



Parts Manual

Transfer Switch

300/400/600 Amps

OTPCSEC (Spec A)

MODEL IDENTIFICATION

This catalog covers models produced under the Cummins®/Onan® and Cummins Power Generation brand names.

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO. and SERIAL NO. from the Cummins Power Generation nameplate.

For handy reference, insert your nameplate information in the spaces below.

MODEL AND SPEC NO.

SERIAL NO.

DIGITAL CONTROL SOFTWARE VERSION
AND DATE (IF APPLICABLE)

SAFETY PRECAUTIONS

The following symbols are used in Cummins Power Generation manuals to alert users to the potentially dangerous conditions relating to maintenance of equipment and replacement of parts. Please read and observe.



This symbol warns of immediate hazards which will result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or product or property damage.

PRODUCT SAFETY PRECAUTIONS



Service and repair of Cummins Power Generation equipment must be performed by trained, experienced personnel only. Improper service or repair may result in property damage, severe personal injury or death. Do not use this catalog as a guide to servicing your equipment. Read and follow the IMPORTANT SAFETY INSTRUCTIONS in the Service Manual appropriate for the equipment you are working on.



Contact with USED ENGINE OILS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking or changing engine oils take all necessary precautions not to ingest, breathe the fumes or contact the used oil.



Contact with ASBESTOS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When handling engine gaskets take all necessary precautions not to ingest, breathe or contact the dust from the gaskets! Use adequate ventilation and wear protective gloves, masks and clothing!



Contact with BENZINE and LEAD, found in gasoline, fuel additives and solvents has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking, draining or adding gasoline and fuel additives or using solvents take all necessary precautions not to ingest, breathe the fumes or contact the liquids. Use adequate ventilation and wear protective gloves, masks and protective clothing!

Introduction

This catalog applies to the Cummins Power Generation OTPCSE 300/400/600 Amp Transfer Switch. Each illustrated part is identified by a reference number corresponding to the same reference number in the parts list for that group. Parts illustrations are typical. Using the model and spec number from the switch box nameplate, select the parts that apply to your Transfer Switch. Unless otherwise noted in the parts description, parts are interchangeable between models.

Feature Options

Code	Description	Code	Description
A028	3-Pole Switch	L202	Auxiliary Relay – Emergency Position – 12 VDC
A029	4-Pole Switch	L203	Auxiliary Relay – Normal Position – 12 VDC
A035	Utility to Generator Set Applications	M003	Terminal Block – 30 Points
A041	One Phase – 2 or 3 wire	M007	Load Shed – From Emergency
A042	Three Phase – 3 or 4 wire	M017	Security – Front Panel
A044	Frequency – 60 Hz	M018	Display – Digital
A045	Frequency – 50 Hz	M022	Monitoring – Load
B001	Cabinet – Type 1	M023	Module – Relay Signal
B002	Cabinet – Type 3R	M031	Interface – Comms Network
B010	Cabinet – Type 12	N020	Terminal Block – Retransfer Inhibit
C023	Control – Level 1	R020	Voltage – 120
C024	Control – Level 2	R021	Voltage – 208
D009	Meters – Bar Graph Display	R022	Voltage – 220
K001	Battery Charger – 2 Amp, 12/24V	R023	Voltage – 240
KB59	Battery Charger – 15 Amp, 12V	R024	Voltage – 380
KB60	Battery Charger – 12 Amp, 24V	R025	Voltage – 416
L101	Auxiliary Relay – 24 VDC Coil	R026	Voltage – 480
L102	Auxiliary Relay – Emergency Position – 24 VDC	R035	Voltage – 440
L103	Auxiliary Relay – Normal Position – 24 VDC	S043	UL Listed
L201	Auxiliary Relay – 12 VDC Coil		

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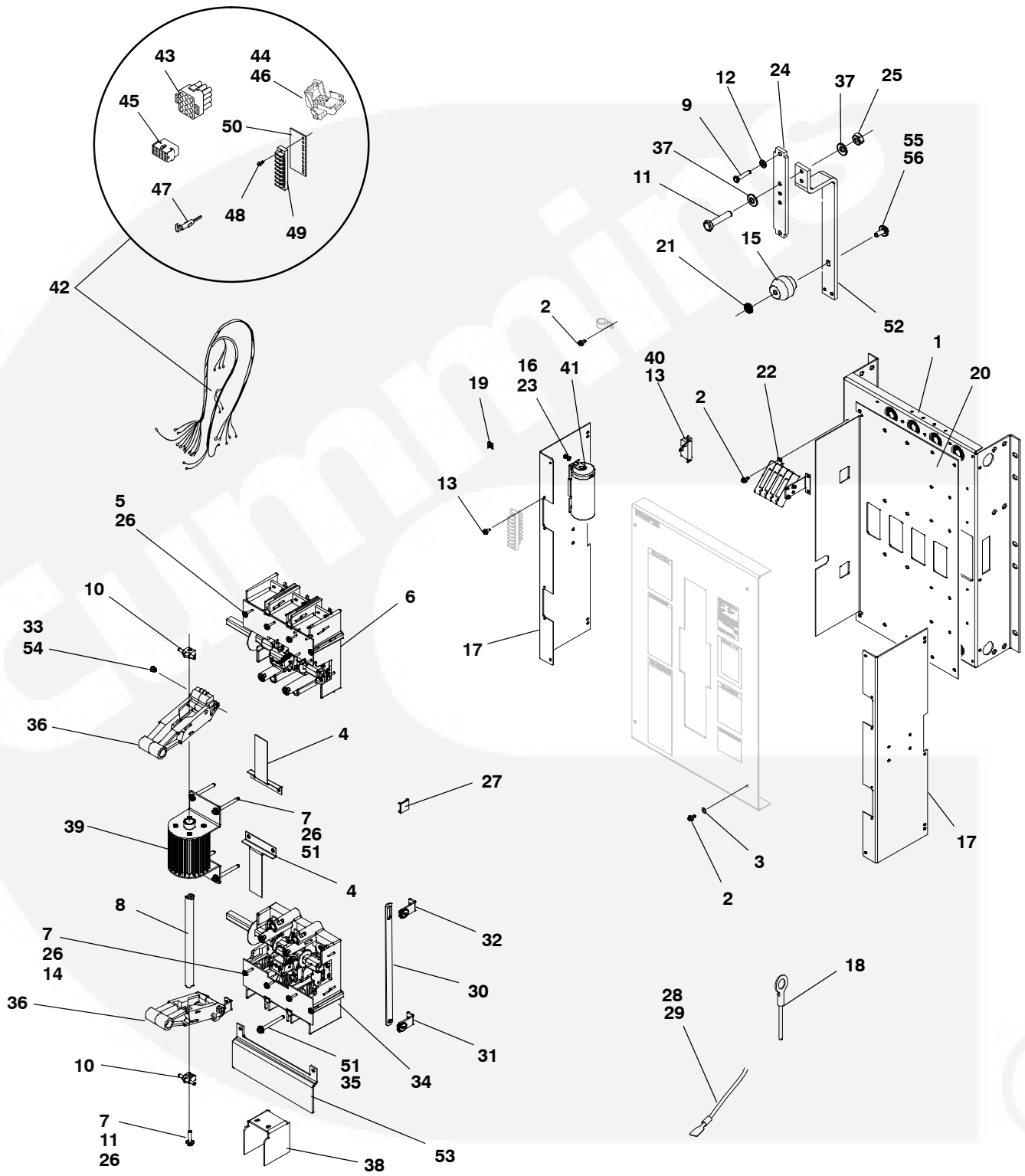
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Abbreviations

Some of the following abbreviations may be used throughout this Parts Catalog:

AC	Alternating Current	MCM	Metric Circular Mils
Amp	Ampere	mm	Millimeter
A/R	As Required	MOH	Mobile Off Highway
AVR	Automatic Voltage Regulator	NFS	Not For Sale
AWG	American Wire Gauge	NPT	National Pipe Thread
CSA	Canadian Standard Association	OD	Outside Diameter
DC	Direct Current	oz.	Ounce
Deg.	Degree	PCB	Printed Circuit Board
EFC	Electronic Fuel Control	Ph	Phase
EIT	External/Internal Tooth	PMG	Permanent Magnet Generator
EPROM	Erasable Programmable Read Only Memory	PT/CT	Potential Transformer/ Current Transformer
ET	External Tooth	RFI	Radio Frequency Interference
GFI	Ground Fault Interrupter	RT	Right
ID	Inside Diameter	Spec	Specification
IEC	International Electrotechnical Commission	Thk	Thick
IT	Internal Tooth	UL	Underwriters Laboratories Inc.
kW	Kilowatt	UNC	Unified Coarse Thread
LPG	Liquid Petroleum Gas	UNF	Unified Fine Thread
LT	Left	VAC	Volts Alternating Current
M(meter number)	Meter	VDC	Volts Direct Current
		W/(ET, IT, EIT)	With

