



GEF-4649A

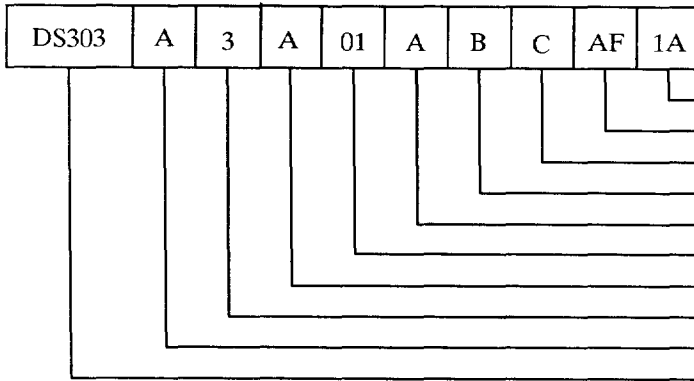
GE Drive Systems

Renewal Parts

HEAVY DUTY DC CONTACTORS

DS303A3 (600V STYLE)

DS303B3 (1000V STYLE)



Special setting and stamping
 Electric interlock (See Table 4)
 Operating coil and voltage rating (See Table 3A or 3B)
 Normally closed blowout coil rating 1 or 2 poles - bottom (See Table 2)
 Normally open blowout coil rating 1 or 2 poles - top (See Table 2)
 Electro-mechanical configuration
 Contact pole configuration (See Table 1)
 NEMA Size Rating (100 Amps)
 Design (A = 600V, B = 1000V)
 Basic catalog number

TABLE 1

NAMEPLATE IDENTIFICATION OF CONTACT POLE CONFIGURATION

A	1 NORMALLY OPEN
B	1 NORMALLY CLOSED
C	2 NORMALLY OPEN
D	1 NORMALLY OPEN AND 1 NORMALLY CLOSED
E	2 NORMALLY OPEN AND 1 NORMALLY CLOSED
F	2 NORMALLY OPEN AND 1 NORMALLY CLOSED
F	2 NORMALLY OPEN AND 2 NORMALLY CLOSED
G	1 NORMALLY CLOSED WITH HOLDING COIL
J	1 NORMALLY OPEN AND 1 NORMALLY CLOSED WITH HOLDING COIL
K	2 NORMALLY OPEN AND 1 NORMALLY CLOSED WITH HOLDING COIL
L	2 NORMALLY OPEN AND 2 NORMALLY CLOSED WITH HOLDING COIL

TABLE 2

BLOWOUT COILS

See nameplate reading above

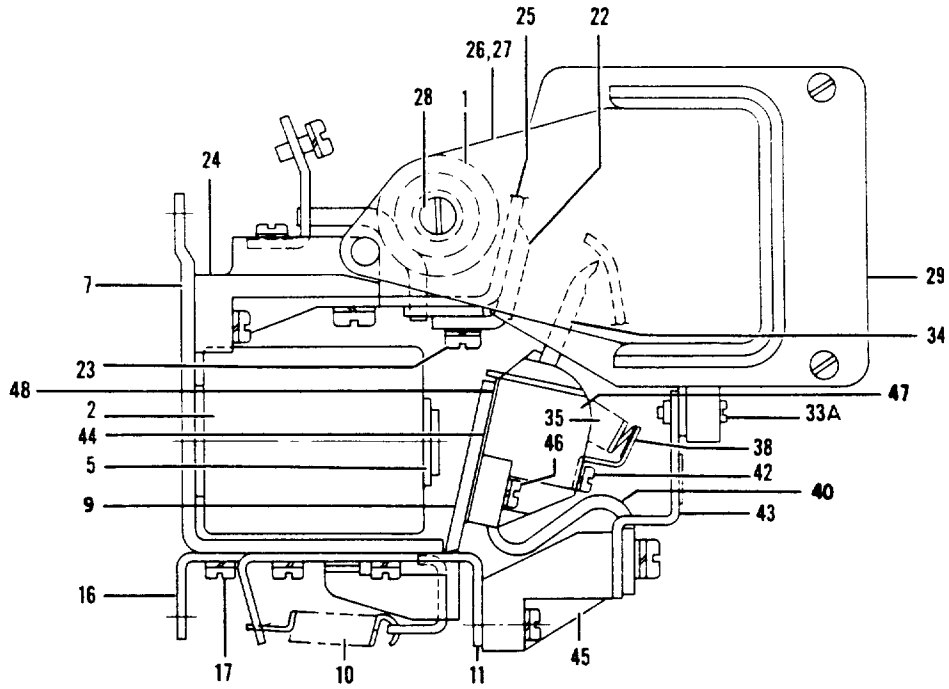
Blowout Coil Letter	Current Rating	Coil Cat. No. Ref. No. 1
A	Less B.O.	-----
E*	25 amp	259A5635G3
F*	50 amp	259A5635G2
G*	100 amp	259A5635G1

