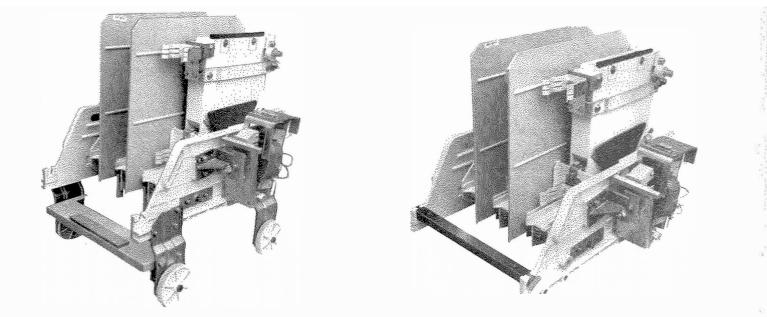


RENEWAL PARTS BULLETIN

High voltage contactors IC302E

EA7 700A-2300V EB7 700A-4800V EC7 700A-5000V

In 2018 ABB acquired GE Industrial Solutions. IC302E is now serviced and maintained by ABB. If you need spare parts or your installed equipment has aged and requires modernization or replacement – ABB is your first point of contact (look for contact details on the last page).



PARTS RECOMMENDED FOR NORMAL STOCK (all forms)

Ref. No.	Catalog Number	No. Req'd	Description	
1		1	Operating coils (see table on page 2)	
27	245A1258P1	3	Compression spring for moving contact	
28	245A1229G1	3	Moving contact assembly	
3.1	194B8326G1	3	Shunt for moving contact	
34	245A1229G1	3	Main stationary contact	
62	177B3253P3	36	Arc barrier plate	
62	177B3253P4	36	Arc barrier plate	
88	125A4278P1	12	Contact finger for stab-on	
89	174A4422P1	3	Spring for stab-on	

GEF-4576

IC302E HIGH VOLTAGE CONTACTORS

REF. NO. 1 - OPERATING COILS - 1 Required

NOTE: The operating coil (also pick-up resistor, holding resistor and rectifier when required) are identified by the number following the form letter in the IC designation.

EXAMPLE:	IC302EA7AA1A412AA3A requires operating coil No. 413, Cat. No. 1D300G144, holding resistor
	A100G125EA-TH, and rectifier Cat. No. IC3500A403C6.

Coil No.	Catalog Number	Å Pick-up Resistor (1 Required) Catalog Number	Å Holding Resistor Catalog Number	No. Req'd	∮ Rectifier (1 Required) Catalog Number
412 413 415 512 513	1D300G152 1D300G144 1D300G139 1D300G148 1D300G149	 A100G1EA-TH A100G5EA-TH	A100G25EA-TH A100G10EA-TH A100G125EA-TH A100G250EA-TH A100G200EA-TH A100G25EA-TH A100G10EA-TH A100G125EA-TH A100G125EA-TH	2 1 2 3 1 2 1 2	IC3500A403C2 IC3500A403C6 IC3500A403C5

A Must be ordered separately.

LATCH ASSEMBLY ONLY - 1 Required

NOTE: The latch assembly is identified by the form letter following the coil number in the IC designation.

EXAMPLE: IC302EA7AA1A412AB3A requires Form Letter AB, Cat. No. 136C1754G9.

Form	Catalog	Form	Catalog	Form	Catalog	Form	Catalog		
Letter	Number	Letter	Number	Letter	Number	Letter	Number		
AB* AC*	136C1754G9 136C1754G7	AD* AE	136C1754G8 136C1754G5	A F AG	136C1754G7 136C1754G8	АН	136C1754G9		

* Wire harness (Cat. No. 7128R73) must be ordered separately, if used.

NOTE: The latch and trip bar assemblies are identified by the form letter following the coil number in the IC designation.

