly
3	GM24245	Contact, coil control
4	GM24300	Module, control
5	See chart	Relay, control module (SER, ERR)
6	GM24237	Lubrication kit
7	GM25404	Handle, maintenance
8	GM25406	Hub, adjusting
9	*	Barrier
10	*	Cover
11	*	Lug
12	*	Switch, miniature
13	*	Contact assembly, moveable
14	*	Contact assembly, stationary
15	*	Contact, moveable arcing
16	*	Contact, stationary arcing
17	*	Chute, arc
18	*	Contacts, auxiliary
19	GM25405	Pin, adjusting
20	GM25407	Sim gauge, main contact

Item 1, Coil Kit

Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
C	208	N, T, V	2, 3, 4	1600-2000	GM24301
D, F	220-240	N, T, V	2, 3, 4	1600-2000	GM24302
G, H, J	380-416	N, T, V	2, 3, 4	1600-2000	GM24303
M	460-480	N, T, V	2, 3, 4	1600-2000	GM24304
N	600	N, T, V	2, 3, 4	1600-2000	GM24305

Item 2, Solenoid Assembly

Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
C	208	N, T, V	2, 3, 4	1600-2000	GM24290
D, F	220-240	N, T, V	2, 3, 4	1600-2000	GM24291
G, H, J	380-416	N, T, V	2, 3, 4	1600-2000	GM24292
M	460-480	N, T, V	2, 3, 4	1600-2000	GM24293
N	600	N, T, V	2, 3, 4	1600-2000	GM24294

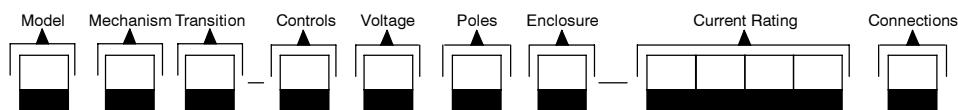
Item 5, Control Module Relay

Voltage Code (s)	Voltage	Part Number
C	208	GM24295
D, F	220-240	GM24296
G, H, J	380-416	GM24297
M	460-480	GM24298
N	600	GM24299

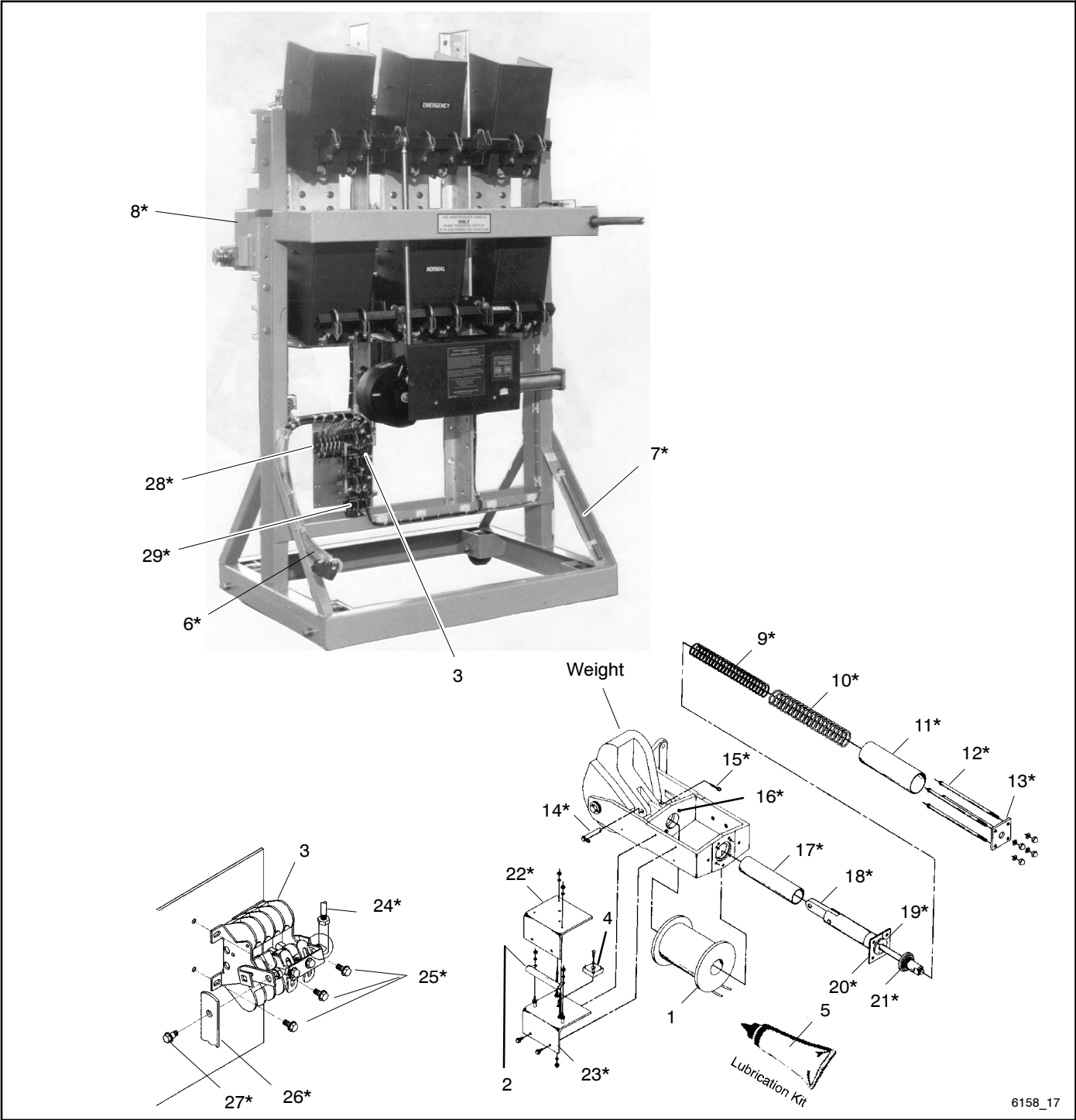
* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number

Model Designation



Contactor, Model SCS & SCP 4000 Amp



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number	Model Designation								
Contactor Serial Number	Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SCS & SCP

4000 Amp

Item	Part Number	Description
1	See chart	Kit, coil
2	See chart	Resistor
3	GM24238	Contact, coil control
4	294544	Rectifier (snubber no longer required because of improved rectifier)
5	GM24237	Lubrication kit
6	*	Harness, contactor
7	*	Handle, manual operating
8	*	Lug
9	*	Spring, inside
10	*	Spring, outside
11	*	Tube, spring
12	*	Rod
13	*	Plate, retaining
14	*	Pin, pivot
15	*	Pin, cotter
16	*	Screw, coil clamping
17	*	Tube, core
18	*	Stem, core and link assembly
19	*	Washer, leather
20	*	Plate, cover
21	*	Stop, core
22	*	Cover, rectifier
23	*	Panel, rectifier mounting
24	*	Link, upper drive
25	*	Screw, mounting
26	*	Link, lower drive
27	*	Screw, #10-32 shoulder
28	*	Switches, miniature
29	*	Contacts, auxiliary

Item 1, Coil Kit

Voltage Code(s)	Voltage	Poles/Wires Code	Poles/Wires	Amps	Part Number
C	208	T, V	3 & 4	4000	GM24288
D, F	220-240	T, V	3 & 4	4000	GM24286
G, H, J	380-416	T, V	3 & 4	4000	GM24289
M	460-480	T, V	3 & 4	4000	GM24287

Item 2, Resistor

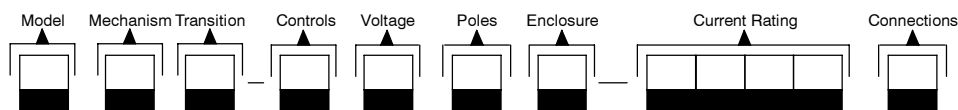
Voltage Code(s)	Voltage	Part Number
C	208	GM24249
D, F	220-240	GM24246
G, H, J	380-416	GM24247
M	460-480	GM24248

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

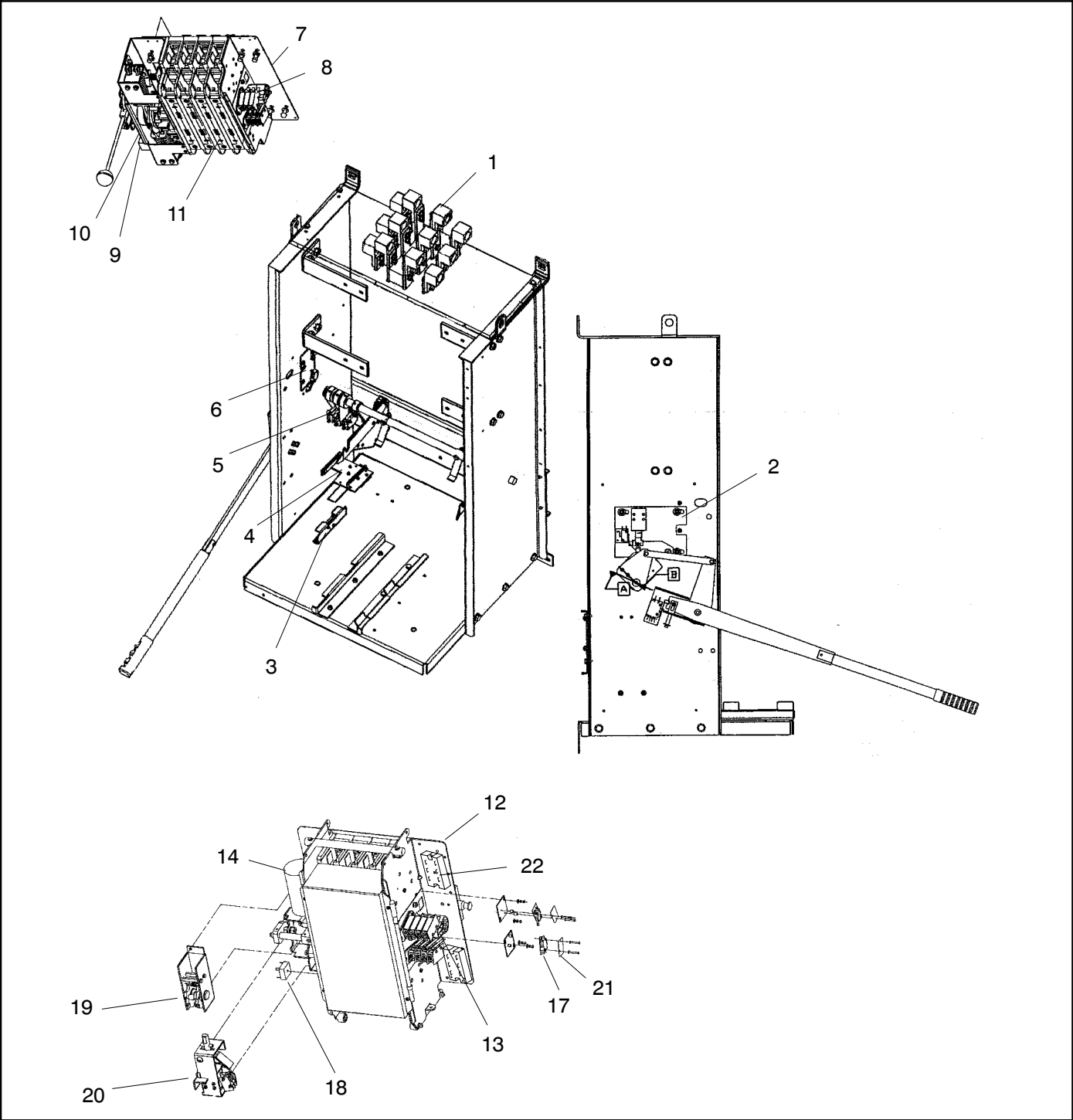
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SGP **100-400 Amp**



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number	Model Designation								
Contactor Serial Number	Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SGP

100-400 Amp

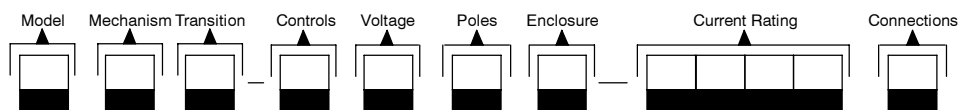
Item	Description	Part Number	
1	Lugs, cable connection	321743	
2	Interlock assembly	GM39154	
3	Switch, roller arm limit	321818	
4	Switch assembly, position indicator s	GM39135	
5	Switch, limit	321821	
6	Switch assembly	GM39153	
7	Panel, top power, 2-pole	GM39136	
7	Panel, top power, 3-pole	GM39137	
7	Panel, top power, 4-pole	GM39138	
8	Switch assembly, limit	GM39156	
9	Solenoid, ATS release	321815	
10	Switch, roller arm limit	321818	
11	Arc chute assembly	GM39145	
12	Panel, bottom power, 2-pole	GM39142	
12	Panel, bottom power, 3-pole	GM39143	
12	Panel, bottom power, 4-pole	GM39144	
13	Switch assembly, limit	GM39155	
14	Solenoid assembly	Volts	
		120	GM39159
		208/240	GM39160
		380/415	GM39161
		480	GM39162
		575/600	GM39163
17	Switch, simulated roller limit	GM39164	
18	Rectifier	GM39166	
18	Rectifier (above 380 V)	GM39165	
19	Module, cam	GM39146	
20	Solenoid assembly	Volts	
		120	GM39147
		208	GM39148
		240	GM39149
		380/415	GM39150
		480	GM39151
		575/600	GM39152
21	Insulator, switch	362203	
22	SCR	Amp	Volts
		50	480 & below
		75	480 & below
		50	600
		75	600

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation



600-1200 Amp



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Model Mechanism Transition Controls Voltage Poles Enclosure Current Rating Connections

Diagram illustrating the hierarchical structure of a transformer model, showing components and their relationships.

Contactor, Model SGP

600-1200 Amp

Item	Description	Part Number by Amperage			
		600	800	1000	1200
1	Lugs, normal	321843	321853	321854	321854
2	Lugs, emergency	321744	321745	321746	321746
3	Lugs, load	321744	321745	321746	321746
4	Contact assembly, stationary bypass*	321847	346583	346583	346583
5	Contact assembly, stationary, ATS*	321847	346583	346583	346583
6	Arc chute assembly kit*	321753	321753	321753	321753
7	Contact assembly, moveable*	321876	321880	321880	321880
	Contact, moveable (switched neutral)*	321876	321816	321816	321816

* All kits include the parts for one contact, therefore, each pole requires two kits.

Item	Description					Part Number by Amperage			
						600	800	1000	1200
8	ATS Main operating coils					Part Numbers By Amperage			
	Voltage System								
	Volts	Ph	Wire	Coil Volts	Pole	600	800	1000	1200
	120	1	2	120	2	Consult factory	Consult factory	Consult factory	Consult factory
	120/240	1	2	240	2	Consult factory	Consult factory	Consult factory	Consult factory
	120/240	1	2	240	3	321811	321813	321813	321813
	120/240	3	4	240	3	321811	321813	321813	321813
	120/208	3	4	208	3,4	321811	321813	321813	321813
	480	3	3	480	3	321812	321814	321814	321814
	277/480	3	4	480	3	321812	321814	321814	321814
277/480	3	4	480	4	321812	321814	321814	321814	
240/416	3	4	416	3	Consult factory	Consult factory	Consult factory	Consult factory	
						Voltage		Part Number	
9	Bypass stepdown transformer					120/240		321864	
	25VA, 24 volt secondary					208/416		321844	
						220/440		321845	
						240/480		321846	
						380		321894	
						575		321848	
						600		321849	
10	Switch					321819			
	Bypass normal position								
	BSS emergency position								
	BSS normal position								
	Limit switch DPOT, lever actuator								
11	ATS auto location switch					321851			
	ATS test Location switch					321852			
	Crank limit switches					321818			
	ATS isolate Location switch					321851			
	Limit switch DPOT, roller actuator					321852			
12	ATS emergency position switch					(SPDT) 296298		(DPDT) 321758	
13	ATS normal position switch (auxiliary contact)					296299		321855	
14	ATS normal position coil cutout switch DPDT								
15	ATS emergency position coil cutout switch DPDT					321758			
16	ATS solenoid disconnect switch					321856			
	Operator 2-position maintain					321773			
	Contact block N.O.					296300			
	Contact block N.O.					321857			
17	Solenoid					321858			
	Emergency interlock								
	Normal interlock								
18	Crank mechanism solenoid					321858			
19	Bypass permissive pushbutton								
	Operator pushbutton					321887			
	Contact block N.O.					321888			
20	SCR	Amp		Volts					
		50		480 & below		GM49357			
		75		480 & below		GM49372			
		50		600		GM49373			
		75		600		GM49374			

1600-3000 Amp



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Contactor, Model SGP

1600-3000 Amp

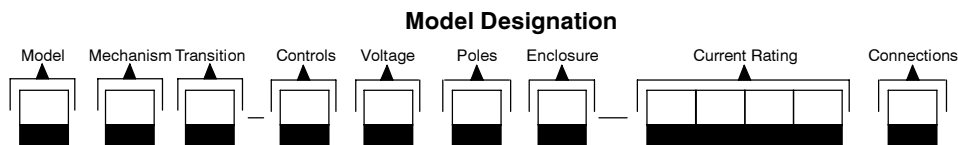
Item	Description	Part Number by Amperage		
		1600	2000	3000
1	Cable connection at rear	321746 (2)	321746	321746
2	Contact assembly, stationary (bypass)*	321870	321870	321871
3	Contact assembly, stationary (ATS)*	321870	321870	321871
4	Arc chute assembly*	321872	321872	321872
5	Contact assembly, moveable*	321757	321757	321873

* All kits include the parts for one contact, therefore, each pole requires two kits.

