



GEF-4647A

***GE Drive Systems***

---

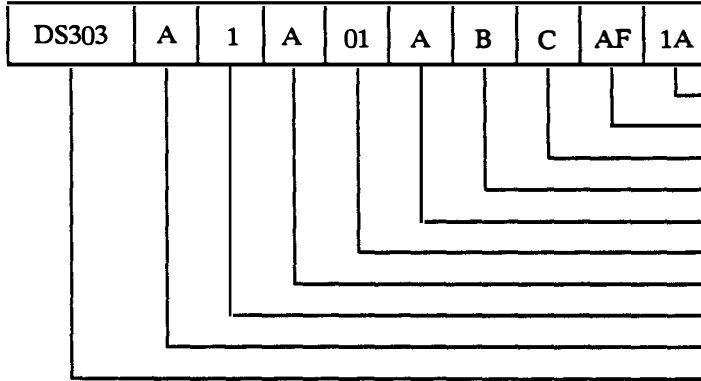
*Renewal Parts*

**HEAVY DUTY DC CONTACTORS**

DS303A1 (600V STYLE)

DS303B1 (1000V STYLE)

[www.ElectricalPartManuals.com](http://www.ElectricalPartManuals.com)



- Special setting and stamping
- Electric interlock (See Table 4)
- Operating coil and voltage rating (See Table 3)
- 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 (25 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
D		1	Normally open and 1 normally closed
G		1	Normally closed with holding coil
J		1	Normally open and 1 normally closed with holding coil

**TABLE 2**  
BLOWOUT COILS  
See nameplate reading above

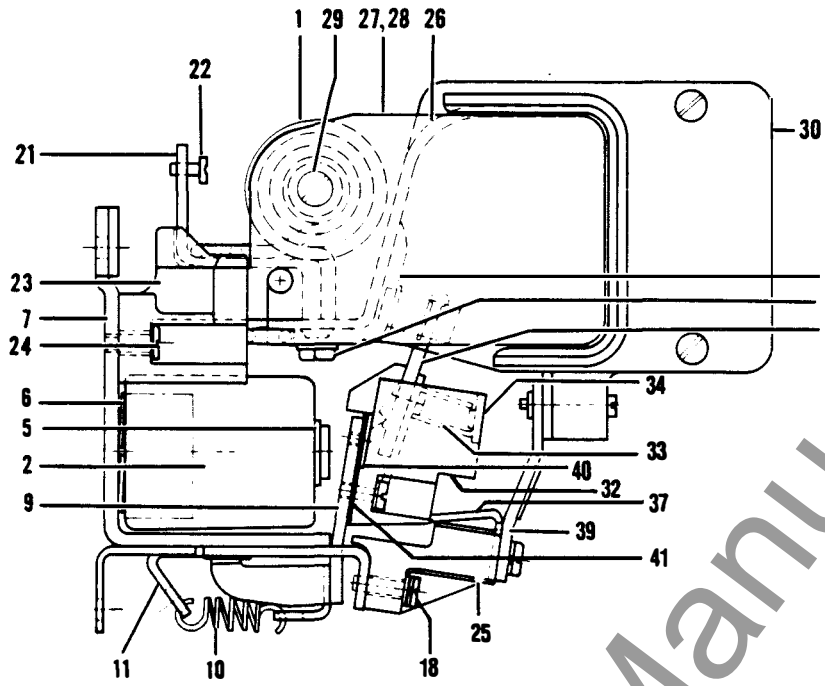
Blowout Coil Letter	Current Rating	Coil Cat. No. Ref. No. 1
A	Less B.O.	-----
B	2 amp	259A8153G3
C	5 amp	259A8153G2
D	10 amp	259A8153G1
E*	25 amp	259A5686P2
X	---	Pole Eliminated