* Order insulation tube cat. no. 259A5643P2 and qty. 2 insulation spacers 259A5688P1.

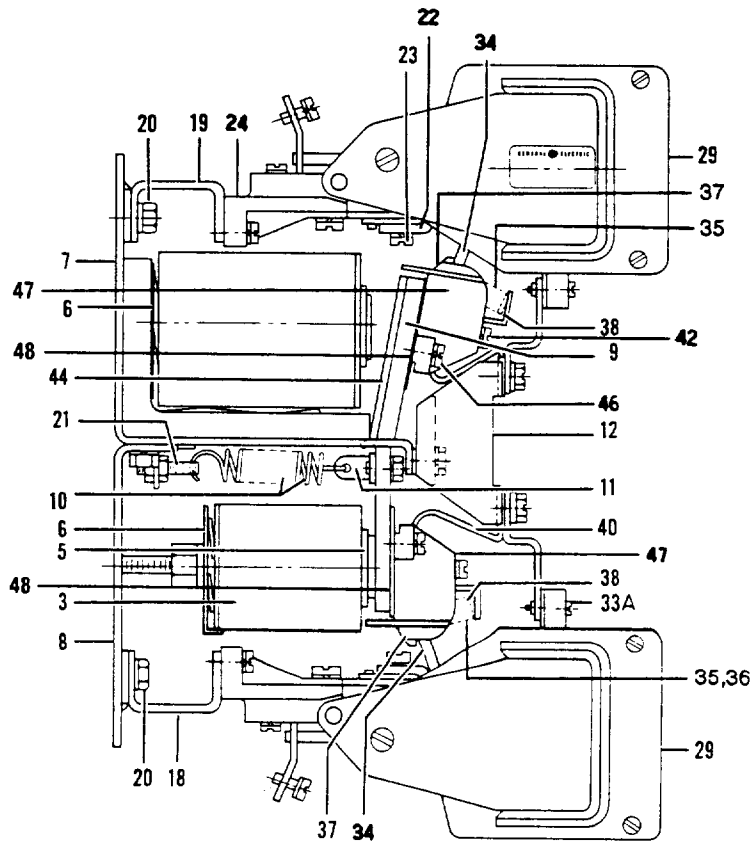
PARTS RECOMMENDED FOR STOCK

Ref. No.	Quantity Required for						Catalog Number	Description
	1 N.O.	1 N.C.	1 N.O. 1 N.C.	2 N.O.	2 N.O. 1 N.C.	2 N.O. 2 N.C.		
2	-	-	-	-	-	-		Operating coil (see table 3A or 3B)
3	-	-	-	-	-	-		Holding coil (see table 3A or 3B)
4	#	#	-	#	#	#		Electrical interlock (see table 4)
10	1	-	-	-	-	-	259A5675P1	Tension spring for armature
10	-	1	1	-	-	-	2418823P1	Tension spring for armature
10	-	-	-	1	1	1	2412649P1	Tension spring for armature
22	1	1	2	2	3	4	259A5637G1	Stationary tip assembly
29	1	1	2	2	3	4	195B6285G1	Arc chute, complete
34	1	1	2	2	3	4	259A5640G1	Movable tip assembly
35	1	-	1	2	2	2	259A5673P1	Compression spring for movable contact finger (used with holding coil)
36	-	1	1	-	1	2	2417929P1	Compression spring for movable contact finger (used without holding coil)
40	1	1	2	2	3	4	259A5644G1	Shunt for movable contact finger

If interlock is used, a quantity of one set is required for each interlock.