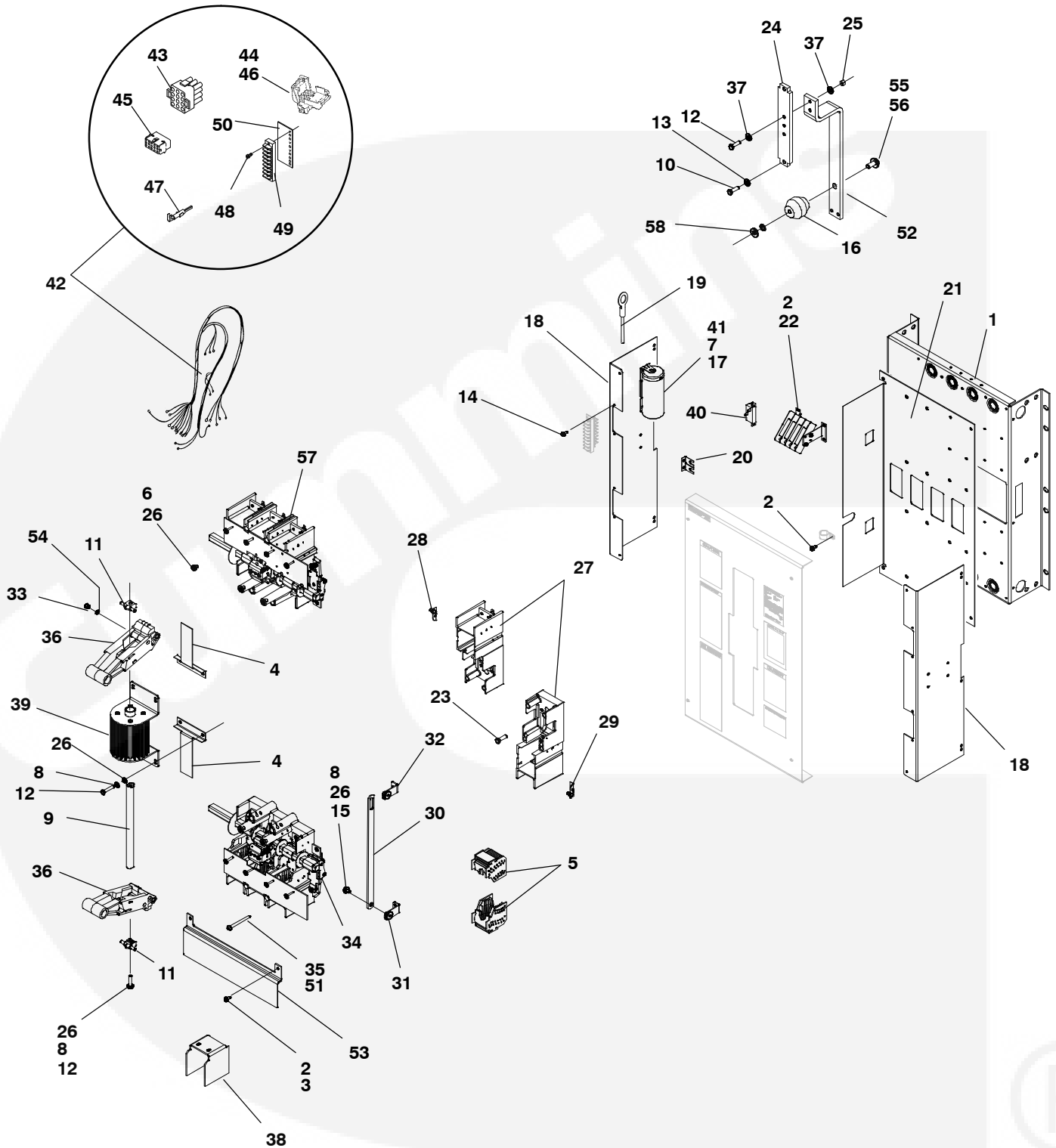
Transfer Switch 3-Pole Front Connect



Transfer Switch 3-Pole Front Connect1

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	306-3415	1	Base, Mounting	35	526-2081	8	Washer, Flat
2	815-0652	23	Screw, Slotted – Hex Head (#10-32 x .50)	36	306-1372-S0	2	Handle, Actuator
3	114-0023	8	Washer, Flat (#10)	37	851-0027	12	Washer, Conical Disk Spring (1/4)
4	306-2340	2	Barrier	38	306-3893	1	Barrier, Lug
5	800-0002	2	Screw, Cap – Hex Head (1/4-20 x .38)	39			Actuator, Linear
6	306-5019-02	1	Block and Crossbar Assembly		306-3109	1	115 VAC
7	526-0018	8	Washer, Flat (1/4)		306-3111	1	208 VAC
8	306-3424	1	Rod, Actuator		306-3112	1	220/240 VAC
9	800-0028	6	Screw, Cap – Hex Head (1/4-20 x .50)		306-3114	1	380/416 VAC
10	306-3400-02	2	Rod, End		306-3115	1	440/480 VAC
11	800-0008	12	Screw, Cap – Hex Head (1/4-20 x 1.25)	40			Breaker, Circuit
12	851-0028	6	Washer, Spring (5/16)		320-0613	1	115 VAC
13	815-0651	6	Screw, Pan Head – Cross Recessed – W/ET (#6-32 x .75)		320-0611	1	208 VAC
14	800-0003	2	Screw, Cap – Hex Head (1/4-20 x .50)		320-0611	1	220/240 VAC
15	332-2512	3	Standoff, Insulator (3/8-16)		320-0609	1	380/416 VAC
16	870-0131	A/R	Nut, Hex – W/ET (#10-32)		320-0608	1	440/480 VAC
17	306-3418	2	Bracket, Terminal	41			Capacitor
18	226-3380	1	Lead (380/416/440/480 VAC)		312-0218-S0	1	208 VAC
19	332-2605	1	Jumper, Terminal		312-0206-S0	1	220/240 VAC
20	306-3416	1	Barrier, Mounting Base		312-0204-S0	2	380/416 VAC
21	526-0030	3	Washer, Flat (3/8)	42	338-4897	1	Harness, Switch (Includes the Parts Marked ^)
22	306-4749	2	Contact, Auxiliary	43	323-1314	1	^ Plug, Connector (12 Place)
23	815-0029	A/R	Screw, Machine – Flat Head – Cross Recessed (#10-32 x .50)	44	323-1316	2	^ Relief, Strain (12 Place)
24	337-1941	3	Strap, Jumper	45	323-1156	1	^ Plug, Connector (15 Place)
25	862-0001	6	Nut, Hex (1/4-20)	46	323-1158	2	^ Relief, Strain (15 Place)
26	850-0039	10	Washer, Lock (1/4)	47	323-1199	23	^ Pin, Contact
27	332-2420	A/R	Mount, Cable Tie	48	815-0937	4	^ Screw, Pan Head – Cross Recessed (#6-32 x 1/2)
28	226-4796-05	1	Lead (NN)	49	332-2832	2	^ Block, Terminal (8 Place)
29	226-4796-06	1	Lead (EN)	50	332-2903	2	^ Marker, Strip
30	306-3107	1	Bar, Interlock	51	815-0656	8	Screw, Machine – Round Head (1/4-20 x 2.75)
31	306-0510	1	Arm, Interlock	52	337-1940	3	Strap, Load
32	306-0509	1	Arm, Interlock	53	306-3899	1	Cover, Lug
33	815-0485	4	Screw, Shoulder (#10-32)	54	850-0030	4	Washer, Lock – Split (#10)
34	306-5019-01	1	Block and Crossbar Assembly – Emergency	55	851-0022	3	Washer, Conical Disk Spring (3/8)
				56	800-0050	3	Screw, Cap – Hex Head (3/8-16 x 1)
							^ Parts Included in 338-4897 Wiring Harness.

Transfer Switch 4-Pole Front Connect

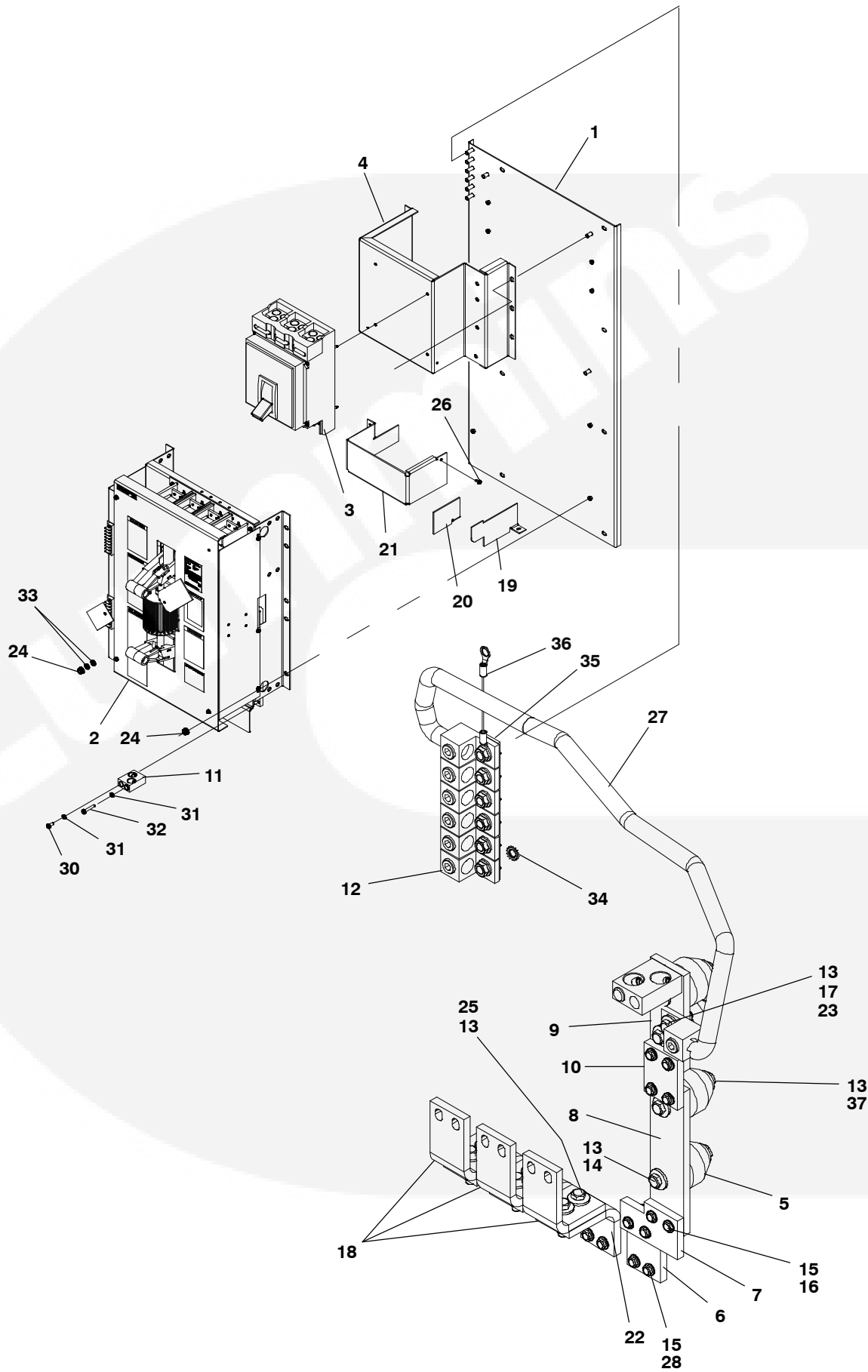


Transfer Switch 4-Pole Front Connect

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	306-3415	1	Base, Mounting	37	851-0027	16	Washer, Conical Disk Spring (1/4)
2	815-0652	25	Screw, Slotted – Hex Head (#10-32 x .50)	38	306-3893	2	Barrier, Lug
3	114-0023	10	Washer, Flat (#10)	39			Actuator, Linear
4	306-2340	2	Barrier		306-3109	1	115 VAC
5	306-4898	2	Chute, Arc		306-3111	1	208 VAC
6	800-0002	2	Screw, Cap – Hex Head (1/4-20 x .38)		306-3112	1	220/240 VAC
7	815-0029	A/R	Screw, Machine – Flat Head – Cross Recessed (#10-32 x .50)		306-3114	1	380/416 VAC
					306-3115	1	440/480 VAC
8	526-0018	8	Washer, Flat (1/4)	40			Breaker, Circuit
9	306-3424	1	Rod, Actuator		320-0613	1	115 VAC
10	800-0028	8	Screw, Cap – Hex Head (1/4-20 x .50)		320-0611	1	208 VAC
					320-0611	1	220/240 VAC
11	306-3400-02	2	Rod, End		320-0609	1	380/416 VAC
12	800-0008	14	Screw, Cap – Hex Head (1/4-20 x 1.25)		320-0608	1	440/480 VAC
13	851-0028	8	Washer, Spring (5/16)	41			Capacitor
14	815-0651	6	Screw, Pan Head – Cross Recessed – W/ET (#6-32 x .75)		312-0239	1	115 VAC
					312-0218	1	208 VAC
15	800-0003	2	Screw, Cap – Hex Head (1/4-20 x .50)		312-0206	1	220/240 VAC
16	332-2512	4	Standoff, Insulator (3/8-16)		312-0204	2	380/416 VAC
17	870-0131	A/R	Nut, Hex – W/ET (#10-32)		312-0236	2	440/480 VAC
18	306-3418	2	Bracket, Terminal	42	338-4897	1	Harness, Switch (Includes the Parts Marked ^)
19	226-3380	1	Lead (380/416/440/480 VAC)	43	323-1314	1	^ Plug, Connector (12 Place)
20	332-2605	1	Jumper, Terminal	44	323-1316	2	^ Relief, Strain (12 Place)
21	306-3416	1	Barrier, Mounting Base	45	323-1156	1	^ Plug, Connector (15 Place)
22	306-4749	2	Contact, Auxiliary	46	323-1158	2	^ Relief, Strain (15 Place)
23	815-0653	8	Screw, Round Head – Cross Recessed (#10-32 x 1.75)	47	323-1199	23	^ Pin, Contact
				48	815-0937	4	^ Screw, Pan Head – Cross Recessed (#6-32 x 1/2)
24	337-1941	4	Strap, Jumper	49	332-2832	2	^ Block, Terminal (8 Place)
25	862-0001	8	Nut, Hex (1/4-20)	50	332-2903	2	^ Marker, Strip
26	850-0039	12	Washer, Lock (1/4)	51	815-0656	8	Screw, Machine – Round Head (1/4-20 x 2.75)
27	306-5021	2	Block (Contact)	52	337-1940	4	Strap, Load
28	306-4889	1	Plate, Guide (LH)	53	306-3892	1	Cover, Lug
29	306-4890	1	Plate, Guide (RH)	54	850-0030	4	Washer, Lock – Split (#10)
30	306-3107	1	Bar, Interlock	55	851-0022	4	Washer, Conical Disk Spring (3/8)
31	306-0510	1	Arm, Interlock	56	800-0050	4	Screw, Cap – Hex Head (3/8-16 x 1)
32	306-0509	1	Arm, Interlock	57	306-5020-02	1	Block and Crossbar Assembly
33	815-0485	4	Screw, Shoulder (#10-32)	58	526-0030	4	Washer, Flat (3/8)
34	306-5020-01	1	Block and Crossbar Assembly – Emergency	59	815-0157	2	Screw, Set – Socket Head (#10-32 x 1.0) (Not Shown)
35	526-2081	8	Washer, Flat				
36	306-1372-S0	2	Handle, Actuator				

