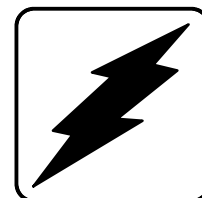


Parts Catalog

Transfer Switches



Series R33

Automatic Transfer Switches
Nonautomatic Transfer Switches

(See TP-5645 for Contactor Service Parts)

KOHLER[®]
POWER SYSTEMS

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Introduction

Use this catalog to locate service parts for Kohler R33 Transfer Switches 30 to 320 Amperes.

Contactor Service Parts

This catalog does not contain service parts for Group 405-Contactors and the contactor assemblies. Contactor service parts are listed in a separate catalog, TP-5645.

Standard Hardware and Leads

Procure standard hardware (identified as #) locally using description provided. Individual leads do not appear in this catalog. Most leads are available by ordering the appropriate wiring harness. Otherwise replacement will require fabrication using same type of stranded copper wire (gauge, color, length), identical terminals, and proper lead designation at each end.

How To Find Part Numbers

Follow the step-by-step instructions to determine the correct parts. An example is given with each step. For a complete description of the transfer switch part number, see "Explanation of Kohler Part Number."

1. Record transfer switch part number on the following page.
Example: HK-222231-0030
2. Determine group in which service part is needed using figure 1, page 4.
Example: Need enclosure door.
3. Locate the NEMA Type 1 section in Enclosures.
4. Locate 30 amperage column.
5. Locate part number in 30 amperage column.
Example: Door, enclosure 294857

When a quantity of more than one is used, a number in parentheses will follow the part description or part number.

Accessory Part Numbers

1. Record transfer switch part number and include accessory requiring service. Factory installed accessories are shown on transfer switch nameplate.
Example: HK-222231-0030, 23-C
2. Determine accessory number and component needed.
Example: 23-C (Plant Exerciser); Need Transformer.
3. Turn to Accessories and locate accessory number. Look at parts listing for components.

Example: Transformer 295355

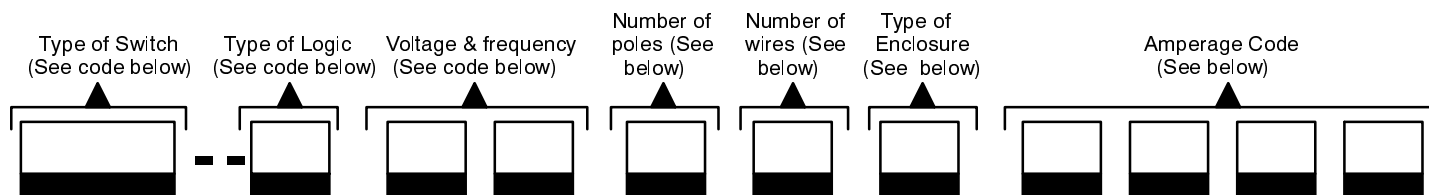
When a quantity of more than one is used, a number in parentheses will follow the part description.

Consult Factory

If part numbers or accessories indicate "Consult Factory," contact Generator Service Parts Dept., Kohler Co., Generator Division, Kohler, WI 53044. Telephone (414) 565-3381.

Explanation of Kohler Part Number

TRANSFER SWITCH MODEL NUMBER IDENTIFICATION



Kohler Model Number Key

This diagram explains the Kohler Transfer Switch model numbering code system. The sample number shown is for a relay logic Home Standby Automatic Transfer Switch, 120 Volt, 60 hertz, singlephase, 2pole, 3 wire, 30 ampere model in a NEMA 1 enclosure.

TYPE OF TRANSFER SWITCH

HK – Home Standby Automatic Transfer Switch
HKN – Home Standby Nonautomatic Transfer Switch

