



## 1395 Digital DC Drive Renewal Parts

### Important Information, Read First

The 1395 Product Line has evolved from current rated units to horsepower rated units. Within the range of sizes there are various series levels of hardware that you must identify before ordering parts.

### Figure 1-1 Series Levels

#### Current Rated Pages 2 thru 5

SERIES A			SERIES B (MKVA)			SERIES A (HKVA)		
3.6A	230V	345A	346A	230V	980A	1350A	230/380/415V	2250A
3.6A	460V	345A	346A	460V	980A	1350A	460/575/660V	2250A

#### Horsepower Rated Pages 6 thru 11

SER B			SER A			SER B(Med KVA)		
1HP	230V	30HP	40HP	230V	100HP	125HP	230V	300HP
2HP	460V	60HP	75HP	460V	200HP	250HP	460V	600HP

### Drive Series Identification

The Drive Nameplate (Fig. 1-2) which is located inside the front cover of the drive can be used to identify the Series of your drive. If your drive contains an extra Power Output Rating entry at the bottom of the label it is a Horsepower rated drive.

### Figure 1-2. Drive Nameplates

#### Horsepower Rated Drive Nameplate

1395 - A61 - C2 - P10 - P51

Inst. Man 1395 - 5 - 40

S/N 07076 SER B

DC OUTPUT

Volts 240      Max Amps 4.7

Power Output

Rated .75 KW / 1HP

↑ Power Rating Label

#### Current Rated Drive Nameplate

Bulletin 1395 DC Controller

HT - T2214880

Cat 1395 AR - 1A - A005 - BA1 - CB1 - FMA - F2A - PB - AX

Max DC Output - Armature

Volts 500

Amps 5

# 1395 Digital DC Drive Renewal Parts

**Current Rated**, Series A Drives, 3.6A to 345A, 50/60 Hz, 230, 380, 415 & 460 Volt AC Inputs.  
Parts Common to All Ratings

Description	Part Number	Quantity per Drive	Supersedes
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01 .....	119521 .....	1 .....	
Firmware Rev. 4.03 .....	144961 .....	1 .....	
Firmware Rev. 5.01 .....	145048 .....	1 .....	
Firmware Rev. 8.02 .....	155800 .....	1 .....	
Firmware Rev. 8.03 .....	156009 .....	1 .....	
Firmware Rev. 8.10 .....	185694 .....	1 .....	170174
Firmware Rev. 9.20 .....	185713 .....	1 .....	
Firmware Rev. 10.10 .....	194933 .....	1 .....	
Firmware Rev. 9.30 .....	196259 .....	1 .....	Rev 10.10 194933 (Note 1)
Discrete Adapter Board 115V AC .....	170024 .....	1 .....	119712 & 145479
Discrete Adapter Board 24 VDC .....	170023 .....	1 .....	145472
Digital Reference Adapter Board.....	140093 .....	1 .....	
Digital Reference Adapter Board (RTP only).....	164325 .....	1 .....	133496
Multi Communication Adapter Board.....	196274 .....	1 .....	145108,155993
ControlNet Adapter Board .....	196273 .....	1 .....	185240
Node Adapter Board .....	148540 .....	1 .....	119527
Feedback Board 240V.....	122970 .....	1 .....	
Feedback Board 300-575V .....	122972 .....	1 .....	
Armature Pulse Board.....	110996 .....	3 .....	
Field Pulse Board .....	170130 .....	1 .....	110997
PSI Board .....	170948 .....	1 .....	119524
Power Supply Board .....	142129 .....	1 .....	126438
Transformer, 24V Supply .....	122985 .....	1 .....	
Fuse, 600V, 25A KTK-R.....	101705 .....	3 .....	
Fuse, 250V 1 A MDL .....	101664 .....	1 .....	
Fuse, 250V, 5A Slow Blow .....	113829 .....	1 .....	
Pilot Relay.....	125928 .....	1 .....	
Heat Sink Thermoswitch.....	112929 .....	1 .....	
MOV Field 240-480V.....	173973 .....	2 .....	115549
MOV Three Phase 240-480V .....	115547 .....	1 .....	
MOV Control Power.....	123396 .....	1 .....	

**Parts Associated with a Particular Rating**

Description	3.6- 19A	20- 56A	57- 80A	81- 110A	Quantity Per Drive
Line Fuse, 240-480V	155620	155621	140053	155622	3
Line Circuit Breaker, 240-480V	123360	123361	123362	123363	1
Cooling Fans (2 per unit)	NA	NA	NA	129016	2
Cooling Fans (3 per unit)	NA	NA	NA	NA	3
Contact - 2 Pole wo/DB	123148	123148	123154	123154	1
Contact Kit for	<b>123148 (56A):</b>	40410-331-54 (2Ea) Normally Open (N/O)			
	<b>123154 (110A):</b>	40420-322-52 (2Ea) Normally Open (N/O)			
Contact - 3 Pole w/DB	123172	123172	123178	123178	1
Contact Kit for	<b>123172 (56A):</b>	40410-331-54 (2Ea) N/O & 40410-857-01 (1Ea) N/C			
	<b>123178 (110A):</b>	40420-322-52 (2Ea) N/O & 40420-850-01 (1Ea) N/C			
N.O./N.C. Aux. Contact	111307	111307	111307	111307	1
Contact Coil	119487	119487	119488	119488	1
Contact Suppressor 120VAC, 5 Joules	151643	151643	151643	151643	1
SCR Armature 240-480V Kits	135111	192705(2)	192705(2)	192705(2)	6
SCR Field 240-480V	192738(3)	192738(3)	192738(3)	192738(4)	2

Notes: (1) 9.30 functionally identical to 10.10. ITS and DT-32 limited to three digits.