^ Parts Included in 338-4897 Wiring Harness.

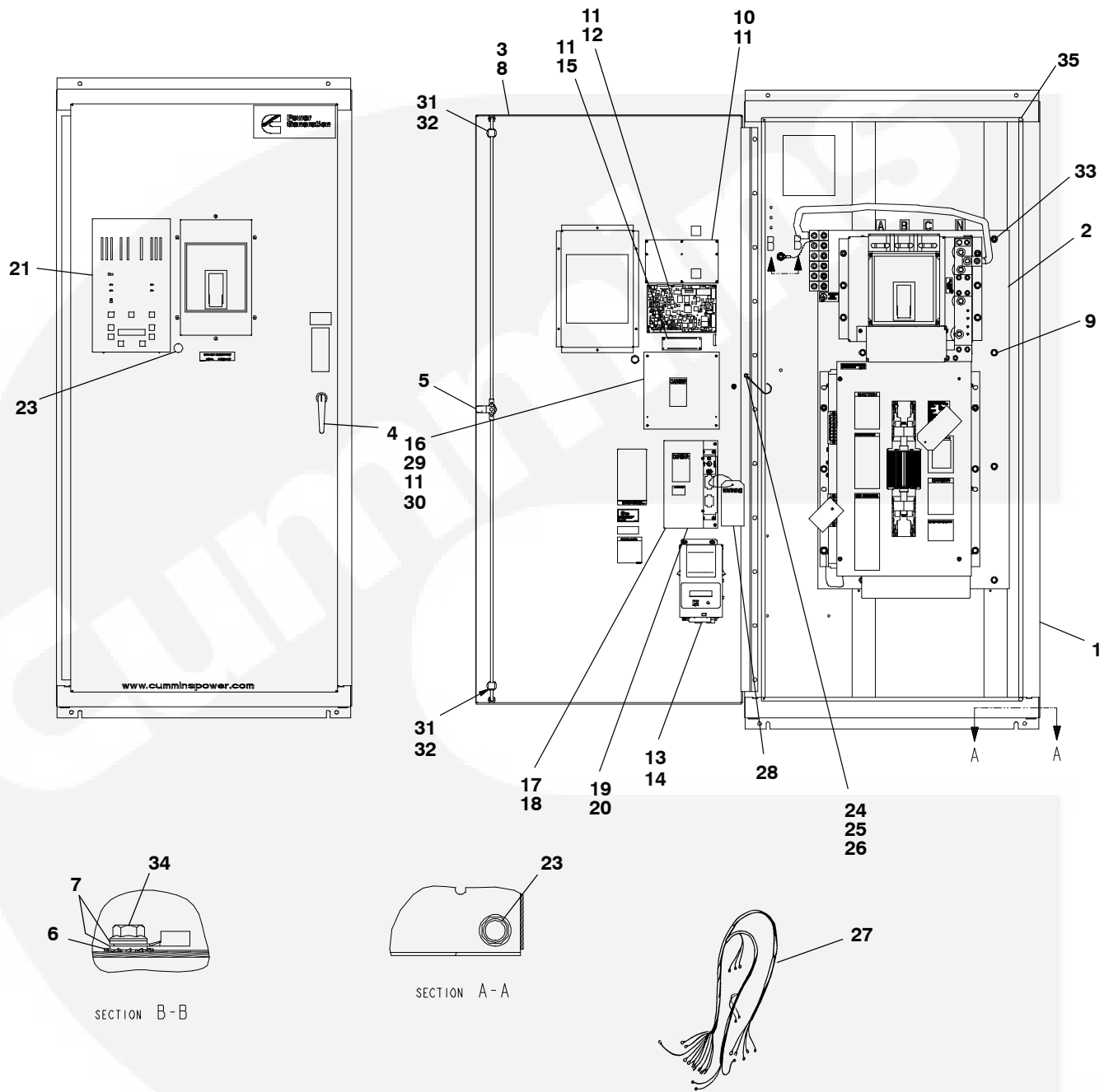
Transfer Switch



Transfer Switch

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-6609-02	1	Plate, Mounting	20	319-6619	1	Guard, Electrical
2			Switch, Transfer	21	319-6390	1	Guard, Electrical
			3-Pole (See Page 7 for Components)	22	337-3863	3	Bar, Bus
			4-Pole (See Page 9 for Components)	23	870-0281	17	Nut, Hex – Whiz Lok (3/8-16)
				24	821-0028	8	Nut, Hex – Whiz Lok (3/8-16)
3			Breaker, Circuit (See Page 27 for Components)	25	821-0052	6	Screw, Cap – Hex Head (3/8-16 x 1.5)
4	319-6610-02	1	Bracket, Circuit Breaker	26	815-0652	5	Screw, Slotted – Hex Head (#10-32 x 1/2)
5	332-2512	4	Standoff, Insulator	27	334-2354	1	Cable, Shielded
6	337-3858	1	Bar, Bus (Neutral) (4-Pole)	28	800-0005	A/R	Screw, Cap – Hex Head (1/4-20 x .75)
7	337-3877	1	Bar, Bus (4-Pole)				Terminal (3-Pole) (Not Shown)
8	337-3881	1	Bar, Bus	29	332-2366	2	Screw, Pan Head (1/4-20 x .625)
9	337-3882	1	Bar, Bus	30	822-0085	9	Washer, Lock (1/4)
10	337-3883	1	Bar, Bus				Screw, Pan Head (1/4-20 x 1.50)
11	332-2660	9	Lug, Solderless	31	850-0039	18	Washer, Flat (3/8)
12	332-3653	7	Lug, Solderless	32	822-0091	9	Washer, Lock – W/EIT (3/8)
13	851-0022	15	Washer, Spring (3/8)				Bar, Bus – Ground
14	800-0050	4	Screw, Cap – Hex Head (3/8-16 x 1)	33	526-0029	2	Lead
15	851-0027	A/R	Washer, Spring (1/4)	34	856-0010	6	Screw, Cap – Hex Head (3/8-16 x 0.63)
16	800-0007	A/R	Screw, Cap – Hex Head (1/4-20 x 1)	35	337-4086	1	Screw, Cap – Hex Head (1/4-20 x 3/8) (3-Pole) (Not Shown)
17	800-0051	1	Screw, Cap – Hex Head (3/8-16 x 1.25)	36	226-4990-03	1	
18	337-3864	3	Bar, Bus	37	800-0047	4	
19	319-6382	2	Guard, Electrical	38	800-0002	2	