Item	Description					Part Number by Amperage		
6	ATS Main operating coils							
	Volts	Phase	Wire	Coil Volts	Pole	1600	2000	3000
7	120	1	2	120	2	Consult factory	Consult factory	Consult factory
	120/240	1	3	240	3	321809	321809	321809
	240	3	3	240	4	321809	321809	321809
	120/208	3	4	208	3,4	321809	321809	321809
	480	3	3	480	3	321810	321810	321820
	575	3	3	575/600	3	Consult factory	Consult factory	Consult factory
	277/480	3	4	480	3,4	321810	321810	321810
	240/416	3	4	416	3	Consult factory	Consult factory	Consult factory
						Voltage	Part Number	
8	Bypass stepdown transformer 24 volt secondary					120/240	321864	
						208/416	321844	
						220/440	321845	
						240/480	321846	
						380	321894	
						575	321848	
					600	321849		
9	ATS normal position coil cutout switch					321889		
10	ATS emergency position coil cutout switch					321890		
11	ATS emergency position switch					296303, 321877, 321878, 321879		
12	ATS normal position switch					296304, 321881, 321882, 321883		
13	Crank handle limit switch					321851		
14	ATS auto location switch					321821		
15	ATS isolate/remove location switch					321851		
16	Location switch					321821		
	ATS isolate							
	ATS test							
17	Position switch					321819		
	Bypass emergency							
	Bypass normal							
18	ATS latched limit switch					321818		
19	ATS solenoid disconnect switch							
	Operator 2-position maintain					321772		
	Contact block N.O. (1)					321774		
	Contact block N.O. (2)					321888		
	Contact block mounting plate					321817		
20	Bypass interlock solenoid					321884		
21	Crank enable solenoid					321885		
22	SCR	Amp		Volts				
		50		480 & below		GM49357		
		75		480 & below		GM49372		
		50		600		GM49373		
		75		600		GM49374		

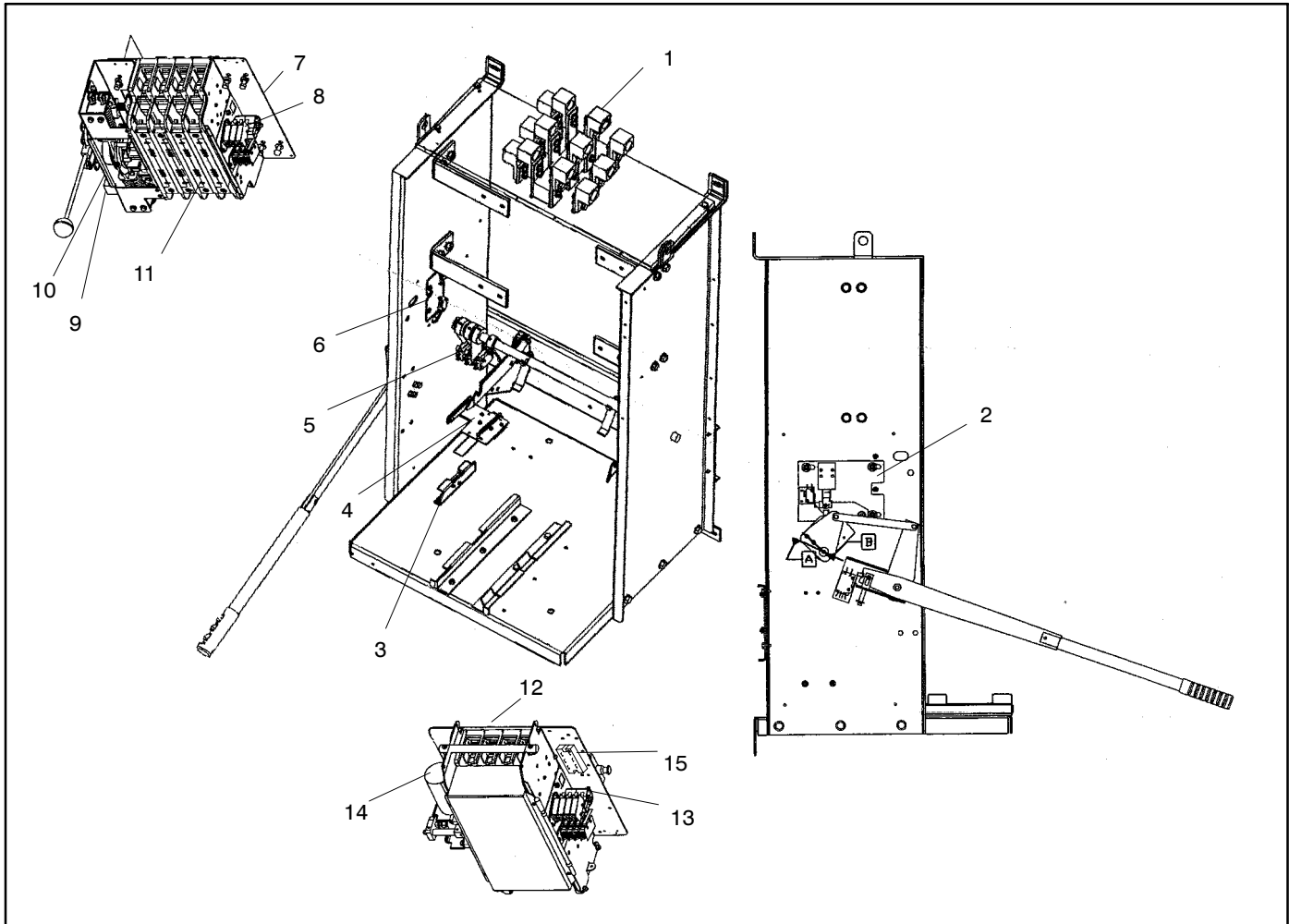
* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number



150-400 Amp

Note: See pages 66 and 68 for detailed view of the contactors.



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Model Designation

Model Mechanism Transition Controls Voltage Poles Enclosure Current Rating Connections

Contactor Serial Number

Contactor, Model SGS

150-400 Amp

Item	Description	Part Number
1	Lugs, cable connection	321743
2	Interlock assembly	GM39154
3	Switch, roller arm limit	321818
4	Switch assembly, position indicator	GM39135
5	Switch, limit	321821
6	Switch assembly	GM39153
7	Panel, top power, 4-pole	GM39138
7	Panel, top power, 3-pole	GM39137
7	Panel, top power, 2-pole	GM39136
8	Switch assembly, limit	GM39156
9	Solenoid, ATS release	321815
10	Switch, roller arm limit	321818
11	Arc chute assembly	GM39145
12	Panel, bottom power, 4-pole	GM39141
12	Panel, bottom power, 3-pole	GM39140
12	Panel, bottom power, 2-pole	GM39139
13	Switch assembly, limit	GM39155
14	Solenoid assembly	Volts
		120
		208/240
		380/415
		480
15	SCR	575/600
		Amp
		Volts
		50
		75
		480 & below
		480 & below
		600
		600

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

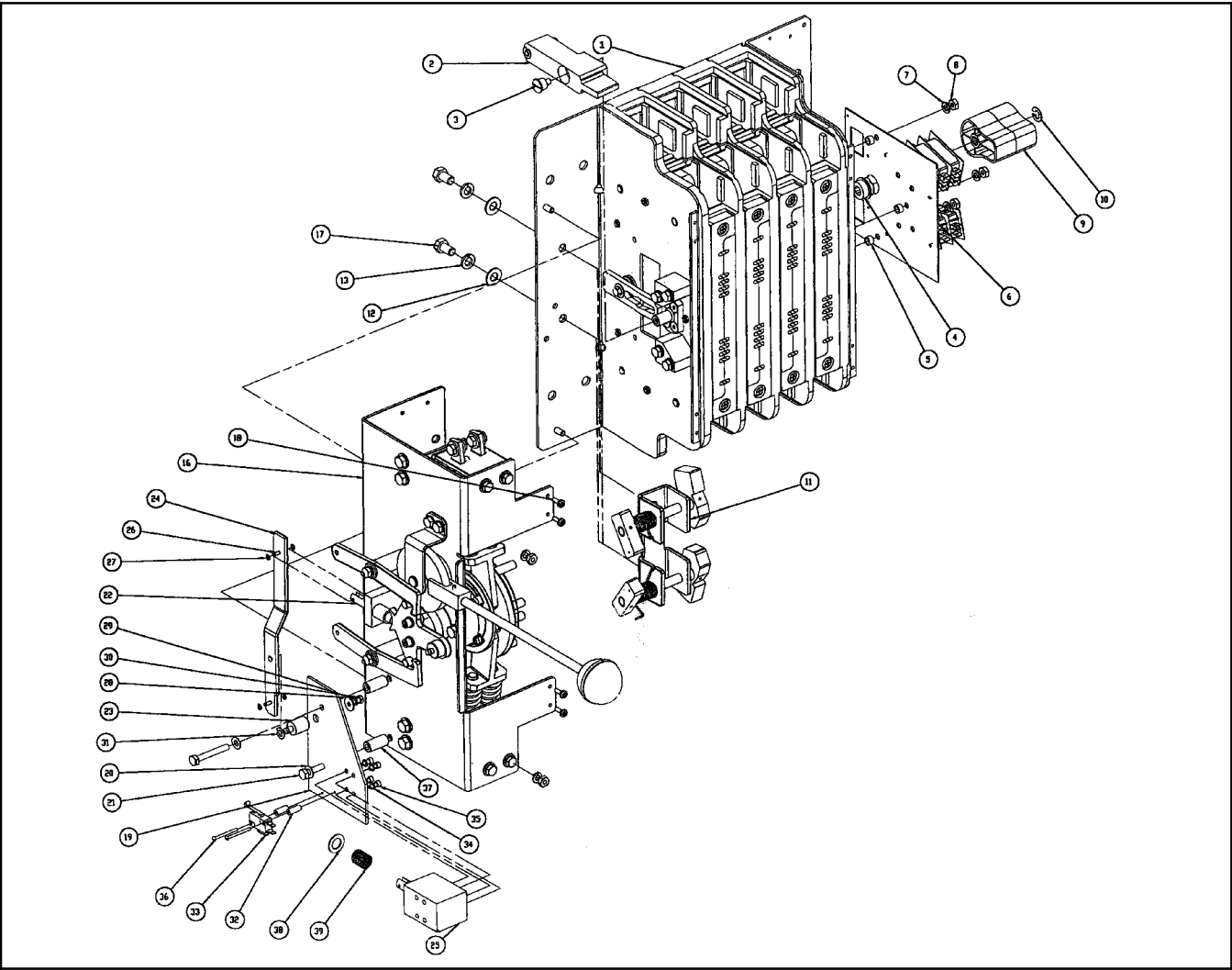
Transfer Switch Serial Number
Contactor Serial Number

Model Designation

Model	Mechanism Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SGS

150-400 Amp Top Power Panel Details



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SGS

150-400 Amp Top Power Panel Details

Item	Part Number	Description
1	*	Panel assembly, power
2	*	Linkage assembly, drive
3	*	Pin, shoulder (lock)
4	*	Bushing, fork
5	*	Spacer, limit switch
6	See page 65	Switch assembly, limit
7	*	Washer, split lock, 1/4
8	*	Nut, hex jam, 1/4-20
9	*	Cam
10	*	E-ring
11	*	Mid stop assembly
12	*	Washer, flat, 3/8
13	*	Washer, split lock, 3/8
16	*	QMQB assembly
17	*	Hex head countersunk, 3/8-16 x .63
18	*	Screw, bind head ext sems, 8-32 x .50
19	*	Bracket, solenoid
20	*	Washer, flat, 1/4
21	*	Hex head countersunk, 1/4-20 x 1.75
22	*	Lock, pin
23	*	Stud, solenoid
24	*	Lever, solenoid
25	See page 65	Solenoid, ATS release
26	*	Shaft, solenoid
27	*	E-ring
28	*	Washer, #10 flat
29	*	Washer, #10 split lock
30	*	Screw, hex head machine, 10-32 x .50
31	*	E-ring
32	*	—
33	See page 65	Switch, roller arm limit
34	*	#8 int. tooth l/w
35	*	Socket head countersunk, 8-32 x .38
36	*	M/s, round head, 4-40 x 1.25
37	*	Spacer
38	*	Washer
39	*	Spring, sol. plunger
40	*	QMBQ kit (includes items 3, 11, 16, and 24)

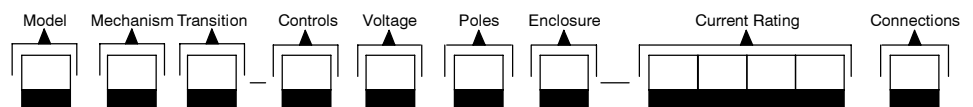
* Serviceable items without part numbers are available by recording the serial numbers and model designation and contacting your supplier of DDC/MTU Power Generation parts.

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

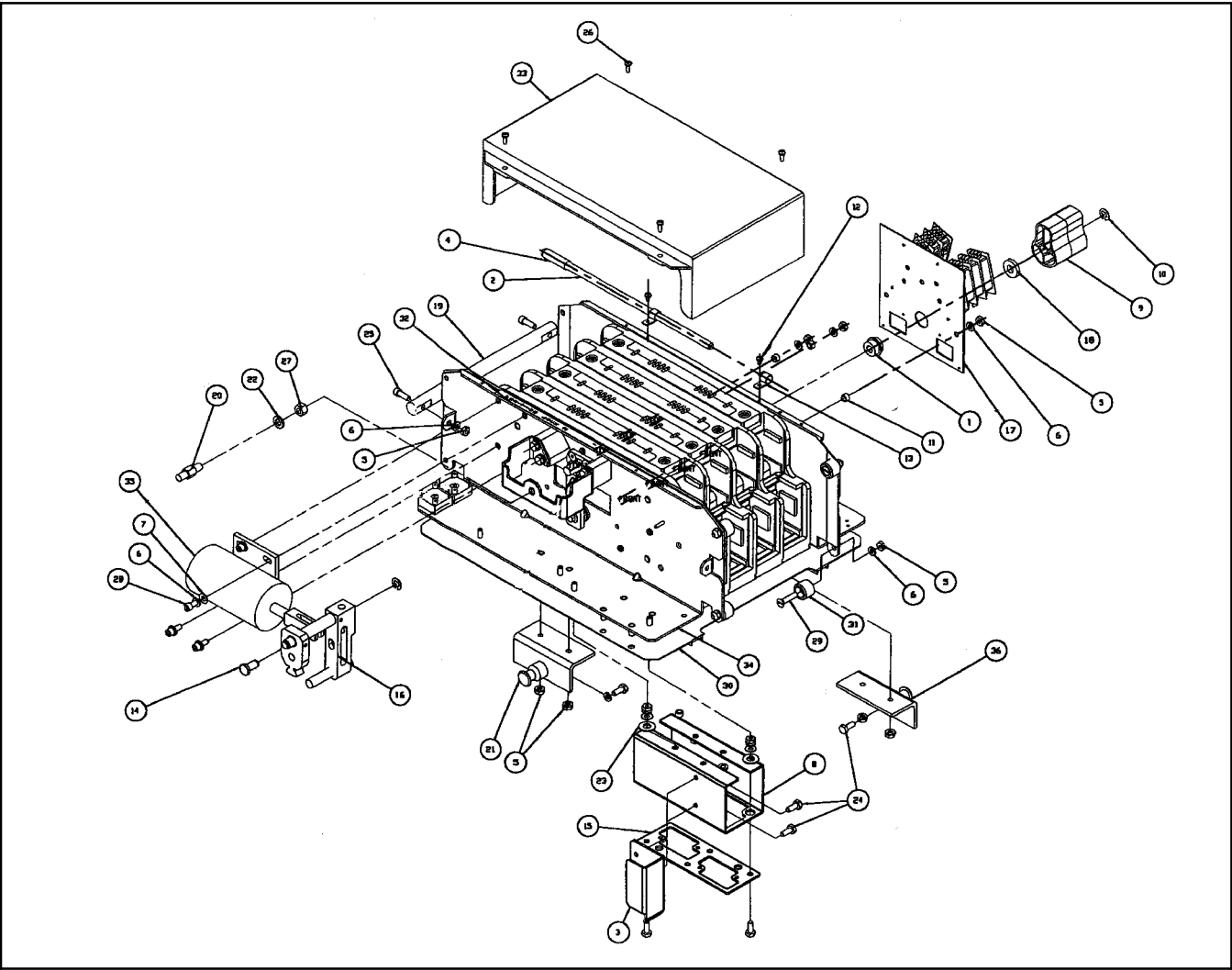
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SGS 150-400 Amp Bottom Power Panel Details



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

Contactor, Model SGS

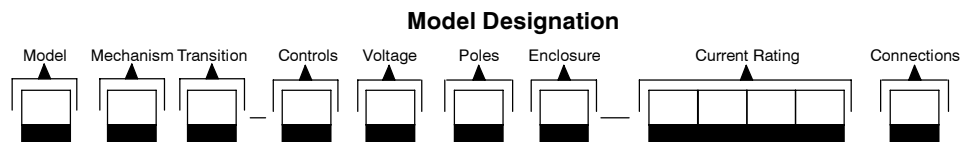
150-400 Amp Bottom Power Panel Details

Item	Part Number	Description
1	*	Bushing, fork
2	*	Handle, manual
3	*	Actuator, limit switch
4	*	Grip, handle
5	*	Nut, hex jam, 1/4-20
6	*	Washer, split lock washer, 1/4
7	*	Washer, flat, 1/4
8	*	Bracket, lug
9	*	Cam
10	*	E-ring
11	*	Spacer, limit switch
12	*	Screw, rwd head ext sems, 8-32 x .31
13	*	Clamp
14	*	Pin, solenoid
15	*	Bracket, plug, 25-pin
16	*	Linkage, drive
17	See page 65	Switch assembly, limit
18	*	Spacer
19	*	Handle
20	*	Stud, connecting
21	*	Stud
22	*	Washer, split lock washer, 3/8
23	*	Washer, flat, 3/8
24	*	Hex head countersunk, 1/4-20 x .63
25	*	Socket head countersunk, 1/4-20 x .75
26	*	Screw, bind head ext sems, 8-32 x .50
27	*	Nut, hex, 3/8-16 grade 8
28	*	Socket head countersunk, 1/4-20 x .63
29	*	M/s, flat countersunk head, 1/4-20 x 1.13
30	*	Barrier
31	*	Skid
32	*	Label, position lock
33	*	Cover
34	*	Panel assembly, power
35	See page 65	Solenoid assembly
36	*	Bracket, stud
37	*	Harness (not shown)

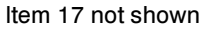
* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts.