(2) Supersedes 135110,123119 (3) Supercedes 119734, 142569 (4) Supersedes 142570

# 1395 Digital DC Drive Renewal Parts

**Current Rated** (Continued) Series A Drives, 3.6A to 345A, 50/60 Hz, 230, 380, 415 & 460 Volt AC Inputs.  
Parts Associated with a Particular Rating

<u>Description</u>	<u>111- 140A</u>	<u>141- 180A</u>	<u>181- 260A</u>	<u>261- 345A</u>	<u>Quantity per Drive</u>
Line Fuse, 240-480V	155623	155624	155625	155626	3
Line Circuit Breaker, 240-480V	123364	123365	123366	NA	1
Cooling Fans (2 per unit)	129016(7)	129016(7)	NA	NA	2
Cooling Fans (3 per unit)	NA	NA	129016	129016	3
Contactors - 2 Pole wo/DB	123160	123160	123166	170858(1)	1
Contact Kit for	<b>123160 (180A):</b>	40430-300-52 (2Ea) Normally Open (N/O)			
	<b>123154 (280A):</b>	40440-325-52 (2Ea) Normally Open (N/O)			
	<b>170858 (360A):</b>	Z-34042 (2Ea) Normally Open (N/O)			
Contactors - 3 Pole w/DB	163440	163440	123190	170861(2)	1
Contact Kit for	<b>163440 (180A):</b>	40430-300-52 (2Ea) (N/O) & 40430-850-01 (N/C)			
	<b>123190 (280A):</b>	40440-325-52 (2Ea) (N/O) & 40440-850-01 (N/C)			
	<b>170861 (360A):</b>	Z-34042 (2Ea) (N/O) &			
	(40450-319-52 Front term assy, 40450-320-52 Rear term assy, 40450-318-52 Movable Contact) N/C Kit				
N.O. /N.C. Aux. Contact	111307	111307	111307	NA	1
Contactors Coil	119489	119489	119490	119490	1
Contactors Suppressor	115619	115619	115619	115621	1
SCR Armature 240-480V Kits	192707(3)	192707(3)	192708(4)	192709(5)	6
SCR Field 240-480V	192738(6)	192738(6)	192738(6)	192738(6)	2

- (1) Supersedes 155770, 116747(ASEA EFLG315-2P) To replace 116747, use kit # 170859
- (2) Supersedes 155780, 117940(ASEA EFLG315) To replace 117940, use Kit #170862
- (3) Supersedes 135109, (4) Supersedes 135108, (5) Supersedes 135107, (6) Supersedes 142570
- (7) Supersedes 135787

**Current Rated**, Series B Drives, 346A to 980A, MKVA, 50/60 Hz, 230, 380, 415 & 460 Volt AC Input  
Parts Common to All Ratings

<u>Description</u>	<u>Part Number</u>	<u>Quantity per Drive</u>	<u>Supersedes</u>
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01	119521	1	
Firmware Rev. 4.03	144961	1	
Firmware Rev. 5.01	145048	1	
Firmware Rev. 8.02	155800	1	
Firmware Rev. 8.03	156009	1	
Firmware Rev. 8.10	185694	1	170174
Firmware Rev. 9.20	185713	1	
Firmware Rev. 10.10	194933	1	
Firmware Rev. 9.30	196259	1	Rev 10.10 194933 (Note 7)
Discrete Adapter Board 115V AC	170024	1	119712 & 145479
Discrete Adapter Board 24 VDC	170023	1	145472
Digital Reference Adapter Board	140093	1	
Digital Reference Adapter Board (RTP only)	164325	1	133496
Multi Communication Adapter Board	196274	1	145108,155993
ControlNet Adapter Board	196273	1	185240
Node Adapter Board	148540	1	119527
Feedback Board 240V	122970	1	
Feedback Board 300-575V	122972	1	
Armature Pulse Board	126511	3	
Field Pulse Board	170131	1	110997 & 155227
Power Stage Interface Board (PSI)	170950	1	126305
PSI Board Cable Connectors:			
J1, 6 Pin Cable connector	122982	1	
J10, 12 Pin Cable Connector	122983	1	
Power Supply Board	142129	1	126438
Transformer, 24V Supply	122985	1	

Note: (7) 9.30 functionally identical to 10.10. ITS and DT-32 limited to three digits.

# 1395 Digital DC Drive Renewal Parts

**Current Rated** (Continued) Series B Drives, 346A to 980A, MKVA, 50/60 Hz, 230, 380, 415 & 460 Volt AC Input  
Parts Common to All Ratings

<u>Description</u>	<u>Part Number</u>	<u>Quantity per Drive</u>	<u>Supersedes</u>
Fuse, 600V, 25A KTK-R .....	101669 .....	3 .....	
Fuse, 500V, 800A, Blade Semiconductor type .....	119436 .....	6 .....	
Fuse, 250V 1A MDL .....	109226 .....	1 .....	
Fuse, 250V, 5A Slow Blow .....	113829 .....	1 .....	
Pilot Relay .....	125928 .....	1 .....	
Cooling Fans .....	117475 .....	3 .....	
Fan Switch Kit ( Includes switch and vane).....	103997 .....	3 .....	
Fan Switch (Only).....	101935 .....	3 .....	
Fan Switch Vane .....	102362 .....	3 .....	
Contactor-1 Pole .....	172002 .....	1 .....	117474
SCR Fixture Kit .....	119495 .....	1 .....	
SCR, Field (Part of Kit # 192705, Order Kit ) .....	192696 .....	2 .....	123119
SCR Field Kit, 95A, 1400V .....	192705 .....	2 .....	135110
MOV Field .....	173973 .....	2 .....	115549
MOV Three Phase.....	115547 .....	1 .....	
Current Transformer (FCT).....	105061 .....	1 .....	
Current Transformer (ACT1-3).....	118430 .....	3 .....	
Inductor (CH1).....	129816 .....	1 .....	