EXAMPLE: IC302EA7A1A412BB3A requires Form Letter BB, Latch Assy Cat. No. 136C1754G9 and Trip Bar Assy Cat. No. 685D963G1.

Form	Latch Assy.	Trip Bar Assy.	Form	Latch Assy.	Trip Bar Assy.
Letter	Cat. No.	Cat. No.	Letter	Cat. No.	Cat. No.
BA BBô BCô BDô	136C1754G9 136C1754G7 136C1754G7 136C1754G8	685D963G1 685D963G2 685D963G2 685D963G2 685D963G2	BF† BG† BH†	136C1754G7 136C1754G8 136C1754G9	685D963G3 685D963G3 695D963G3

ô With wire harness.

† Without wire harness.

TRIP SOLENOID FOR LATCH ASSY (1 Required)

NOTE: The solenoid is identified by the number following the latch assembly form letter in the IC designation.

EXAMPLE: IC302EAA4A47AB3A requires Solenoid No. 3. Cat. No. CR9500A201CM12A.

Solenoid Form No.	Solenoid Catalog Number	Solenoid Coil Catalog Number	Rectifier Catalog Number	Solenoid Form No.	Solenoid Catalog Number	Solenoid Coil Catalog Number	Rectifier Catalog Number
3	CR9500A201CM2A	15D2G42		53	CR9500A201CM8A	15D2G63	
4	CR9500A201CM7A	15D2G55		54	CR9500A201CM2A	15D2G2	
5	CR9500A201CM22A	15D2G70		55	CR9500A201CM6A	15D2G6	
6	CR9500A201CM3A	15D2G80		75	CR9500A201CM8A	15D2G69	IC3500A403C2
				76	CR9500A201CM3A	15D2G380	IC3500A403C6