TYPE OF LOGIC

2 – Relay

VOLTAGE & FREQUENCY PHASE TO PHASE

240V AC MAX

21 – 110V 50/60 HZ
22 – 120V 50/60 HZ
23 – 220V 50/60 HZ
24 – 240V 50/60 HZ
27 – 190V 50/60 HZ
28 – 208V 50/60 HZ

NUMBER OF POLES

2 – 2 Pole, single-phase

NUMBER OF WIRES

2 – 2 Wire
3 – 3 Wire

TYPE OF ENCLOSURE

1 – NEMA 1

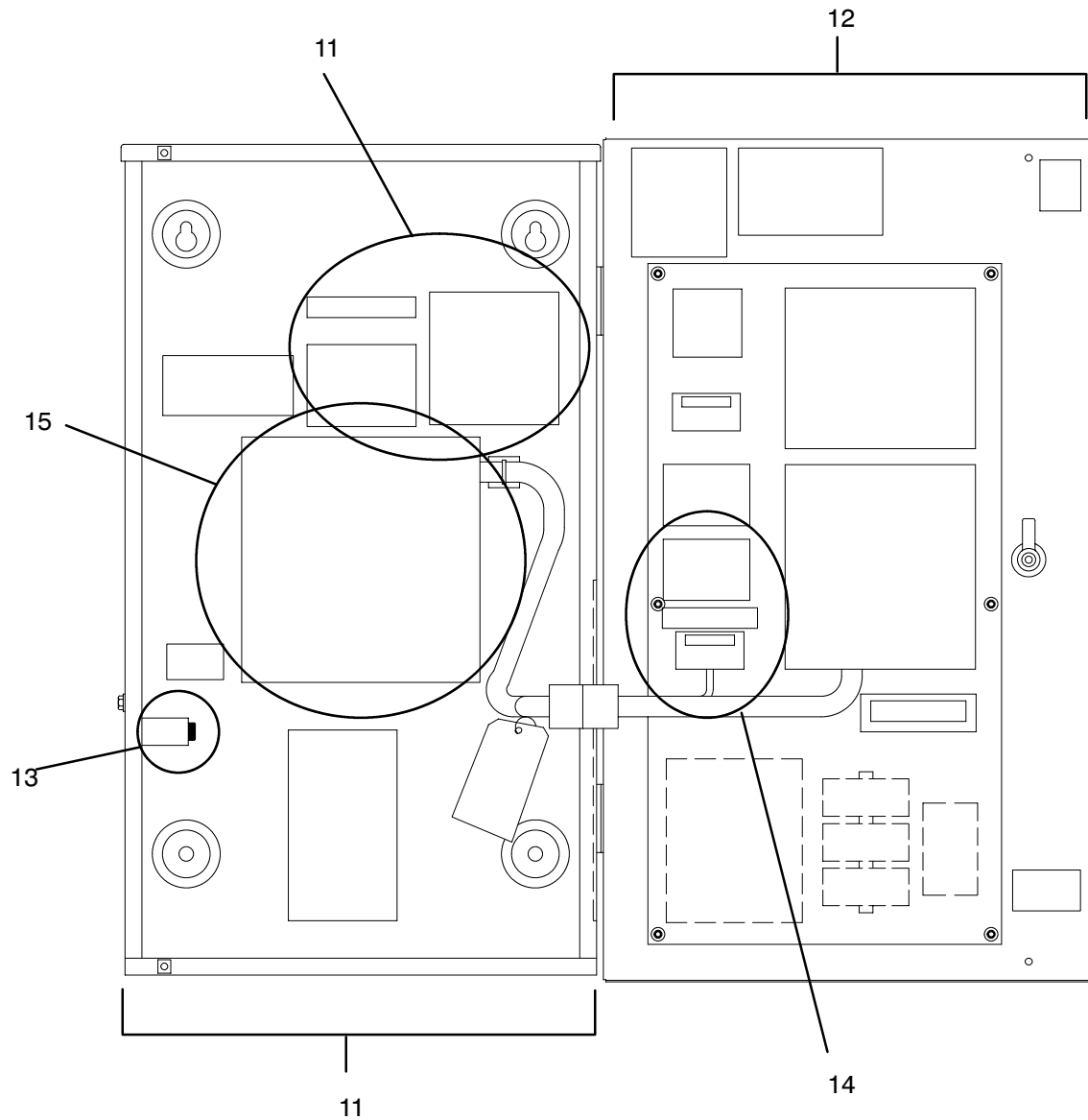
AMPERES

0030 – 30 amperes
0080 – 80 amperes
0100 – 100 amperes
0160 – 160 amperes
0200 – 200 amperes
0225 – 225 amperes
0260 – 260 amperes
0320 – 320 amperes