**Parts Associated with a Particular Rating**

<u>Description</u>	<u>346A- 670A</u>	<u>671A- 980A</u>	<u>Quantity per Drive</u>
SCR-Armature. 240-480V Regen	117486	117487	12
SCR-Arm, 240-480V Non-Regen	117486	117487	6
Arm Pole Piece Regen	118571	117444	3
Armature Pole Piece Non-Regen	118573	118572	3

**Series A Drives, 1350A & 2250A, HKVA , 50/60 Hz, 230, 380, 415, 460, 575 & 660 Volt, AC Input.  
Parts Common to All Ratings**

<u>Description</u>	<u>Part Number</u>	<u>Quantity per Drive</u>	<u>Supersedes</u>
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01 .....	119521 .....	1 .....	
Firmware Rev. 4.03 .....	144961 .....	1 .....	
Firmware Rev. 5.01 .....	145048 .....	1 .....	
Firmware Rev. 8.02 .....	155800 .....	1 .....	
Firmware Rev. 8.03 .....	156009 .....	1 .....	
Firmware Rev. 8.10 .....	185694 .....	1 .....	170174
Firmware Rev. 9.20 .....	185713 .....	1 .....	
Firmware Rev. 10.10 .....	194933 .....	1 .....	
Firmware Rev. 9.30 .....	196259 .....	1 .....	Rev 10.10 194933 (Note 1)
Discrete Adapter Board 115V AC .....	170024 .....	1 .....	119712 & 145479
Discrete Adapter Board 24 VDC .....	170023 .....	1 .....	145472
Digital Reference Board (24V DC).....	140093 .....	1 .....	
Digital Reference Adapter Board (RTP only).....	164325 .....	1 .....	133496
Multi Communication Adapter Board.....	196274 .....	1 .....	145108,155993
ControlNet Adapter Board .....	196273 .....	1 .....	185240
Node Adapter Board .....	148540 .....	1 .....	119527

Notes: (1) 9.30 functionally identical to 10.10. ITS and DT-32 limited to three digits.

# 1395 Digital DC Drive Renewal Parts

(Continued)

**Current Rated**

Series A Drives, 1350A & 2250A, HKVA , 50/60 Hz, 230, 380, 415, 460, 575 & 660 Volt, AC Input.

Parts Common to All Ratings

Description	Part Number	Quantity per Drive	Supersedes
SCR Firing Power Supply (24 VDC).....	137875	1	
Armature Pulse Board (Regen).....	144965	4	
Armature Pulse Board (Non-Regen).....	144965	2	
Field Pulse Board (Non-Regen).....	110997	1	
PSI Board.....	170952	1	144966
Power Supply Board.....	142129	1	
Fuse, Arm Bridge 900A, 700V,SPP.....	132650	12	
Fuse, Field Bridge 45A, 600V, LPJ.....	143151	1	
Fuse, Power Transformer 7A, 600V.....	149860	2	
Fuse, Power Transformer 8A, 600V.....	101698	1	
Fuse, Power Transformer 5A, 600V.....	125422	1	
Pilot Relay.....	125928	1	
SCR-Field Supply.....	192705	2	135110, 123119
MOV-Field.....	173973	2	115549
Current Transformer, Field.....	105061	1	
Current Transformer, Armature.....	505534	3	
Inductor, Field.....	109833	1	

**Parts Associated with a Particular Rating**

Description	1350A 230- 460V	1350A- 575- 660V	2250A- 230- 460V	2250A- 575- 660V	Quantity per Drive
Feedback Board Kit 230VAC	122970	NA	122970	NA	1
Feedback Board Kit 300 - 575V AC	122972	NA	122972	NA	1
Feedback Board Assembly 660V AC	NA	142429	NA	142429	1
Fuse, Field Bridge 25A, 1500V	NA	159367	NA	159367	2
Fuse, Field Bridge 40A, 1500V	NA	159366	NA	159366	2
Fuse, Field Bridge 40A, 1500V	NA	159366	NA	159366	2
Fuse, Field Bridge 60A, 1500V	NA	159368	NA	159368	2
Fuse, Fan 15A, 600V, LPJ	118346	NA	118346	NA	3
Fuse, Fan 15A, 700V,	NA	145003	NA	145003	3
Line Circuit Breaker	192950(1)	192950(1)	192952(2)	192952(2)	1
Cooling Fan	506393	144133	506393	144133	1
Contact,1 Pole	147703	147703	147704	147704	1
Rectifier Bridge for Contactor	129362	129362	129362	129362	1
SCR Armature (Regen)	506155	505998	506155	505998	12
SCR Armature (Non-Regen)	506155	505998	506155	505998	6
Armature Pole Piece:					
Regenerative (+) Bridge	505980	506031	505980	506031	1
Regenerative (-) Bridge	505981	506032	505981	506032	1
Non-Regenerative (+) Bridge	505978	506029	505978	506029	1
Non-Regenerative (-) Bridge	505979	506030	505979	506030	1
MOV -3 Phase AC ( MOV 4, 5, 6 )	142241	142463	142241	142463	3
MOV -3 Phase AC ( MOV 7 )	142242	142464	142242	142464	1

Note 1 Supercedes 506152

Note 2 Supercedes 506153, 192951, 506154

# Allen-Bradley HMIs

# 1395 Digital DC Drive Renewal Parts

## Horsepower Rated

Series B Drives, 1 to 30 HP, 230 Volt, 2 to 60 HP, 460 Volt, Regenerative & Non-Regenerative  
Parts Common to All Ratings,

