



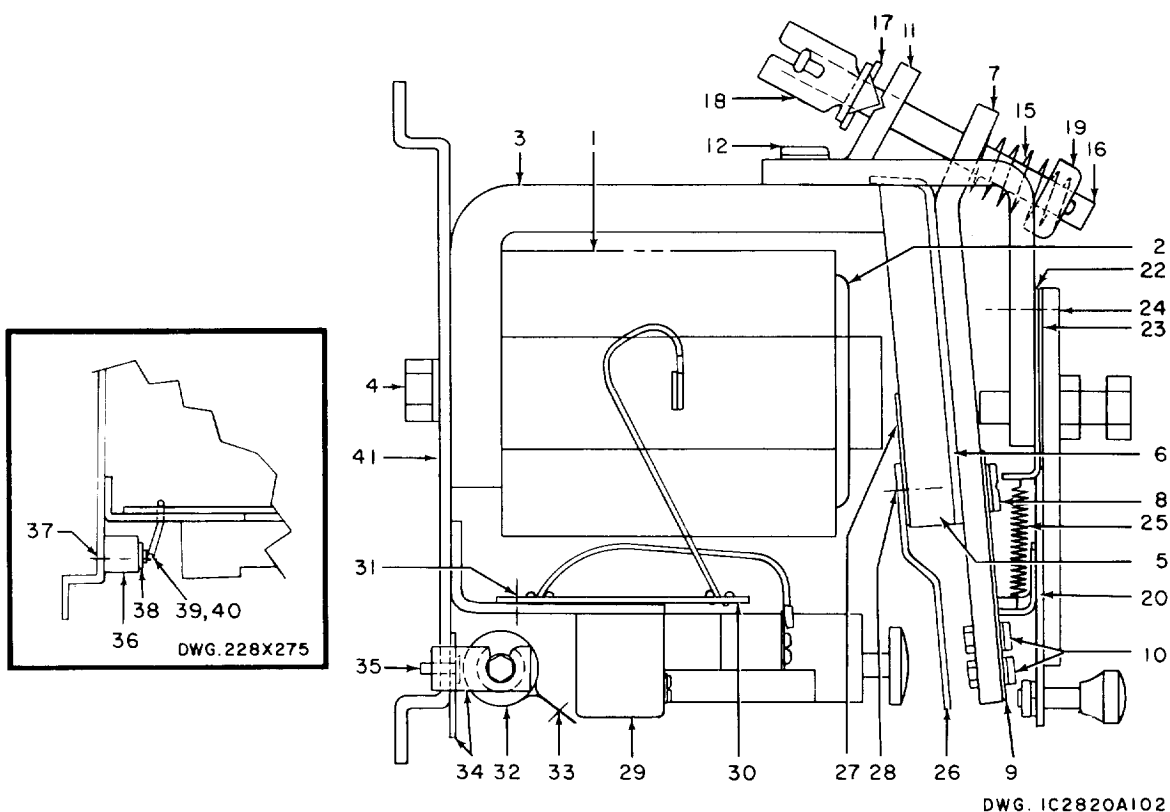
RENEWAL PARTS

GEF-4318A
Supersedes GEF-4318
and GEF-4332

IC2820A102-A THRU BW AND CAT. NO. 228X275G1 THRU-G10 RELAYS

CAUTION: After replacing parts in the Cat. No. 228X275G1, -G2, -G3 or -G4 relay, be sure to test and adjust relay for pick-up current as specified on instruction sheet GEH-3072.

NOTE:—When ordering parts for a form of the relay not covered by this bulletin, give reference number, description of part, complete nameplate reading, and above bulletin (GEF) number. Do not use catalog number when form for which the parts are needed is not covered by the bulletin.



When ordering renewal parts, give quantity, catalog number, description of each item required, and complete nameplate reading.