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number



600-1200 Amp



6443

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Figure 1 illustrates the hierarchical structure of a transformer model. The components are organized into two rows. The top row lists the components: Model, Mechanism Transition, Controls, Voltage, Poles, Enclosure, Current Rating, and Connections. The bottom row shows the corresponding blocks, which are connected to the top components by arrows. The 'Current Rating' block is divided into three sub-blocks. The 'Model' block is shaded black, while the others are white.

Contactor, Model SGS

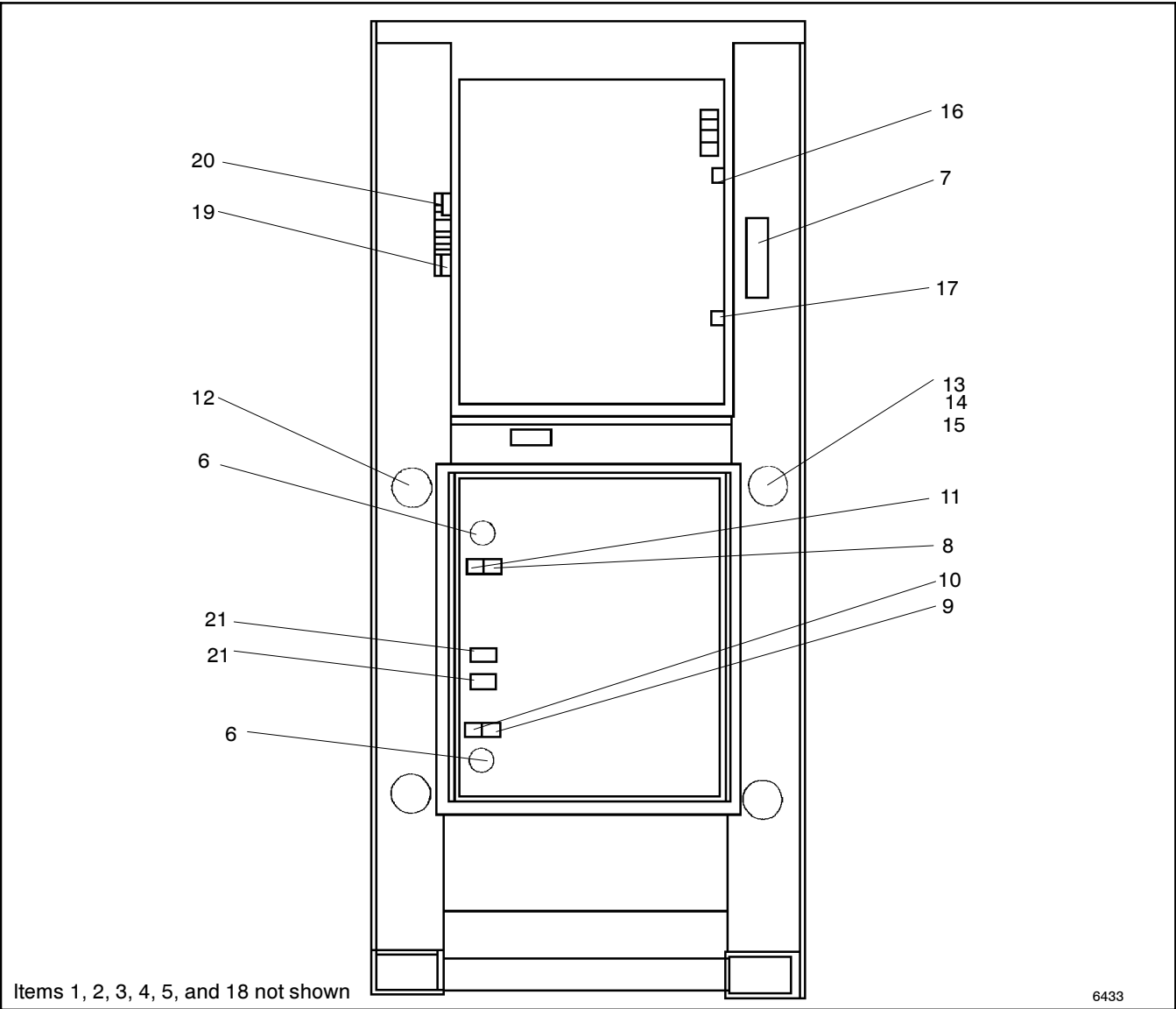
600-1200 Amp

Item	Description	Part Number by Amperage			
		600	800	1000	1200
1	Lugs, normal	321843	321853	321854	321854
2	Lugs, emergency	321744	321745	321746	321746
3	Lugs, load	321744	321745	321746	321746
4	Contact assembly bypass, stationary*	321847	346583	346583	346583
5	Contact assembly, stationary, ATS*	321847	346583	346583	346583
6	Arc chute assembly kit*	321753	321753	321753	321753
7	Contact assembly, moveable*	321876	321880	321880	321880
7	Contact, moveable (switched neutral)*	321876	321816	321816	321816

* All kits include the parts for one contact; therefore, each pole requires two kits.

						Part Number by Amperage			
Item	Description					600	800	1000	1200
8	ATS Main operating coils					Part Numbers By Amperage			
	Voltage System								
	Volts	Ph	Wire	Coil Volts	Pole	600	800	1000	1200
	120	1	2	120	2	321859	321860	321860	321860
	120/240	1	2	240	2	321861	321862	321862	321862
	120/240	1	2	240	3	321865	321862	321862	321862
	120/240	3	4	240	3	321865	321862	321862	321862
	120/208	3	4	208	3,4	321866	296296	296296	296296
	480	3	3	480	3	321867	296297	296297	296297
	575	3	3	575/600	3	321868	Consult factory	Consult factory	Consult factory
	277/480	3	4	480	3	321867	296297	296297	296297
	277/480	3	4	480	4	321869	296297	296297	296297
	240/416	3	4	416	3	321867	296297	296297	296297
						Voltage		Part Number	
9	Bypass stepdown transformer 25VA, 24 volt secondary					120/240	321864		
						208/416	321844		
						220/440	321845		
						240/480	321846		
						380	321894		
						575	321848		
						600	321849		
10	Switch					321819			
	Bypass emergency position								
	Bypass normal position								
	BSS emergency position								
	BSS normal position								
11	Limit switch DPDT, lever actuator								
	ATS auto location switch					321851			
	ATS test Location switch					321852			
	Crank limit switches					321818			
	ATS isolate location switch					321851			
	Limit switch DPDT, roller actuator					321852			
12	ATS emergency position switch					(SPDT) 296298		(DPDT) 321758	
13	ATS normal position switch (auxiliary contact)					296299		321855	
14	ATS normal position coil cutout switch DPDT					321758			
15	ATS emergency position coil cutout switch DPDT					321856			
16	ATS solenoid disconnect switch								
	Operator 2-position maintain					321773			
	Contact block N.O.					296300			
	Contact block N.O.					321857			
17	Solenoid					321858			
	Emergency interlock								
	Normal interlock								
18	Crank mechanism solenoid					321858			
19	SCR	Amp		Volts					
		50		480 & below		GM49357			
		75		480 & below		GM49372			
		50		600		GM49373			
		75		600		GM49374			

Contactor, Model SGS **1600-3000 Amp**



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

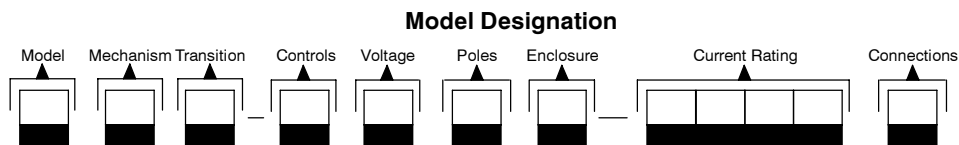
Contactor, Model SGS

1600-3000 Amp

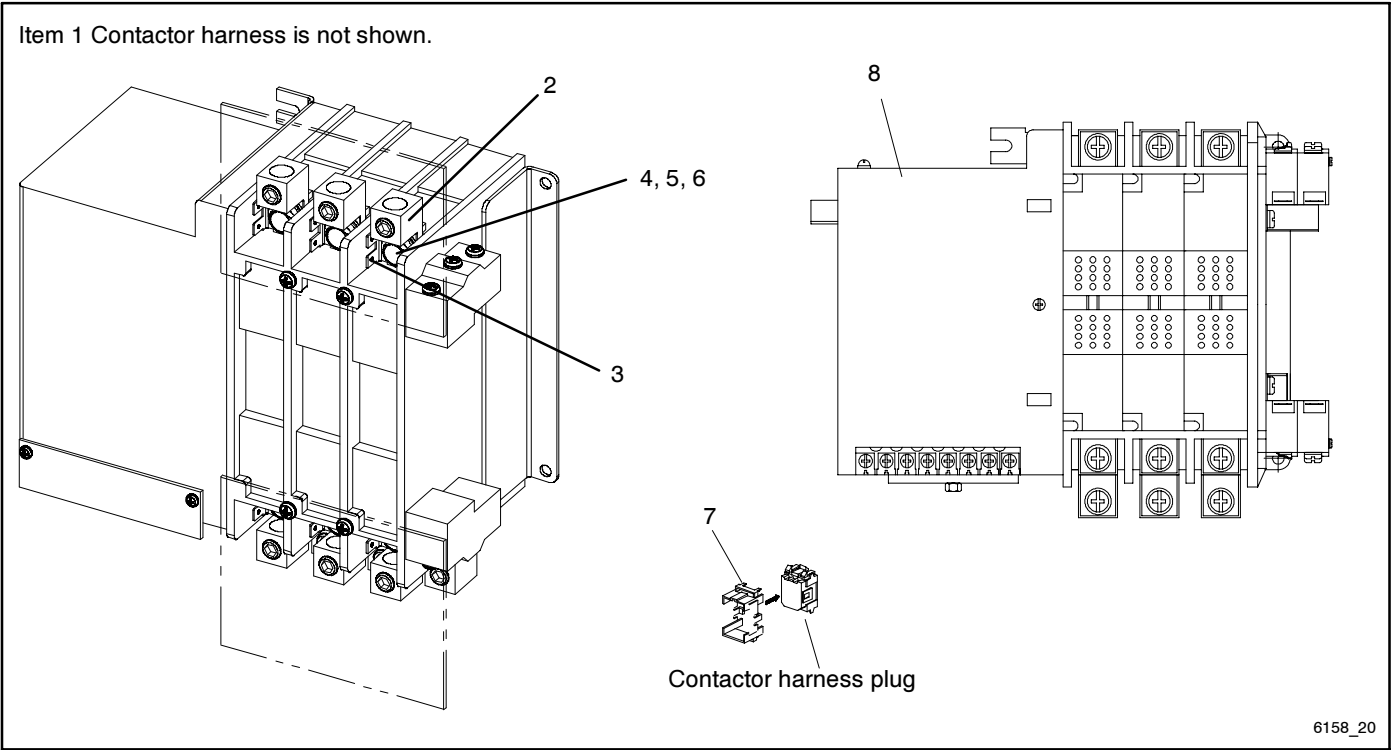
						Part Number by Amperage		
Item	Description					1600	2000	3000
1	Cable connection at rear					321746 (2)	321746	321746
2	Contact assembly, stationary (bypass)*					321870	321870	321871
3	Contact assembly, stationary (ATS)*					321870	321870	321871
4	Arc chute assembly*					321872	321872	321872
5	Contact assembly, moveable*					321757	321757	321873
* All kits include the parts for one contact, therefore, each pole requires two kits.								
6	ATS Main operating coils							
	Volts	Phase	Wire	Coil Volts	Pole	1600	2000	3000
	120/240	1	3	240	3	321891	321891	321891
	240	3	3	240	3	321891	321891	321891
	240	3	4	240	4	321893	321893	321893
	120/280	3	4	208	3	321892	321892	321892
	120/208	3	4	208	4	321895	321895	321895
	480	3	3	480	3	296301	296301	296301
	277/480	3	4	480	3	296301	296301	296301
	277/480	3	4	480	4	296302	296302	296302
	240/416	3	4	416	3	321896	321896	321896
						Voltage	Part Number	
7	Bypass stepdown transformer 24 volt secondary					120/240	321864	
						208/416	321844	
						220/440	321845	
						240/480	321846	
						380	321894	
						575	321848	
						600	321849	
8	ATS normal position coil cutout switch					321874		
9	ATS emergency position coil cutout switch					321875		
10	ATS emergency position switch					296303, 321877, 321878, 321879		
11	ATS normal position switch					296304, 321881, 321882, 321883		
12	Crank handle limit switch					321851		
13	ATS auto location switch					321821		
14	ATS isolate/remove location switch					321851		
15	Location switch					321821		
	ATS isolate							
	ATS test							
16	Position switch					321819		
	Bypass emergency							
	Bypass normal							
17	ATS latched limit switch					321818		
18	ATS solenoid disconnect switch							
	Operator 2-position maintain					321772		
	Contact block N.O. (1)					321774		
	Contact block N.O. (2)					321888		
	Contact block mounting plate					321817		
19	Bypass interlock solenoid					321884		
20	Crank enable solenoid					321885		
21	SCR	Amp		Volts				
		50		480 & below		GM49357		
		75		480 & below		GM49372		
		50		600		GM49373		
		75		600		GM49374		

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number



Contactor, Model SSP 100-400 Amp



Model SSP Contactors								
Module Number Key								
Model Designation Code								
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Module Number
S	S	P	D, F	C, D, F	N	all	100	GM30222-KA1
S	S	P	D, F	C, D, F	T	all	100	GM30222-KA2
S	S	P	D, F	C, D, F	V	all	100	GM30222-KA3
S	S	P	D, F	C, D, F	N	all	200	GM30222-KA4
S	S	P	D, F	C, D, F	T	all	200	GM30222-KA5
S	S	P	D, F	C, D, F	V	all	200	GM30222-KA6
S	S	P	D, F	G, J, K, M	N	all	100	GM30222-KA7
S	S	P	D, F	G, J, K, M	T	all	100	GM30222-KA8
S	S	P	D, F	G, J, K, M	V	all	100	GM30222-KA9
S	S	P	D, F	G, J, K, M	N	all	200	GM30222-KA10
S	S	P	D, F	G, J, K, M	T	all	200	GM30222-KA11
S	S	P	D, F	G, J, K, M	V	all	200	GM30222-KA12
S	S	P	D, F	C, D, F	N	all	400	GM30223-KA1
S	S	P	D, F	C, D, F	T	all	400	GM30223-KA2
S	S	P	D, F	C, D, F	V	all	400	GM30223-KA3
S	S	P	D, F	G, J, K, M	N	all	400	GM30223-KA4
S	S	P	D, F	G, J, K, M	T	all	400	GM30223-KA5
S	S	P	D, F	G, J, K, M	V	all	400	GM30223-KA6

Please refer to instructions on page 5 for an explanation of how to use this table.