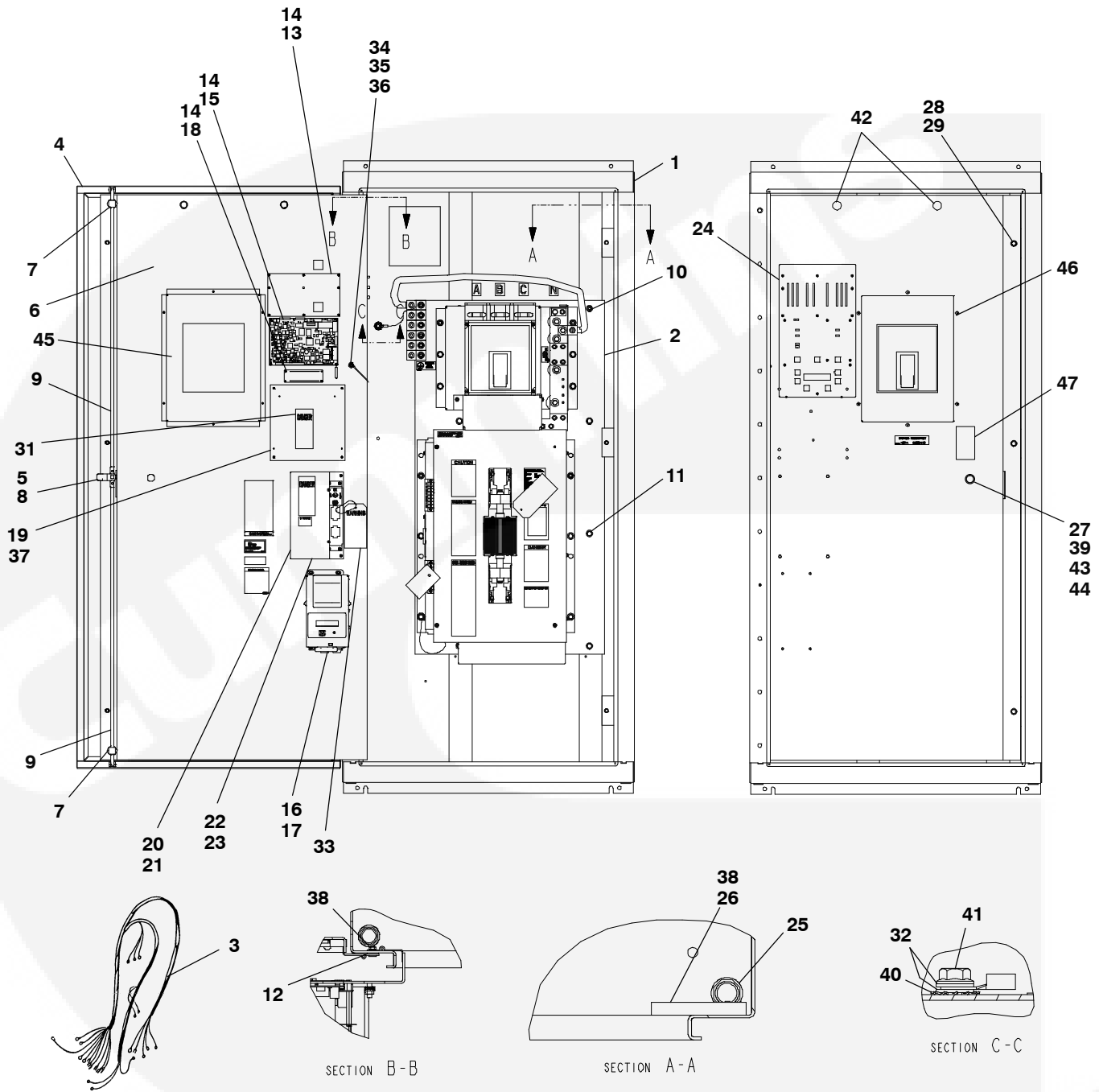
Control
NEMA 1



Control NEMA 1

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-5287-02	1	Box, Control	17			Relay – Assembly (See Page 16 for Components)
2			Switch, Transfer (See Page 11 for Components)	18	815-0960-03	4	Screw, Cross Recessed – Pan Head W/ET (M4 x 0.7 x 10)
3	319-6517-02	1	Door, Transfer Switch	19	319-3942-02	1	Shield, Relay Plate
4	406-0613	1	Handle, Keyed	20	815-0792-02	2	Screw, Cross Recessed – Pan Head (M4 x 0.7 x 8)
5	306-3525	1	Latch, Cam (3 Point)	21			Membrane, Panel
6	856-0008	1	Washer, Lock – W/EIT (5/16)		300-5391	1	Level 1 Control Without Digital Display
7	526-0115	2	Washer, Flat (5/16)		300-5392	1	With Digital Display
8	870-0131	11	Nut, Hex – W/ET (#10-32)		300-5392	1	Level 2 Control Without Meters–Bar Graph Display
9	821-0030	5	Screw, Hex – Lock (3/8-16 x 1)		300-5393	1	With Meters–Bar Graph Display
10	300-5180	1	Board, Printed Circuit – Bargraph	22	226-4798	1	Lead – ATS Sensing (Not Shown)
11	815-0959-02	26	Screw, Cross Recessed – Pan Head – W/ET (M3 x 0.5 x 7)	23	517-0137	3	Plug, Hole
12			Board, Printed Circuit – Digital	24	853-2006	2	Washer – W/ET (M6)
	300-5146-01	1	Level 1 Control	25	870-2054	1	Nut, Lock (M6 x 1)
	300-5147-04	1	Level 2 Control	26	226-4916-01	1	Lead
13		1	Charger, Battery (See Pages 24 and 25)	27			Harness, Main
14	800-2006	4	Nut, Hex (M5)		338-3854	1	Level 1 Control
15	300-5151	1	Display, Digital		338-3855-01	1	Level 2 Control
16			Board, Printed Circuit – Power Module	28	323-1156	1	Plug, Circuit
			Level 1 Control	29	306-4523	1	Cover, Printed Circuit Board
	300-5148-01	1	120 VAC	30	870-2216	4	Standoff, Male Snap
	300-5148-02	1	208, 220, 240, 440, 480 VAC	31	306-3467	2	Rod, Guide
	300-5148-04	1	380, 416 VAC	32	306-3526-12	2	Rod, Roller
			Level 2 Control	33	870-0281	2	Nut, Hex – Whiz Lok (3/8-16)
	300-5149-05	1	120 VAC	34	870-0550-07	1	Nut, Hex Flange (5/16-18)
	300-5149-06	1	208, 220, 240, 440, 480 VAC	35	508-0231	2	Bumper
	300-5149-08	1	380, 416 VAC				

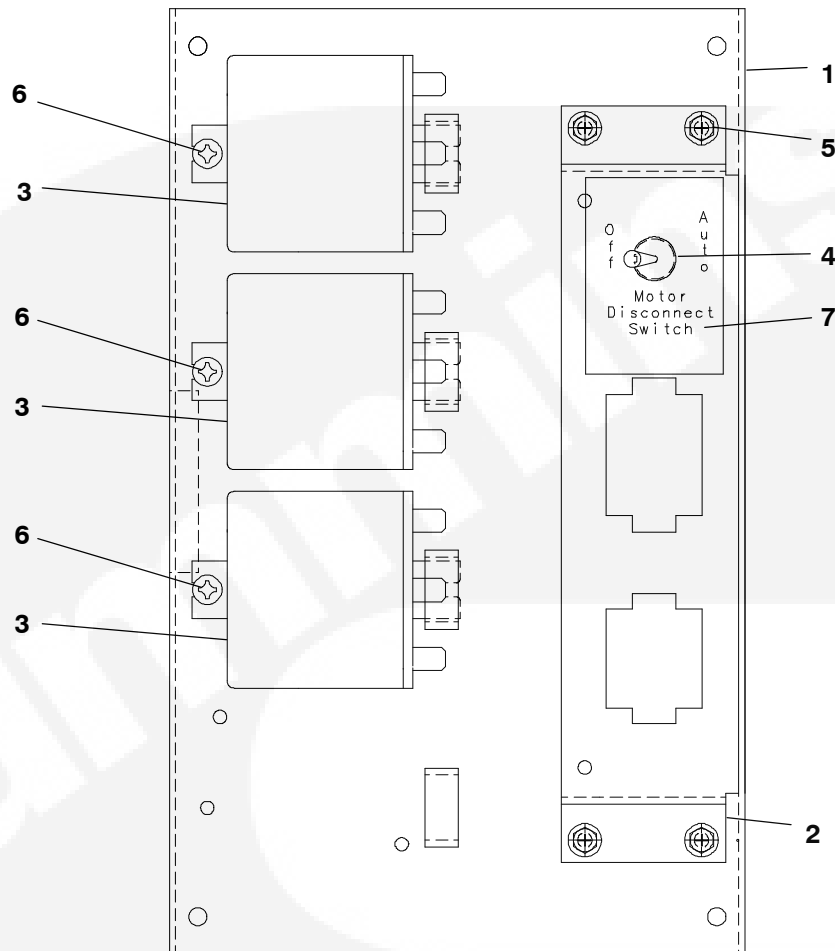
Control 3R and 12



Control 3R and 12

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Box, Control	21	815-0960-03	4	Screw, Cross Recessed – Pan Head – W/ET (M4 x 0.7 x 10)
	319-5287-02	1	3R	22	319-3942-02	1	Cover, Relay Plate
	319-5321-02	1	12	23	815-0792-02	2	Screw, Cross Recessed – Pan Head (M4 x 0.7 x 8)
2			Switch, Transfer (See Page 11 for Components)	24			Membrane, Panel
3			Harness, Main				Level 1 Control
	338-3854	1	Level 1 Control				Without Digital Display
	338-3855-01	1	Level 2 Control	300-5391	1		With Digital Display
4	319-6524-02	1	Door, Transfer Switch	300-5392	1		Level 2 Control
5	406-0613	1	Handle, Keyed				Without Meters–Bar Graph Display
6	319-6523-02	1	Door, Transfer Switch	300-5392	1		With Meters–Bar Graph Display
7	306-3467	2	Rod, Guide				
8	306-3525	1	Latch, Cam (3 Point)	300-5393	1		
9	306-3526-12	2	Rod, Roller				
10	870-0281	2	Nut, Hex – Whiz Lok (3/8–16)	25	517-0266	4	Plug, Hole
11	821-0030	5	Screw, Lock (3/8–16 x 1)	26	319-7405-02	3	Bracket, Saddle
12	508-0233	11	Washer, Rubber	27	406-0714	1	Knob, Ball
13	300-5180	1	Board, Printed Circuit – Bargraph	28	800-0047	3	Screw, Cap – Hex Head (3/8–16 x 5/8)
14	815-0959-02	26	Screw, Pan Head – Cross Recessed – W/ET (M3 x 0.5 x 7)	29	526-0029	3	Washer (3/8)
				30	226-4798	1	Lead – ATS Sensing (Not Shown)
15			Board, Printed Circuit – Digital	31	306-4523	1	Cover, Printed Circuit Board
	300-5146	1	Level 1 Control	32	526-0115	2	Washer, Flat (5/16)
	300-5147-01	1	Level 2 Control	33	323-1156	1	Plug, Circuit
16		1	Charger, Battery (See Pages 24 and 25)	34	226-4916-01	1	Lead
17	800-2006	4	Nut, Hex (M5)	35	853-2006	2	Washer – W/ET (M6)
18	300-5151	1	Display, Digital	36	870-2054	1	Nut, Lock – Flange (M6)
19			Board, Printed Circuit – Power Module	37	870-2216	4	Standoff, Male Snap
			Level 1 Control	38	870-0131	17	Nut, Hex – W/ET (#10–32)
	300-5148-01	1	120 VAC	39	526-0018	1	Washer, Flat (1/4)
	300-5148-02	1	208, 220, 240, 440, 480 VAC	40	856-0008	1	Washer, Lock – W/EIT (5/16)
	300-5148-04	1	380, 416 VAC	41	870-0550-07	1	Nut, Hex (5/16–18)
			Level 2 Control	42	517-0137	2	Plug, Hole
	300-5149-05	1	120 VAC	43	800-0004	1	Screw, Hex Head (1/4–20 x 5/8)
	300-5149-06	1	208, 220, 240, 440, 480 VAC	44	850-0040	1	Washer, Lock (1/4)
20			Relay – Assembly (See Page 16 for Components)	45	306-5243	1	Bracket, Cover
				46	815-0652	6	Screw, Hex Head – Slotted
				47	098-7613	1	Label, Danger

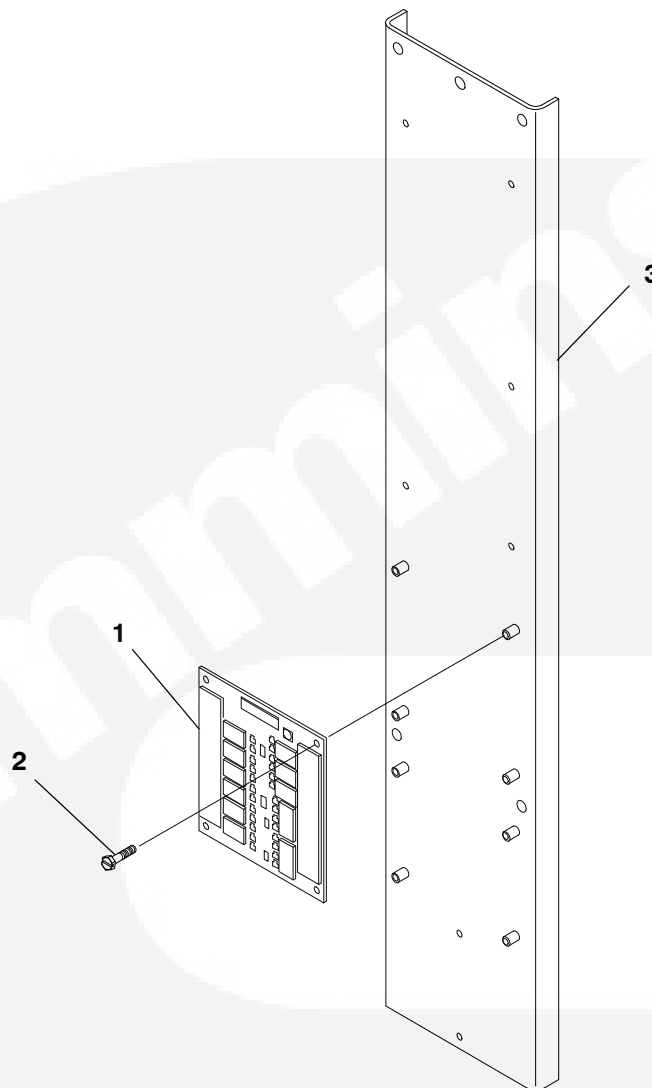
Relay Plate



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-3940-02	1	Plate, Relay
2	319-3941-02	1	Bracket, Connector
3	307-2929	3	Relay, 3PDT
4	308-0406	1	Switch, Toggle
5	815-0955-03	4	Screw, Cap – Hex Head (M4 x 10)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	815-0792-02	3	Screw, Cap – Hex Head – Cross Recessed (M4 x 8)
7	098-7643	1	Label, Plate Assembly