SAMPLE MODEL NUMBER

HK-222231-0030

Transfer Switch Breakdown



BN-295000

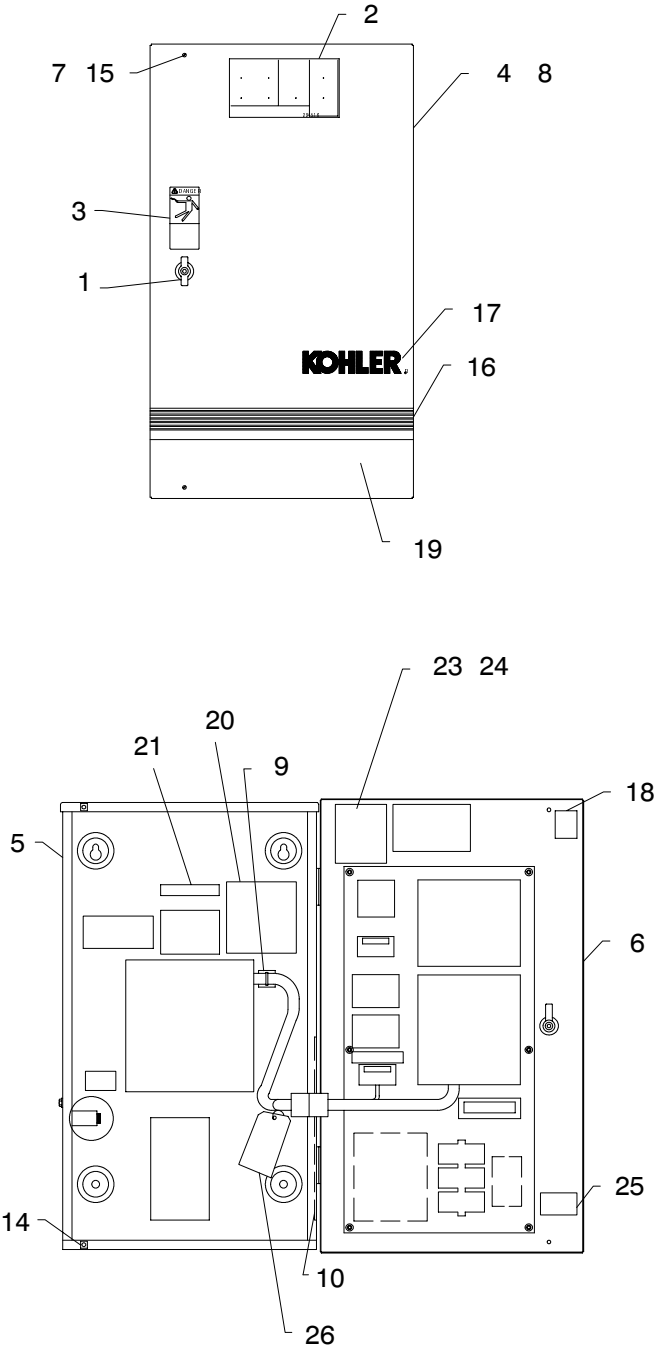
- 11 Enclosure (includes Decals)
- 12 Inner Panel
- 13 Neutral Lug
- 14 Transformer, See Inner Door Panel
- 15 Contactor Use TP-5645

Figure 1. Transfer Switch Breakdown

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Enclosures

Automatic and Nonautomatic,
NEMA Type 1, 30-320 Amps.



BN-295000

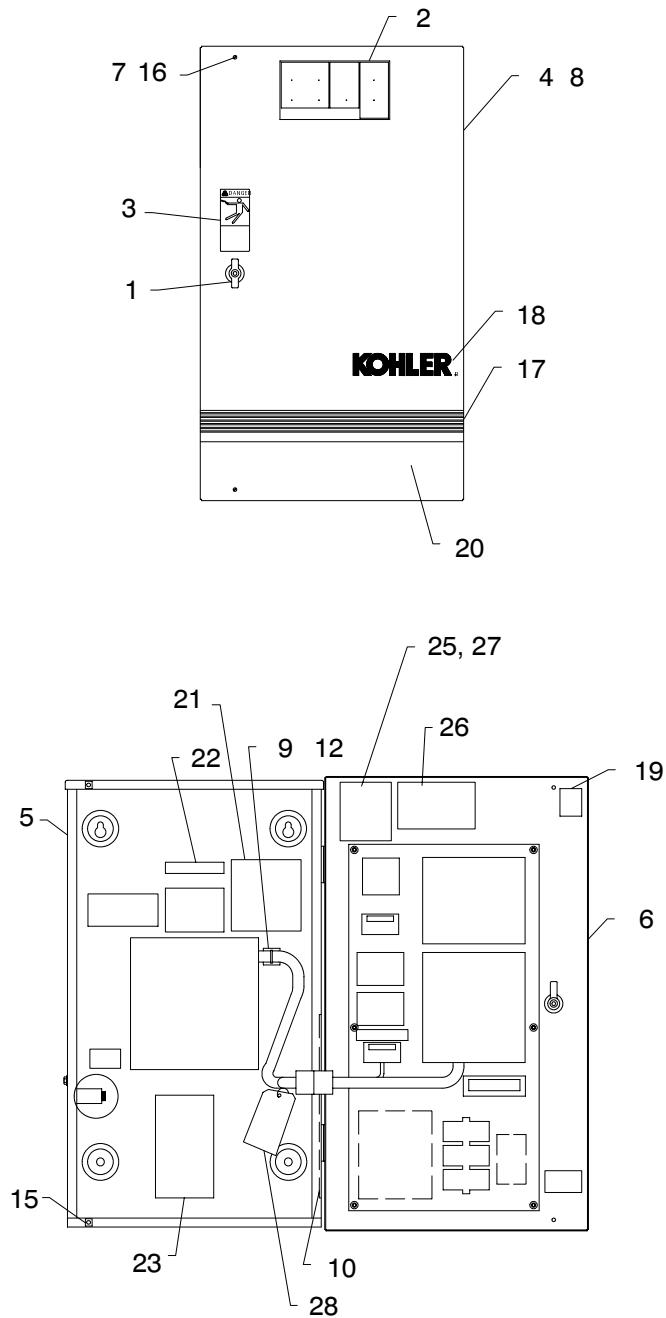
Automatic and Nonautomatic, NEMA Type 1, 30-320 Amps.