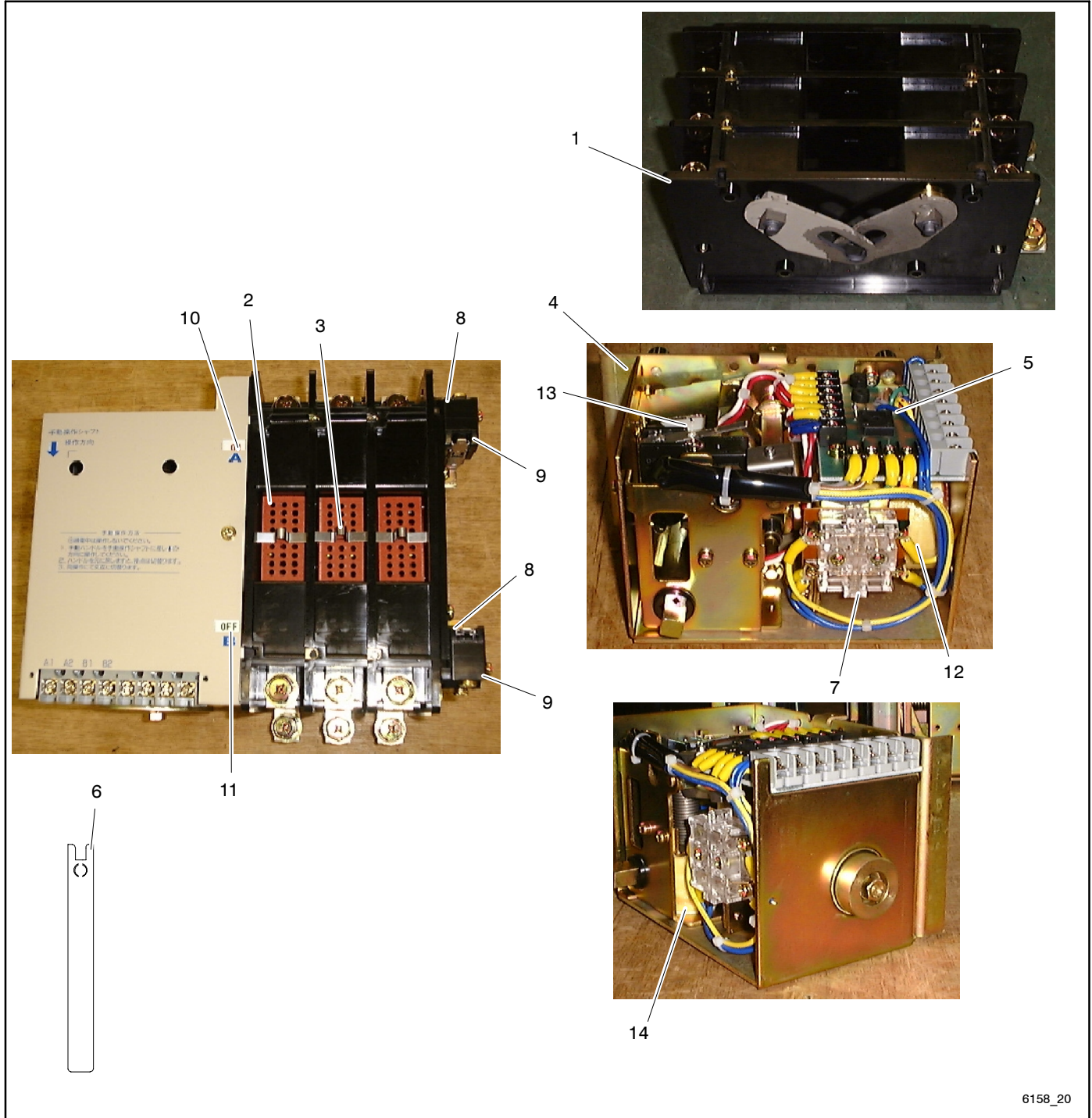
Contactor, Model SSP

100-400 Amp

100-200-Amp Modules												
Item	Part Number	Description	Quantity									
			Module									
			GM30222-KA1	GM30222-KA2	GM30222-KA3	GM30222-KA4	GM30222-KA5	GM30222-KA6	GM30222-KA7	GM30222-KA8	GM30222-KA9	GM30222-KA10
1	GM29448	Harness, contactor	1	1	1							
1	GM29449	Harness, contactor				1	1	1				
1	GM32466	Harness, contactor							1	1	1	
1	GM32465	Harness, contactor										1
2	X-6207-6	Lug, terminal, aluminum	6	9	12				6	9	12	1
2	GM28413	Lug, terminal				6	9	12				6
3	GM31854	Terminal, ATS lug sensing	6	9	12				6	9	12	9
3	GM31855	Terminal, ATS lug sensing				6	9	12				6
4	X-25-20	Washer, plain, .312 ID x .75 OD	6	9	12				6	9	12	9
4	X-25-18	Washer, plain, .391 ID x .875 in. OD				12	18	24				12
5	X-6086-24	Washer, spring	6	9	12				6	9	12	18
5	X-6086-25	Washer, spring				6	9	12				6
6	X-465-2	Bolt, hex cap	6	9	12				6	9	12	9
6	X-125-5	Bolt, hex cap				6	9	12				6
6	X-82-6	Bolt, hex cap				6	9	12				6
7	321330	Boot, connector	2	2	2	2	2	2	2	2	2	2
8	GM29048	Contactor, PT, series, 100 A. 2 P	1						1			
8	GM29050	Contactor, PT, series, 100 A. 3 P		1						1		
8	GM29052	Contactor, PT, series, 100 A. 4 P			1						1	
8	GM29049	Contactor, PT, series, 200 A. 2 P				1						1
8	GM29051	Contactor, PT, series, 200 A. 3 P					1					1
8	GM29053	Contactor, PT, series, 200 A. 4 P						1				1
See page 76 for contactor components												

400-Amp Modules								
			Quantity					
			Module					
Item	Part Number	Description	GM30223-KA1	GM30223-KA2	GM30223-KA3	GM30223-KA4	GM30223-KA5	GM30223-KA6
1	GM29450	Harness, contactor	1	1	1			
1	GM32467	Harness, contactor				1	1	1
2	X-6207-9	Lug, terminal, aluminum	6	9	12	6	9	12
3	GM31855	Terminal, ATS lug sensing	6	9	12	6	9	12
4	X-25-118	Washer, plain, .406 ID x 1 in. OD	12	18	24	12	18	24
5	X-6086-24	Washer, spring, .39 ID x .81 in. OD	6	9	12	6	9	12
6	X-6238-4	Bolt, hex cap	6	9	12	6	9	12
6	X-83-7	Nut, hex, 3/8-16, zinc	6	9	12	6	9	12
7	321330	Boot, connector	2	2	2	2	2	2
8	GM29054	Contactor, PT, series, 400 A. 2 P	1			1		
8	GM29055	Contactor, PT, series, 400 A. 3 P		1			1	
8	GM29056	Contactor, PT, series, 400 A. 4 P			1			1
		See page 76 for contactor components						

100-400 Amp Contactor Components



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

The diagram shows a label layout with three main sections:

- Transfer Switch Serial Number**: A rectangular field at the top left.
- Contactor Serial Number**: A rectangular field below the transfer switch serial number.
- Model Designation**: A series of fields to the right of the serial numbers, each with a small upward-pointing triangle above it. The fields are:
 - Model
 - Mechanism Transition
 - Controls
 - Voltage
 - Poles
 - Enclosure
 - Current Rating
 - Connections

Contactor, Model SSP

100-400 Amp Contactor Components

Item	Part Number	Description
1	*	Unit, current-carrying (without arc chutes)
2	GM32477	Chute, arc, 100 A
2	GM32478	Chute, arc, 200 A
2	GM32479	Chute, arc, 400 A
3	GM32480	Clip, spring, 100 A
3	GM32481	Clip, spring, 200 A
3	GM32482	Clip, spring, 400 A
4	*	Unit, mechanical
5	*	Board, circuit (bridge rectifier)
6	GM32475	Handle, manual
7	GM32483	Switch, control
8	GM32484	Barrier, auxiliary contact
9	GM32485	Switch, auxiliary
10	GM32486	Indicator, ON-OFF (A)
11	GM32487	Indicator, ON-OFF (B)
12	See chart	Coil, closing
13	GM32496	Coil, select
14	GM32498	Coil, trip, 100/200 A
14	GM32499	Coil, trip, 400 A

Item 12, Closing Coil

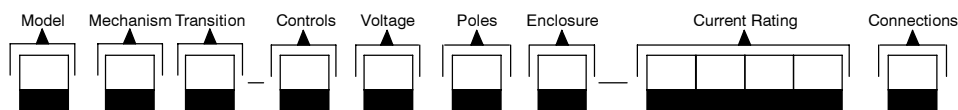
Poles/Wires Code	Poles/Wires	Amps	Part Number
N, T	2, 3	100	GM32488
V	4	100	GM32489
N, T	2, 3	200	GM32489
V	4	200	GM32490
N, T	2, 3	400	GM32491
V	4	400	GM32492

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

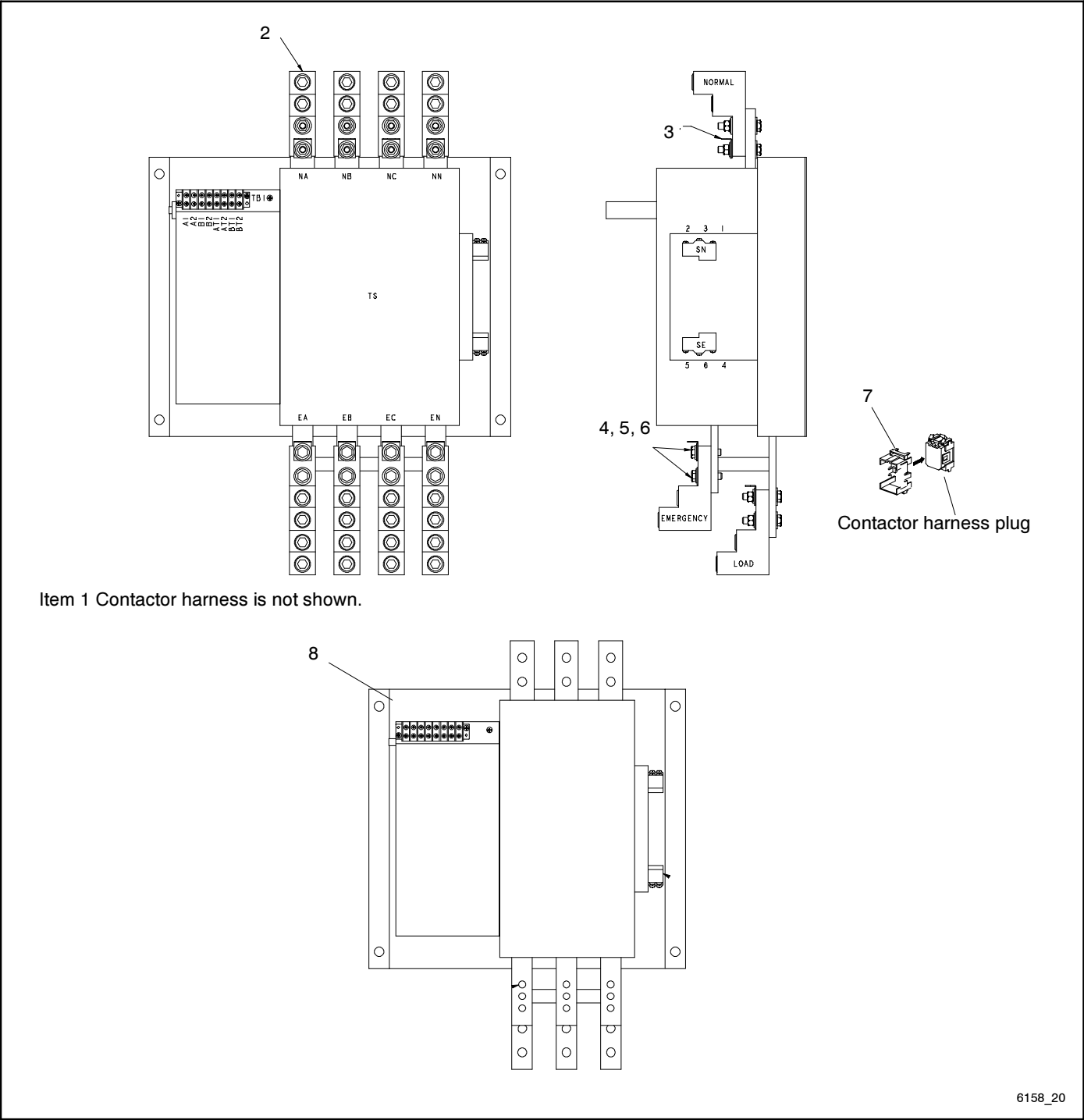
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SSP 600 Amp



* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism

Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

78

MP-6433 9/06

Contactor, Model SSP

600 Amp

Item	Part Number	Description	Quantity					
			Module					
			GM30224-KA1	GM30224-KA2	GM30224-KA3	GM30224-KA4	GM30224-KA5	GM30224-KA6
1	GM29451	Harness, contactor	1	1	1			
1	GM32464	Harness, contactor				1	1	1
2	297981	Lug, terminal, aluminum	6	9	12	6	9	12
3	GM31855	Terminal, ATS lug sensing	6	9	12	6	9	12
4	X-25-118	Washer, plain, .406 ID x 1 in. OD	20	30	40	20	30	40
5	X-6086-6	Washer, spring	12	18	24	12	18	24
6	X-6238-17	Bolt, hex cap (normal lugs)	4	6	8	4	6	8
6	X-6238-5	Bolt, hex cap (emergency lugs)	4	6	8	4	6	8
6	X-6238-6	Bolt, hex cap (load lugs)	4	6	8	4	6	8
6	X-83-7	Nut, hex, 3/8-16, zinc (normal and load lugs)	8	12	16	8	12	16
7	321330	Boot, connector	2	2	2	2	2	2
8	GM29057	Contactor, PT, series, 600 A. 2 P	1			1		
8	GM29058	Contactor, PT, series, 600 A. 3 P		1			1	
8	GM29060	Contactor, PT, series, 600 A. 4 P			1			1

Model SSP 600 Amp Contactors

Module Number Key								
Model Designation Code								Module Number
Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	
S	S	P	D, F	C, D, F	N	all	600	GM30224-KA1
S	S	P	D, F	C, D, F	T	all	600	GM30224-KA2
S	S	P	D, F	C, D, F	V	all	600	GM30224-KA3
S	S	P	D, F	G, J, K, M	N	all	600	GM30224-KA4
S	S	P	D, F	G, J, K, M	T	all	600	GM30224-KA5
S	S	P	D, F	G, J, K, M	V	all	600	GM30224-KA6

Please refer to instructions on page 5 for an explanation of how to use this table.

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number

Model Designation

Model	Mechanism	Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SSP

600 Amp Contactor Components

Item 11 Terminal Cover is not shown.