Description	Part Number	Quantity Per Drive	Supersedes
Front Cover .....	193632 .....	1 .....	
Shoulder Hinge Screw.....	125930 .....	2 .....	
Washer, Flat Plastic.....	126002 .....	2 .....	
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01.....	119521 .....	1 .....	
Firmware Rev. 4.03.....	144961 .....	1 .....	
Firmware Rev. 5.01.....	145048 .....	1 .....	
Firmware Rev. 8.02.....	155800 .....	1 .....	
Firmware Rev. 8.03.....	156009 .....	1 .....	
Firmware Rev. 8.10.....	185694 .....	1 .....	170174
Firmware Rev. 9.20.....	185713 .....	1 .....	
Firmware Rev. 10.10 .....	194933 .....	1 .....	
Firmware Rev. 9.30 .....	196259 .....	1 .....	Rev 10.10 194933 (Note 1)
Discrete Adapter Board 115VAC.....	170024 .....	1 .....	119712 & 145479
Discrete Adapter Board 24V DC.....	170023 .....	1 .....	145472
Digital Reference Adapter Board.....	140093 .....	1 .....	
Digital Reference Adapter Board (RTP only).....	164325 .....	1 .....	133496
Multi Communication Adapter Board.....	196274 .....	1 .....	145108,155993
ControlNet Adapter Board.....	196273 .....	1 .....	185240
Node Adapter Board .....	148540 .....	1 .....	119527
Mounting Hardware ( Main Control Board and all Adapter Boards)			
White plastic hinge bar.....	119912 .....	1 .....	
Left Hinge Bracket.....	145321 .....	1 .....	
Right Hinge Bracket.....	145322 .....	1 .....	
Screw, Bracket to White Plastic Hinge Bar .....	109844 .....	2 .....	
Screw, Pivot .....	126019 .....	2 .....	
Power Board w/Dual Field MOV			
Regenerative.....	173172 .....	1 .....	148249 & 155507 & 170770
Non-Regenerative .....	173174 .....	1 .....	148250 & 155506 & 170771
Mounting Hardware (Power Board)			
Bus Bar .....	152229 .....	1 .....	
Screw .....	152793 .....	10 .....	
Standoff.....	128937 .....	2 .....	
Washer.....	152434 .....	2 .....	
White Plastic Mounting Standoffs.....	145310 .....	9 .....	
TB1, 4 pin cable connector.....	173595 .....	1 .....	
PSI/Switcher Board (with J2, 5 pin connector) .....	194954 .....	1 .....	148248 & 154966 & 170946 & 173169 & 192364
Mounting Hardware (PSI Board)			
Base Plate.....	145316 .....	1 .....	
Screws Shoulder, Hinge .....	126019 .....	2 .....	
Mylar Insulator, 2"x 2", .5 mil .....	152922 .....	1 .....	
Black plastic mounting standoffs .....	111565 .....	10 .....	
J2 cable connector, 5 pin .....	145381 .....	1 .....	
J14 cable conn, 12 pin, w/screw hold downs.....	170980 .....	1 .....	
TB2, 7 Pin Cable connector .....	145457 .....	1 .....	
Wire Harness Assembly, J14.....	170981 .....	1 .....	
Fuse 250V,1.5AAGC (F1 on PSI).....	106937 .....	1 .....	
Fuse 250V, 1A MDL (F2 on PSI) .....	128458 .....	1 .....	
Fuse 250V, 5A MDX (F3 on PSI).....	113829 .....	1 .....	
Fuse 600V, 12A KTK-R (F1, F2 on Power) .....	117033 .....	2 .....	
Heat Sink Thermoswitch.....	112929 .....	1 .....	
MOV2 (Control Power) .....	107960 .....	1 .....	
ACT1, ACT2, FCT .....	173941 .....	3 .....	123969
ACT turns 230Volt      1-5 HP (6 turns)      7.5-30 HP (1 turn)			
ACT turns 460Volt      2-10 HP (6 turns)      15 -60 HP (1 turn)			
TD-1 Transducer, 825:1.....	105062.....	1 .....	

Notes: (1) 9.30 functionally identical to 10.10. ITS and DriveTools32 were limited to three digits.

# 1395 Digital DC Drive Renewal Parts

## Horsepower Rated

Series B Drives, 1 to 30 HP, 230 Volt Regenerative & Non-Regenerative  
Parts Associated with a Particular Rating

Description	1-5 HP	7.5-10 HP	15 HP	20-30 HP	Quantity per Drive
Auxiliary Contact NO./NC.	111307	111307	111307	111307	1
Contact, 2 Pole	123148	123148	123148	123154	1
Contact Kit for <b>123148 (56A):</b>	40410-331-54 (2Ea) Normally Open (N/O)				
<b>123154 (110A):</b>	40420-322-52 (2Ea) Normally Open (N/O)				
Contact, 3 Pole with DB	123172	123172	123172	123178	1
Contact Kit for <b>123172 (56A):</b>	40410-331-54 (2Ea) N/O & 40410-857-01 (1Ea) N/C				
<b>123178 (110A):</b>	40420-322-52 (2Ea) N/O & 40420-850-01 (1Ea) N/C				
Contact Coil	119487	119487	119487	119488	1
Contact Suppressor	151643	151643	151643	151643	1
Fan (if supplied)	-	-	129016	129016	1
Fuses, Line 500V FWH-35A	151038	-	-	-	3
500V FWH-60A	-	151041	151041	-	3
500V FWH-125A	-	-	-	140054	3
Lugs	155256	155256	155256	155255	3
Mounting Post for fuses, White	145396	145396	145396	145396	6
Nut for Mounting post	145380	145380	145380	145380	6
Fuse, Snubber Board					
600V, 0.3A KTK-R	140852	-	-	-	1
Snubber Bd. w/Resistor	151490	-	-	-	1
SCR, Armature Kits					
Regenerative	192704(1)	192704(1)	192706(2)	192706(2)	6
Non-Regenerative	192704(1)	192704(1)	192706(2)	192706(2)	3
SCR, Field	145415	145415	145415	145415	1