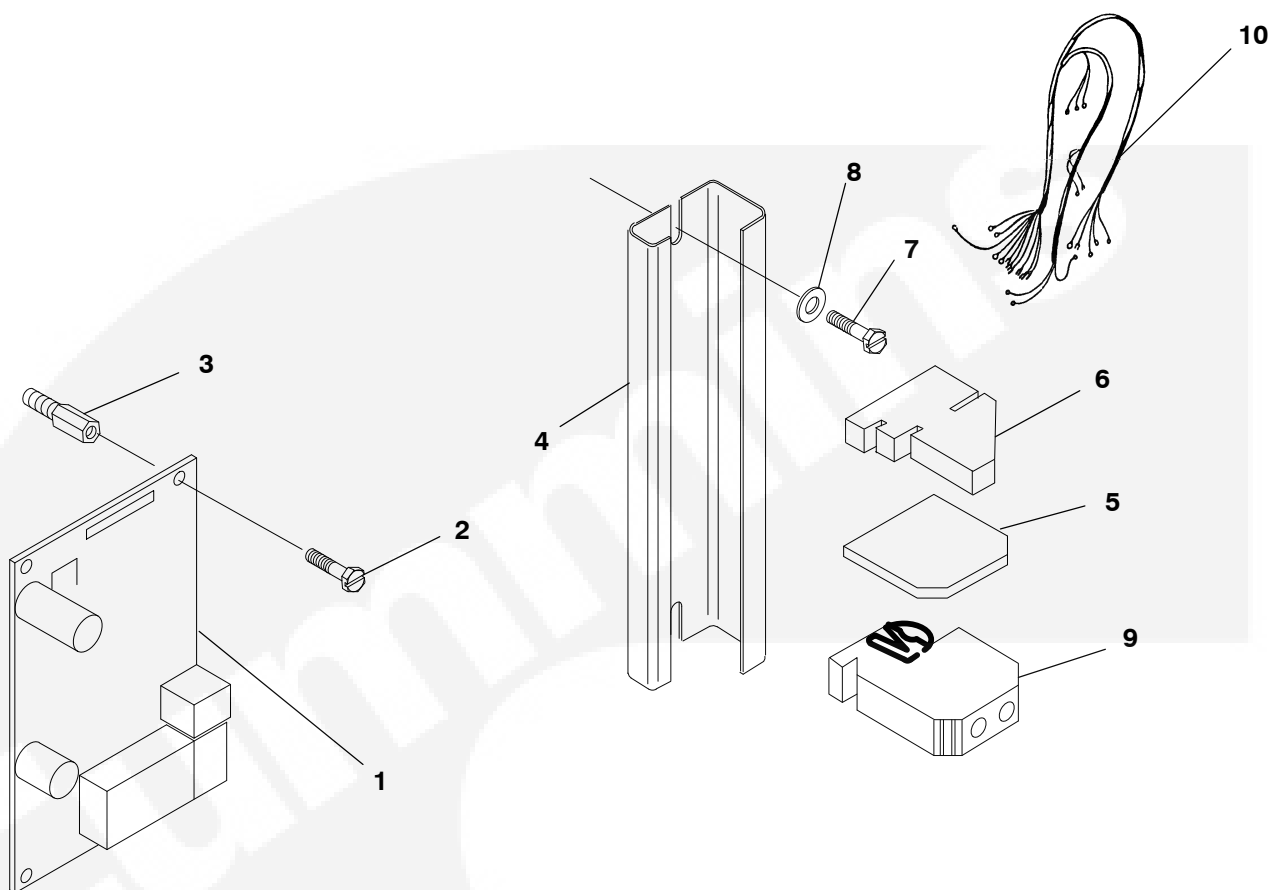
Relay Module



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	300-5152	1	Board, Printed Circuit – Relay Module	3	319-3943-01	1	Plate, Mounting
2	815-0959-02	4	Screw, Pan Head – Cross Recessed (M3 x 0.5 x 7)				



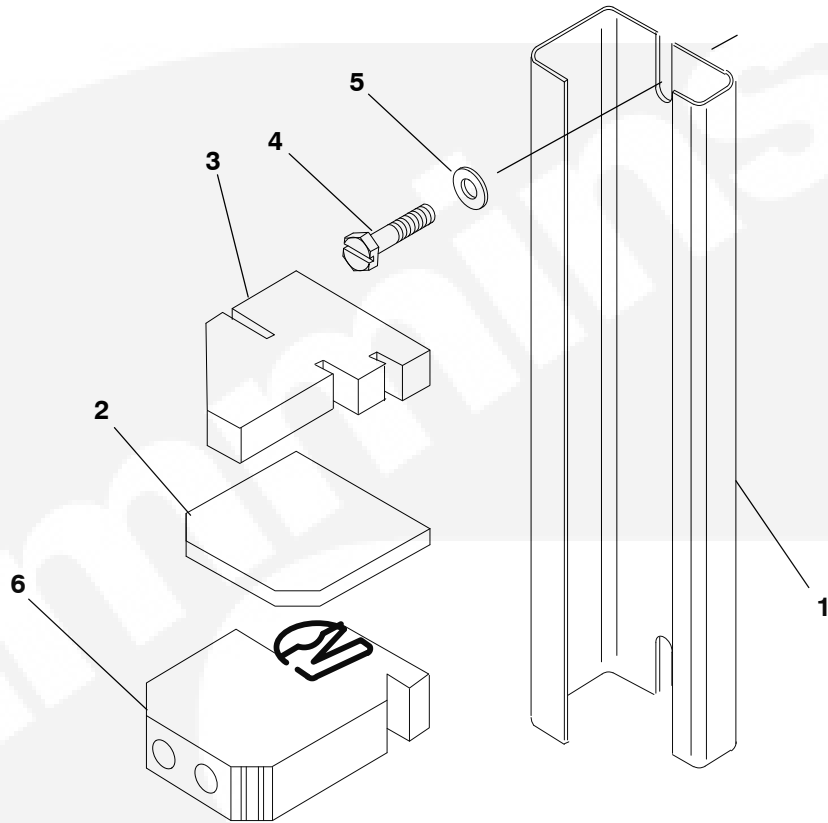
Network Module



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	327-1542	1	Board, Printed Circuit – Network Module
2	815-0959-03	4	Screw, Pan Head (M3 x 0.5 x 8)
3	870-2213-02	4	Standoff, Hex Thread (M3)
4	332-2837-09	1	Rail, Terminal Block
5	332-2841	1	Plate, End – Terminal

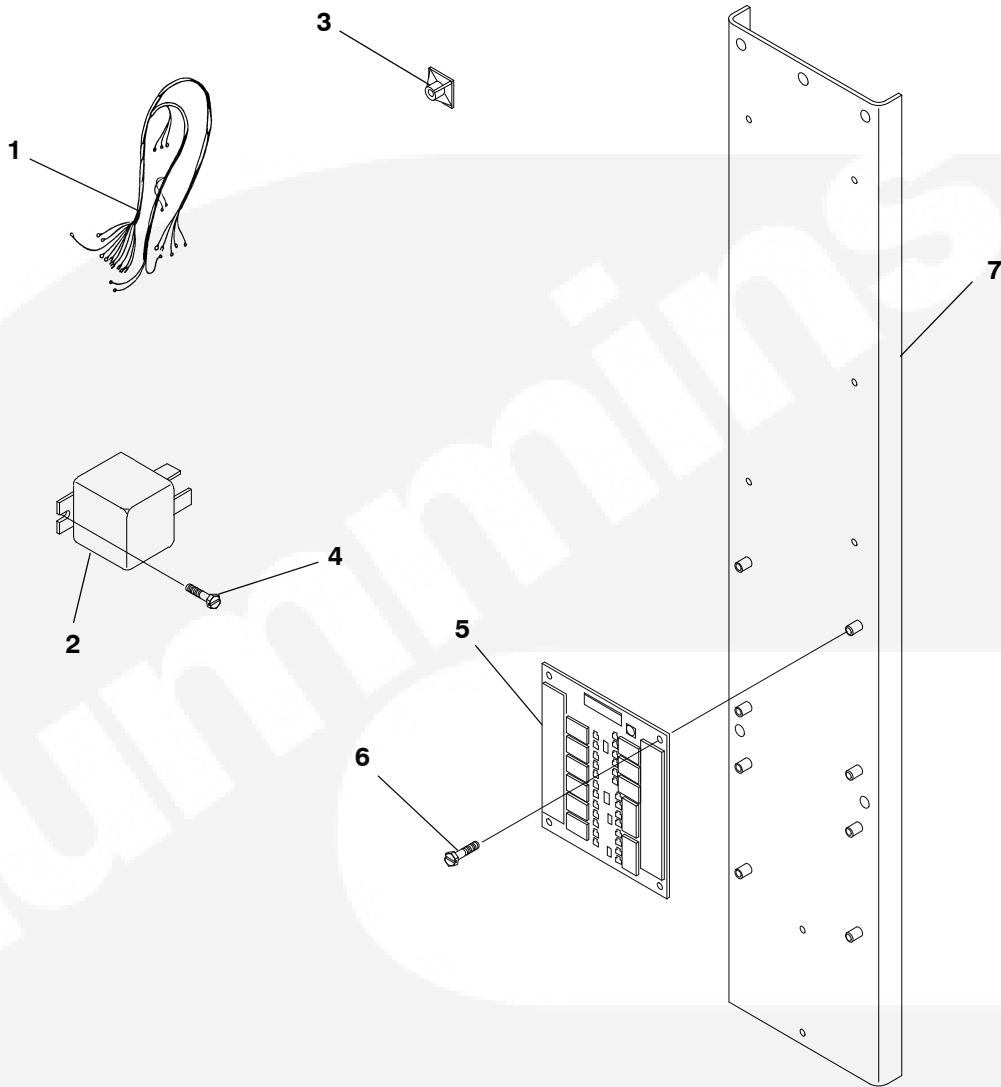
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	332-2839	2	Bracket, End – Terminal
7	815-0955-03	2	Screw, Phillips/Hex Head – GND (M4 x 10)
8	526-0003	2	Washer, Flat
9	332-2836-01	2	Block, Terminal (Sectional)
10	338-3886	1	Harness, Network