DS303A3 1 N.O. Contact



DS303A3 2 N.O. and 1 N.C. Contact

LIST OF PARTS

Ref. No.	Quantity Required for						Catalog Number	Description
	1 N.O.	1 N.C.	1 N.O. 1 N.C.	2 N.O.	2 N.O. 1 N.C.	2 N.O. 2 N.C.		
1	-	-	-	-	-	-		Blowout coil (see table 2)
2	-	-	-	-	-	-		Operating coil (see table 3A or 3B)
3	-	-	-	-	-	-		Holding coil (see table 3A or 3B)
4*	-	-	-	-	-	-		Electrical interlock (see table 4)
5	1	1	-	-	-	-	N931P68C6	Coil retainer ring
5	-	-	-	1	1	1	N931P112C6	Coil retainer ring
6	-	-	-	1	1	1	259A2698P1	Coil retainer
7	1	1	1	-	-	-	8650866G1	Magnet frame with core for operating coil
7	-	-	-	1	1	1	129B5696G2	Magnet frame with core for operating coil
8	1	1	1	-	-	-	8650871G1	Magnet frame with core for holding coil
8	-	-	-	-	1	1	129B5694G2	Magnet frame with core for holding coil
9	1	-	-	-	-	-	195B6248G4	Armature assembly
9	-	1	1	-	-	-	259A8170G1	Armature assembly
9	-	-	-	1	-	-	981B172G3	Armature assembly
9	-	-	-	-	1	-	981B172G2	Armature assembly
9	-	-	-	-	-	1	981B172G1	Armature assembly
10	1	-	-	-	-	-	259A5675P1	Tension spring for armature
10	-	1	1	-	-	-	2428823P1	Tension spring for armature
10	-	-	-	1	1	1	2422649P1	Tension spring for armature
11	1	-	-	-	-	-	195B6287G1	Spring support
11	-	-	-	1	-	-	8067062G1	Spring support
11	-	-	1	-	1	1	8087264G2	Spring support
12	-	1	1	-	-	-	259A8166G1	Terminal block
12	-	-	-	1	-	-	125A5940G3	Terminal block
12	-	-	-	-	1	-	125A5940G6	Terminal block
12	-	-	-	-	-	1	125A5940G1	Terminal block
13*	-	1	1	-	-	-	8650868P8	Terminal block support
14*	-	1	1	-	-	-	9023691P1	Adjusting screw for tension spring
15*	-	2	-	-	-	-	N144P16010C6	Screw fastening terminal block to supporting bracket
16	1	-	-	-	-	-	8650866P4	Mounting bracket
17	-	2	-	-	-	-	N144P16006C6	Screw fastening mounting bracket to magnet frame
18	-	-	-	1	-	-	151A2001UTP1	Supporting bracket, bottom
18	-	-	-	-	1	-	129B5702P2	Supporting bracket, bottom
19	-	-	-	1	1	2	129B5702P1	Supporting bracket, top
20	-	-	-	-	2	2	N26P21008B6	Screw fastening brackets to magnet frame
20	-	-	-	2	-	-	N144P21008C6	Screw fastening brackets to magnet frame
21	-	-	-	1	1	1	167A9802P1	Eyebolt for tension spring
22	1	1	2	2	3	4	259A5637G1	Stationary tip assembly
23	1	1	2	2	3	4	9384190P2	Mounting screw for stationary tip
24	1	1	2	2	3	4	195B6280P1	Blowout coil support
25	1	1	2	2	3	4	259A5628P1	Arc horn for stationary tip
26	1	1	2	2	3	4	259A5633G1	Pole piece with core
27	1	1	2	2	3	4	195B6281P2	Pole piece
28	1	1	2	2	3	4	N51P16008B6	Screw fastening pole pieces together
29	1	1	2	2	3	4	195B6285G1	Arc chute, complete
33A	1	1	2	2	3	4	259A5630P1	Latch screw
34	1	1	2	2	3	4	259A5640G1	Movable tip assembly
35	-	-	2	-	3	4	259A5673P1	Compression spring for movable contact finger (used with holding coil)
35	1	-	1	2	2	2	259A5673P1	Compression spring for movable contact finger
36	-	1	1	-	1	2	2417929P1	Compression spring for movable contact finger