Enclosures

Item	Description	Part Number	
		30-160 Amps.	225-320 Amps.
1	Latch, locking	294515	294515
2	Decal, Auto/Manual Control	294516	294516
3	Decal, Danger	294520	294520
4	Hinge, split right	294749 (2)	294749 (3)
5	Enclosure, transfer	294855	294856
6	Door, enclosure (Includes the following:)	294857	294858
	Screw, weld 1/4-20 x 3/4	X-152-15 (5)	X-152-15 (5)
	Screw, weld 1/4-20 x 1-1/2	X-152-16	X-152-16
	Hinge, split	294750 (2)	294750 (3)
7	Retainer	295010 (2)	295010 (2)
8	Screw, flat head machine	295098 (6)	295098 (9)
9	Base, tie wrap	298776 (2)	298776 (4)
10	Envelope, instruction	298777	298777
11	Screw, H.C. (Item not shown)	X-117-4 (2)	X-117-4 (2)
12	Tie (Item not shown)	X-468-3	X-468-3
13	Screw, R.H.M. 8-32 x 1/2 (Item not shown)	X-51-15	X-51-15
14	Retainer, nut	X-6204-4 (2)	X-6204-4 (2)
15	Screw, H.H.M. 10-32 x .50	X-97-2 (2)	X-97-2 (2)
16	Decal, stripes	X-6232-1	X-6232-1
17	Decal, Kohler Power System	X-6246-3	X-6246-3
18	Decal, 1-800 number	224233	224233
19	Decal, Transfer Switch	273746	273746
20	Decal, Solenoid Mechanism	294414	294414
21	Decal, Copper Conductor	294543	294543
22	Decal, Generator will Energize (Item not shown)	294743	294743
23	Nameplate	295232	297506
24	Nameplate, serial no.	295392	295392
25	Decal, UL	297009	297484
26	Tag, hang	297949	297949

Enclosures

Automatic and Nonautomatic, NEMA Type 1, CSA 30-320 Amps.