## Horsepower Rated Series B Drives , 2 to 60 HP, 460 Volt, Regenerative & Non-Regenerative Parts Associated with a Particular Rating

Description	2-10HP	15-20HP	25-30HP	40-60HP	Quantity per Drive
Auxiliary Contact	111307	111307	111307	111307	1
Contact, 2 Pole	123148	123148	123148	123154	1
Contact Kit for <b>123148 (56A):</b>	40410-331-54 (2Ea) Normally Open (N/O)				
<b>123154 (110A):</b>	40420-322-52 (2Ea) Normally Open (N/O)				
Contact, 3 Pole with DB	123172	123172	123172	123178	1
Contact Kit for <b>123172 (56A):</b>	40410-331-54 (2Ea) N/O & 40410-857-01 (1Ea) N/C				
<b>123178 (110A):</b>	40420-322-52 (2Ea) N/O & 40420-850-01 (1Ea) N/C				
Contact Coil	119487	119487	119487	119488	1
Contact Suppressor	151643	151643	151643	151643	1
Fan (if supplied)	-	-	129016(3)	129016(3)	1
Fuses, Line					
500V FWH-35A	151038	-	-	-	3
500V FWH-60A	-	151041	151041	-	3
500V FWH-125A	-	-	-	140054	3
Lugs	155256	155256	155256	155255	3
Mounting Post for fuses, White	145396	145396	145396	145396	6
Nut for Mounting post	145380	145380	145380	145380	6
Fuse, Snubber Board,					
600V, 0.3A KTK-R	140852	-	-	-	1
Snubber Bd. w/Resistor	151490	-	-	-	1
SCR, Armature Kits					
Regenerative	192704(1)	192704(1)	192706(2)	192706(2)	6
Non-Regenerative	192704(1)	192704(1)	192706(2)	192706(2)	3
SCR, Field	145415	145415	145415	145415	1

(1) Supersedes: 135111

(2) Supersedes: 145416

(3) Supersedes: 135787

Allen-Bradley HMIs

# 1395 Digital DC Drive Renewal Parts

**Horsepower Rated Series A Drives, 40 to 100 HP, 230 Volt, 75 to 200 HP, 460 Volt,  
Parts Common to All Ratings**

<u>Description</u>	<u>Part Number</u>	<u>Quantity per Drive</u>	<u>Supersedes</u>
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01 .....	119521 .....	1 .....	
Firmware Rev. 4.03 .....	144961 .....	1 .....	
Firmware Rev. 5.01 .....	145048 .....	1 .....	
Firmware Rev. 8.02 .....	155800 .....	1 .....	
Firmware Rev. 8.03 .....	156009 .....	1 .....	
Firmware Rev. 8.10 .....	185694 .....	1 .....	170174
Firmware Rev. 9.20 .....	185713 .....	1 .....	
Firmware Rev. 10.10 .....	194933 .....	1 .....	
Firmware Rev. 9.30 .....	196259 .....	1 .....	Rev 10.10 194933 (Note 1)
Digital Reference Adapter Board.....	140093 .....	1 .....	
Discrete Adapter Board 115VAC .....	170024 .....	1 .....	119712 & 145479
Discrete Adapter Board 24V DC .....	170023 .....	1 .....	145472
Digital Reference Adapter Board (RTP only).....	164325 .....	1 .....	133496
Multi Communication Adapter Board.....	196274 .....	1 .....	145108,155993
ControlNet Adapter Board .....	196273 .....	1 .....	185240
Node Adapter Board .....	148540 .....	1 .....	119527
Feedback Board 230V AC .....	122970 .....	1 .....	
Feedback Board 460V AC .....	122972 .....	1 .....	
Armature Pulse Transformer and Snubber Board .....	110996 .....	3 .....	
Mounting Hardware			
Hex Spacer.....	107955 .....	6 .....	
Field Pulse Board .....	170130 .....	1 .....	110997
Power Stage Interface Board.....	170948 .....	1 .....	119524
Power Supply Board .....	142129 .....	1 .....	
Fuse 600V, 25A KTK-R (F4, F5, F6).....	101705 .....	3 .....	
Fuse 250V, 1A MDL (F7).....	101664 .....	1 .....	
Fuse 250V, 5A MDX (F8).....	113829 .....	1 .....	
Fuse Holder for F7 & F8.....	126018 .....	2 .....	
Heat Sink Thermoswitch.....	112929 .....	1 .....	
Pilot Relay .....	125928 .....	1 .....	
Suppressor, Control 120VAC, 55J (4 MOV).....	123396 .....	1 .....	
Suppressor, Field (2, 3 MOV).....	173973 .....	2 .....	115549
Suppressor, Pilot Relay (SP2).....	115621 .....	1 .....	
Suppressor, Three-Phase(1 MOV).....	115547 .....	1 .....	
Transformer, 24V Supply .....	122985 .....	1 .....	
ACT1, ACT2, FCT1 .....	105061 .....	3 .....	
TD-1 .....	105062 .....	1 .....	

Notes: (1) 9.30 functionally identical to 10.10. ITS and DriveTools32 were limited to three digits.