* Not Shown

LIST OF PARTS CONT'D NEXT SHEET

LIST OF PARTS (Cont'd)

Ref. No.	Quantity Required for						Catalog Number	Description
	1 N.O.	1 N.C.	1 N.O. 1 N.C.	2 N.O.	2 N.O. 1 N.C.	2 N.O. 2 N.C.		
37	1	1	1	2	3	4	259A5672G2	Movable tip support
38	1	1	2	2	3	4	259A5674P1	Spring seat
39*	1	1	2	2	3	4	N144P16006C6	Screw with lock washer fastening tip to shunt
40	1	1	2	2	3	4	259A5644G1	Shunt for movable contact finger
41*	1	1	2	2	3	4	259A8165P2	Arc barrier
42	1	1	2	2	3	4	N144P15008C6	Screw fastening spring seat to support
43	1	—	—	—	—	—	259A5629P1	Arc chute support
43	—	—	—	—	1	—	259A5995G1	Arc chute support
43	—	—	—	1	1	2	259A8159P1	Arc chute support
43	—	—	—	1	1	2	259A8159P2	Arc chute support
43	—	1	2	—	—	—	259A8167P1	Arc chute support
44	1	1	2	2	3	4	9644199P1	Spacer for movable tip
45	1	—	—	—	—	—	5149048G1	Terminal support
46	1	1	2	2	3	6	N144P16012C6	Screw fastening spacer to movable tip
47	1	—	1	2	2	2	195B6283G1	Movable tip assembly (complete - N.O.)
47	—	1	1	—	1	2	195B6283G3	Movable tip assembly (complete - N.C.)
48	1	1	2	2	3	4	273A4995P2	Insulation (1000 volt form only)

* Not Shown

TABLE 3A
 OPERATING AND HOLDING COILS
 See nameplate reading on page 1
 (1 N.O., 1 N.C., 1 N.O. - 1 N.C. Poles)

Coil No.	Volts	Operating Coil Cat. No.	Volts	Holding Coil Cat. No.	Pick-up Resistor Cat. No.	Rectifier Cat. No.
A002	230/250	22D154G2A	----	----	----	----
A003	115/120	22D154G3A	----	----	----	----
A004	475/500	22D154G4A	----	----	----	----
A005	550	22D154G5A	----	----	----	----
A006	600	22D154G5A	----	----	----	----
A007	6	22D154G17A	----	----	----	----
A008	12	22D154G18A	----	----	----	----
A009	18/20	22D154G29A	----	----	----	----
A010	24	22D154G15A	----	----	----	----
A012	32	22D154G9A	----	----	----	----
A013	38	22D154G34A	----	----	----	----
A014	48/50	22D154G6A	----	----	----	----
A016	62/68	22D154G9A	----	----	----	----
A017	74	22D154G11A	----	----	----	----
A018	78	22D154G11A	----	----	----	----
A019	80	22D154G11A	----	----	----	----
A020	90	22D154G22A	----	----	----	----
A021	100	22D154G36A	----	----	----	----
A023	150	22D154G10A	----	----	----	----
A026	200	22D154G12A	----	----	----	----
A027	275	22D154G21A	----	----	----	----
A028	300	22D154G13A	----	----	----	----
A031	440	22D154G39A	----	----	----	----
A050	1.42 AMPS	22D154G14A	----	----	----	----
A051	2.86 AMPS	22D154G19A	----	----	----	----
A052	1.95 AMPS	22D154G20A	----	----	----	----
A053	6.40 AMPS	22D154G37A	----	----	----	----
A055	.40 AMPS	22D154G43A	----	----	----	----
A502*	230/250	22D154G2A	----	----	----	----
A503*	115/120	22D154G3A	----	----	----	----
A650	115 AC	22D154G16A	----	----	A50E150DA-TH	IC3500A403C2
A651	230 AC	22D154G3A	----	----	A50E500DA-TH	IC3500A403C6
A652	460 AC	22D154G2A	----	----	A50E2000DA-TH	IC3500A403C5
A653	575 AC	22D154G4A	----	----	----	IC3500A403C8
J202	230/250	22D154G2A	230/250	22D154G2A	----	----
J203	115/120	22D154G3A	115/120	22D154G3A	----	----
J204	500	22D154G4A	500	22D154G4A	----	----
J205	550/600	22D154G5A	550/600	22D154G5A	----	----
J206	90	22D154G22A	275	22D154G21A	----	----
J207	62	22D154G16A	62	22D154G16A	----	----
J208	115/120	22D154G3A	230/250	22D154G2A	----	----
J209	62	22D154G16A	230	22D154G2A	----	----
J210	48	22D154G6A	48	22D154G6A	----	----
J211	200	22D154G12A	300	22D154G13A	----	----
J212	150	22D154G10A	275	22D154G21A	----	----
J213	200	22D154G12A	230/250	22D154G2A	----	----
J214	275	22D154G21	275	22D154G21A	----	----
J215	230/250	22D154G2A	500	22D154G4A	----	----
J216	200	22D154G12A	200	22D154G12A	----	----
J217	32	22D154G9A	32	22D154G9A	----	----
J218	90	22D154G22A	90	22D154G22A	----	----
J219	440	22D154G39A	440	22D154G39A	----	----
J220	78	22D154G11A	78	22D154G11A	----	----
J221	38	22D154G34A	38	22D154G34A	----	----