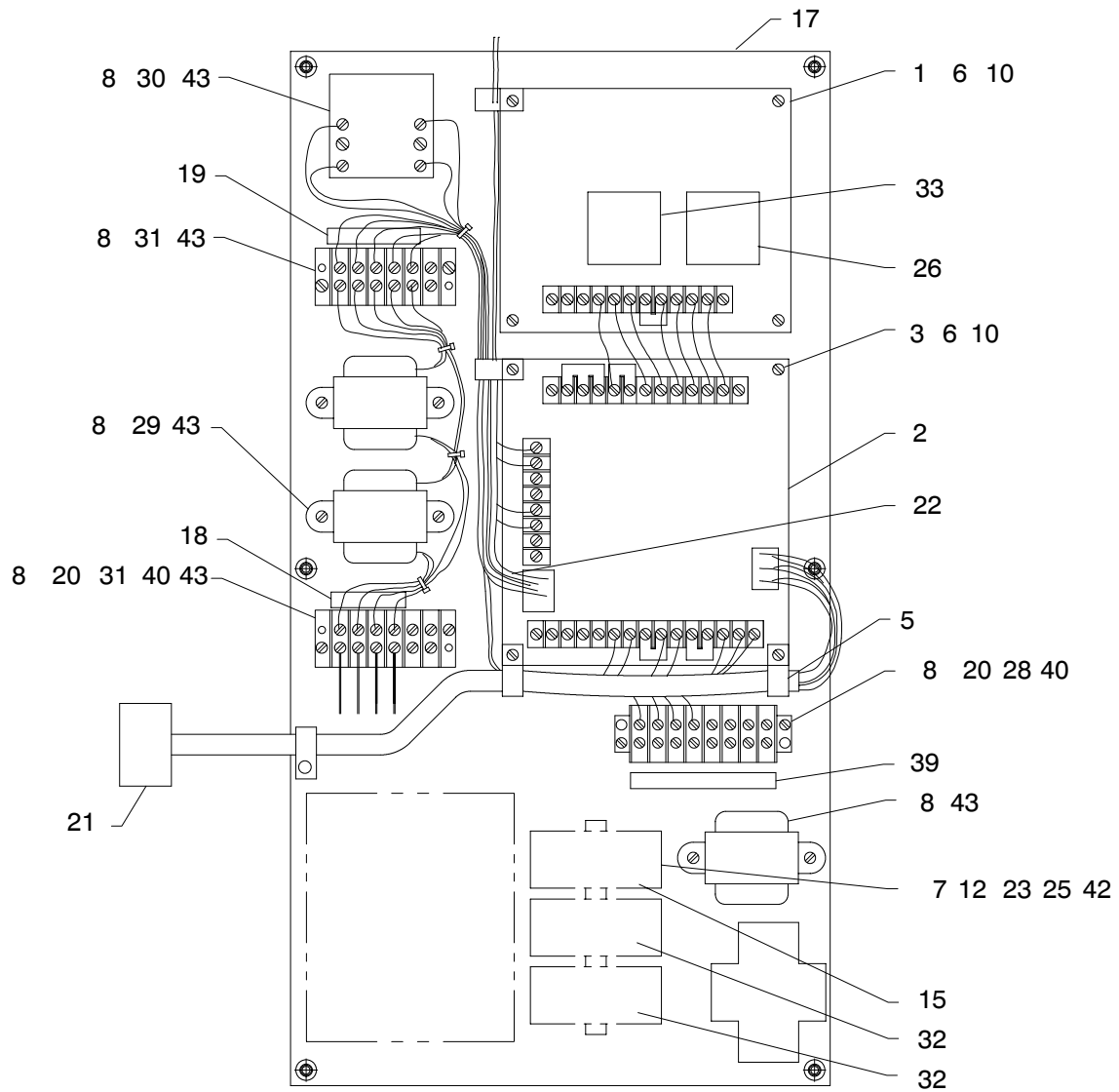


BN-295000

Automatic and Nonautomatic, NEMA Type 1, CSA 30-320 Amps.

Enclosures

Item	Description	Part Number		Part Number
		30-160 Amps.	225-260 Amps.	320 Amp.
1	Latch, locking	294515	294515	294515
2	Decal, Auto/Manual Control	294516	294516	294516
3	Decal, Danger	294520	294520	294520
4	Hinge, split right	294749 (2)	294749 (3)	294749 (3)
5	Enclosure, transfer panel	294855	294553	294553
6	Door, enclosure (Includes the following:)	294857	294554	294554
	Screw, weld 1/4-20 x 3/4	X-152-15 (5)	X-152-15 (4)	X-152-15 (4)
	Screw, weld 1/4-20 x 1-1/2	X-152-16	X-152-16	X-152-16
	Hinge, split	294750 (2)	294750 (3)	294750 (3)
7	Retainer	295010 (2)	295010 (2)	295010 (2)
8	Screw, flat head machine	295098 (6)	295098 (9)	295098 (9)
9	Base, tie wrap	298776 (2)	298776 (4)	298776 (4)
10	Envelope, instruction	298777	298777	298777
11	Screw, H.C. (Item not shown)	X-117-4 (2)	X-117-4 (2)	X-117-4 (2)
12	Tie, cable	-----	X-468-1 (8)	X-468-1 (8)
13	Tie (Item not shown)	X-468-3	X-468-3	X-468-3
14	Screw, R.H.M. 8-32 x 1/2 (Item not shown)	X-51-15	X-51-15	X-51-15
15	Retainer, nut	X-6204-4 (2)	X-6204-4 (2)	X-6204-4 (2)
16	Screw, HHM 10-32 x .50	X-97-2 (2)	X-97-2 (2)	X-97-2 (2)
17	Decal, stripes	X-6232-1	X-6232-1	X-6232-1
18	Decal, Kohler Power System	X-6246-3	X-6246-3	X-6246-3
19	Decal, 1-800 number	224233	224233	224233
20	Decal, Transfer Switch	273746	273746	273746
21	Decal, Solenoid Mechanism	294414	294414	294414
22	Decal, Copper Conductor	294543	294543	294543
23	Decal, Contactor	294602	294602	294602
24	Decal, Generator will Energize (Item not shown)	294743	294743	294743
25	Nameplate, serial no.	295392	295392	295392
26	Decal, CSA	297721	297721	297721
27	Nameplate, CSA	297722	297722	297722
28	Tag, hang	297949	297949	297949