LATCH AND TRIP BAR ASSEMBLIES - 1 Required

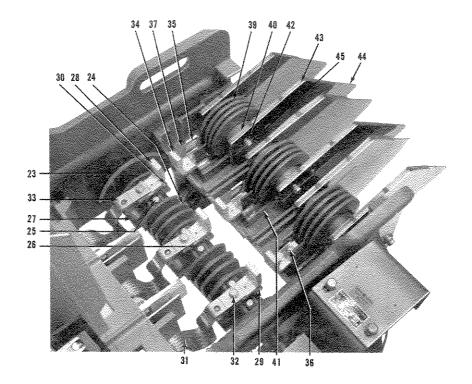
IC302E HIGH VOLTAGE CONTACTORS

GEF-4576

Ref. No.	Catalog Number	No. Req'd	Description
2	918D625P1	1	Frame, right-side
2A	157C8183P1		Frame, left-side
3	129B9715P1	1	Magnet frame for operating coil
5	218A5593G1	1	Coil holder
6	138A5536P1		Clamp for magnet frame, bottom
7	188A5536P2	1	Clamp for magnet frame, top
•	194A7822P1	1	Plate for lower clamp
	N22P25032B6	3	Bolt fastening clamp to magnet frame (3/8-16, 2 in., hex hd, pro fin)
	218A6880P1	3	Washer for bolt
	139B7623G4	1	Armature assembly (with or without counter weight)
	139B7623G8	1	Armature assembly (special dc magnet (time delay drop out by residual magnetism)
9	129B8715P2	1	Armature assenting (special de magnet (time delay drop out by residual magnetism) Armature for 139B7623G4
9	171B3255P1	1	Armature for 139B7623G8
10	139B8161G1	1	Armature for 155B1025G6
10			
12	284A964P2		Fulcrum $Polt for trainer following to have bet (2, 0, 10, 7/0) in the bary between (1, 0)$
13	N22P25014B6	2 2	Bolt fastening fulcrum to bracket $(3/8-16, 7/8 \text{ in.}, \text{hex hd, pro fin})$
10	PFC 41439		Bolt fastening armature bracket to shaft
	PFC 43685	2	Lock washer for Ref. 13
14	139B8162G3	1	Armature stop
15	188A5553P1		Stop screw for armature stop
16	577A177P2	4	Mounting bolt for stop assembly
17	188A5542P1		Terminal for operating coil
18	N144P16010B6	2	Screw with lock washer for terminal $(10-32, 5/8 \text{ in., pan hd, pro fin})$
	8617022P1	2	Terminal clamp
	N144P16008B6	2	Screw with lock washer for mounting terminal clamp (10-32, $1/2$ in., pan hd, pro fin)
19	188A5527G1	2	Stub shaft assembly
21	577A177P2	4	Mounting bolt for stub shaft assembly
22	286A113P27	2	Bolt for end of stub shaft
23	188A5537G1	2	Bearing plate assembly for moving contact shaft
	181A4108P2	2	Collar for end of moving contact shaft
	245A6128P1	4	Set screw for collar
24	187B8905G1	1	Shaft assembly, complete
	685D924G1	1	Main shaft
25	188A5539P1	3	Pin for moving contact support
26	N22P21012B6	6	Bolt fastening moving contact support to shaft (1/4-20, $3/4$ in., hex hd, pro fin)
27	245A1258P1	3	Compression spring for moving contact
28	245A1229G1	3	Moving contact assembly
29	139B8165G1	3	Support for moving contact
30	188A5551P1	3	Adjusting screw for contact support
31	194B8326G1	3	Shunt for moving contact
32	N22P23016B6	3	Bolt fastening moving contact and shunt to support $(5/16-18, 1 \text{ in., hex hd, pro fin})$
33	N22P23016B6	6	Screw for contact support to position shunt $(5/16-18, 1 \text{ in hex hd, pro fin})$
34	245A1229G1	3	Stationary contact
37	6851952P1	1	Base
	N22P23022B6	3	Bolt fastening blowout coll to base $(5/16-18, 13/8 \text{ in.}, \text{hex hd}, \text{pro fin})$
	577A328P2	3	Tee nut for bolt
39	219A1668G3	3	Blowout coil
	187B9400G1	3	Auxiliary blowout coil
	139B8170G1	3	Core for blowout coil
40	194A1454P2	3	Insulation tube for core
42	PFC 40265	6	Insulation washer for pole pieces
43	139B8168G1	3	Pole piece, left-hand
44	139B8168G2	3	Pole piece, right-hand
45	N647B23012C6	6	Bolt fastening pole pieces to core $(5/61-18, 3/4 \text{ in.}, \text{ button hex hd, pro fin})$
1	205A7742P105	6	Washer for Ref. 45

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17,18 ê îĒ 112 11, 12 114-



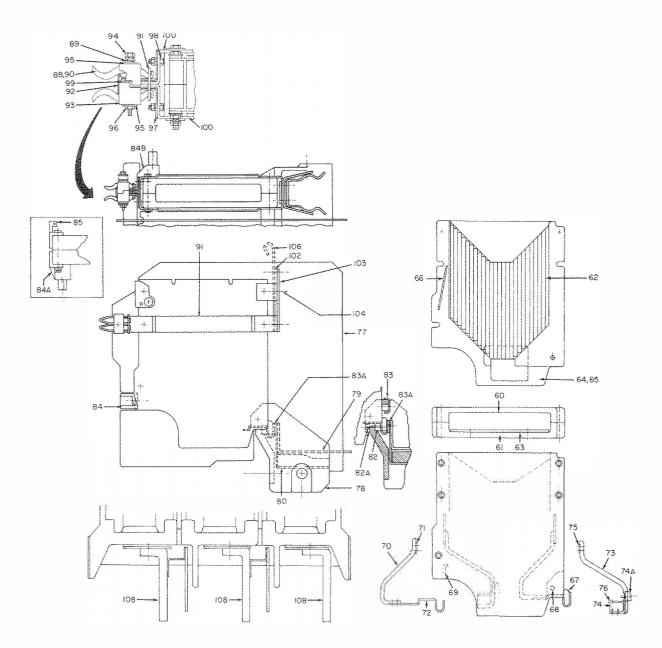
IC302E HIGH VOLTAGE CONTACTORS

EXAMPLE: IC302E7AA1A412AB3A requires arc chute and fuse base assembly designation <u>AB</u>. Listed below are the different designations and voltage ratings.