6158_20

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

80

MP-6433 9/06

Contactor, Model SSP

600 Amp Contactor Components

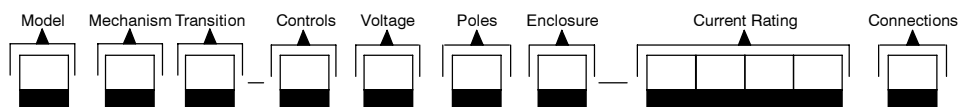
Item	Part Number	Description
1	GM32471	Chute, arc, 600 A
2	*	Unit, mechanical
3	*	Board, circuit (bridge rectifier)
4	GM32476	Handle, manual
5	GM32483	Switch, control
6	GM32484	Barrier, auxiliary contact
7	GM32485	Switch, auxiliary
8	GM32494	Coil, closing, 2-pole, 3-pole
8	GM32495	Coil, closing, 4-pole
9	GM32497	Coil, select
10	GM32500	Coil, trip
11	GM32472	Cover, terminal, 2-pole
11	GM32473	Cover, terminal, 3-pole
11	GM32474	Cover, terminal, 4-pole
12	*	Contact, fixed A-side
13	*	Contact, fixed B-side
14	*	Contact, moving A-side
15	*	Contact, moving B-side

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

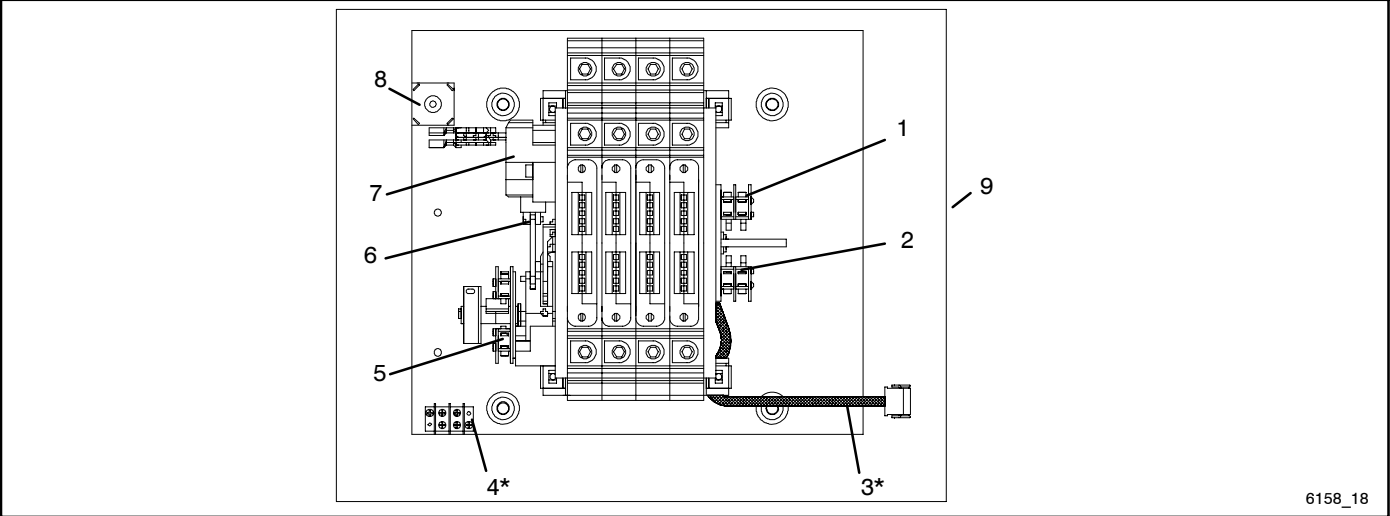
Transfer Switch Serial Number

Contactor Serial Number

Model Designation



Contactor, Model SSS 40-225 Amp



Item	Part Number	Description
1	GM25434	Contacts, auxiliary
2	GM25434	Contacts, auxiliary
3	*	Harness, wiring
4	*	Terminal block, engine start
5	GM25434	Switch, coil cutout
6	GM32387	Plunger and link, solenoid
7	See chart	Solenoid
8	See chart	Rectifier
9	See chart	Contactor assembly

Items 7 and 8, Solenoid and Rectifier			
Voltage Code(s)	Voltage	Part Number	
		Item 7, Solenoid	Item 8, Rectifier
C, D	208/220	362087	GM32388
F	240	362135	GM32388
G, H, J	380/400/416	362089	321781
K, M	440/480	362090	321781

Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

Contactor, Model SSS 40-225 Amp

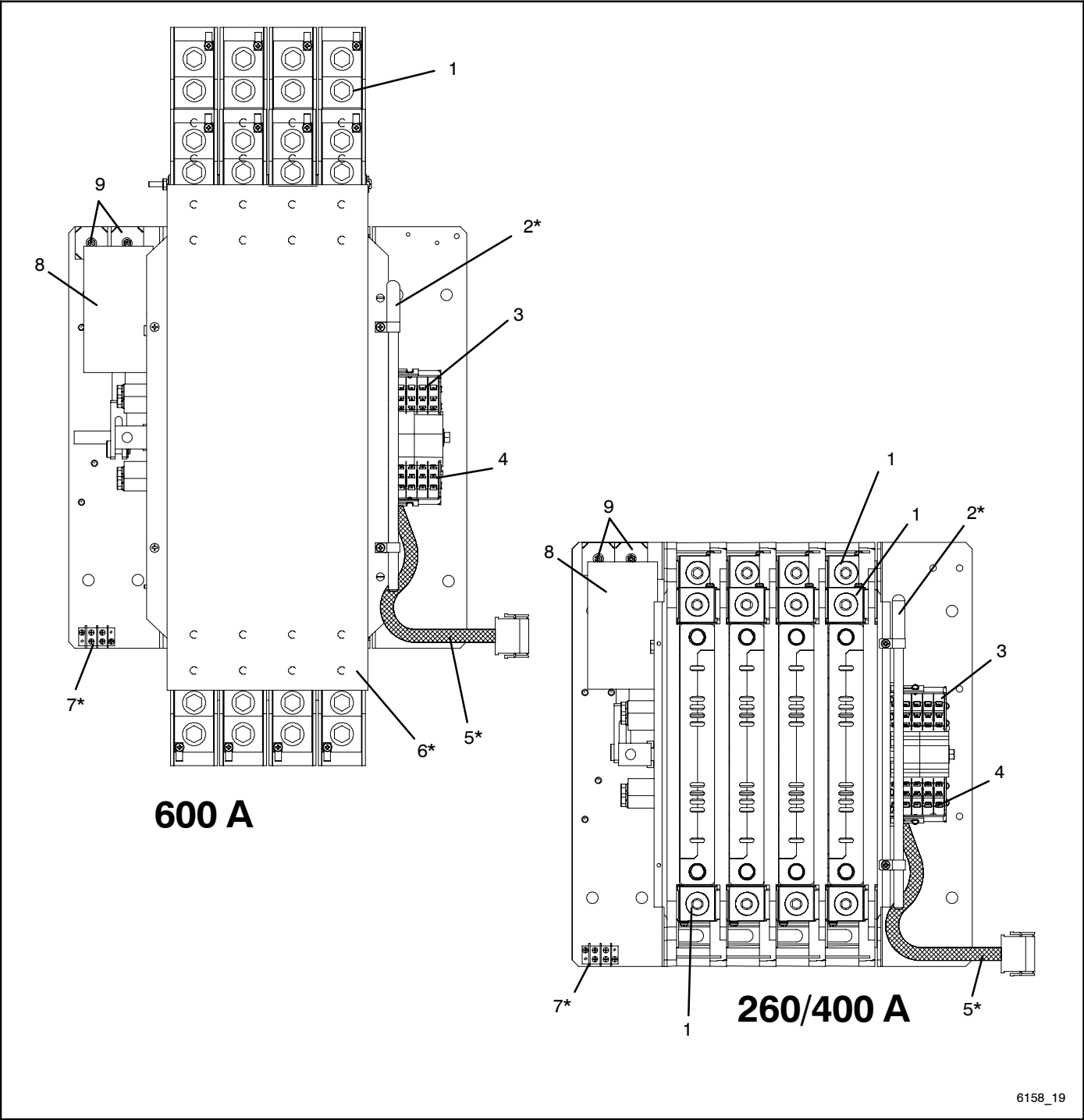
Use this table to identify the switch's contactor part number.

Item 9, Contactor Assembly				Item 9, Contactor Assembly			
Amps	Poles/Wires Code	Voltage Code	Part Number	Amps	Poles/Wires Code	Voltage Code	Part Number
40	N	C	GM30267	150	N	C	GM30303
40	N	D, F	GM30268	150	N	D, F	GM30304
40	N	G, H, J	GM30269	150	N	G, H, J	GM30305
40	N	K, M	GM30270	150	N	K, M	GM30306
40	T	C	GM30271	150	T	C	GM30307
40	T	D, F	GM30272	150	T	D, F	GM30308
40	T	G, H, J	GM30273	150	T	G, H, J	GM30309
40	T	K, M	GM30274	150	T	K, M	GM30310
40	V	C	GM30275	150	V	C	GM30311
40	V	D, F	GM30276	150	V	D, F	GM30312
40	V	G, H, J	GM30277	150	V	G, H, J	GM30313
40	V	K, M	GM30278	150	V	K, M	GM30314
80	N	C	GM30279	200	N	C	GM30315
80	N	D, F	GM30280	200	N	D, F	GM30316
80	N	G, H, J	GM30281	200	N	G, H, J	GM30317
80	N	K, M	GM30282	200	N	K, M	GM30318
80	T	C	GM30283	200	T	C	GM30684
80	T	D, F	GM30284	200	T	D, F	GM30685
80	T	G, H, J	GM30285	200	T	G	GM30686
80	T	K, M	GM30286	200	V	C	GM30688
80	V	C	GM30287	200	T	K, M	GM30687
80	V	D, F	GM30288	200	V	D, F	GM30689
80	V	G, H, J	GM30289	200	V	G, H, J	GM30690
80	V	K, M	GM30290	200	V	K, M	GM30691
100	N	C	GM30291	225	N	C	GM28989
100	N	D, F	GM30292	225	N	D, F	GM28990
100	N	G, H, J	GM30293	225	N	G, H, J	GM28991
100	N	K, M	GM30294	225	N	K, M	GM28992
100	T	C	GM30295	225	T	C	GM28993
100	T	D, F	GM30296	225	T	D, F	GM28994
100	T	G, H, J	GM30297	225	T	G, H, J	GM28995
100	T	K, M	GM30298	225	T	K, M	GM28996
100	V	C	GM30299	225	V	C	GM28997
100	V	D, F	GM30300	225	V	D, F	GM28998
100	V	G, H, J	GM30301	225	V	G, H, J	GM28999
100	V	K, M	GM30302	225	V	K, M	GM29000

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number	Model Designation							
Contactor Serial Number	Model	Mechanism Transition	Controls	Voltage	Poles	Enclosure	Current Rating	Connections

Contactor, Model SSS 260-600 Amp



Transfer Switch Serial Number

Contactor Serial Number

Model Designation

Model

Mechanism Transition

Controls

Voltage

Poles

Enclosure

Current Rating

Connections

Contactor, Model SSS

260-600 Amp

Item	Part Number	Description
1	GM32389	Lug, cable connection, 260/400 A
1	321744	Lug, cable connection, 600 A
2	*	Handle
3	GM25434	Switch, coil cutout
4	GM25434	Contacts, auxiliary
5	*	Harness, wiring
6	*	Barrier
7	*	Terminal block, engine start
8	See chart	Solenoid
9	321781	Rectifier
10	See chart	Contactor assembly

Item 8, Solenoid		
Voltage	Voltage Code(s)	Part Number
		Item 8, Solenoid
208/220/240	C, D, F	GM32390
380/416	G, H, J	GM32391
440/480	K, M	GM32392

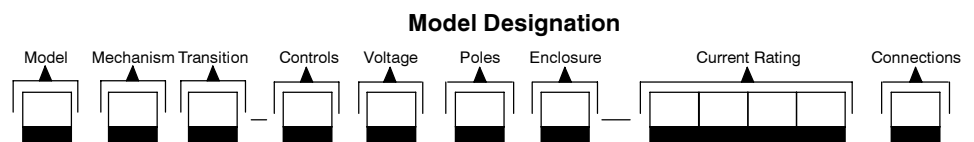
Use this table to identify the switch's contactor part number.

Item 9, Contactor Assembly			
Amps	Poles/Wires Code	Voltage Code	Part Number
260	N	C	GM29001
260	N	D, F	GM29002
260	N	G, H, J	GM29003
260	N	K, M	GM29004
260	T	C	GM29005
260	T	D, F	GM29006
260	T	G, H, J	GM29007
260	T	K, M	GM29008
260	V	C	GM29009
260	V	D, F	GM29010
260	V	G, H, J	GM29011
260	V	K, M	GM29012
400	N	C	GM29013
400	N	D, F	GM29014
400	N	G, H, J	GM29015
400	N	K, M	GM29016
400	T	C	GM29017
400	T	D, F	GM29018
400	T	G, H, J	GM29019
400	T	K, M	GM29020
400	V	C	GM29021
400	V	D, F	GM29022
400	V	G, H, J	GM29023
400	V	K, M	GM29024

Item 9, Contactor Assembly			
Amps	Poles/Wires Code	Voltage Code	Part Number
600	N	C	GM29025
600	N	D, F	GM29026
600	N	G, H, J	GM29027
600	N	K, M	GM29028
600	T	C	GM29029
600	T	D, F	GM29030
600	T	G, H, J	GM29031
600	T	K, M	GM29032
600	V	C	GM29033
600	V	D, F	GM29034
600	V	G, H, J	GM29035
600	V	K, M	GM29036

* Serviceable items without part numbers are available by recording the serial numbers and model designation below and contacting your supplier of DDC/MTU Power Generation parts. See Introduction for more instructions.

Transfer Switch Serial Number
Contactor Serial Number



Literature

Literature

Qty.	Description	Common Parts	Unique Parts by Model			
			SCS/SCP	SSS/SSP	SBS/SBP	SGS/SGP
1	Warranty, 1-year limited ATS	MP-5373				
1	P/C SCS/SCP/SSS/SSP/SBS/SBP/SGS/SGP	MP-6433				
1	O/I/M SCS/SCP Transfer Switch		MP-6446			
1	O/I/M SSS/SSP Transfer Switch			MP-6447		
1	O/I/M SBS/SBP Transfer Switch				MP-6448	
1	O/I/M SGS/SGP Transfer Switch					MP-6449
1	S/M SCS/SCP/SBS/SBP Transfer Switch		MP-6460		MP-6460	
1	S/M SSS/SGS/SGP Transfer Switch			MP-6461		MP-6461
1	W/D SCS/SCP/SSS/SSP		MP-6434	MP-6434		
1	W/D SBS/SSP/SGS/SGP				MP-6452	MP-6452

Accessories

Battery Charger Kits, 30-800 A

Kits: GM22498-KA1(KP1) to GM22498-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			208 V	240 V	480 V	600 V
			GM22498-KP1	GM22498-KP2	GM22498-KP3	GM22498-KP4
1	Charger, battery	GM22502				
1	Harness, wiring		GM22530	GM22532	GM22531	GM22529
2	Lead, jumper	SWJ-1004-1414				
1	Terminal, 1/4 in. eyelet, 16-22 gauge	X-283-9				
2	Terminal, 3/16 in. pushon, 16-22 gauge	X-431-48				
2	Terminal, 3/8 in. eyelet, 16-22 gauge	X-283-21				
2	Terminal, 3/8 in. eyelet, 16-14 gauge	X-283-3				
2	Terminal, #10 eyelet, 10-12 gauge	X-283-11				
1	Screw, 1/4-20 x 3/4 in. thread-forming	X-67-114				
4	Nut, 1/4-20	X-6210-2				
1	Lockwasher, 1/4 in. internal/external	X-22-12				
1	Installation Instructions	TT-1320				

Battery Charger Kits, 1000-4000 A

Kits: GM22498-KA5(KP5) to GM22498-KA8(KP8)

Qty.	Description	Common Parts	Unique Parts			
			208 V	240 V	480 V	600 V
			GM22498-KP5	GM22498-KP6	GM22498-KP7	GM22498-KP8
1	Battery charger	GM22502				
1	Harness, wiring		GM22530	GM22532	GM22531	GM22529
1	Panel, mounting	GM22398				
2	Jumper lead	SWJ-1004-1414				
1	Terminal, 1/4 in. eyelet, 16-22 gauge	X-283-9				
2	Terminal, 3/16 in. pushon, 16-22 gauge	X-431-48				
2	Terminal, 3/8 in. eyelet, 16-22 gauge	X-283-21				
2	Terminal, 3/8 in. eyelet, 16-14 gauge	X-283-3				
2	Terminal, #10 eyelet, 10-12 gauge	X-283-11				
5	Screw, 1/4-20 x 3/4 in. thread-forming	X-67-114				
4	Nut, 1/4-20	X-6210-2				
1	Lockwasher, 1/4 in. internal/external	X-22-12				
1	Installation Instructions	TT-1320				

Accessories, continued

Current Sensing

Kits: GM47965-KA1(KP1) to GM47965-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM47965-KA1	GM47965-KA2	GM47965-KA3	GM47965-KA4
1	Insulation, terminal block	GM47797				
1	Harness, CT	GM47798				
1	Bracket, terminal block mounting	GM47801				
1	Terminal block	X-6126-27				
1	Harness, CT 6 ft.		GM40560	GM40561	GM40560	GM40561
3	Transformer, current (200:0.5A)		GM47788	GM47788		
3	Transformer, current (400:0.5A)				GM47789	GM47789
1	Bracket, CT mounting			GM47799		GM47799

Kits: GM47965-KA5(KP5) to GM47965-KA8(KP8)

Qty.	Description	Common Parts	Unique Parts			
			GM47965-KA5	GM47965-KA6	GM47965-KA7	GM47965-KA8
1	Insulation, terminal block	GM47797				
1	Harness, CT	GM47798				
1	Bracket, terminal block mounting	GM47801				
1	Terminal block	X-6126-27				
1	Harness, CT 6 ft.	GM40562				
3	Transformer, current (1000:0.5A)		GM47790			
3	Transformer, current (1200:0.5A)			GM47791	GM47791	
3	Transformer, current (2000:0.5A)					GM47792
1	Bracket, CT mounting		GM47800			GM47800
1	Channel, CT mounting			GM47802		GM47802

Kits: GM47965-KA9(KP8) to GM47965-KA11(KP11)