Terminal Block



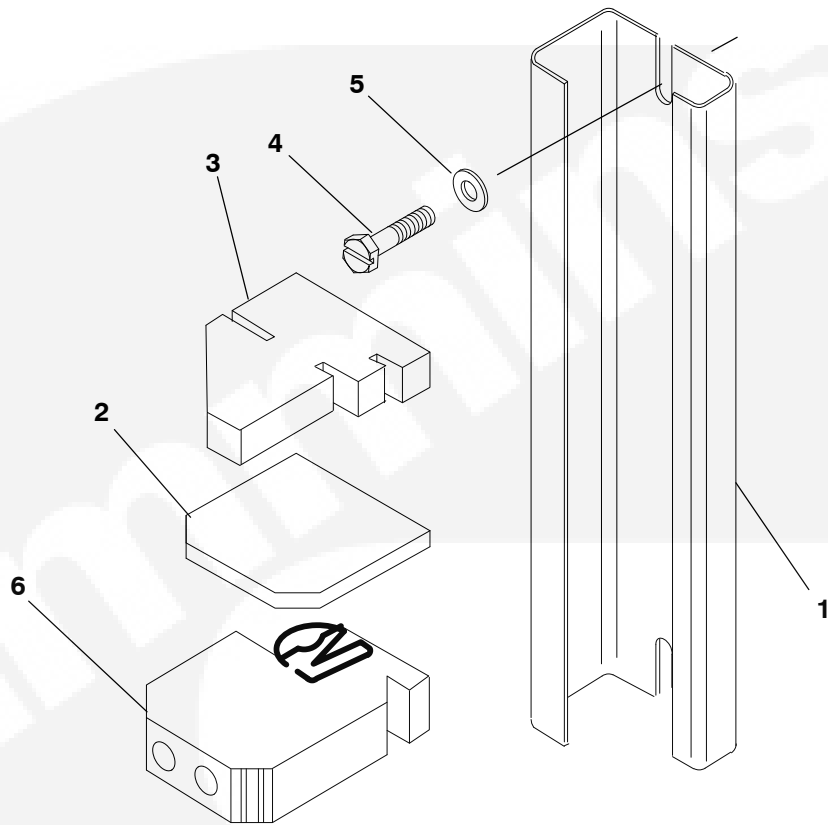
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-2837-09	1	Rail, Terminal Block	5	526-0003	2	Washer, Flat
2	332-2841	1	Plate, End – Terminal	6	332-2836-02	3	Block, Terminal (Sectional)
3	332-2839	2	Bracket, End – Terminal				
4	815-0955-03	2	Screw, Phillips/Hex Head – GND (M4 x 10)				

Load Shed



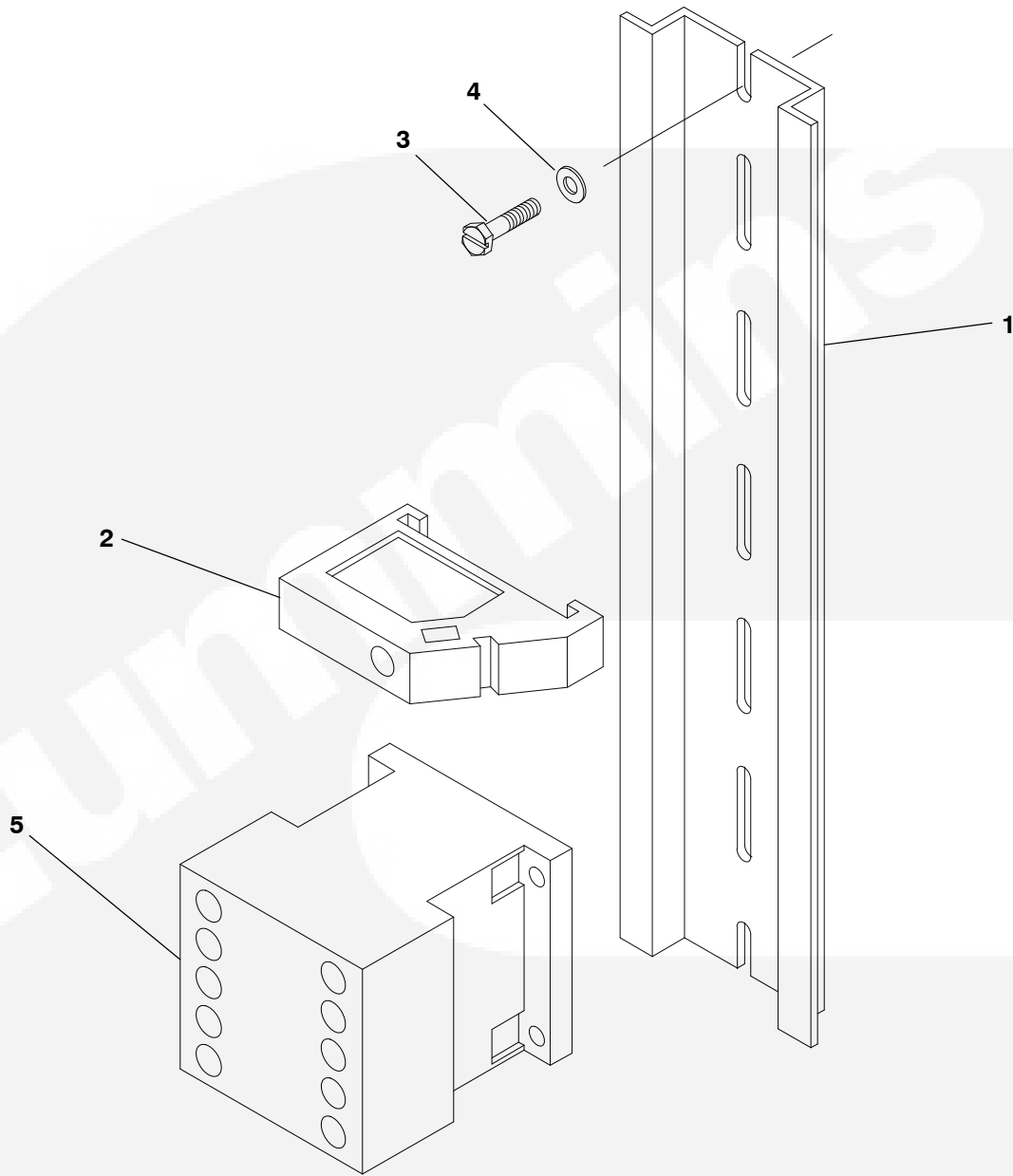
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	338-3876-01	1	Harness, Load Shed	4	815-0792-02	1	Screw, Pan Head (M4 x 8)
	338-3876-02	1	All Except 600 Volt	5	300-5152	1	Board, Printed Circuit – Relay Module
2	307-2929	1	Relay – 3PDT (12 VDC)	6	815-0959-02	4	Screw, Pan Head (M3 x 7)
3	332-2420	2	Mount, Cable Tie	7	319-3943-01	1	Plate, Mounting

Terminal Block Retransfer Inhibit



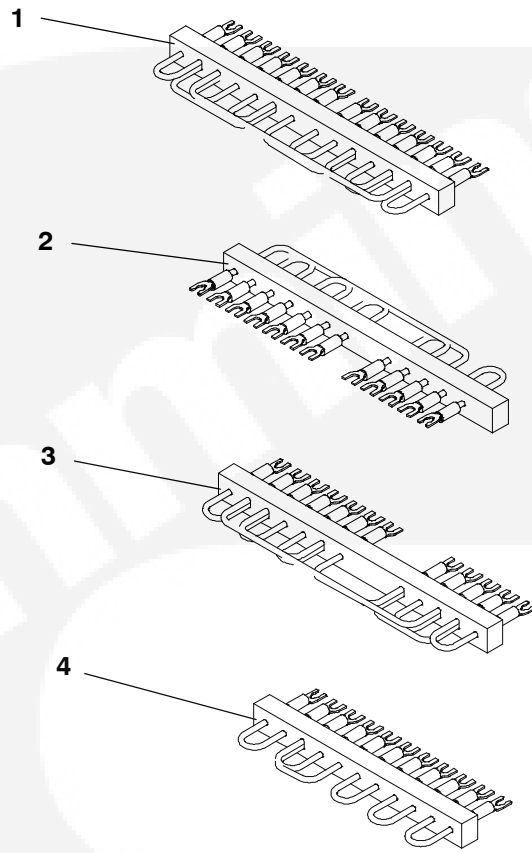
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-2837-09	1	Rail, Terminal Block	5	526-0003	2	Washer, Flat
2	332-2841	1	Plate, End - Terminal	6	332-2836-01	2	Block, Terminal (Sectional)
3	332-2839	2	Bracket, End - Terminal				
4	815-0955-03	2	Screw, Phillips/Hex Head - GND (M4 x 10)				

Auxiliary Relay



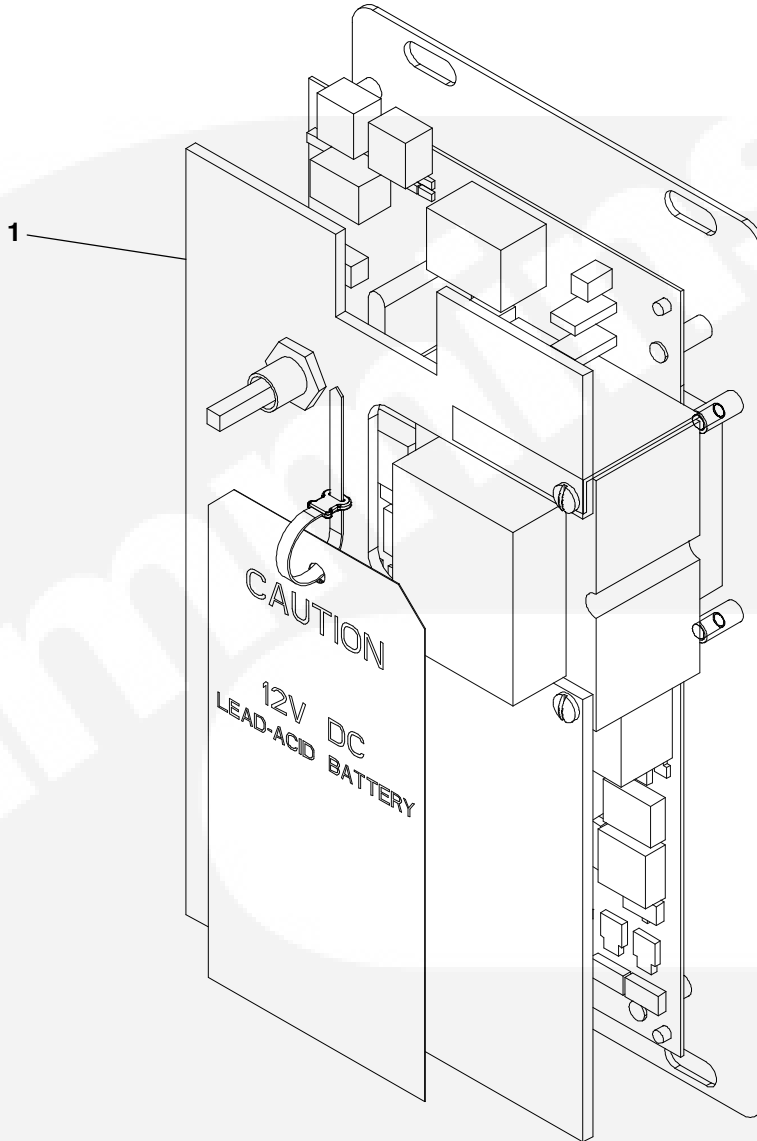
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-2879-04	1	Rail, Terminal	4	526-0003	2	Washer, Flat
2	332-2878	2	Bracket, End	5			Relay, Control
3	815-0955-03	2	Screw, Phillips/Hex Head – GND (M4 x 10)		307-2873	1	12 VDC
					307-2874	1	24 VDC