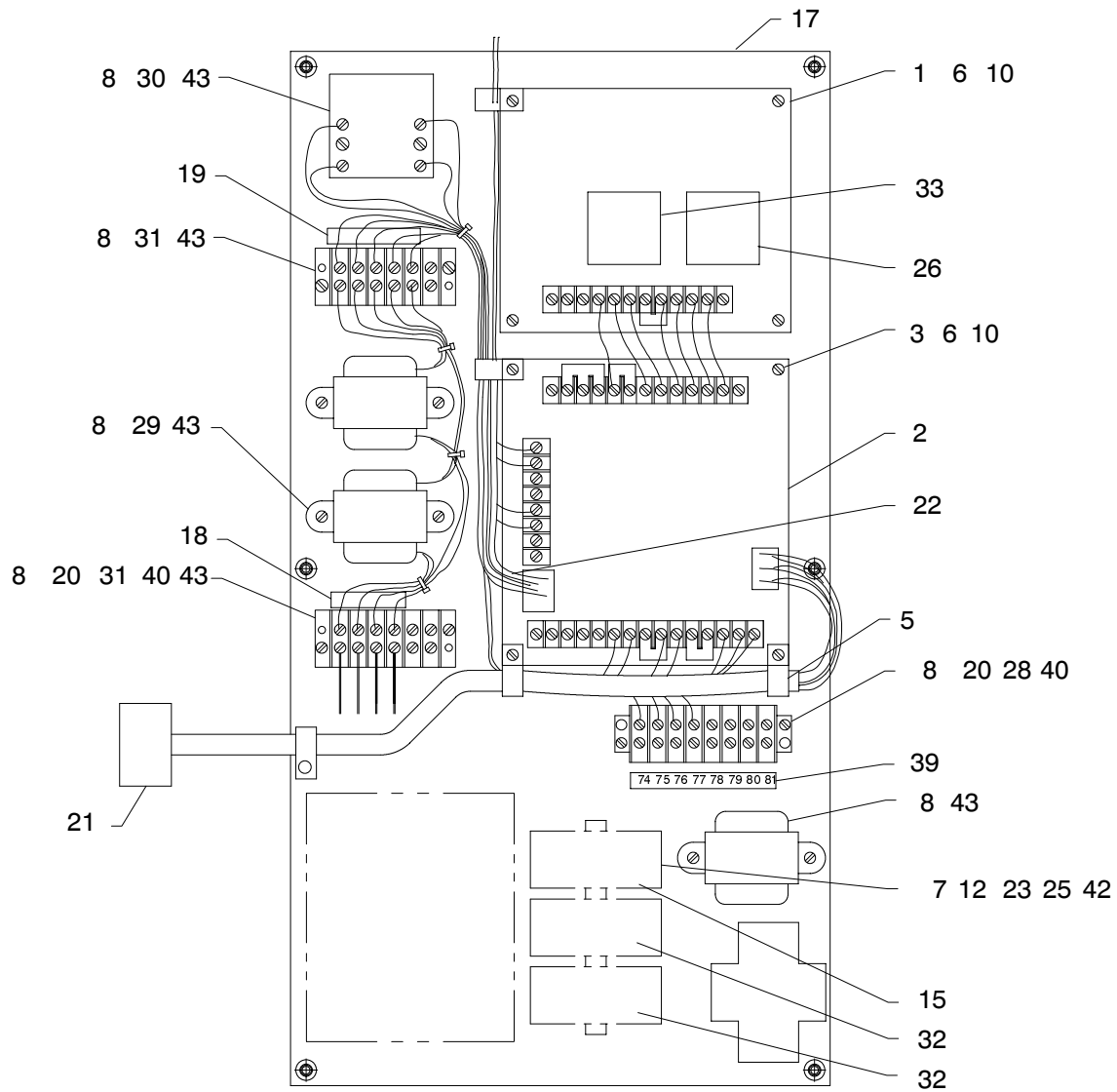


BV-295000

Inner Door Panel

Relay Logic

Item	Description	Part Number			
		60 Hz		50 Hz	
		Automatic	Nonautomatic	Automatic	Nonautomatic
1	Circuit board, relay option:	A-295128	A-295128	A-295128	A-295128
	Relay	295270	295270	295270	295270
2	Circuit board, main relay:	A-297377	A-297377	B-297376	B-297376
	Relay, ER and NR	295253 (2)	295253 (2)	295253 (2)	295253 (2)
	Relay, EFR	295254	295254	295254	295254
	Relay, NR1	295318	295318	295318	295318
3	Washer, lock #8	X-22-7 (12)	X-22-7 (12)	X-22-7 (12)	X-22-7 (12)
4	Tie (expense), cable (Item not shown)	X-468-2 (2)	X-468-2 (2)	X-468-2 (2)	X-468-2 (2)
5	Tie	X-468-3 (5)	X-468-3 (5)	X-468-3 (5)	X-468-3 (5)
6	Screw, R.H.M. 8-32x1-	X-51-2 (10)	X-51-2 (10)	X-51-2 (10)	X-51-2 (10)
7	Screw, R.H.M. 6-32 x 3/8	-----	X-49-6 (4)	X-49-6 (4)	-----
8	Screw, R.H.M. 8-32 x 1	X-51-3 (8)	X-51-3 (8)	X-51-3 (8)	X-51-3 (8)
9	Screw, R.H.M. 8-32 x 5/8 (Item not shown)	X-51-9 (4)	X-51-9 (4)	X-51-9 (4)	X-51-9 (4)
10	Grommet, plastic	X-593-2 (8)	X-593-2 (10)	X-593-2 (10)	X-593-2 (8)
11	Jumper (Item not shown)	X-6048-2	X-6048-2	X-6048-2	X-6048-2
12	Spacer, fiber	-----	X-712-2 (4)	X-712-2 (4)	-----
13	Ring, lock	-----	-----	151511	-----
14	Spacer, .281 x .500 x .375 (Item not shown)	265861 (6)	265861 (6)	265861 (6)	265861 (6)
15	Relay	-----	291309	291309	-----
16	Switch (Item not shown)	-----	294518	294518	-----
17	Panel, inner	294519	294519	294519	294519
18	Decal, NS1, NS2, ES1, ES2	294521	294521	294521	294521
19	Decal, NL1, NL2, EL1, EL2	294522	294522	294522	294522
20	Decal, Hazardous Voltage	294524 (2)	294524 (2)	294524 (2)	294524 (2)
21	Harness, wiring	294549	294549	294549	294549
22	Harness, wiring	294550	294550	294550	294550
23	Socket, relay	-----	295034 (3)	295034 (3)	-----
24	Spacer, socket (Item not shown)	-----	295151 (3)	295151 (3)	-----