* Order noise suppressor cat. no. 128C4095G4 for DS303A3A N.O. contact.
 Order noise suppressor cat. no. 128C4095G5 for DS303A3B N.C. contact.

TABLE 3B
OPERATING AND HOLDING COILS
 See nameplate reading on page 1
 (2 N.O., 2 N.O. - 1 N.C., 2 N.O. - 2 N.C. Poles)

Coil No.	Volts	Operating Coil Cat. No.	Volts	Holding Coil Cat. No.	Pick-up Resistor Cat. No.	Rectifier Cat. No.
A002	230/250	22D101G2A	----	-----	-----	-----
A003	115/120	22D101G3A	----	-----	-----	-----
A004	475/500	22D101G5A	----	-----	-----	-----
A005	550	22D101G6A	----	-----	-----	-----
A006	600	22D101G6A	----	-----	-----	-----
A008	12	22D101G16A	----	-----	-----	-----
A009	18/20	22D101G21A	----	-----	-----	-----
A010	24	22D101G18A	----	-----	-----	-----
A011	28	22D101G27A	----	-----	-----	-----
A012	32	22D101G14A	----	-----	-----	-----
A013	38	22D101G119A	----	-----	-----	-----
A014	48/50	22D101G8A	----	-----	-----	-----
A016	62/68	22D101G4A	----	-----	-----	-----
A017	74	22D101G25A	----	-----	-----	-----
A018	78	22D101G7A	----	-----	-----	-----
A020	90	22D101G15A	----	-----	-----	-----
A021	100	22D101G118A	----	-----	-----	-----
A022	135	22D101G111A	----	-----	-----	-----
A023	150	22D101G11A	----	-----	-----	-----
A024	165	22D101G115A	----	-----	-----	-----
A025	180/190	22D101G12A	----	-----	-----	-----
A027	275	22D101G112A	----	-----	-----	-----
A028	300	22D101G10A	----	-----	-----	-----
A030	380	22D101G17A	----	-----	-----	-----
A032	67	22D101G125A	----	-----	-----	-----
A033	50	22D101G113A	----	-----	-----	-----
A034	600	22D101G121A	----	-----	-----	-----
A035	120	22D101G126A	----	-----	-----	-----
A502*	230/250	22D101G2A	----	-----	-----	-----
A503*	115/120	22D101G3A	----	-----	-----	-----
B013	38	22D101G123A	----	-----	-----	-----
C013	38	22D101G128A	----	-----	-----	-----
C018	78	22D101G127A	----	-----	-----	-----
G002	230	22D101G102	----	-----	-----	-----
G003	115	22D101G103	----	-----	-----	-----
G004	500	22D101G105	----	-----	-----	-----
G006	600	22D101G106	----	-----	-----	-----
G009	18/20	22D101G32	----	-----	-----	-----
G010	24	22D101G110	----	-----	-----	-----
G013	38	22D101G108	----	-----	-----	-----
G015	55/60	22D101G104	----	-----	-----	-----
G018	78	22D101G116	----	-----	-----	-----
G020	90	22D101G109	----	-----	-----	-----