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

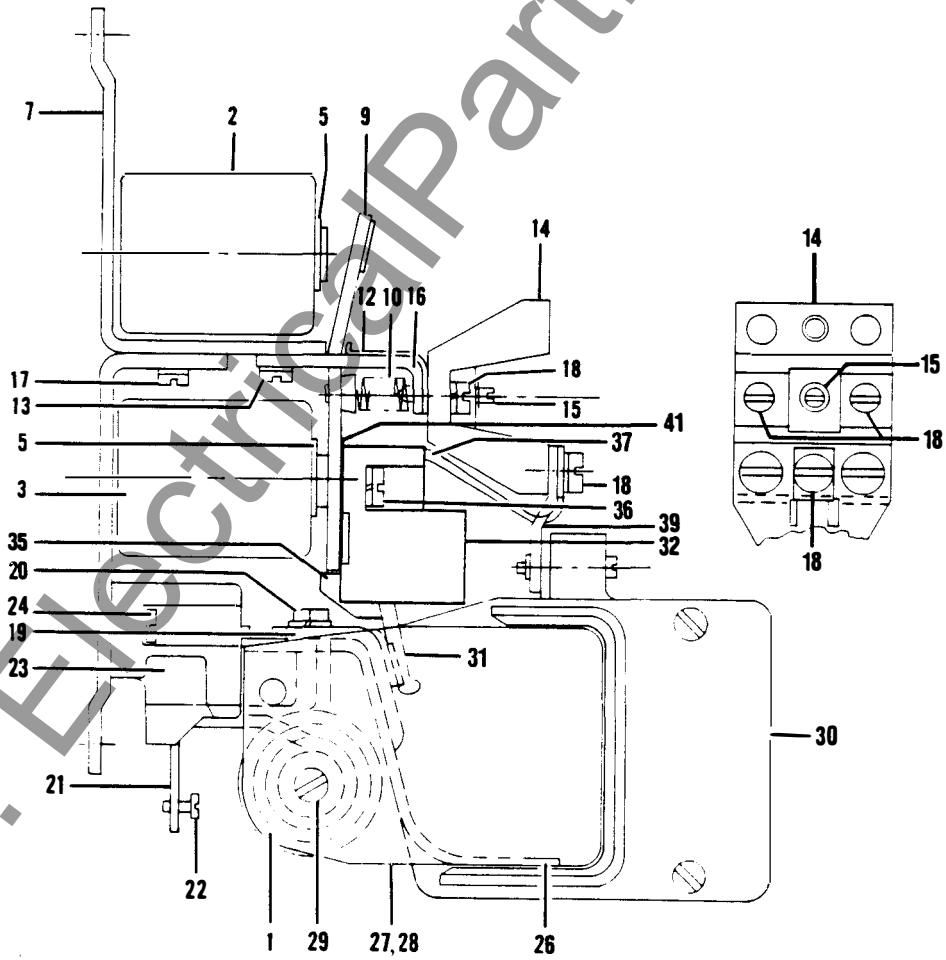
**PARTS RECOMMENDED FOR STOCK**

Ref. No.	Quantity Required for			Catalog Number	Description
	1 N.O.	1 N.C.	1 N.O. 1 N.C.		
2	-	-	-		Operating coil (see table 3)
3	-	-	-		Holding coil (see table 3)
4	#	#	#		Electrical interlock (see table 4)
10	1	-	-	2417924P1	Tension spring for armature
10	-	1	1	2418822P1	Tension spring for armature
19	1	1	2	259A5615G1	Stationary tip assembly
30	1	1	2	195B6285G3	Arc chute assembly
31	1	1	2	259A5614G1	Movable tip assembly
33	-	1	2	304A6611P1	Compression spring for movable contact finger (used with holding coil)
33	1	-	1	304A6611P1	Compression spring for movable contact finger (used without holding coil)
33	-	1	1	2418819P1	Compression spring for movable contact finger (used without holding coil)
37	1	-	-	259A5683G1	Shunt assembly
37	-	1	2	259A8160G1	Shunt assembly