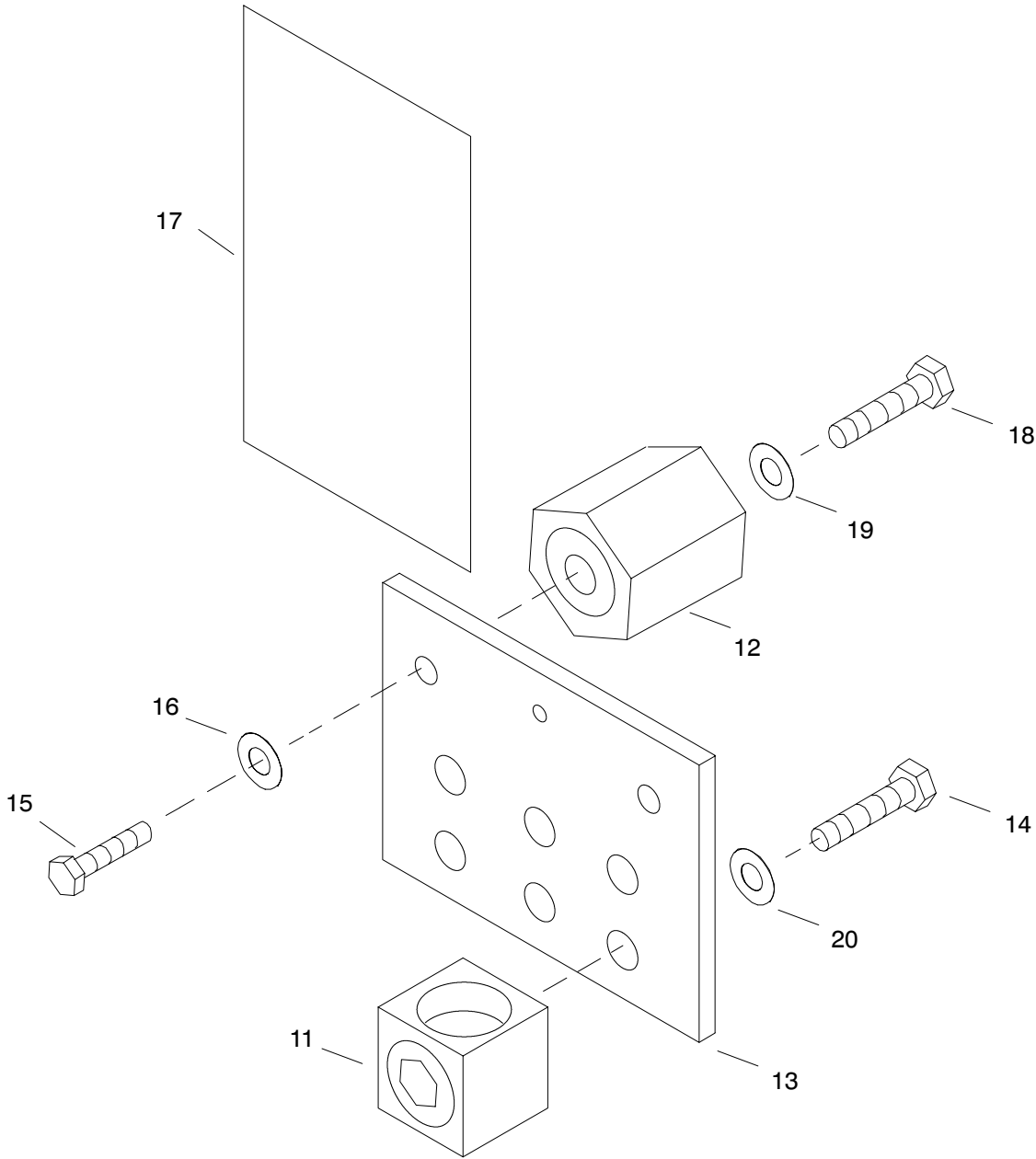


BV-295000

Inner Door Panel

Relay Logic

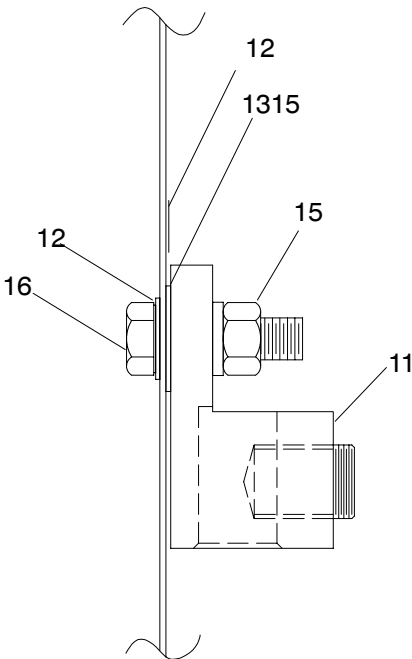
Item	Description	Part Number			
		60 Hz		50 Hz	
		Automatic	Nonautomatic	Automatic	Nonautomatic
25	Clamp, relay hold down	-----	295189 (3)	295189 (3)	-----
26	Relay	295255	295255	295255	295255
27	Decal, This Transfer Switch (Item not shown)	295261	295261	295261	295261
28	Block, terminal	295266	295266	295266	295266
29	Transformer	295282 (2)	295282 (2)	295282 (2)	295282 (2)
30	Relay	295294	295294	295294	295294
31	Block, terminal	295314 (2)	295314 (2)	295314 (2)	295314 (2)
32	Relay	-----	295318 (2)	-----	295318 (2)
33	Relay	295319	295319	295319	295319
34	Lamp	-----	295324 (4)	-----	295324 (4)
35	Lamp, socket (Item not shown)	-----	295325 (4)	-----	295325 (4)
36	Lens, white (Item not shown)	-----	295326 (2)	-----	295326 (2)
37	Lens, green (Item not shown)	-----	295327	-----	295327
38	Lens, red (Item not shown)	-----	295328	-----	295328
39	Decal, 74, 75, 76, 77, 78, 79, 80, 81	295329	295329	295329	295329
40	Cover, terminal strip	295925 (2)	295925 (2)	295925 (2)	295925 (2)
41	Switch, toggle (Item not shown)	-----	297680	-----	297680
42	Nut, captive	-----	298810 (4)	-----	298810 (4)
43	Nut, captive	298811 (12)	298811 (12)	298811 (12)	298811 (12)



30-320 Amp.

Neutral Lug Assembly

Item	Description	Part Number	
		30-160 Amp.	225-320 Amp.
11	Lug, terminal	295303 (3)	X-6207-5 (3)
12	Insulator, panel (standoff)	233269 (2)	233568 (2)
13	Bracket, mounting	295304	294362
14	Screw, H.C.	X-97-11 (3)	3/8-16 (3)
15	Screw, H.C.	X-465-6 (2)	X-6238-10 (2)
16	Washer	1/4" (2)	3/8" (2)
17	Decal, neutral lug torque	297556	297556
18	Screw H.C.	X-465-6 (2)	X-6238-2 (2)
19	Washer	1/4" (2)	3/8" (2)
20	Washer, lock	X-22-9 (3)	-----