TABLE 3B continued on next sheet

* Order noise suppressor cat. no. 128C4095G16 for DS303A3C 2 N.O. contacts.
 Order noise suppressor cat. no. 128C4095G17 for DS303A3E 2 N.O. - 1 N.C. contacts.
 2 N.O. - 2 N.C. contacts.

TABLE 3B (Cont'd)
 OPERATING AND HOLDING COILS
 See nameplate reading on page 1
 (2 N.O., 2 N.O. - 1 N.C., 2 N.O. - 2 N.C. Poles)

Coil No.	Volts	Operating Coil Cat. No.	Volts	Holding Coil Cat. No.	Pick-up Resistor Cat. No.	Rectifier Cat. No.
G027	275	22D101G117	----	-----	-----	-----
G028	300	22D101G124	----	-----	-----	-----
G032	20	22D101G32	----	-----	-----	-----
G033	115	22D101G122	----	-----	-----	-----
G650	115AC	22D101G15A	----	-----	A50E25DA-TH	IC3500A403C2
G651	230AC	22D101G12A	----	-----	A50E150DA-TH	IC3500A403C6
G652	460AC	22D101G17A	----	-----	A50E750DA-TH	IC3500A403C5
G653	575AC	22D101G5A	----	-----	A50E750DA-TH	IC3500A403C8
G654	380AC	22D101G10A	----	-----	A50E400DA-TH	IC3500A403C5
J202	230/250	22D101G2A	230/250	22D163G2A	-----	-----
J203	115/120	22D101G3A	115/120	22D163G3A	-----	-----
J204	500	22D101G5A	500	22D163G10A	-----	-----
J205	550/600	22D101G6A	550/600	22D163G5A	-----	-----
J206	62	22D101G4A	62	22D163G6A	-----	-----
J207	190	22D101G12A	230/250	22D163G2A	-----	-----
J208	90	22D101G15A	230/250	22D163G2A	-----	-----
J209	90	22D101G15A	300	22D163G7A	-----	-----
J210	78	22D101G7A	230/250	22D163G2A	-----	-----
J211	230/250	22D101G2A	300	22D163G7A	-----	-----
J212	230/250	22D101G2A	500	22D163G10A	-----	-----
J213	115/120	22D101G3A	500	22D163G10A	-----	-----
J214	115/120	22D101G3A	300	22D163G7A	-----	-----
J215	115/120	22D101G3A	230/250	22D163G2A	-----	-----
J216	230/250	22D101G2A	115/120	22D163G3A	-----	-----
J217	38	22D101G119A	38	22D163G13A	-----	-----
J218	200	22D101G1A	300	22D163G7A	-----	-----
J219	78	22D101G7A	62	22D163G6A	-----	-----
J220	190	22D101G12A	190	22D163G11A	-----	-----
J221	135	22D101G111A	135	22D163G15A	-----	-----
J222	62	22D101G4A	62	22D163G6	-----	-----
J223	78	22D101G7A	78	22D163G16A	-----	-----
J224	600	22D101G121A	550/600	22D163G5A	-----	-----
J225	230/250	22D101G2A	32	22D163G17A	-----	-----
J226	230	22D101G2A	56 amps	278A919G3	-----	-----
J227	230/250	22D101G102	56 amps	278A919G3	-----	-----
J228	90	22D101G109	230/250	278A919G2A	-----	-----
J229	230/250	22D101G102	230/250	278A919G2A	-----	-----
J230	144	22D101G26A	90	278A919G9A	-----	-----
J231	74	22D101G25A	45	278A919G45	-----	-----