# 1395 Digital DC Drive Renewal Parts

## Horsepower Rated

Series A Drives, 40 to 100 HP, 230 Volt

Parts Associated with a Particular Rating

Description	40 HP	50 HP	60-75 HP	100 HP	Quantity per Drive
Auxiliary Contact, N.O./N.C.	111307	111307	111307	-	1
Contactor, 2 Pole	123160	123160	123166	170858 (1)	1
Contact Kit for <b>123160 (180A):</b>	40430-300-52 (2Ea) Normally Open (N/O)				
<b>123154 (280A):</b>	40440-325-52 (2Ea) Normally Open (N/O)				
<b>170858 (360A):</b>	Z-34042 (2Ea) Normally Open (N/O)				
Contactor, 3 Pole with DB	163440(2)	163440	123190	170861 (3)	1
Contact Kit for <b>163440 (180A):</b>	40430-300-52 (2Ea) (N/O) & 40430-850-01 (N/C)				
<b>123190 (280A):</b>	40440-325-52 (2Ea) (N/O) & 40440-850-01 (N/C)				
<b>170861 (360A):</b>	Z-34042 (2Ea) (N/O) &				
	(40450-319-52 Front term assy, 40450-320-52 Rear term assy, 40450-318-52 Movable Contact) N/C Kit				
Contactor Coil	119489	119489	119490	-	1
Contactor Suppressor (SP1)	115619	115619	115619	115621	1
Fans (if supplied)	129016(8)	129016(8)	-	-	2
			129016(8)	129016(8)	3
Fuses, Line	155623	155624	155625	155626	3
SCR, Armature	192707(4)	192707(4)	192708(5)	192709(6)	6
SCR, Field	192738(7)	192738(7)	192738(7)	192738(7)	2

Series A Drives, 75 to 200 HP, 460 Volt

Parts Associated with a Particular Rating

Description	75 HP	100 HP	125 - 150 HP	200 HP	Quantity per Drive
Auxiliary Contact, N.O./N.C.	111307	111307	111307	-	1
Contactor, 2 Pole	123160	123160	123166	170858 (1)	1
Contact Kit for <b>123160 (180A):</b>	40430-300-52 (2Ea) Normally Open (N/O)				
<b>123154 (280A):</b>	40440-325-52 (2Ea) Normally Open (N/O)				
<b>170858 (360A):</b>	Z-34042 (2Ea) Normally Open (N/O)				
Contactor, 3 Pole with DB	163440(2)	163440	123190	170861 (3)	1
Contact Kit for <b>163440 (180A):</b>	40430-300-52 (2Ea) (N/O) & 40430-850-01 (N/C)				
<b>123190 (280A):</b>	40440-325-52 (2Ea) (N/O) & 40440-850-01 (N/C)				
<b>170861 (360A):</b>	Z-34042 (2Ea) (N/O) &				
	(40450-319-52 Front term assy, 40450-320-52 Rear term assy, 40450-318-52 Movable Contact) N/C Kit				
Contactor Coil	119489	119489	119490	-	1
Contactor Suppressor (SP1)	115619	115619	115619	115621	1
Fans (if supplied)	129016(8)	129016(8)	-	-	2
			129016(8)	129016(8)	3
Fuses, Line 200A, 500V	155623	-	-	-	3
250A, 500V		155624	-	-	3
350A, 500V			155625	-	3
400A, 500V				155626	3
SCR, Armature	192707(4)	192707(4)	192708(5)	192709(6)	6
SCR, Field	192738(7)	192738(7)	192738(7)	192738(7)	2

(1) Supersedes 155770, 116747(ASEA EFLG315-2P) To replace 116747, use kit # 170859

(2) Supersedes 123184

(3) Supersedes 155780, 117940(ASEA EFLG315). To replace 117940, use kit # 170862

(4) Supersedes 135109

(5) Supersedes 135108

(6) Supersedes 135107

(7) Supersedes 142570

(8) Supersedes 135787

Allen-Bradley HMIs

# 1395 Digital DC Drive Renewal Parts

## Horsepower Rated

Series B Drives, MKVA, 125 to 300 HP@230 Volt; 250 to 600 HP@460V; 500 to 600 HP@575V; 600 to 737HP@660V

Regenerative & Non-Regenerative

Parts Common to All Ratings

Description	Part Number	Quantity per Drive	Supercedes
Main Control Board ( All boards refer to "spare parts kit" number label on board. And all are downward compatible.)			
Firmware Rev. 3.01 .....	119521 .....	1 .....	
Firmware Rev. 4.03 .....	144961 .....	1 .....	
Firmware Rev. 5.01 .....	145048 .....	1 .....	
Firmware Rev. 8.02 .....	155800 .....	1 .....	
Firmware Rev. 8.03 .....	156009 .....	1 .....	
Firmware Rev. 8.10 .....	185694 .....	1 .....	170174
Firmware Rev. 9.20 .....	185713 .....	1 .....	
Firmware Rev. 10.10 .....	194933 .....	1 .....	
Firmware Rev. 9.30 .....	196259 .....	1 .....	Rev 10.10 194933 (Note 1)
Discrete Adapter Board 115VAC .....	170024 .....	1 .....	119712 & 145479
Discrete Adapter Board 24V DC .....	170023 .....	1 .....	145472
Digital Reference Adapter Board .....	140093 .....	1 .....	
Digital Reference Adapter Board (RTP only) .....	164325 .....	1 .....	133496
Multi Communication Adapter Board .....	196274 .....	1 .....	145108,155993
ControlNet Adapter Board .....	196273 .....	1 .....	185240
Node Adapter Board .....	148540 .....	1 .....	119527
Armature Pulse Board .....	126511 .....	3 .....	
Field Pulse Board .....	170131 .....	1 .....	110997 & 155227
Feedback Board .....			
230 VAC (150/300VAC) .....	122970 .....	1 .....	
460V AC (300/575VAC) .....	122972 .....	1 .....	
575/660V AC .....	142429 .....	1 .....	
Power Stage Interface Board (PSI) .....	170950 .....	1 .....	126305
PSI Board Cable Connectors:			
J1, 6 Pin Cable connector .....	122982 .....	1 .....	
J10, 12 Pin Cable Connector .....	122983 .....	1 .....	
Power Supply Board Kit			
(Includes 2.5" and 18" cable and PCB connector) .....	142129 .....	1 .....	
Contactors .....	172002 .....	1 .....	117474
Fans .....	117475 .....	3 .....	
Fan Switch Kit ( Includes switch and vane) .....	103997 .....	3 .....	
Fan Switch (Only) .....	101935 .....	3 .....	
Fan Switch Vane .....	102362 .....	3 .....	
Fuse SCR, (F7 to F12) 800A, 500V .....	119436 .....	6 .....	Bulletin 2361(MCC) 505973
Fuse SCR, (F7 to F12) 800A, 700V Bull. 2361, MCC .....	505973 .....	6 .....	
Fuse 600V, 20A KTK-R (F1, F2, F3) .....	101669 .....	3 .....	
Fuse 125V,1.5A MDL (F5) .....	109226 .....	1 .....	
Fuse 250V, 7A MSL (F4) .....	125747 .....	1 .....	
Fuse Holder for F4 & F5 .....	126018 .....	2 .....	
Pilot Relay .....	125928 .....	1 .....	
Pilot Relay Diode Bridge (D1) .....	129362 .....	1 .....	
SCR Field Kit .....	192706 .....	2 .....	135110, 192705
Suppressor, Control 115V AC (4 MOV) .....	123396 .....	1 .....	
Suppressor, Field (2, 3 MOV) .....	173973 .....	2 .....	115549
Suppressor, Pilot Relay (SP2) .....	115621 .....	1 .....	
Suppressor, Three-Phase(1 MOV) .....	120630 .....	1 .....	
Transformer, 24V Supply .....	122985 .....	1 .....	