ARC CHUTE AND FUSE BASE ASSEMBLY

AA - 2300 VOLT, FUSE, STABS, POWER INTERMEDIATE STABS AB - 4800 VOLT, FUSE, STABS, POWER INTERMEDIATE STABS AC - 5000 VOLT, NO FUSE, NO STABS, POWER INTERMEDIATE STABS AD - 5000 VOLT, SHORTING BAR, STABS, POWER INTERMEDIATE STABS AE - 2300 VOLT, FUSE, STABS, CONTROL INTERMEDIATE STABS AF - 4800 VOLT, FUSE, STABS, CONTROL INTERMEDIATE STABS AG - 5000 VOLT, SHORTING BAR, CONTROL INTERMEDIATE STABS

Ref.	No	Ren	'd fo	r IC	Des	ionat	ion	Catalog	
No.				AD				Number	Description
	3	3	3	3	3	3	3	177B8794G2	Arc chute assembly
60	3	3	3	3	3	3	3	501D196P1	Arc chute side, left
61	3	3	3	3	3	3	3	501D196P2	Arc chute side, right
62	36	36	36	36	36	36	36	177B3253P3	Arc barrier plate
62	36	36	36	36	36	36	36	177B3253P4	Arc barrier plate
63	3	3	3	3	3	3	3	149B1784G2	Barrier holder
64	3	3	3	3	3	3	3	177B3273P1	Chute insert, left
65	3	3	3	3	3	3	3	177B3273P2	Chute insert, right
66	3	3	3	3	3	3	3	245A1235P1	Deflector
	3	3	3	3	3	3	3	151A7164P10	Mica tubing
67	3	3	3	3	3	3	3	139B8999G1	Chute block assembly
68	6	6	6	6	6	6	6	577A177P5	Mounting bolt or chute block
69	3	3	3	3	3	3	3	188A5554G1	Nut plate
	-	-	-	~	-	-	- 1	245A4320P1	Shims (as required) (for tight bundle of barriers)
	- 1		-	-	-	-	-	245A4320P2	Shims (as required) (for tight bundle of barriers)
	3	3	3	3	3	3	3	194B8338G3	Arcing horn assembly, front
70	3	3	3	3	3	3	3	194B8340P4	Main arcing horn
71	3	3	3	3	3	3	3	259A8786P1	Spacer
72	3	3	3	3	3	3	3	259A5550P1	Hooked shaped end plate
	6	6	6	6	6	6	6	N57P16008C6	Screw fastening spacer or end plate to horn $(10-32, 1/2 \text{ in.})$
									pan hd, pro fin)
	3	3	3	3	3	3	3	194B8338G4	Arcing horn assembly, rear
73	3	3	3	3	3	3	3	194B8340P5	Main arcing horn
74	3	3	3	3	3	3	3	259A5543P3	Block
	3	3	3	3	3	3	3	259A5543P4	Block
75	3	3	3	3	3	3	3	194B8337P1	Spacer
76	3	3	3	3	3	3	3	259A8786P1	Spacer
77	2	2	-	-	2	2	-	187B9448P1	Barrier between arc chutes
77	-	-	2	2	-	-	2	139B7619P1	Barrier between arc chutes
78	1	1	1	the state of the s	1	1	1	158C1805G1	Fuse base and shunt plate assembly
80	-		-	-	3	3	3	259A5291G1	Ground strap
81	-	-	-	-	2	2	2	N22P23024B6	Mounting screw for ground strap $(5/16-18, 1 1/2 \text{ in., hex, pro fit})$
82	3	3	3	3	3	3	3	139B8179P3	Nut block
82A	3	3	3	3	3	3	3	188A5292P1	Support for nut block
83	3	3	3	3	3	3	3	194A7125P1	Saddle
83A	3	3	3	3	3	3	3	205A9613P6	Bus spacer
83B	-	-	-	3	-	-	3	205A9613P3	Shorting bar
	3	3	3	3	3	3	3	577A177P5	Mounting screw for saddle, bus spacer, and shorting bar
84	1	1	1	1	1	1	1	116C9907P1	Chute tie bar
84A	1	1	-	1	1	1	1	194A6900G2	Shaft assembly for left-hand arc chute assembly
84B	1	1	-	1	1	1	1	194A6900G1	Shaft assembly for right-hand arc chute assembly
85	1	1	-	1	1	1	1	116C9908P2	Operating shaft, left-half, for shaft assembly
	1	1	-	1	1	1	1	116C9908P1	Operating shaft, right-half, for shaft assembly
	3	3	-	-	3	3	-	202B3965G1	Stab assembly
~~	-	-	-	3	-	-	3	202B3965G2	Stab assembly
88	12	12	-	12	12	12	12	125A4278P1	Contact fingers
89	3	3	-	3	3	3	3	174A4422P1	Spring
90	12	12	-	12	12	12	12	125A4279P1	Spacer for stab-on finger
91	3	3	-	3	3	3	3	125A4280P1	Retainer
92	3	3	-	3	3	3	3	125A4281P1	Retainer
93	6	6		6	6	6	6	125A4282P1	Retainer
94	3	3	- 1	3	3	3	3	N22P21048B6	Screw for contact finger assembly
95	6	6	-	6	6	6	6	284A403P7	Mica washer for screw
96	3	3	-	3	3	3	3	577A251P2	Lock nut for screw
00	3	3	-	3	3	3	3	219A1695G1	Connection strap
.01	3	3	-	3	3	3	3	259A5536G1	Bracket assembly
.02	3	3	-	-	3	3	800	245A8108G2	Spacer
103	3	3	-	-	3	3	-	245A8111P2	Strap
104	12	12	-	-	12	12	-	577A176P2	Bolt