Terminal Jumper



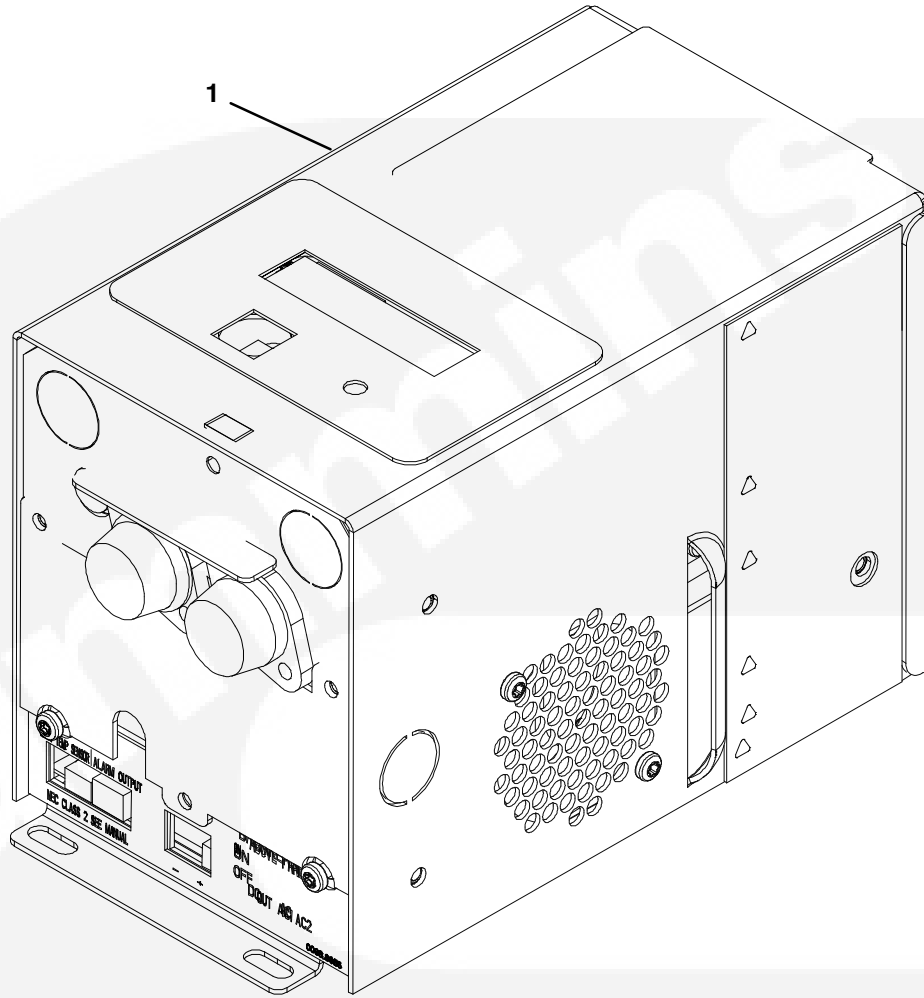
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	332-4291	2	Jumper, Terminal (190-240V Level 2)	3	332-4300	2	Jumper, Terminal (240V Level 2)
2	332-4298	2	Jumper, Terminal (380-480V Level 2)	4	332-4301	1	Jumper, Terminal (190-240V Level 1)

Battery Charger **2 Amp, 12/24 Volt**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Charger, Battery				
	300-6026-01	1	120V				
	300-6026-02	1	208V				
	300-6026-03	1	240V				
	300-6026-05	1	380V				
	300-6026-06	1	416V				
	300-6026-07	1	480V				

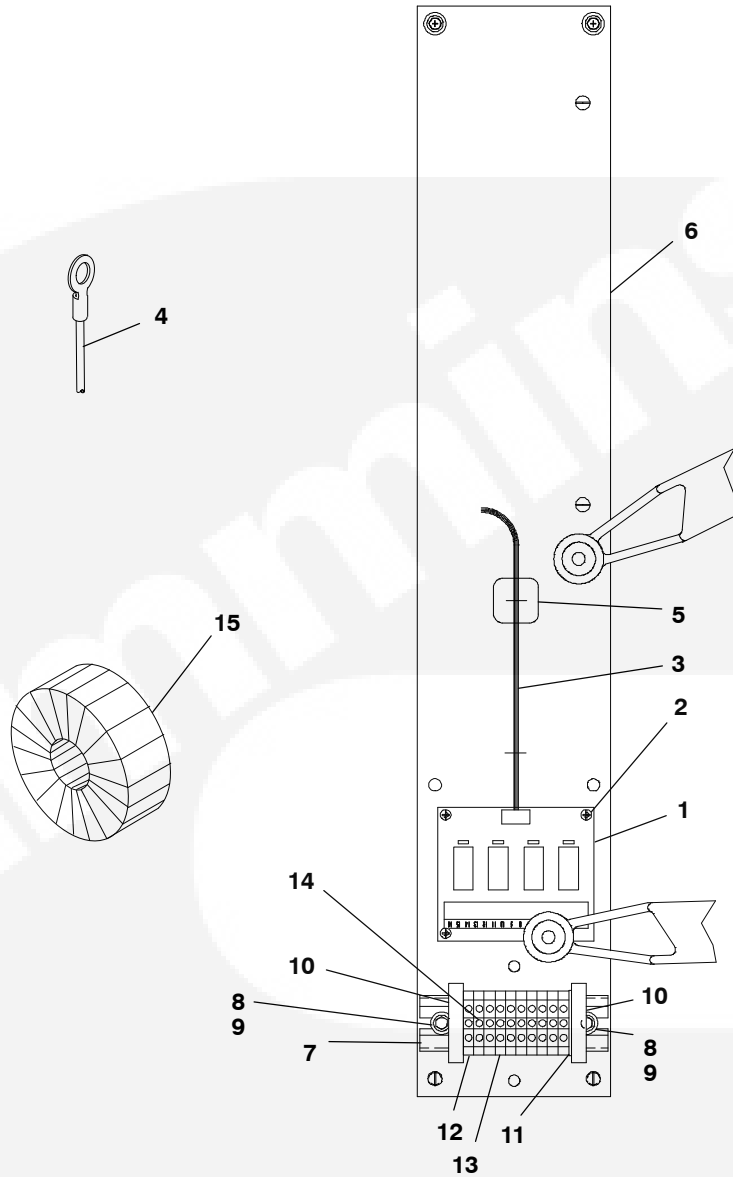
Battery Charger **15/12 Amp, 12/24 Volt**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Charger, Battery				
	300-5878-13	1	120, 208, 240V				
	300-5878-15	1	380V				
	300-5878-16	1	416V				
	300-5878-17	1	480V				

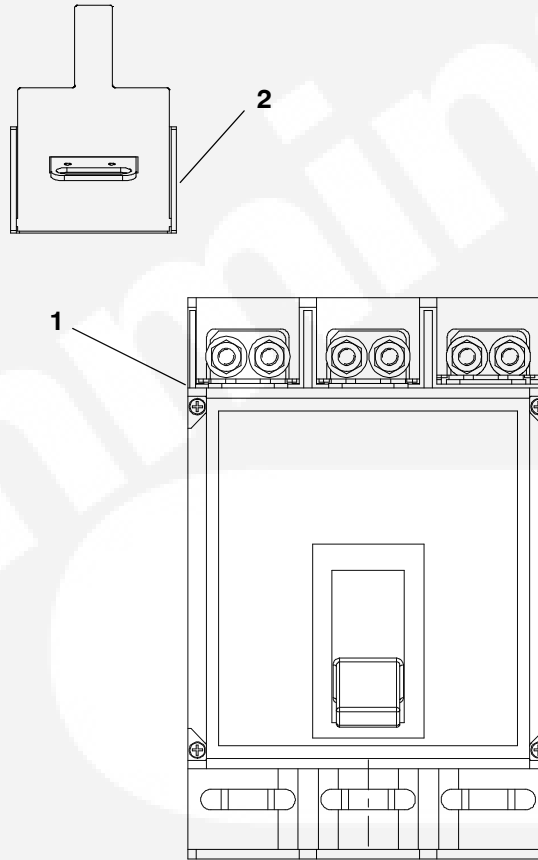


Current Transformer Module



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	300-5254	1	Board, Printed Circuit – Current Module	14	332-2843-04	1	Jumper, Terminal (10 Pole) Transformer, Current
2	815-0959-02	4	Screw, Pan Head (M3 x 7)	15			
3	338-3884-01	1	Harness, Current Module		302-1394	2	300 Amp 120 VAC
4	226-4794-03	1	Lead		302-1394	3	1 Phase, 2 or 3 Wire
5	332-2420	A/R	Mount, Cable Tie		302-1394	4	3 Phase, 3 or 4 Wire
6	319-3943-01	1	Plate, Mounting				400 Amp 120 VAC
7	332-2837-11	1	Rail, Terminal		302-1809	2	1 Phase, 2 or 3 Wire
8	815-0955-03	2	Screw, Cap – Hex Head (M4 x 10)		302-1809	3	3 Phase, 3 or 4 Wire
9	526-0003	2	Washer, Flat		302-1809	4	
10	332-2839	2	Bracket, End – Terminal				600 Amp 120 VAC
11	332-2841	1	Plate, End – Terminal		302-1395	2	1 Phase, 2 or 3 Wire
12	332-2836-02	1	Block, Terminal – Sectional		302-1395	3	3 Phase, 3 or 4 Wire
13	332-2842-11	2	Tag, Terminal (1-10)		302-1395	4	

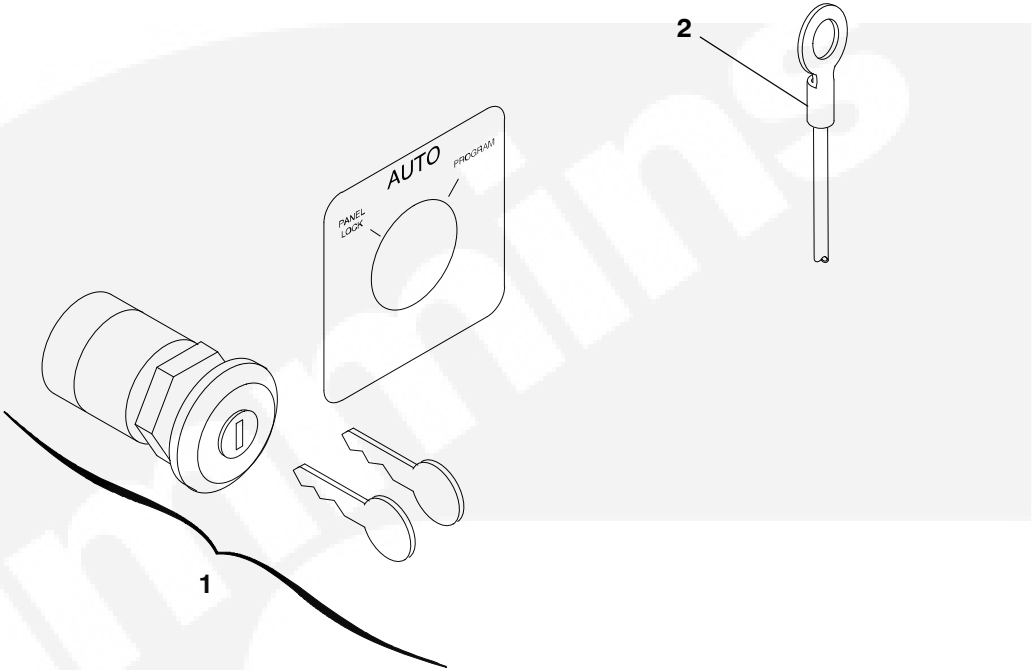
Circuit Breaker



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	320-2410-02	1	Breaker, Circuit – 600 Amp – 3 Pole	2	406-1145	1	Plate, Lock



Front Panel Security



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	308-1094	1	Switch, Selector	2	226-4794-01	1	Lead 14" (Marked S20-3 - J27-5)
					226-4794-02	1	16" (Marked S20-4 - J27-11)

Labels

1

FIELD WIRING REQUIREMENTS
TB3, KNA, KEA, KGS, J14, J15
Use copper wire only.
Torque to 7 Lbs-In (0.8 Nm)

2

▲ CAUTION
FACTORY PROGRAMMED FOR
12VDC BATTERY
0098-8350.A

3

▲ CAUTION
FACTORY PROGRAMMED FOR
24VDC BATTERY
0098-8351.A

4

WITHSTAND RATINGS
THIS TRANSFER SWITCH IS RATED
FOR USE ON A CIRCUIT CAPABLE OF
DELIVERING NOT MORE THAN
INDICATED RMS SYMMETRICAL AMPERES
FROM BELOW AT 480 VOLTS MAXIMUM.