GENERAL  ELECTRIC

IC2820A102 AND CAT. NO. 228X275 RELAYS

Ref. No.	Number Required for IC2820-A102-																Catalog Number	Description																	
	E		F, AF		G		H, AH		L		R		S		T				U		W		X		Y		BK		BM						
	A, B, C, D	AE, DE	AN, BN	AF, BF	AG, BG	AS, BS	AH, BH	AL, BL	AM, BM	N	Q	R	S	T	U	W			X	Y	BK	BM	W	X	Y	BK	BM	W	X	Y	BK	BM			
24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	N57P15010B6	Screw fastening latch bar, latch stop, and shim to armature stop plate (8-32, 5/8 in., pan hd, slot, pro fin)	
25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*574A743P1	Tension spring for latch bar assembly		
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	576A118P1	Operating arm for interlock		
27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	576A118P2	Shim for operating arm		
28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	N75P15006	Screw fastening interlock operating arm and shim to armature (8-32, 3/8 in., pan hd, slot, brass)		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200AS	Switch unit for Form A only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200F	Switch unit for Forms E, F, M, Q, T, U only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200D	Switch unit for Forms G, H, K only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200E	Switch unit for Forms J, P, R, W, X, Y, BW only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200BC	Switch unit for Forms L, N only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A200BK	Switch unit		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A207D	Switch unit for Forms AE, AF, AM, DE, BF, BK only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A207E	Switch unit for Forms AG, AH, AK, BG, BH, BM only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A207F	Switch unit for Forms AL, AN, BL, BN only		
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IC2956A207G	Switch unit for Forms AS, BS only		
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*6960053G37	Set of interlock contacts, with springs and contact-holding screws	
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	576A115P1	Mounting bracket for switch unit	
30	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	576A145P4	Screw fastening mounting bracket to base	
30	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	119A4655P5	Screw fastening mounting bracket to switch unit	
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*149B2816G1	Rectifier board assembly for Forms A, B, C, D, E, F, G, H, J, L, M, R, T, X, Y, Q, U, AE-AH, AK, AM only	
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*149B2816G2	Rectifier board assembly for Forms L, N, P, S, AL, AN, AS only	
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*177B8744C1	Rectifier board assembly for Forms DE-BK, BM only	
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*177B8744G2	Rectifier board assembly for Forms BL, BN, BS only	
31	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	N57P15006B6	Screw fastening rectifier board assembly to interlock mounting bracket (8-32, 3/8 in., pan hd, slot, pro fin)	
32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	168A1796P1	Resistor
32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	168A1796P1	Resistor for Forms BN, BS only
32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	168A1796G3	Resistor
33	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	N57P13004B6	Screw for resistor terminal (6-32, 1/4 in., pan hd, slot, pro fin)
34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	167A9933P1	Support for resistor
35	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	N144P15006B6	Screw with lock washer fastening support to base (8-32, 3/8 in., pan hd, pro fin)
36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	167A5694P1	Base
36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	167A5694P2	Base
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	193A9123P1	Core head

* Parts recommended for normal stock.

IC2820A102 AND CAT. NO. 228X275 RELAYS

GEF-4318

Number Required for IC2820-A102-

Ref. No.	A, B		C, D		E	F, AF	G	H, AH	J	K	L	M	N	Q	R	S	T	U	W	X	Y	BK	BM	Catalog Number	Description
	A	B	C	D																					
1	1	1	-	-	-	-	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	*22D11G267A	Operating coil
1	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*22D11G128A	Operating coil
1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	*22D11G125A	Operating coil
1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	*22D11G59A	Operating coil for Form W only
1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	*22D11G262A	Operating coil for Form BW only
1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	*22D11G70A	Operating coil
1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*22D11G55A	Operating coil
1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*22D11G44A	Operating coil
1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*22D11G124A	Operating coil
2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1445721	Retaining washer for operating coil
3	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2810489G1	Magnet frame and core assembly
3	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	193A9125G1	Magnet frame and core assembly
4	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N26P21012B6	Screw fastening magnet assembly to base (1/4-20, 3/4 in., hex hd, slot, pro fin)
5	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219A1688P1	Armature
6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2453389	Guide strip for armature
7	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	576A123P1	Spring support for armature
7	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	576A123P2	Spring support for armature
8	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N144P16010C	Screw with lock washer fastening guide strip and spring support to armature (10-32, 5/8 in., pan hd, pro fin)
9	†	†	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A9872P1	Spacer
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A9872P2	Spacer
10	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N144P16008B6	Screw with lock washer fastening spacer to armature spring support (10-32, 1/2 in., pan hd, pro fin)
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N144P16006B6	Screw with lock washer fastening spacer to armature spring support (10-32, 3/8 in., pan hd, pro fin)
11	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	177B8123P2	Stop plate for armature
12	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N144P16010C	Screw with lock washer fastening stop plate to frame (10-32, 5/8 in., pan hd, pro fin)
13	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139B7147G3	Latch assembly for Forms A, C, D only
14	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139B7147G4	Latch assembly for Form B only
15	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139B7147G7	Latch assembly
16	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139B7147G9	Latch assembly
17	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139B7147G8	Latch assembly
18	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N75P21022	Stop screw for armature (1/4-20, 1 3/8 in., hex hd, slot, brass)
19	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A5696P3	Space nut for stop screw
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*53215P1	Compression spring for armature
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125A4875P1	Guide pin for compression spring
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	578A552P2	Collar for guide pin
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9196760P1	Lock nut for guide pin
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161A7306P1	Retaining washer for compression spring
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A5695G1	Latch bar assembly
20	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A5695G2	Latch bar assembly
22	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A5696P1	Latch stop
23	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167A5696P2	Shim for latch stop

* Parts recommended for normal stock.

† Use as required to limit end play in latch assembly to 1/64 in. max with the armature pickup.