TABLE 4
ELECTRICAL INTERLOCK
 See nameplate reading on page 1

Interlock Letter	Interlock Switch Unit		# Set of Contacts Cat. No.	Mounting Kit Cat. No.	Interlock Cover Cat. No.
	Left-hand Cat. No.	Right-hand Cat. No.			
XF	IC2956A200A	-----	6960053G3	IC2956A202C	-----
XG	-----	IC2956A200A	6960053G3	IC2956A202H	-----
XH	IC2956A200C	-----	6960053G3	IC2956A202C	-----
XJ	-----	IC2956A200C	6960053G3	IC2956A202D	-----
XK	IC2956A200B	-----	6960053G3	IC2956A202C	-----
XL	-----	IC2956A200B	6960053G3	IC2956A202D	-----
XM	IC2956A200A	IC2956A200A	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	----- ----- -----
XN	IC2956A200A	IC2956A200C	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	----- ----- -----
XP	IC2956A200A	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	----- ----- -----
XR	IC2956A200C	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	----- ----- -----
XS	IC2956A200B	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	----- ----- -----
AF	IC2956A200A	-----	6960053G3	IC2956A202C	136C2527P1
AG	-----	IC2956A200A	6960053G3	IC2956A202D	136C2527P1
AH	IC2956A200C	-----	6960053G3	IC2956A202C	136C2527P1
AJ	-----	IC2956A200C	6960053G3	IC2956A202D	136C2527P1
AK	IC2956A200B	-----	6960053G3	IC2956A202C	136C2527P1
AL	-----	IC2956A200B	6960053G3	IC2956A202D	136C2527P1
AM	IC2956A200A	IC2956A200A	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	136C2527P1 ----- -----

TABLE 4 continued on next sheet

- # Includes movable and stationary contacts, springs, and contact-holding screws.
- * For left-hand interlock mounting.
- ** For right-hand interlock mounting - 1 N.O. main pole only.
- & For right-hand interlock mounting - 2 N.O., 2 N.O. - 1 N.C., 2 N.O. - 2 N.C. main pole only.

TABLE 4 (Cont'd)
ELECTRICAL INTERLOCK
See nameplate reading on page 1

Interlock Letter	Interlock Switch Unit		# Set of Contacts Cat. No.	Mounting Kit Cat. No.	Interlock Cover Cat. No.
	Left-hand Cat. No.	Right-hand Cat. No.			
AN	IC2956A200A	IC2956A200C	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	136C2527P1 ----- -----
AP	IC2956A200A	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	136C2527P1 ----- -----
AR	IC2956A200C	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	136C2527P1 ----- -----
AS	IC2956A200B	IC2956A200B	6960053G3	IC2956A202C* IC2956A202T** IC2956A202V&	136C2527P1 ----- -----
DF	IC2956A205A	-----	6960053G24	IC2956A202C	-----
DG	-----	IC2956A205A	6960053G24	IC2956A202D	-----
DH	IC2956A205C	-----	6960053G24	IC2956A202C	-----
DJ	-----	IC2956A205C	6960053G24	IC2956A202D	-----
DK	IC2956A205B	-----	6960053G24	IC2956A202C	-----
DL	-----	IC2956A205B	6960053G24	IC2956A202D	-----
EF	IC2956A205A	-----	6960053G24	IC2956A202C	136C2527P1
EG	-----	IC2956A205A	6960053G24	IC2956A202D	136C2527P1
EH	IC2956A205C	-----	6960053G24	IC2956A202C	136C2527P1
EJ	-----	IC2956A205C	6960053G24	IC2956A202D	136C2527P1
EK	IC2956A205B	-----	6960053G24	IC2956A202C	136C2527P1
EL	-----	IC2956A205B	6960053G24	IC2956A202D	136C2527P1

- # Includes movable and stationary contacts, springs, and contact-holding screws.
- * For left-hand interlock mounting.
- ** For right-hand interlock mounting - 1 N.O. main pole only.
- & For right-hand interlock mounting - 2 N.O., 2 N.O. - 1 N.C., 2 N.O. - 2 N.C. main pole only.