SWITCH AMPERES WCR @ 480V
40, 70, 125 35,000
150, 225, 250 65,000
300, 400, 600 65,000
800, 1000 65,000
0098-8830.A

5

MAIN BONDING
JUMPER
98-7700.A

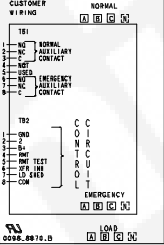
6

 **PROTECTIVE
EARTH
(GROUND)**
009-888

7

**NEUTRAL
DISCONNECT LINK**
0098-8268.A

8

 0098-8910.B

9

TYPE 1 Enclosure
To provide protection against a
limited amount of falling dirt.
0098-6118.C

10

Exercise Enable
TDPT
Synch Check
TDNE
TDEN
Start-B
Start-A
S2 Available
S1 Available
Status
0098-7672.B

11

▲ DANGER

Hazardous Voltage.
Will cause severe injury
or death.
Disconnect all electrical
supply sources before
servicing.
▲ WARNING
Improper operation can
cause severe personal
injury or death. Read
operator's manual before
use. Operator's manual
can be obtained from
your dealer.
0098-7613.B

12

REPLACE ALL COVERS
BEFORE APPLYING POWER
TO THE SWITCH
▲ DANGER

More than one live circuit
To ensure against shock or
accident hazard, disconnect
all sources of supply before
servicing. See diagram.
ADVERTISEMENT-COUPER
TOUTES LES SOURCES
D'ALIMENTATION AVANT
DE FAIRE L'ENTRETIEN ET
LES REPARATIONS
0098-7735.A

13

▲ WARNING
BEFORE SERVICING PANEL

PLACE S1 TO OFF
REMOVE P1
0098-8228.A

14

SERVICE DISCONNECT
NORMAL DISCONNECT
98-7768.A

15

www.cumminspower.com

16

A B C N

17

**CUSTOMER CONNECTIONS
TERMINAL TORQUE REQUIREMENTS**
TORQUE, POUND-INCHES (N-m) FOR SLOTTED SCREWS
SMALLER THAN 1/8" (3.2 mm) FOR USE WITH TSE, ARE OR
BY CONDUCTOR CROSS-SECTION, OR THE NEXT SMALLER
TORQUE FOR INTERMEDIATE SIZES.

SCREW SIZE	LENGTH	SLOT WIDTH (1/8" MIN. 0.47 In (1.2 mm)	SLOT WIDTH (1/4" MIN. 0.63 In (1.6 mm)	SLOT WIDTH (3/8" MIN. 0.95 In (2.4 mm)
1/8" (4.1)	1/4"	7 (0.79)	8 (1.0)	12 (1.4)
5/32" (4.1)	1/2"	7 (0.79)	12 (1.4)	12 (1.4)
3/16" (4.8)	3/4"	7 (0.79)	12 (1.4)	12 (1.4)
7/32" (5.2)	7/8"	7 (0.79)	12 (1.4)	12 (1.4)
1/4" (6.4)	1"	9 (1.0)	12 (1.4)	16 (1.7)
5/16" (7.1)	1 1/8"	-	16 (1.7)	20 (2.2)

LUG TIGHTENING REQUIREMENTS
NORMAL, EMERGENCY, LOAD, NEUTRAL AND GROUND
LUGS ACCEPT EITHER CU OR AL CONNECTORS. ALL
CRIMP TERMINALS, JOINTS, OR SOLDER JOINTS FOR PROPER
OPERATION. TORQUE FIELD CONNECTIONS TO THE
FOLLOWING VALUES:

SCREW SIZE	ACROSS FLATS	MINIMUM TIGHTENING TORQUE
5/32" (4)	100 (11.3)	100 (11.3)
3/16" (6)	120 (13.6)	120 (13.6)
7/32" (8)	150 (16.8)	150 (16.8)
1/4" (10)	200 (22.5)	200 (22.5)
5/16" (12)	275 (31.1)	275 (31.1)
3/8" (16)	375 (42.4)	375 (42.4)
1/2" (20)	500 (56.5)	500 (56.5)
5/8" (24)	600 (67.8)	600 (67.8)

0098-8367.C

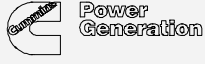
18

TYPE 3R Rainproof Enclosure
To provide a degree of protection
against falling rain; undamaged
by the formation of ice on the
enclosure.
U.L. Listed Type 3 conduit hubs
are to be used. 0098-6119.C

19

TYPE 12 DUSTTIGHT ENCLOSURE
Indoor use, to provide a degree of
protection against circulating dust,
falling dirt and dripping noncorrosive
liquids.
U.L. Listed Type 12 conduit hubs
are to be used. 0098-6776.B

20



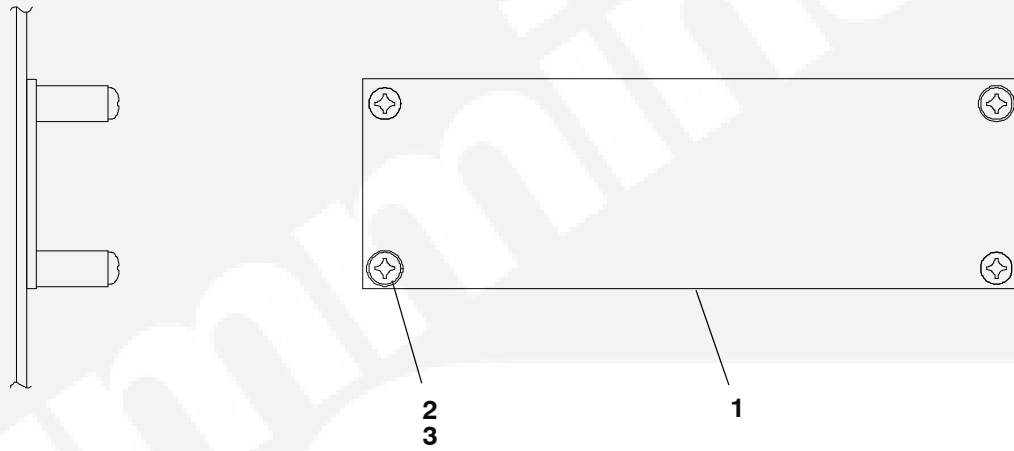
21

SUITABLE FOR USE AS SERVICE EQUIPMENT
-NORMAL SOURCE ONLY
An additional disconnect must be
readily available for the alternate
source, unless the alternate source
is an accessible generator and can
be readily shut down.
0098-8851.A

Labels

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	098-7621	1	Label, Torque	14	098-7786	1	Label, Service Disconnect
2	098-8350	1	Label, Instruction	15	098-8280	1	Label, Information
3	098-8351	1	Label, Instruction	16			Label, Bus Marking
4	098-8930	1	Label, Information		098-5854-01	1	"A"
5	098-7700	1	Label, Bonding Jumper		098-5854-02	1	"B"
6	098-6635	A/R	Label, Ground		098-5854-03	1	"C"
7	098-8268	1	Label, Information		098-5854-04	1	"N"
8	098-8870	1	Label, Information	17	098-6367	1	Label, Torque
9	098-6118	1	Label, Cabinet	18	098-6119	1	Label, Cabinet
10	098-7672	1	Label, Function	19	098-6776	1	Label, Cabinet
11	098-7613	1	Label, Danger/Warning	20	098-7902-02	1	Label, Logo
12	098-7735	2	Label, Danger	21	098-8851	1	Label, Information
13	098-8228	1	Label, Warning				

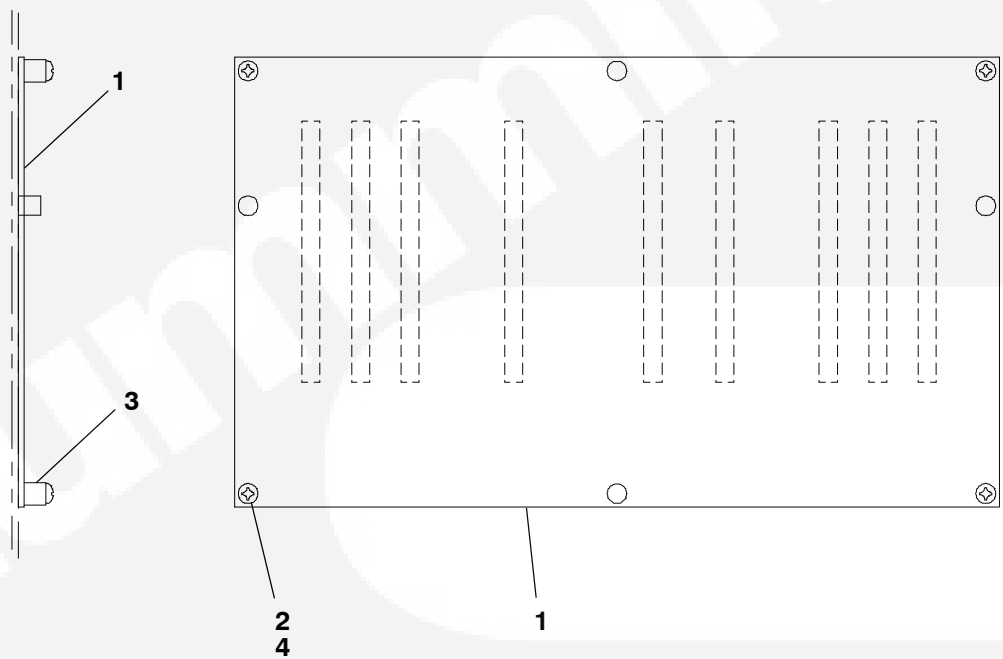
Digital Display Cover



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-4140-01	1	Cover, Digital Display	3	526-0257	4	Washer, Flat
2	815-0959-02	4	Screw, Pan Head – Cross Recessed (M3 x 0.5 x 7)				



Bargraph Cover



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-4139-01	1	Plate, Display Cover	3	870-2218-01	4	Standoff, Nylon
2	815-0959-02	4	Screw, Pan Head – Cross Recessed (M3 x 0.5 x 7)	4	526-0257	4	Washer, Flat



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