Qty.	Description	Common Parts	Unique Parts		
			GM47965-KA9	GM47965-KA10	GM47965-KA11
1	Insulation, terminal block	GM47797			
1	Harness, CT	GM47798			
1	Bracket, terminal block mounting	GM47801			
1	Terminal block	X-6126-27			
1	Harness, CT 6 ft.	GM40562			
3	Transformer, current (2000:0.5A)		GM47792	GM47792	
3	Transformer, current (3000:0.5A)				GM47793
1	Bracket, CT mounting		GM47800		

Kits: GM47965-KA12(KP12) to GM47965-KA15(KP15)

Qty.	Description	Common Parts	Unique Parts			
			GM47965-KA12	GM47965-KA13	GM47965-KA14	GM47965-KA15
1	Insulation, terminal block	GM47797				
1	Harness, CT	GM47798				
1	Bracket, terminal block mtg.	GM47801				
1	Terminal block	X-6126-27				
1	Harness, CT 6 ft.		GM40560	GM40561	GM40560	GM40561
2	Transformer, current (200:0.5A)		GM47788	GM47788		
2	Transformer, current (400:0.5A)				GM47789	GM47789
1	Bracket, CT mounting			GM47799		GM47799

Kits: GM47965-KA16(KP16) to GM47965-KA18(KP18)

Qty.	Description	Common Parts	Unique Parts		
			GM47965-KA16	GM47965-KA17	GM47965-KA18
1	Insulation, terminal block	GM47797			
1	Harness, CT	GM47798			
1	Bracket, terminal block mounting	GM47801			
1	Terminal block	X-6126-27			
1	Harness, CT 6 ft.	GM40562			
2	Transformer, current (1000:0.5A)		GM47790		
2	Transformer, current (1200:0.5A)			GM47791	GM47791
1	Bracket, CT mounting		GM47800	GM47800	GM47800
1	Channel, CT mounting			GM47802	

Accessories, continued

External Battery Supply Module GM46889-KA1(KP1)

Qty.	Description	Part Number
1	PCB assembly, DXPower1500 external BOB	GM42227

Input/Output Module GM46888-KA1(KP1)

Qty.	Description	Part Number
1	PCB assembly, standard I/O module	GM41093

Input/Output Module GM46890-KA1(KP1)

Qty.	Description	Part Number
1	PCB assembly, high power I/O module	GM42186

Input/Output Module Mounting GM46258-KA1(KP1)

Qty.	Description	Part Number
1	Bracket, I/O	GM46754
1	Cover, I/O	GM49269
1	Decal	GM46756
1	Harness, wiring	GM46921

Line To Neutral Voltage Monitoring Module, 30-800 Amp

GM23425-KA1(KP1)

Qty.	Description	Part Number
1	Tool, pin extractor	241918
3	Base, cable tie	298776
3	Tie, cable	X-468-1
3	Terminal, 3/8 in. eyelet	X-283-21
3	Lead, 66 in.	SWN-1866-19200
1	Installation Instructions	TT-1328

Line To Neutral Voltage Monitoring Module, 1000-4000 Amp

GM23425-KA2(KP2)

Qty.	Description	Part Number
1	Tool, pin extractor	241918
3	Base, cable tie	298776
3	Tie, cable	X-468-1
3	Terminal, 3/8 in. eyelet	X-283-21
3	Lead, 120 in.	SWN-18120-19200
1	Installation Instructions	TT-1328

Load Shed Module, 208-480 V

GM23469-KA1

Qty.	Description	Part Number
3	Contactors	353390
1	Relay	GM13641
1	Transformer	GM23491
1	Bracket, mounting	GM23492
1	Socket	X-6124-4
1	Strap, holddown	X-6124-5
4	Fuse holder, 30 A, 600 V	X-6129-16
2	Fuse, 5 A, 250 V	X-6134-14
2	Fuse, 2 A, 600 V	X-6135-3
1	Rail, din	GM23502
8	Screw, hex washer, thread-forming	X-67-113

Accessories, continued

Load Shed Module

GM23469-KA2(KP2)

Qty.	Description	Part Number
3	Contactor	353390
1	Relay	GM13641
1	Transformer	GM47736
1	Bracket, mounting	GM23492
1	Socket	X-6124-4
1	Strap, holddown	X-6124-5
4	Fuse holder, 30 A, 600 V	X-6129-16
2	Fuse, 5 A, 250 V	X-6134-14
2	Fuse, 2 A, 600 V	X-6135-3
1	Rail, din	GM23502
8	Screw, hex washer, thread-forming	X-67-113
1	Installation Instructions	TT-1330

Logic Disconnect

Kits: GM46770-KA1(KP1) to GM46770-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM46700-KA1	GM46700-KA2	GM46700-KA3	GM46700-KA4
1	Bracket, disconnect switch	GM46772				
1	Decal, logic disconnect	GM40575				
1	Switch, disconnect		GM46771	GM46771	GM48910	GM48910
1	Harness		GM46773	GM46774	GM46773	GM46774
1	Harness, extension (sold separately)		294731	GM46919	294731	GM46919

Monitor III Software

GM41141-KP1S

Qty.	Description	Part Number
1	Cable, DB9M\DB9F, null modem	GM16657
1	USB interface	GM29225
1	Software, Windows Monitor III	GM41098
1	O/M Monitor III Software	MP-6347
1	TT Converters & Connections, Monitor III	TT-1405
1	Resistor, 121 Ohm	X-6058-27

Monitor III Software w/Modem

GM41141-KP2S

Qty.	Description	Part Number
1	Cable, DB9M\DB25M, AT modem	GM16658
1	Isolator, optical	GM17837
1	USB interface	GM29225
1	Connector, null modem	GM29363
1	Connector	GM29364
1	Converter, RS232/RS485	GM41096
1	Software, Windows Monitor III	GM41098
1	Modem, device	GM41115
1	O/M Monitor III Software	MP-6347
1	TT Converters & Connections, Monitor III	TT-1405
1	Resistor, 121 Ohm	X-6058-27

Power Meter, Digital

Kits: GM39070-KA1(KP1) to GM39070-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39070-KA1	GM39070-KA2	GM39070-KA3	GM39070-KA4
1	Door, enclosure	GM39086				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer		246886 (2)	246886 (3)	246886 (2)	246886 (3)
1	Transformer (150:5)		GM40071	GM40071		
2	Guard, terminal		GM26856	GM26856		
1	Conduit, convoluted	X-6003-36				

Accessories, continued

Power Meter, Digital, continued

Kits: GM39071-KA1(KP1) to GM39071-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39071-KA1	GM39071-KA2	GM39071-KA3	GM39071-KA4
1	Door, enclosure	GM39080				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (400:5)		248874 (2)	248874 (3)	248874 (2)	248874 (2)
1	Transformer		GM40071	GM40071		
2	Guard, terminal		GM26856	GM26856		
1	Conduit, convoluted	X-6003-36				

Kits: GM39072-KA1(KP1) to GM39072-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39072-KA1	GM39072-KA2	GM39072-KA3	GM39072-KA4
1	Door, enclosure	GM39081				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (1000:5)		291546 (2)	291546 (3)	291546 (2)	291546 (3)
1	Transformer		GM40071	GM40071		
2	Guard, terminal		GM26856	GM26856		

Kits: GM39073-KA1(KP1) to GM39073-KA2(KP2) and GM39074-KA1(KP1) to GM39074-KA2(KP2)

Qty.	Description	Common Parts	Unique Parts			
			GM39073-KA1	GM39073-KA2	GM39074-KA1	GM39074-KA2
1	Door, enclosure	GM39082				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM38864	GM40070	GM38864
3	Current transformer (2000:5)		291548	291548		
3	Current transformer (3000:5)				297675	297675
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	

Kits: GM39075-KA1(KP1) to GM39075-KA2(KP2)

Qty.	Description	Common Parts	Unique Parts	
			GM39075-KA1	GM39075-KA2
1	Door, enclosure	GM39084		
1	Harness, wiring	GM39069		
1	Switch, 3-position selector	GM39076		
1	Meter, digital		GM40070	GM38864
3	Current transformer (4000:5)	297676		
1	Transformer		GM40071	
2	Guard, terminal		GM26856	

Kits: GM39077-KA1(KP1) to GM39077-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39077-KA1	GM39077-KA2	GM39077-KA3	GM39077-KA4
1	Door, enclosure	GM39085				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (150:5)		246886 (2)	246886 (3)	246886 (2)	246886 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	
1	Conduit, convoluted	X-6003-36				

Accessories, continued

Power Meter, Digital , continued

Kits: GM39078-KA1(KP1) to GM39078-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39078-KA1	GM39078-KA2	GM39078-KA3	GM39078-KA4
1	Door, enclosure	GM39085				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (400:5)		248874 (2)	248874 (3)	248874 (2)	248874 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	
1	Conduit, convoluted	X-6003-36				

Kits: GM39088-KA1(KP1) to GM39088-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39088-KA1	GM39088-KA2	GM39088-KA3	GM39088-KA4
1	Door, enclosure	GM39081				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (150:5)		246886 (2)	246886 (3)	246886 (2)	246886 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	
1	Conduit, convoluted			X-6003-36		X-6003-36

Kits: GM39089-KA1(KP1) to GM39089-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM39078-KA1	GM39078-KA2	GM39078-KA3	GM39078-KA4
1	Door, enclosure	GM39081				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (400:5)		248874 (2)	248874 (3)	248874 (2)	248874 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	
1	Conduit, convoluted			X-6003-36		X-6003-36

Kits: GM40069-KA1(KP1) to GM40069-KA2(KP2)

Qty.	Description	Common Parts	Unique Parts	
			GM40069-KA1	GM40069-KA2
1	Door, enclosure	GM39082		
1	Harness, wiring	GM39069		
1	Switch, 3-position selector	GM39076		
1	Meter, digital		GM40070	GM38864
3	Current transformer (1500:5)	291547		
1	Transformer		GM40071	
2	Guard, terminal		GM26856	

Kits: GM41945-KA1(KP1) to GM41945-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM41945-KA1	GM41945-KA2	GM41945-KA3	GM41945-KA4
1	Door, enclosure	GM39080				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (150:5)		246886 (2)	246886 (3)	246886 (2)	246886 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	
1	Conduit, convoluted	X-6003-36				

Accessories, continued

Power Meter, Digital , continued

Kits: GM41946-KA1(KP1) to GM41946-KA4(KP4)

Qty.	Description	Common Parts	Unique Parts			
			GM41946-KA1	GM41946-KA2	GM41946-KA3	GM41946-KA4
1	Door, enclosure	GM39085				
1	Harness, wiring	GM39069				
1	Switch, 3-position selector	GM39076				
1	Meter, digital		GM40070	GM40070	GM38864	GM38864
—	Current transformer (600:5)		297148 (2)	297148 (3)	297148 (2)	297148 (3)
1	Transformer		GM40071		GM40071	
2	Guard, terminal		GM26856		GM26856	

Supervised Transfer Control Switch GM40807-KA1(KP1) (for automatic operation)

Qty.	Description	Part Number
1	Switch assembly, 3-position	GM20926
2	Key, switch assembly (included with GM20926)	—
1	Contact assembly (1 NO/1 NC contacts)	GM20929
1	Decal, supervised transfer control	GM21286
1	Harness, supervised transfer	GM40417
1	PCB assy., switch/alarm board	GM40764

Supervised Transfer Control Switch GM40807-KA2(KP2) (for non-automatic or bypass operation)

Qty.	Description	Part Number
1	Switch assembly, 3-position	GM20926
2	Key, switch assembly (included with GM20926)	—
1	Contact assembly (1 NO/1 NC contacts)	GM20929
1	Decal, supervised transfer control	GM21286
1	Harness, supervised transfer	GM40417
1	PCB assy., switch/alarm board	GM40764

Alarm Module GM40808-KA1(KP1)

Qty.	Description	Part Number
1	PCB assy., switch/alarm board	GM40764

Alarm Module GM41056-KA1

Qty.	Description	Part Number
1	PCB assy., switch/alarm board	GM40764

User Interface Covers with Padlock

Kits: GM22703-KA1(KP1) to GM22703-KA5(KP5)

Qty.	Description	Common Parts	Unique Parts				
			30-800 A		1000-4000 A		
			GM22703-KA1	GM22703-KA2	GM22703-KA5	GM22703-KA3	GM22703-KA4
—	Bracket, padlock		GM20576 (2)	GM20576 (2)	GM20576 (2)	GM20576 (1)	GM20576 (1)
1	Cover, security		GM22504		GM22504	GM22504	
1	Cover, security (with window)			GM22505			GM22505
1	Bracket, latch	GM22533					
1	Latch, compression (key operated)	GM22534					
2	Key, compression latch	GM20574					
6	Nut, 10-32	X-6210-1					
1	Installation Instructions	TT-1319					

Appendix A Abbreviations

The following list contains abbreviations that may appear in this publication.

A, amp	ampere	cfm	cubic feet per minute	ext.	external
ABDC	after bottom dead center	CG	center of gravity	F	Fahrenheit, female
AC	alternating current	CID	cubic inch displacement	fglass.	fiberglass
A/D	analog to digital	CL	centerline	FHM	flat head machine (screw)
ADC	analog to digital converter	cm	centimeter	fl. oz.	fluid ounce
adj.	adjust, adjustment	CMOS	complementary metal oxide substrate (semiconductor)	flex.	flexible
ADV	advertising dimensional drawing	cogen.	cogeneration	freq.	frequency
AHWT	anticipatory high water temperature	com	communications (port)	FS	full scale
AISI	American Iron and Steel Institute	coml	commercial	ft.	foot, feet
ALOP	anticipatory low oil pressure	Coml/Rec	Commercial/Recreational	ft. lb.	foot pounds (torque)
alt.	alternator	conn.	connection	ft./min.	feet per minute
Al	aluminum	cont.	continued	g	gram
ANSI	American National Standards Institute (formerly American Standards Association, ASA)	CPVC	chlorinated polyvinyl chloride	ga.	gauge (meters, wire size)
AO	anticipatory only	crit.	critical	gal.	gallon
API	American Petroleum Institute	CRT	cathode ray tube	gen.	generator
approx.	approximate, approximately	CSA	Canadian Standards Association	genset	generator set
AR	as required, as requested	CT	current transformer	GFI	ground fault interrupter
AS	as supplied, as stated, as suggested	Cu	copper	GND, ⊕	ground
ASE	American Society of Engineers	cu. in.	cubic inch	gov.	governor
ASME	American Society of Mechanical Engineers	cw.	clockwise	gph	gallons per hour
assy.	assembly	CWC	city water-cooled	gpm	gallons per minute
ASTM	American Society for Testing Materials	cyl.	cylinder	gr.	grade, gross
ATDC	after top dead center	D/A	digital to analog	GRD	equipment ground
ATS	automatic transfer switch	DAC	digital to analog converter	gr. wt.	gross weight
auto.	automatic	dB	decibel	H x W x D	height by width by depth
aux.	auxiliary	dBA	decibel (A weighted)	HC	hex cap
A/V	audiovisual	DC	direct current	HCHT	high cylinder head temperature
avg.	average	DCR	direct current resistance	HD	heavy duty
AVR	automatic voltage regulator	deg., °	degree	HET	high exhaust temperature, high engine temperature
AWG	American Wire Gauge	dept.	department	hex	hexagon
AWM	appliance wiring material	dia.	diameter	Hg	mercury (element)
bat.	battery	DI/EO	dual inlet/end outlet	HH	hex head
BBDC	before bottom dead center	DIN	Deutsches Institut für Normung e. V. (also Deutsche Industrie Normenausschuss)	HHC	hex head cap
BC	battery charger, battery charging	DIP	dual inline package	HP	horsepower
BCA	battery charging alternator	DPDT	double-pole, double-throw	hr.	hour
BCI	Battery Council International	DPST	double-pole, single-throw	HS	heat shrink
BDC	before dead center	DS	disconnect switch	hsg.	housing
BHP	brake horsepower	DVR	digital voltage regulator	HVAC	heating, ventilation, and air conditioning
blk.	black (paint color), block (engine)	E, emer.	emergency (power source)	HWT	high water temperature
blk. htr.	block heater	EDI	electronic data interchange	Hz	hertz (cycles per second)
BMEP	brake mean effective pressure	EFR	emergency frequency relay	IC	integrated circuit
bps	bits per second	e.g.	for example (<i>exempli gratia</i>)	ID	inside diameter, identification
br.	brass	EG	electronic governor	IEC	International Electrotechnical Commission
BTDC	before top dead center	EGSA	Electrical Generating Systems Association	IEEE	Institute of Electrical and Electronics Engineers
Btu	British thermal unit	EIA	Electronic Industries Association	IMS	improved motor starting
Btu/min.	British thermal units per minute	EI/EO	end inlet/end outlet	in.	inch
C	Celsius, centigrade	EMI	electromagnetic interference	in. H ₂ O	inches of water
cal.	calorie	emiss.	emission	in. Hg	inches of mercury
CARB	California Air Resources Board	eng.	engine	in. lb.	inch pounds
CB	circuit breaker	EPA	Environmental Protection Agency	Inc.	incorporated
cc	cubic centimeter	EPS	emergency power system	ind.	industrial
CCA	cold cranking amps	ER	emergency relay	int.	internal
ccw.	counterclockwise	ES	engineering special, engineered special	int./ext.	internal/external
CEC	Canadian Electrical Code	ESD	electrostatic discharge	I/O	input/output
cert.	certificate, certification, certified	est.	estimated	IP	iron pipe
cfh	cubic feet per hour	E-Stop	emergency stop	ISO	International Organization for Standardization
		etc.	et cetera (and so forth)	J	joule
		exh.	exhaust	JIS	Japanese Industry Standard
				k	kilo (1000)
				K	kelvin