Notes: (1) 9.30 functionally identical to 10.10. ITS and DriveTools32 were limited to three digits.

### Horsepower Rated

Series B Drives, MKVA, 125 to 300 HP@230 Volt; 250 to 600 HP@460V; 500 to 600 HP@575V; 600 to 737HP@660V  
Regenerative & Non-Regenerative

#### Parts Associated with a Particular Rating

<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Bull. 2361 MCC Style</u>
SCR Cell Assembly Kits, 125-200 HP@230V, 250-400 HP@460V (670 Amps)			
Includes Upper(133736) and Lower(129891) Snubber Boards. For MCC Style Upper and Lower are same (161502)			
Regenerative Drive	142756(1)	3	161489(3)
Non-Regenerative Drive	142758(2)	3	161491(4)
SCR Only, 230/460V	117486	12 regen 6 Non-regen	

- Notes:
1. Supersedes Armature Pole Part 133177
  2. Supersedes Armature Pole Part 133178
  3. Supersedes Armature Pole Part 161485
  4. Supersedes Armature Pole Part 161487

SCR Cell Assembly Kits, 250-300 HP@230V, 500-600 HP@ 460V (980 Amps)			
Includes Upper(133736) and Lower(129891) Snubber Boards. For MCC Style Upper and Lower are same (161502)			
Regenerative Drive	142757(1)	3	161490(3)
Non-Regenerative Drive	142759(2)	3	161492(4)
SCR Only, 230/460V	117487	12 regen 6 Non-regen	

- Notes:
1. Supersedes Armature Pole Part 133175
  2. Supersedes Armature Pole Part 133176
  3. Supersedes Armature Pole Part 161486
  4. Supersedes Armature Pole Part 161488

#### Series B Drives, MKVA , 500 to 600 HP@575 Volt Parts Associated with a Particular Rating

<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Bull. 2361 MCC Style</u>
500-600 HP, 575V			
Includes Upper and Lower Snubber boards. Only MCC Style available, Upper and Lower are same (161502)			
Regenerative Drive, 1880A Pole Parts for 575V Drive		3	161493
Non-Regenerative Drive, SCR Cell Assy Kit (Not Used)		N/A	N/A
SCR only, 1880 Amp 1800V	161469	12 regen	
<hr/>			
Pole Piece Fixture Assembly. ( Includes PIP Gauge )	119495		
PIP Gauge only	119518		

# Allen-Bradley HMIs

## Field Installation Kits

**Series A and B Drives, 3.6A to 345A, 1 to 100 HP, 230 Volt, 2 to 200 HP, 460 Volt, 50/60 Hz AC Inputs  
Regenerative & Non-Regenerative  
Parts Common to All Ratings**

<u>Description</u>	<u>Kit Number</u>	<u>Catalog Number</u>	<u>Quantity</u>	<u>Supersedes</u>
Node Adapter Board .....	148542	1395-KP50	1 .....	
Discrete Adapter Board 24 VDC .....	170977	1395-KP11	1 .....	142136
Discrete Adapter Board 115 VAC .....	170976	1395-KP10	1 .....	142137
Digital Reference Adapter Board.....	140263	1395-KP12	1 .....	
Multi Communication Adapter Board.....	196274	1395-KP51	1 .....	155993
ControlNet Adapter Board .....	196273	1395-KP54EN	1 .....	185240

**Series B MKVA Drives, 346A to 980A, 125 to 300 HP, 230 Volt, 250 to 600 HP, 460 Volt, 50/60 Hz AC Inputs,  
Regenerative & Non-Regenerative**

<u>Description</u>	<u>Kit Number</u>	<u>Catalog Number</u>	<u>Quantity</u>	<u>Supersedes</u>
Node Adapter Board .....	148542	1395-KP50	1 .....	
Discrete Adapter Board 24 VDC .....	170975	1395-KP31	1 .....	142135
Discrete Adapter Board 115 VAC .....	170974	1395-KP30	1 .....	142134
Digital Reference Adapter Board.....	140297	1395-KP32	1 .....	
Multi Communication Adapter Board.....	196274	1395-KP51	1 .....	155993
ControlNet Adapter Board .....	196273	1395-KP54EN	1 .....	185240