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



DS303A1 N.O. Contact



DS303A1 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.		
1	—	—	—		Blowout coil (see table 2)
2	—	—	—		Operating coil (see table 3)
3	—	—	—		Holding coil (see table 3)
4*	—	—	—		Electrical interlock (see table 4)
5	1	1	1	N931P50C6	Coil retainer
6	1	1	1	151A3966P1	Washer for operating or holding coil
7	1	—	—	202B3632G1	Magnet frame with core for operating coil
7	—	1	1	237B7702G1	Magnet frame with core for operating coil and holding coil
9	1	—	—	259A5681G1	Armature assembly
9	—	1	1	259A8164G1	Armature assembly
10	1	—	—	2417924P1	Tension spring for armature
10	—	1	1	2418822P1	Tension spring for armature
11	1	—	—	161A7368G7	Spring support
12	—	1	1	181A4841P2	Armature stop
13	—	2	2	N144P15006C6	Screw with lock washer fastening support to armature
14	—	1	1	202B3636G1	Terminal block
15	—	1	1	9023691P1	Adjusting screw for tension spring
16	—	1	1	8650775P5	Supporting bracket for terminal block
17	—	2	2	N144P13006C6	Screw with lock washer fastening upper magnet to lower magnet frame
18	2	3	4	N144P16010C6	Screw with lock washer fastening terminal block to supporting bracket
19	1	1	2	259A5615G1	Stationary tip assembly
20	1	1	2	9384190P1	Screw with lock washer fastening stationary tip to support
21	1	1	2	259A5690P1	Terminal
22	1	1	2	N144P21008C6	Terminal screw with lock washer
23	1	1	2	259A5685G1	Blowout coil and terminal support
24	1	1	2	N144P16008C6	Screw with lock washer fastening terminal to support
25	1	—	—	259A6597G1	Terminal support
26	1	1	2	259A5687P1	Arc horn for stationary tip
27	1	1	2	259A5689G1	Pole piece with core
28	1	1	2	305A1210G1	Pole piece
29	1	1	2	N51P16008B6	Screw fastening pole pieces together
30	1	1	2	195B6285G3	Arc chute assembly
31	1	1	2	259A5614G1	movable tip assembly
32	1	—	—	202B2627G2	Movable tip assembly (complete) N.O.
32	—	—	1	202B3638G2	Movable tip assembly (complete) N.O.
32	—	1	1	202B3638G6	Movable tip assembly (complete) N.C.
33	—	1	2	304A6611P1	Compression spring for movable contact finger (used with holding coil)
33	1	1	1	304A6611P1	Compression spring for movable contact finger (used without holding coil)
33	—	—	1	2418819P1	Compression spring for movable contact finger (used without holding coil)
34	1	1	2	259A5684P1	Spring support
35	1	1	2	259A5682G1	Movable tip support
36*	2	2	4	N144P13004C6	Screw with lock washer fastening spring support to molded support
37	1	—	—	259A5683G1	Shunt assembly
37	—	1	1	259A8160G1	Shunt assembly
38*	1	1	2	259A8165P1	Arc Barrier
39	1	—	—	259A5695P1	Arc support
39	—	1	2	259A8161P1	Arc support
40	1	—	—	259A8156P2	Spacer
41	1	1	2	273A4945P1	Insulation (1000 volt form only)