kA	kiloampere	MTBO	mean time between overhauls	rly.	relay
KB	kilobyte (2 ¹⁰ bytes)	mtg.	mounting	rms	root mean square
kg	kilogram	MW	megawatt	rnd.	round
kg/cm ²	kilograms per square centimeter	mW	milliwatt	ROM	read only memory
kgm	kilogram-meter	μF	microfarad	rot.	rotate, rotating
kg/m ³	kilograms per cubic meter	N, norm.	normal (power source)	rpm	revolutions per minute
kHz	kilohertz	NA	not available, not applicable	RS	right side
kJ	kilojoule	nat. gas	natural gas	RTV	room temperature vulcanization
km	kilometer	NBS	National Bureau of Standards	SAE	Society of Automotive Engineers
kOhm, kΩ	kilo-ohm	NC	normally closed	scfm	standard cubic feet per minute
kPa	kilopascal	NEC	National Electrical Code	SCR	silicon controlled rectifier
kph	kilometers per hour	NEMA	National Electrical Manufacturers Association	s, sec.	second
kV	kilovolt	NFPA	National Fire Protection Association	SI	<i>Système international d'unités</i> , International System of Units
kVA	kilovolt ampere	Nm	newton meter	SI/EO	side in/end out
kVAR	kilovolt ampere reactive	NO	normally open	sil.	silencer
kW	kilowatt	no., nos.	number, numbers	SN	serial number
kWh	kilowatt-hour	NPS	National Pipe, Straight	SPDT	single-pole, double-throw
kWm	kilowatt mechanical	NPSC	National Pipe, Straight-coupling	SPST	single-pole, single-throw
L	liter	NPT	National Standard taper pipe thread per general use	spec, specs	specification(s)
LAN	local area network	NPTF	National Pipe, Taper-Fine	sq.	square
L x W x H	length by width by height	NR	not required, normal relay	sq. cm	square centimeter
lb.	pound, pounds	ns	nanosecond	sq. in.	square inch
lbm/ft ³	pounds mass per cubic feet	OC	overcrank	SS	stainless steel
LCB	line circuit breaker	OD	outside diameter	std.	standard
LCD	liquid crystal display	OEM	original equipment manufacturer	stl.	steel
ld. shd.	load shed	OF	overfrequency	tach.	tachometer
LED	light emitting diode	opt.	option, optional	TD	time delay
Lph	liters per hour	OS	oversize, overspeed	TDC	top dead center
Lpm	liters per minute	OSHA	Occupational Safety and Health Administration	TDEC	time delay engine cooldown
LOP	low oil pressure	OV	overvoltage	TDEN	time delay emergency to normal
LP	liquefied petroleum	oz.	ounce	TDES	time delay engine start
LPG	liquefied petroleum gas	p., pp.	page, pages	TDNE	time delay normal to emergency
LS	left side	PC	personal computer	TDOE	time delay off to emergency
L _{wa}	sound power level, A weighted	PCB	printed circuit board	TDON	time delay off to normal
LWL	low water level	pF	picofarad	temp.	temperature
LWT	low water temperature	PF	power factor	term.	terminal
m	meter, milli (1/1000)	ph., ∅	phase	TIF	telephone influence factor
M	mega (10 ⁶ when used with SI units), male	PHC	Phillips head crimp (screw)	TIR	total indicator reading
m ³	cubic meter	PHH	Phillips hex head (screw)	tol.	tolerance
m ³ /min.	cubic meters per minute	PHM	pan head machine (screw)	turbo.	turbocharger
mA	milliampere	PLC	programmable logic control	typ.	typical (same in multiple locations)
man.	manual	PMG	permanent-magnet generator	UF	underfrequency
max.	maximum	pot	potentiometer, potential	UHF	ultrahigh frequency
MB	megabyte (2 ²⁰ bytes)	ppm	parts per million	UL	Underwriter's Laboratories, Inc.
MCM	one thousand circular mils	PROM	programmable read-only memory	UNC	unified coarse thread (was NC)
MCCB	molded-case circuit breaker	psi	pounds per square inch	UNF	unified fine thread (was NF)
meggar	megohmmeter	pt.	pint	univ.	universal
MHz	megahertz	PTC	positive temperature coefficient	US	undersize, underspeed
mi.	mile	PTO	power takeoff	UV	ultraviolet, undervoltage
mil	one one-thousandth of an inch	PVC	polyvinyl chloride	V	volt
min.	minimum, minute	qt.	quart, quarts	VAC	volts alternating current
misc.	miscellaneous	qty.	quantity	VAR	voltampere reactive
MJ	megajoule	R	replacement (emergency) power source	VDC	volts direct current
mJ	millijoule	rad.	radiator, radius	VFD	vacuum fluorescent display
mm	millimeter	RAM	random access memory	VGA	video graphics adapter
mOhm, mΩ	milliohm	RDO	relay driver output	VHF	very high frequency
MOhm, MΩ	megohm	ref.	reference	W	watt
MOV	metal oxide varistor	rem.	remote	WCR	withstand and closing rating
MPa	megapascal	Res/Coml	Residential/Commercial	w/	with
mpg	miles per gallon	RFI	radio frequency interference	w/o	without
mph	miles per hour	RH	round head	wt.	weight
MS	military standard	RHM	round head machine (screw)	xfrm	transformer
m/sec.	meters per second				
MTBF	mean time between failure				

Appendix B Common Hardware Application Guidelines

Use the information below and on the following pages to identify proper fastening techniques when no specific reference for reassembly is made.

Bolt/Screw Length: When bolt/screw length is not given, use Figure 1 as a guide. As a general rule, a minimum length of one thread beyond the nut and a maximum length of 1/2 the bolt/screw diameter beyond the nut is the preferred method.

Washers and Nuts: Use split lock washers as a bolt locking device where specified. Use SAE flat washers with whiz nuts, spirallock nuts, or standard nuts and preloading (torque) of the bolt in all other applications.

See Appendix C, General Torque Specifications, and other torque specifications in the service literature.

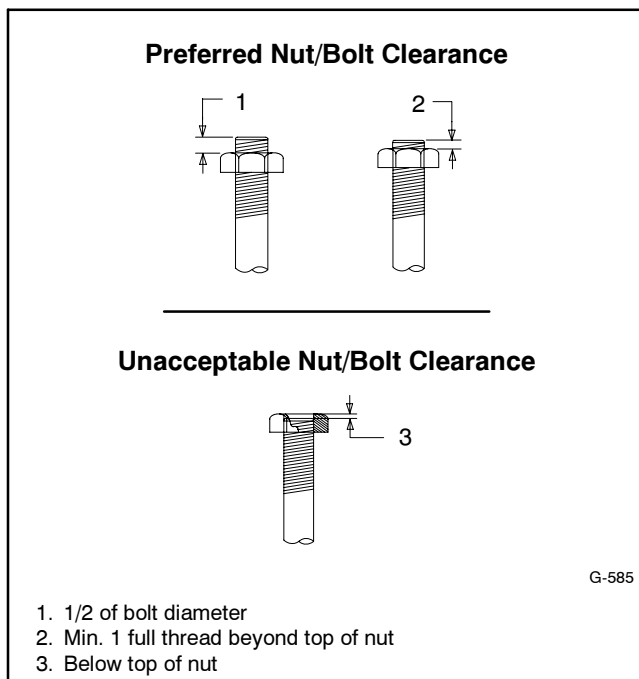


Figure 1 Acceptable Bolt Lengths

Steps for common hardware application:

1. Determine entry hole type: round or slotted.
2. Determine exit hole type: fixed female thread (weld nut), round, or slotted.

For round and slotted exit holes, determine if hardware is greater than 1/2 inch in diameter, or 1/2 inch in diameter or less. Hardware that is *greater than 1/2 inch* in diameter takes a standard nut and SAE washer. Hardware *1/2 inch or less* in diameter can take a properly torqued whiz nut or spirallock nut. See Figure 2.

3. Follow these SAE washer rules after determining exit hole type:
 - a. Always use a washer between hardware and a slot.
 - b. Always use a washer under a nut (see 2 above for exception).
 - c. Use a washer under a bolt when the female thread is fixed (weld nut).
4. Refer to Figure 2, which depicts the preceding hardware configuration possibilities.

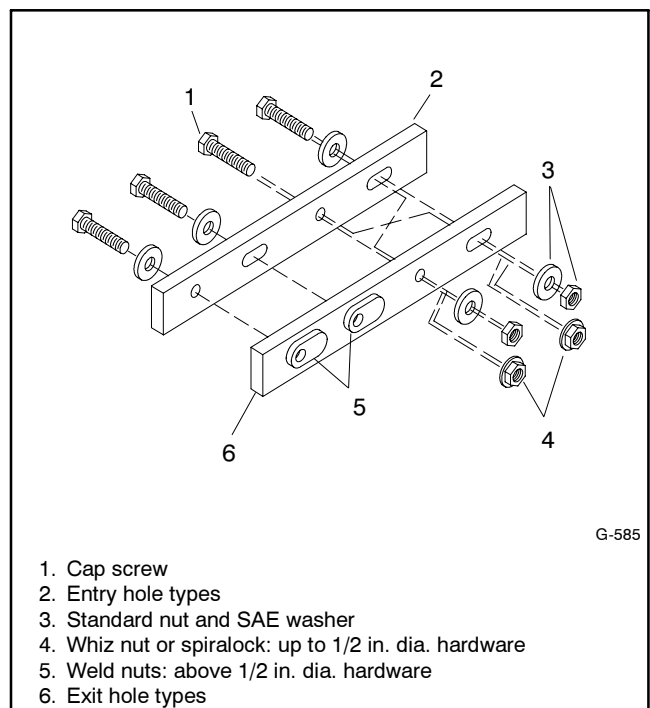


Figure 2 Acceptable Hardware Combinations

Appendix C General Torque Specifications

American Standard Fasteners Torque Specifications					
Size	Torque Measurement	Assembled into Cast Iron or Steel			Assembled into Aluminum Grade 2 or 5
		Grade 2	Grade 5	Grade 8	
8-32	Nm (in. lb.)	1.8 (16)	2.3 (20)	—	See Note 3
10-24	Nm (in. lb.)	2.9 (26)	3.6 (32)	—	
10-32	Nm (in. lb.)	2.9 (26)	3.6 (32)	—	
1/4-20	Nm (in. lb.)	6.8 (60)	10.8 (96)	14.9 (132)	
1/4-28	Nm (in. lb.)	8.1 (72)	12.2 (108)	16.3 (144)	
5/16-18	Nm (in. lb.)	13.6 (120)	21.7 (192)	29.8 (264)	
5/16-24	Nm (in. lb.)	14.9 (132)	23.1 (204)	32.5 (288)	
3/8-16	Nm (ft. lb.)	24.0 (18)	38.0 (28)	53.0 (39)	
3/8-24	Nm (ft. lb.)	27.0 (20)	42.0 (31)	60.0 (44)	
7/16-14	Nm (ft. lb.)	39.0 (29)	60.0 (44)	85.0 (63)	
7/16-20	Nm (ft. lb.)	43.0 (32)	68.0 (50)	95.0 (70)	
1/2-13	Nm (ft. lb.)	60.0 (44)	92.0 (68)	130.0 (96)	
1/2-20	Nm (ft. lb.)	66.0 (49)	103.0 (76)	146.0 (108)	
9/16-12	Nm (ft. lb.)	81.0 (60)	133.0 (98)	187.0 (138)	
9/16-18	Nm (ft. lb.)	91.0 (67)	148.0 (109)	209.0 (154)	
5/8-11	Nm (ft. lb.)	113.0 (83)	183.0 (135)	259.0 (191)	
5/8-18	Nm (ft. lb.)	128.0 (94)	208.0 (153)	293.0 (216)	
3/4-10	Nm (ft. lb.)	199.0 (147)	325.0 (240)	458.0 (338)	
3/4-16	Nm (ft. lb.)	222.0 (164)	363.0 (268)	513.0 (378)	
1-8	Nm (ft. lb.)	259.0 (191)	721.0 (532)	1109.0 (818)	
1-12	Nm (ft. lb.)	283.0 (209)	789.0 (582)	1214.0 (895)	

Metric Fasteners Torque Specifications, Measured in Nm (ft. lb.)				
Size (mm)	Assembled into Cast Iron or Steel			Assembled into Aluminum Grade 5.8 or 8.8
	Grade 5.8	Grade 8.8	Grade 10.9	
M6 x 1.00	6.2 (4.6)	9.5 (7)	13.6 (10)	See Note 3
M8 x 1.25	15.0 (11)	23.0 (17)	33.0 (24)	
M8 x 1.00	16.0 (11)	24.0 (18)	34.0 (25)	
M10 x 1.50	30.0 (22)	45.0 (34)	65.0 (48)	
M10 x 1.25	31.0 (23)	47.0 (35)	68.0 (50)	
M12 x 1.75	53.0 (39)	80.0 (59)	115.0 (85)	
M12 x 1.50	56.0 (41)	85.0 (63)	122.0 (90)	
M14 x 2.00	83.0 (61)	126.0 (93)	180.0 (133)	
M14 x 1.50	87.0 (64)	133.0 (98)	190.0 (140)	
M16 x 2.00	127.0 (94)	194.0 (143)	278.0 (205)	
M16 x 1.50	132.0 (97)	201.0 (148)	287.0 (212)	
M18 x 2.50	179.0 (132)	273.0 (201)	390.0 (288)	
M18 x 1.50	189.0 (140)	289.0 (213)	413.0 (305)	

Notes:

1. The torque values above are general guidelines. Always use the torque values specified in the service manuals and/or assembly drawings when they differ from the above torque values.
2. The torque values above are based on new plated threads. Increase torque values by 15% if non-plated threads are used.
3. Hardware threaded into aluminum must have either two diameters of thread engagement or a 30% or more reduction in the torque to prevent stripped threads.
4. Torque values are calculated as equivalent stress loading on American hardware with an approximate preload of 90% of the yield strength and a friction coefficient of 0.125.

Appendix D Common Hardware Identification

Screw/Bolts/Studs	
Head Styles	
Hex Head or Machine Head	
Hex Head or Machine Head with Washer	
Flat Head (FHM)	
Round Head (RHM)	
Pan Head	
Hex Socket Head Cap or Allen™ Head Cap	
Hex Socket Head or Allen™ Head Shoulder Bolt	
Sheet Metal Screw	
Stud	
Drive Styles	
Hex	
Hex and Slotted	
Phillips®	
Slotted	
Hex Socket	

Nuts	
Nut Styles	
Hex Head	
Lock or Elastic	
Square	
Cap or Acorn	
Wing	
Washers	
Washer Styles	
Plain	
Split Lock or Spring	
Spring or Wave	
External Tooth Lock	
Internal Tooth Lock	
Internal-External Tooth Lock	

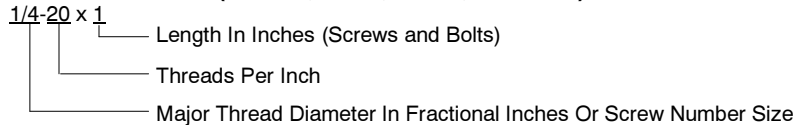
Hardness Grades	
American Standard	
Grade 2	
Grade 5	
Grade 8	
Grade 8/9 (Hex Socket Head)	
Metric	
Number stamped on hardware; 5.8 shown	

Allen™ head screw is a trademark of Holo-Krome Co.

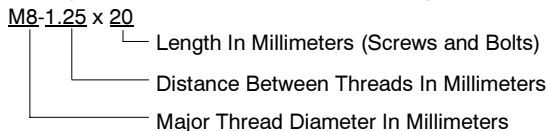
Phillips® screw is a registered trademark of Phillips Screw Company.

Sample Dimensions

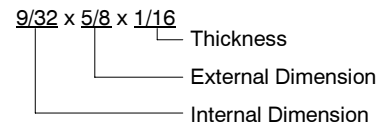
American Standard (Screws, Bolts, Studs, and Nuts)



Metric (Screws, Bolts, Studs, and Nuts)



Plain Washers



Lock Washers



Appendix E Common Hardware List

The Common Hardware List lists part numbers and dimensions for common hardware items.