ARC CHUTE AND FUSE BASE ASSEMBLY (CONT'D)

Ref.	No.	Reg	'd fo	r IC	Des	ignat	ion	Catalog	
No.	AA	AB	AC	AD	AE	AF	AG	Number	Description
106	3	3	3	3	3	3	3	273A2755P1	Fuse bracket (if used)
108	1	1	1	1	~	-	-	177B3271G4	Intermediate stab assembly
	2	2	2	2	-	-	-	177B3271G9	Intermediate stab assembly
	-	-	-	-	3	3	3	188A5686P2	Intermediate stab assembly
	1	~	~			-	~	195B6267G2	Wheel assembly
109	4	-		-	~	-	-	119B1762P1	Wheel
110	3	-	-	-	-	~	-	259A5525P1	Wheel support
	1	3 4 0	(#F)	~	~	-		273A2788P1	Wheel support (left rear only)
	1	-	-	-	-	-	-	259A5516G1	Spacer assembly
111	1	-	-	-	-		-	259A5545P2	Fastener assembly
112	4	-	-	<u> </u>	-	-	-	162A2894P1	Wheel belt
113	2		-	-	-	-	-	151A4894P1	Gasket
	2	~	-	-	-	-		162A4950P32	Spacer
114	-	1		~	-	-	-	188A5532G5	Handle
115	2	2	2	2	2	2	2	188A5688G2	Thumb screw

ABB Inc.

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For further information, please visit: www.electrification.us.abb.com/services

For service, call: 1-888-434-7378 (US) 1-540-387-8617 (International**)**

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