BN-295000

Item	Description	Part Number		
		30-160 Amps.	225-260 Amps.	320 Amps.
9	Lug, terminal	294533	295295	295067
10	Decal, ground	238575	238575	238575
11	Washer, shakeproof 3/8"	X-22-14	-----	-----
12	Washer, plain .391 x .625 x .062	X-25-82	-----	-----
13	Washer, lock 1/2"	-----	X-22-26	X-22-26
14	Washer, plain .547 x .969 x .048 (Item not shown)	-----	X-25-59	X-25-59
15	Nut, hex 1/2-13	-----	X-89-17	X-89-17
16	Screw, 3/8-16	X-6238-4	-----	-----
	Screw, 1/2-13	-----	X-129-20	X-129-20

Automatic, NEMA Type 1, 30-320 Amps.

Literature

Item	Description	Part Number
1	Service Manual, Contactor	TP-5135
2	Parts Catalog R33 Transfer Switch	TP-5627
3	Operation Manual	TP-5454
4	R33 Transfer Switch Service Manual	TP-5609
5	Parts Catalog ASCO Contactor	TP-5645

Accessories

Test Switches

HKA-Accessory	Kit Number	Description	Part Number
06-F		Test Switch Switch, selector	294909

Plant Exerciser

HKA-Accessory	Kit Number	Description	Part Number
23-C		Plant Exerciser	
		Screw, R.H.M. 8-32 x 5/8 (4)	X-51-9
		Clock, time	294541
		Track	294622
		Transformer	295355
		Nut, captive (4)	298811

Battery Chargers

HKA-Accessory	Kit Number	Description	Part Number
24-D		Battery Charger, 240 Volt	
		Charger Assy, battery	A-293295
		Screw, R.H.M. 6-32 x 7/8 (2)	X-49-3
		Cover, terminal block	294214
		Decal, barrier	294742
		Nut, captive (4)	298811
24-G		Battery Charger, 220 Volt	
		Charger Assy, battery	A-295090
		Screw, R.H.M. 6-32 x 7/8 (2)	X-49-3
		Cover, terminal block	294214
		Decal, barrier	294742
		Nut, captive (4)	298811

Paint

HKA-Accessory	Kit Number	Description	Part Number
		Kohler Cream Beige (gallon)	221322
		Kohler Cream Beige Spray Paint	221323

TP-5627

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