American Standard

Part No.	Dimensions	Part No.	Dimensions	Part No.	Dimensions	Type										
Hex Head Bolts (Grade 5)		Hex Head Bolts, cont.		Hex Nuts												
X-465-17	1/4-20 x .38	X-6238-14	3/8-24 x .75	X-6009-1	1-8	Standard										
X-465-6	1/4-20 x .50	X-6238-16	3/8-24 x 1.25													
X-465-2	1/4-20 x .62	X-6238-21	3/8-24 x 4.00													
X-465-16	1/4-20 x .75	X-6238-22	3/8-24 x 4.50													
X-465-18	1/4-20 x .88	X-6024-5	7/16-14 x .75		X-6210-3	6-32	Whiz									
X-465-7	1/4-20 x 1.00		X-6024-2		7/16-14 x 1.00	X-6210-4	8-32	Whiz								
X-465-8	1/4-20 x 1.25		X-6024-8		7/16-14 x 1.25	X-6210-5	10-24	Whiz								
X-465-9	1/4-20 x 1.50		X-6024-3		7/16-14 x 1.50	X-6210-1	10-32	Whiz								
X-465-10	1/4-20 x 1.75		X-6024-4		7/16-14 x 2.00	X-6210-2	1/4-20	Spiralock								
X-465-11	1/4-20 x 2.00		X-6024-11		7/16-14 x 2.75	X-6210-6	1/4-28	Spiralock								
X-465-12	1/4-20 x 2.25	X-6024-12	7/16-14 x 6.50		X-6210-7	5/16-18	Spiralock									
X-465-14	1/4-20 x 2.75	X-129-15	1/2-13 x .75		X-6210-8	5/16-24	Spiralock									
X-465-21	1/4-20 x 5.00				X-6210-9	3/8-16	Spiralock									
X-465-25	1/4-28 x .38				X-6210-10	3/8-24	Spiralock									
X-465-20	1/4-28 x 1.00			X-6210-11	7/16-14	Spiralock										
X-125-33	5/16-18 x .50			X-129-17	1/2-13 x 1.00	X-6210-12	1/2-13	Spiralock								
				X-129-18	1/2-13 x 1.25	X-6210-15	7/16-20	Spiralock								
		X-129-19	1/2-13 x 1.50	X-6210-14	1/2-20	Spiralock										
		X-129-20	1/2-13 x 1.75	X-85-3	5/8-11	Standard										
		X-129-21	1/2-13 x 2.00				X-88-12	3/4-10	Standard							
		X-129-22	1/2-13 x 2.25							X-89-2	1/2-20	Standard				
		X-129-23	1/2-13 x 2.50													
		X-129-24	1/2-13 x 2.75													
		X-129-25	1/2-13 x 3.00		Washers	Part No.	ID	OD	Thick.				Bolt/ Screw			
		X-129-27	1/2-13 x 3.50													
		X-129-29	1/2-13 x 4.00													
		X-129-30	1/2-13 x 4.50													
		X-463-9	1/2-13 x 5.50													
		X-129-44	1/2-13 x 6.00													
X-125-28	5/16-18 x 3.00	X-129-51	1/2-20 x .75							X-25-46	.125	.250		.022	#4	
		X-129-45	1/2-20 x 1.25							X-25-9	.156	.375		.049	#6	
		X-129-52	1/2-20 x 1.50							X-25-48	.188	.438		.049	#8	
		X-6021-3	5/8-11 x 1.00	X-25-36						.219	.500	.049		#10		
				X-6021-4						5/8-11 x 1.25	X-25-40	.281		.625	.065	1/4
				X-6021-2						5/8-11 x 1.50	X-25-85	.344		.687	.065	5/16
X-6021-1	5/8-11 x 1.75			X-25-37						.406	.812	.065		3/8		
273049	5/8-11 x 2.00	X-25-34	.469	.922						.065	7/16					
X-125-30	5/16-24 x .75	X-6021-5	5/8-11 x 2.25	X-25-26	.531	1.062	.095	1/2								
X-125-39	5/16-24 x 2.00	X-6021-6	5/8-11 x 2.50	X-25-15	.656	1.312	.095	5/8								
X-125-38	5/16-24 x 2.75	X-6021-7	5/8-11 x 2.75	X-25-29	.812	1.469	.134	3/4								
X-6238-2	3/8-16 x .62	X-6021-12	5/8-11 x 3.75	X-25-127	1.062	2.000	.134	1								
		X-6021-11	5/8-11 x 4.50													
		X-6021-10	5/8-11 x 6.00													
		X-6021-9	5/8-18 x 2.50													
X-6238-10	3/8-16 x .75	X-6239-1	3/4-10 x 1.00													
X-6238-3	3/8-16 x .88			X-6239-8	3/4-10 x 1.25											
X-6238-11	3/8-16 x 1.00			X-6239-2	3/4-10 x 1.50											
X-6238-4	3/8-16 x 1.25			X-6239-3	3/4-10 x 2.00											
X-6238-5	3/8-16 x 1.50			X-6239-4	3/4-10 x 2.50											
X-6238-1	3/8-16 x 1.75			X-6239-5	3/4-10 x 3.00											
X-6238-6	3/8-16 x 2.00			X-6239-6	3/4-10 x 3.50											
X-6238-17	3/8-16 x 2.25															
X-6238-7	3/8-16 x 2.50															
X-6238-8	3/8-16 x 2.75															
X-6238-9	3/8-16 x 3.00															
X-6238-19	3/8-16 x 3.25			X-792-1	1-8 x 2.25											
X-6238-12	3/8-16 x 3.50					X-792-5	1-8 x 3.00									
X-6238-20	3/8-16 x 3.75					X-792-8	1-8 x 5.00									
X-6238-13	3/8-16 x 4.50															
X-6238-18	3/8-16 x 5.50															
X-6238-25	3/8-16 x 6.50															

Metric

Hex head bolts are hardness grade 8.8 unless noted.

Part No. Dimensions Hex Head Bolts (Partial Thread)

M931-05055-60	M5-0.80 x 55
M931-06040-60	M6-1.00 x 40
M931-06055-60	M6-1.00 x 55
M931-06060-60	M6-1.00 x 60
M931-06060-SS	M6-1.00 x 60
M931-06070-60	M6-1.00 x 70
M931-06070-SS	M6-1.00 x 70
M931-06075-60	M6-1.00 x 75
M931-06090-60	M6-1.00 x 90
M931-06145-60	M6-1.00 x 145
M931-06150-60	M6-1.00 x 150
M931-08035-60	M8-1.25 x 35
M931-08040-60	M8-1.25 x 40
M931-08045-60	M8-1.25 x 45
M931-08050-60	M8-1.25 x 50
M931-08055-60	M8-1.25 x 55
M931-08055-82	M8-1.25 x 55*
M931-08060-60	M8-1.25 x 60
M931-08070-60	M8-1.25 x 70
M931-08070-82	M8-1.25 x 70*
M931-08075-60	M8-1.25 x 75
M931-08080-60	M8-1.25 x 80
M931-08090-60	M8-1.25 x 90
M931-08095-60	M8-1.25 x 95
M931-08100-60	M8-1.25 x 100
M931-08110-60	M8-1.25 x 110
M931-08120-60	M8-1.25 x 120
M931-08130-60	M8-1.25 x 130
M931-08140-60	M8-1.25 x 140
M931-08150-60	M8-1.25 x 150
M931-08200-60	M8-1.25 x 200
M931-10040-82	M10-1.25 x 40*
M931-10040-60	M10-1.50 x 40
M931-10045-60	M10-1.50 x 45
M931-10050-60	M10-1.50 x 50
M931-10050-82	M10-1.25 x 50*
M931-10055-60	M10-1.50 x 55
M931-10060-60	M10-1.50 x 60
M931-10065-60	M10-1.50 x 65
M931-10070-60	M10-1.50 x 70
M931-10080-60	M10-1.50 x 80
M931-10080-82	M10-1.25 x 80*
M931-10090-60	M10-1.50 x 90
M931-10090-82	M10-1.50 x 90*
M931-10100-60	M10-1.50 x 100
M931-10110-60	M10-1.50 x 110
M931-10120-60	M10-1.50 x 120
M931-10130-60	M10-1.50 x 130
M931-10140-60	M10-1.50 x 140
M931-10180-60	M10-1.50 x 180
M931-10235-60	M10-1.50 x 235
M931-10260-60	M10-1.50 x 260
M960-10330-60	M10-1.25 x 330
M931-12045-60	M12-1.75 x 45
M960-12050-60	M12-1.25 x 50
M960-12050-82	M12-1.25 x 50*
M931-12050-60	M12-1.75 x 50
M931-12050-82	M12-1.75 x 50*
M931-12055-60	M12-1.75 x 55
M931-12060-60	M12-1.75 x 60
M931-12060-82	M12-1.75 x 60*
M931-12065-60	M12-1.75 x 65
M931-12075-60	M12-1.75 x 75
M931-12080-60	M12-1.75 x 80
M931-12090-60	M12-1.75 x 90
M931-12100-60	M12-1.75 x 100
M931-12110-60	M12-1.75 x 110

Part No. Dimensions Hex Head Bolts (Partial Thread), continued

M960-16090-60	M16-1.50 x 90
M931-16090-60	M16-2.00 x 90
M931-16100-60	M16-2.00 x 100
M931-16100-82	M16-2.00 x 100*
M931-16120-60	M16-2.00 x 120
M931-16150-60	M16-2.00 x 150
M931-20065-60	M20-2.50 x 65
M931-20090-60	M20-2.50 x 90
M931-20100-60	M20-2.50 x 100
M931-20120-60	M20-2.50 x 120
M931-20140-60	M20-2.50 x 140
M931-20160-60	M20-2.50 x 160
M931-22090-60	M22-2.50 x 90
M931-22120-60	M22-2.50 x 120
M931-22160-60	M22-2.50 x 160
M931-24090-60	M24-3.00 x 90
M931-24120-60	M24-3.00 x 120
M931-24160-60	M24-3.00 x 160
M931-24200-60	M24-3.00 x 200

Hex Head Bolts (Full Thread)

M933-04006-60	M4-0.70 x 6
M933-05030-60	M5-0.80 x 30
M933-05035-60	M5-0.80 x 35
M933-05050-60	M5-0.80 x 50
M933-06010-60	M6-1.00 x 10
M933-06012-60	M6-1.00 x 12
M933-06014-60	M6-1.00 x 14
M933-06016-60	M6-1.00 x 16
M933-06020-60	M6-1.00 x 20
M933-06025-60	M6-1.00 x 25
M933-06030-60	M6-1.00 x 30
M933-06040-60	M6-1.00 x 40
M933-06050-60	M6-1.00 x 50
M933-07025-60	M7-1.00 x 25
M933-08010-60	M8-1.25 x 10
M933-08012-60	M8-1.25 x 12
M933-08016-60	M8-1.25 x 16
M933-08020-60	M8-1.25 x 20
M933-08025-60	M8-1.25 x 25
M933-08030-60	M8-1.25 x 30
M933-08030-82	M8-1.25 x 30*
M933-10012-60	M10-1.50 x 12
M961-10020-60	M10-1.25 x 20
M933-10020-60	M10-1.50 x 20
M933-10025-60	M10-1.50 x 25
M961-10025-60	M10-1.25 x 25
M933-10025-82	M10-1.50 x 25*
M961-10030-60	M10-1.25 x 30
M933-10030-60	M10-1.50 x 30
M933-10030-82	M10-1.50 x 30*
M961-10035-60	M10-1.25 x 35
M933-10035-60	M10-1.50 x 35
M933-10035-82	M10-1.50 x 35*
M961-10040-60	M10-1.25 x 40

Part No. Dimensions Hex Head Bolts (Full Thread), continued

M933-12016-60	M12-1.75 x 16
M933-12020-60	M12-1.75 x 20
M961-12020-60F	M12-1.50 x 20
M933-12025-60	M12-1.75 x 25
M933-12025-82	M12-1.75 x 25*
M961-12030-60	M12-1.25 x 30
M933-12030-82	M12-1.75 x 30*
M961-12030-82F	M12-1.50 x 30*
M933-12030-60	M12-1.75 x 30
M933-12035-60	M12-1.75 x 35
M961-12040-82	M12-1.25 x 40*
M933-12040-60	M12-1.75 x 40
M933-12040-82	M12-1.75 x 40*
M961-14025-60	M14-1.50 x 25
M933-14025-60	M14-2.00 x 25
M961-14050-82	M14-1.50 x 50*
M961-16025-60	M16-1.50 x 25
M933-16025-60	M16-2.00 x 25
M961-16030-82	M16-1.50 x 30*
M933-16030-82	M16-2.00 x 30*
M933-16035-60	M16-2.00 x 35
M961-16040-60	M16-1.50 x 40
M933-16040-60	M16-2.00 x 40
M961-16045-82	M16-1.50 x 45*
M933-16045-82	M16-2.00 x 45*
M933-16050-60	M16-2.00 x 50
M933-16050-82	M16-2.00 x 50*
M933-16060-60	M16-2.00 x 60
M933-16070-60	M16-2.00 x 70
M933-18035-60	M18-2.50 x 35
M933-18050-60	M18-2.50 x 50
M933-18060-60	M18-2.50 x 60
M933-20050-60	M20-2.50 x 50
M933-20055-60	M20-2.50 x 55
M933-24060-60	M24-3.00 x 60
M933-24065-60	M24-3.00 x 65
M933-24070-60	M24-3.00 x 70

Pan Head Machine Screws

M7985A-03010-20	M3-0.50 x 10
M7985A-03012-20	M3-0.50 x 12
M7985A-04010-20	M4-0.70 x 10
M7985A-04016-20	M4-0.70 x 16
M7985A-04020-20	M4-0.70 x 20
M7985A-04050-20	M4-0.70 x 50
M7985A-04100-20	M4-0.70 x 100
M7985A-05010-20	M5-0.80 x 10
M7985A-05012-20	M5-0.80 x 12
M7985A-05016-20	M5-0.80 x 16
M7985A-05020-20	M5-0.80 x 20
M7985A-05025-20	M5-0.80 x 25
M7985A-05030-20	M5-0.80 x 30
M7985A-05080-20	M5-0.80 x 80
M7985A-05100-20	M5-0.80 x 100
M7985A-06100-20	M6-1.00 x 100

Flat Head Machine Screws

M965A-04012-SS	M4-0.70 x 12
M965A-05012-SS	M5-0.80 x 12
M965A-05016-20	M5-0.80 x 16
M965A-06012-20	M6-1.00 x 12

* This metric hex bolt's hardness is grade 10.9.

Metric, continued

Part No.	Dimensions	Type
Hex Nuts		
M934-03-50	M3-0.50	Standard
M934-04-50	M4-0.70	Standard
M934-04-B	M4-0.70	Brass
M934-05-50	M5-0.80	Standard
M934-06-60	M6-1.00	Standard
M934-06-64	M6-1.00	Std. (green)
M6923-06-80	M6-1.00	Spiralock
M982-06-80	M6-1.00	Elastic Stop
M934-08-60	M8-1.25	Standard
M6923-08-80	M8-1.25	Spiralock
M982-08-80	M8-1.25	Elastic Stop
M934-10-60	M10-1.50	Standard
M934-10-60F	M10-1.25	Standard
M6923-10-80	M10-1.50	Spiralock
M6923-10-62	M10-1.50	Spiralock†
M982-10-80	M10-1.50	Elastic Stop
M934-12-60	M12-1.75	Standard
M934-12-60F	M12-1.25	Standard
M6923-12-80	M12-1.75	Spiralock
M982-12-80	M12-1.75	Elastic Stop
M982-14-60	M14-2.00	Elastic Stop
M6923-16-80	M16-2.00	Spiralock
M982-16-80	M16-2.00	Elastic Stop
M934-18-80	M18-2.5	Standard
M982-18-60	M18-2.50	Elastic Stop
M934-20-80	M20-2.50	Standard
M982-20-80	M20-2.50	Elastic Stop
M934-22-60	M22-2.50	Standard
M934-24-80	M24-3.00	Standard
M982-24-60	M24-3.00	Elastic Stop
M934-30-80	M30-3.50	Standard

Washers

Part No.	ID	OD	Thick.	Bolt/ Screw
M125A-03-80	3.2	7.0	0.5	M3
M125A-04-80	4.3	9.0	0.8	M4
M125A-05-80	5.3	10.0	1.0	M5
M125A-06-80	6.4	12.0	1.6	M6
M125A-08-80	8.4	16.0	1.6	M8
M125A-10-80	10.5	20.0	2.0	M10
M125A-12-80	13.0	24.0	2.5	M12
M125A-14-80	15.0	28.0	2.5	M14
M125A-16-80	17.0	30.0	3.0	M16
M125A-18-80	19.0	34.0	3.0	M18
M125A-20-80	21.0	37.0	3.0	M20
M125A-24-80	25.0	44.0	4.0	M24

† This metric hex nut's hardness is grade 8.

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