IC2820A102 AND CAT. NO. 228X275 RELAYS

Ref. No.	Number Required for 228X275G-										Catalog Number	Description
	1	2	3	4	5	6	7	8	9	10		
1	1	-	1	-	-	1	-	1	-	-	*22D11G86	Operating coil
1	-	1	-	1	-	-	1	-	1	-	*22D11G55	Operating coil
1	-	-	-	-	1	-	-	-	-	1	*22D11G26	Operating coil
2	1	1	1	1	1	1	1	1	1	1	1445721	Retaining washer for operating coil
3	1	1	1	1	1	1	1	1	1	1	2810489G1	Magnet frame and core assembly
4	1	1	1	1	1	1	1	1	1	1	N26P21012B6	Screw fastening magnet assembly to base (1/4-20, 3/4 in., hex hd, slot, pro fin)
5	1	1	1	1	1	1	1	1	1	1	9098152P1	Armature
6	1	1	1	1	1	1	1	1	1	1	2453389P1	Guide strip for armature
7	1	1	1	1	1	1	1	1	1	1	576A123P1	Spring support for armature
8	2	2	2	2	2	2	2	2	2	2	N144P16010C	Screw with lock washer fastening guide strip and spring support to armature (10-32, 5/8 in., pan hd, pro fin)
9	4	4	4	4	4	4	4	4	4	4	167A9872P1	Spacer
10	2	2	2	2	2	2	2	2	2	2	N144P16008B6	Screw with lock washer fastening spacer to armature spring support (10-32, 1/2 in., pan hd, pro fin)
11	1	1	1	1	1	1	1	1	1	1	9034493P2	Stop plate for armature
12	2	2	2	2	2	2	2	2	2	2	N144P16010C	Screw with lock washer fastening stop plate to frame (10-32, 5/8 in., pan hd, pro fin)
	1	1	1	1	1	1	1	1	1	-	139B7147G5	Latch assembly
	-	-	-	-	-	-	-	-	-	-	139B7147G6	Latch assembly
15	1	1	1	1	1	1	1	1	1	1	*53215P1	Compression spring for armature
16	1	1	1	1	1	1	1	1	1	1	125A4875P1	Guide pin for compression spring
17	1	1	1	1	1	1	1	1	1	1	578A552P2	Collar for guide pin
18	1	1	1	1	1	1	1	1	1	1	9196760P1	Lock nut for guide pin
19	1	1	1	1	1	1	1	1	1	1	161A7306P1	Retaining washer for compression spring
20	1	1	1	1	1	1	1	1	1	1	167A5695G1	Latch bar assembly
22	1	1	1	1	1	1	1	1	1	1	167A5696P1	Latch stop
23	1	1	1	1	1	1	1	1	1	1	167A5696P2	Shim for latch stop
24	1	1	1	1	1	1	1	1	1	1	N57P15008B6	Screw fastening latch bar, latch stop, and shim to armature stop plate (8-32, 1/2 in., pan hd, slot, pro fin)
25	1	1	1	1	1	1	1	1	1	1	*574A743P1	Tension spring for latch bar assembly
26	1	1	1	1	1	1	1	1	1	1	576A118P1	Operating arm for interlock
27	1	1	1	1	1	1	1	1	1	1	2450533P1	Shim for operating arm
28	2	2	2	2	2	2	2	2	2	2	N75P15006	Screw fastening interlock operating arm and shim to armature (8-32, 3/8 in., pan hd, slot, brass)
29	1	1	-	-	-	1	1	-	-	-	IC2956A200AS	Switch unit
29	-	-	1	1	-	-	-	1	1	-	IC2956A200AU	Switch unit
29	-	-	-	-	1	-	-	-	-	1	IC2956A200BB	Switch unit
	1	1	1	1	1	1	1	1	1	1	*6960053G3	Set of interlock contacts, with springs and contact-holding screws
30	1	1	1	1	-	1	1	1	1	-	*129B5782G1	Rectifier board assembly
30	-	-	-	-	1	-	-	-	-	1	*129B5782G3	Rectifier board assembly
31	1	1	1	1	1	1	1	1	1	1	N57P15006B6	Screw fastening rectifier board assembly to interlock mounting bracket (8-32, 3/8 in., pan hd, slot, pro fin)
32	1	-	1	-	-	1	-	1	-	-	168A1796G1	Resistor
33	1	-	1	-	-	1	-	1	-	-	N57P13004B6	Screw for resistor terminal (6-32, 1/4 in., pan hd, slot, pro fin)
34	1	-	1	-	-	1	-	1	-	-	167A9933P1	Support for resistor
35	2	-	2	-	-	2	-	2	-	-	N144P15006B6	Screw with lock washer fastening support to base (8-32, 3/8 in., pan hd, pro fin)
36	1	1	1	1	1	1	1	1	1	1	167A5694P1	Base

* Parts recommended for normal stock

GENERAL ELECTRIC COMPANY
INDUSTRIAL CONTROL DEPARTMENT
SALEM, VA. 24153