## 1395 Programming Terminals

1300 DHT, Handheld programming terminal, Drive Handheld Terminal (DHT) .....	155187(1)
1300 EHT, Enhanced handheld terminal (w/start/stop/jog/presets).....	155189(1) Supersedes 129149
DHT/EHT EMI filter, (plugs into end of cable of all handhelds) .....	155129 (filter only)
Filter kit w/screws and pub .....	155183 (includes 155129)
1300 DMT, Door mount terminal, .....	128961
DMT Kit, (includes 128961 DMT, 10ft. cable, Bezel) .....	148287

Note (1): DHT (155187) and EHT (155189) are shipped with the filter (155129) installed on the cable(155179), DMT door mount terminals do not require filters (155129) as there are EMI ferrite core filters built into the 9 pin D-Shell connector on the cables listed below.

## Cables

DMT's and ITS (from 1300-ITSSC to drive)	10ft.....	126427
	20 ft.....	126345
	50 ft.....	126428
DHT's and EHT, Replacement cable	10ft.....	155179

## 1395 Programming Software

### DOS Based

ITS (Intelligent Terminal System) Cat.1300-ITS (includes software, cable and converter) .....	158096
ITS software and documentation only, Cat. 1300-ITSSO .....	140265
ITS converter (includes 126427 cable), Cat. 1300-ITSSC .....	140266

### Windows™ 95/98 and Windows™ NT

Application	Catalog Base	Catalog Options	Number of Licenses
DriveManager32	9303-3	C S0E10	1
	"	C1E10	2-3
	"	C2E10	4-6
	"	C3E10	7-24
DriveMonitor32	9303-3C	S0E20	1
	"	C1E20	2-3
DriveTrending32	9303-3C	S0E80	1

Note: for serial communication to the drive, 1300-ITSSC (Above) is required.

# Allen-Bradley HMIs

## Miscellaneous

Encoder Driver Module (Publication 1395-5.23).....	133341
Contactora Coil Snubber .....	116418
Node Adapter J2, 6 Pin, Black Cable Connector (Blue Hose) .....	119654
ControlNet and MultiComm Adapters, J5, 4 pin, black (TE connector).....	108828
MultiComm Adapter, Channel A or B, black, 3 pin, cable connector.....	138893

### **Series A Wiring harness's:**

DMT D-Shell to Main Control Board, 11.5" .....	125904
TB3 Pins 1-12 to Series A PSI Board.....	124111

### **Series B wiring harness's:**

DMT to Main Control Board, 7.5" .....	145264
TB3 Pins 1-12 to Series B PSI Board.....	170981

### **Ribbon Cables:**

#### **All Drives:**

Main Control Board to Adapter Ports A & B, .....	108605
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#### **Low Kva:**

Power Supply Board J2 to PSI Board J7, 2.5", Series A (in 142129 Kit).....	142005
Main Control Board J2 and J5 to PSI J8 and J9, Series A, .....	113503
PSI J2 to Feedback Board J2, 16 Pin, Series A, .....	124158
PSI J3, J4, J5 to Armature Pulse Transformer / Snubber Board, 10", Series A .....	124159
PSI J6 to Field Pulse Transformer/Snubber Board J1, 10 Pin, 8.25" Series A, .....	109129
Main Control Board J2 and J5 to PSI J10 and J13, Series B,.....	145314
PSI J9 to Power Board J6, 4.5" Series B .....	145313

#### **Low Kva, Series A & B Wire harness:**

Discrete Adapter Board J3 to TB3, Pins 43 to 51, 12 Pin, Digital I/O .....	126013
Discrete Adapter Board J4 to TB3, Pins 23 to 41, 20 Pin, Analog I/O .....	126014
TB3 to Digital Reference Adapter Board .....	133340
TB3 Encoder to Main Control Board .....	124110

#### **Medium Kva Ribbon Cables:**

Power Supply Board J2 to PSI Board J7, 18", (In 142129 PS Kit).....	142016
Main Control Board J2 and J5 to PSI J8 and J9 .....	129040
PSI J2 to Feedback Board J2 .....	113499
PSI J3,4,5 to Armature Pole Piece J1, 60", 20 Pin .....	118811
PSI J6 to Field Pulse Transformer / Snubber Bd., 40", 10 Pin .....	118809

#### **Medium Kva Wire Harness**

DMT D-Shell to MCB, 34", .....	124373
Discrete Adapter Board J3 to TB3, Pins 43 to 51, 12 Pin, Digital I/O.....	124107
Discrete Adapter Board J4 to TB3, Pins 23 to 41, 20 Pin, 3.5', Analog I/O.....	126529
Digital Reference Adapter Board to TB3 .....	133527

**Miscellaneous (continued)**

**HKVA Ribbon Cables:**

Power Supply Board J2 to PSI Board J7, 18", Series A, (In 142129 PS Kit) .....	142016
PSI J2 to Feedback board J2, 16 Lead 28 Ga, 43".....	143761
PSI J6 to Field Pulse Transformer and Snubber Board J1, 10 lead 28 Ga, 37",.....	143760
PSI J8 or J9 to Main Control Board J5 or J2, 34 Lead 28Ga, 2" .....	113503
PSI J7 to Power Supply J1, 26 Lead,.....	142005

**HKVA Wire Harness:**

Encoder to Main Control Board, .....	124110
DHT to Main Control Board J4, .....	143763
PSI J10 to TB3 Pins 1-12, .....	143762
Discrete Adapter Board J3 to TB3, Pins 43 to 51, 12 Pin, Digital I/O.....	126013
Discrete Adapter Board J4 to TB3, Pins 23 to 41, 20 Pin, Analog I/O, Includes 126014 .....	159381