\* Not shown

TABLE 3  
OPERATING AND HOLDING COILS  
See nameplate reading on page 1

Coil No.	Volts	Operating Coil Cat. No.	Volts	Holding Coil Cat. No.	Pick-up Resistor Cat. No.	Rectifier Cat. No.
A002	230/250	1D106G2A	----	----	----	----
A003	115/120	1D106G3A	----	----	----	----
A004	475/500	1D106G2A	----	----	A50E4000DA-TH	----
A005	550	1D106G2A	----	----	A50E4000DA-TH	----
A006	600	1D106G2A	----	----	A50E6000DA-TH	----
A008	12	1D106G12A	----	----	----	----
A009	5/20	1D106G30A	----	----	----	----
A010	24	1D106G18A	----	----	----	----
A012	32	1D106G10A	----	----	----	----
A013	38	1D106G93A	----	----	----	----
A014	48/50	1D106G14A	----	----	----	----
A015	55/60	1D106G43A	----	----	----	----
A016	62/68	1D106G9A	----	----	----	----
A017	74	1D106G7A	----	----	----	----
A018	78	1D106G7A	----	----	----	----
A019	80	1D106G7A	----	----	----	----
A020	90	1D106G7A	----	----	----	----
A021	100	1D106G94A	----	----	----	----
A023	150	1D106G8A	----	----	----	----
A025	180/190	1D106G42A	----	----	----	----
A027	275	1D106G2A	----	----	A50E1000DA-TH	----
A028	300	1D106G2A	----	----	A50E1500DA-TH	----
A029	350	1D106G2A	----	----	A50E2000DA-TH	----
A031	440	1D106G2A	----	----	A50E3000DA-TH	----
A032	13.6	1D106G54A	----	----	----	----
A502*	230/250	1D106G2A	----	----	----	----
A503*	115/120	1D106G3A	----	----	----	----
A650	115AC	1D106G7A	----	----	A50E200DA-TH	IC3500A403C2
A651	230AC	1D106G42A	----	----	A50E500DA-TH	IC3500A403C6
A652	460AC	1D106G2A	----	----	A50E4000DA-TH	IC3500A403C5
A653	575AC	1D106G2A	----	----	A50E6500DA-TH	IC3500A403C8
B002	230/250	1D106G44	----	----	----	----
B013	38	1D106G38A	----	----	----	----
C013	38	1D106G51A	----	----	----	----
C019	80	1D106G50A	----	----	----	----
J202	230/250	1D106G2A	230/250	1D106G2A	----	----
J203	115/120	1D106G3A	115/120	1D106G3A	----	----
J204	90	1D106G13A	----	----	----	----
J205	62	1D106G9A	62	1D106G9A	----	----
J206	90	1D106G13A	90	1D106G13A	----	----
J207	115/120	1D106G3A	90	1D106G13A	----	----
J208	230/250	1D106G2A	115/120	1D106G3A	----	----
J209	150	1D106G8A	150	1D106G8A	----	----
J210	125	1D106G41A	250	1D106G40A	----	----

\* Order noise suppressor cat. no. 128C4095G21 for DS303A1A 1 N.O. contact.

Order noise suppressor cat. no. 128C4095G22 for DS303A1B 1 N.C. contact.

Order noise suppressor cat. no. 128C4095G22 for DS303A1D 1 N.O. - 1 N.C. contact.

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	IC2956A202J	-----
XG	-----	IC2956A200A	6960053G3	IC2956A202K	-----
XH	IC2956A200C	-----	6960053G3	IC2956A202J	-----
XJ	-----	IC2956A200C	6960053G3	IC2956A202K	-----
XK	IC2956A200B	-----	6960053G3	IC2956A202J	-----
XL	-----	IC2956A200B	6960053G3	IC2956A202K	-----
AF	IC2956A200A	-----	6960053G3	IC2956A202J	136C2527P1
AG	-----	IC2956A200A	6960053G3	IC2956A202K	136C2527P1
AH	IC2956A200C	-----	6960053G3	IC2956A202J	136C2527P1
AJ	-----	IC2956A200C	6960053G3	IC2956A202K	136C2527P1
AK	IC2956A200B	-----	6960053G3	IC2956A202J	136C2527P1
AL	-----	IC2956A200B	6960053G3	IC2956A202K	136C2527P1
DF	IC2956A205A	-----	6960053G24	IC2956A202J	-----
DG	-----	IC2956A205A	6960053G24	IC2956A202K	-----
DH	IC2956A205C	-----	6960053G24	IC2956A202J	-----
DJ	-----	IC2956A205C	6960053G24	IC2956A202K	-----
DK	IC2956A205B	-----	6960053G24	IC2956A202J	-----
DL	-----	IC2956A205B	6960053G24	IC2956A202K	-----
EF	IC2956A205A	-----	6960053G24	IC2956A202J	136C2527P1
EG	-----	IC2956A205A	6960053G24	IC2956A202K	136C2527P1
EH	IC2956A205C	-----	6960053G24	IC2956A202J	136C2527P1
EJ	-----	IC2956A205C	6960053G24	IC2956A202K	136C2527P1
EK	IC2956A205B	-----	6960053G24	IC2956A202J	136C2527P1
EL	-----	IC2956A205B	6960053G24	IC2956A202K	136C2527P1

\* Includes movable and stationary contacts, springs, and contact-holding screws.

www . ElectricalPartManuals . com

www.ElectricalPartManuals.com



Drive Systems Operations  
1501 Roanoke Boulevard  
Salem, Virginia 24153  
(703) 387-7000