

High performance, multi function and easy use,  
all advanced.

Easy  
Quick  
Smart  
Light  
Safe  
MINAS  
A5

DIGITAL AC SERVO MOTOR & DRIVER  
MINAS A5



# Table of Part Numbers and Options

# Table of Part Numbers and Options

Motor series		Motor					Driver			Power capacity (at rated load)	Optional parts							Options												
		Power supply	Output (W)	Part No. (Note) 1	Rating/Spec. (page)	Part No. (Standard type)	Part No. (Positioning type)	Frame	Encoder cable		Motor cable		Brake cable (Note) 2	Regenerative resistor	Reactor	Noise filter	Title	構成部品名		Part No.	Page									
									20-bit Incremental (Note) 2		17-bit Absolute (Note) 2	without brake (Note) 2						with brake (Note) 2	without brake (Note) 2			with brake (Note) 2	Interface cable	Interface Connector	Part No.	Page				
Low inertia	MSMD (Leadwire type) 3000r/min	Single phase 100V	50	MSMD5AZ□1*	66	MADHT1105	MADHT1105E	A-frame	Approx. 0.4kVA		MFECA 0**0EAM	MFECA 0**0EAE	MFMCA 0**0EED	-	MFMCB 0**0GET	DV0P4280	DV0P227	DV0P4170	Connector for Power Supply Input Connection	A to D-frame (100V/200V)	Single row type	DV0PM20032	120							
			100	MSMD011□1*	68	MADHT1107	MADHT1107E		Approx. 0.4kVA							DV0P4283	DV0P228			DV0PM20033	120									
			200	MSMD021□1*	70	MBDHT2110	MBDHT2110E	B-frame	Approx. 0.5kVA							DV0P4282	DV0P228			DV0PM20042	120									
			400	MSMD041□1*	72	MCDHT3120	MCDHT3120E	C-frame	Approx. 0.9kVA							DV0P4281	DV0P220			DV0PM20044	120									
			50	MSMD5AZ□1*	67	MADHT1505	MADHT1505E	A-frame	Approx. 0.5kVA							DV0P4283	DV0P221			DV0PM20051	121									
			100	MSMD012□1*	69	MADHT1507	MADHT1507E		Approx. 0.5kVA							DV0P4283	DV0P221			DV0PM20052	121									
		200	MSMD022□1*	71	MADHT1507	MADHT1507E	Approx. 0.5kVA		DV0P4283	DV0P221						DV0PM20053	121													
		400	MSMD042□1*	73	MBDHT2510	MBDHT2510E	B-frame		Approx. 0.9kVA							DV0P4283	DV0P221	DV0PM20054	122											
		750	MSMD082□1*	74	MCDHT3520	MCDHT3520E	C-frame		Approx. 1.3kVA							DV0P4283	DV0P221	DV0PM20055	121											
		50	MSME5AZ□1*	36	MADHT1105	MADHT1105E	A-frame		Approx. 0.4kVA							DV0P4280	DV0P227	DV0PM20034	121											
		100	MSME011□1*	38	MADHT1107	MADHT1107E		Approx. 0.4kVA		DV0P4283						DV0P228	DV0PM20036	123												
		200	MSME021□1*	40	MBDHT2110	MBDHT2110E		B-frame	Approx. 0.5kVA							DV0P4282	DV0P228	DV0PM20037	123											
	400	MSME041□1*	42	MCDHT3120	MCDHT3120E	C-frame		Approx. 0.9kVA		DV0P4281	DV0P220	DV0PM20038	124																	
	50	MSME5AZ□1*	37	MADHT1505	MADHT1505E	A-frame		Approx. 0.5kVA		DV0P4283	DV0P221	DV0PM20039	124																	
	100	MSME012□1*	39	MADHT1507	MADHT1507E			Approx. 0.5kVA		DV0P4283	DV0P221	DV0PM20040	124																	
	200	MSME022□1*	41	MADHT1507	MADHT1507E		Approx. 0.5kVA		DV0P4283	DV0P221	DV0PM20041	124																		
	400	MSME042□1*	43	MBDHT2510	MBDHT2510E		B-frame	Approx. 0.9kVA		DV0P4283	DV0P221	DV0PM20042	124																	
	750	MSME082□1*	44	MCDHT3520	MCDHT3520E		C-frame	Approx. 1.3kVA		DV0P4283	DV0P221	DV0PM20043	124																	
	1000	MSME102□1*	45	MDDHT5540	MDDHT5540E		D-frame	Approx. 1.8kVA		DV0P4283	DV0P221	DV0PM20044	124																	
	MSME 3000r/min	Single phase/ 3-phase 200V	1500	MSME152□1*	46	MDDHT5540	MDDHT5540E	D-frame	Approx. 2.3kVA		MFECA 0**0ETD	MFECA 0**0ETE	MFMCA 0**0NJD	-	MFMCB 0**0PJT	DV0P4284	DV0P222	DV0P4220	Connector Kit for Motor/Encoder Connection	DV0P4285	DV0P223	DV0PM20043	DV0P4290	122						
			2000	MSME202□1*	47	MEDHT7364	MEDHT7364E	E-frame	Approx. 3.3kVA							DV0P4285	DV0P223	DV0PM20043		DV0P4380	122									
			3000	MSME302□1*	48	MFDHTA390	MFDHTA390E	F-frame	Approx. 4.5kVA							DV0P4285	DV0P224	DV0PM20035		123										
			4000	MSME402□1*	49	MFDHTB3A2	MFDHTB3A2E		Approx. 6kVA							DV0P4285	DV0P225	DV0PM20036		123										
			5000	MSME502□1*	50	MFDHTB3A2	MFDHTB3A2E		Approx. 7.5kVA							DV0P4285	DV0P225	DV0PM20037		123										
1000			MSME104□1*	82	MDDHT3420	MDDHT3420E	D-frame		Approx. 1.8kVA							DV0P4285	DV0P225	DV0PM20038		124										
1500		MSME154□1*	83	MDDHT3420	MDDHT3420E	D-frame	Approx. 2.3kVA		DV0P4285	DV0P225						DV0PM20039	124													
3-phase 200V		3000	MSME302□1*	48	MFDHTA390	MFDHTA390E	F-frame		Approx. 4.5kVA							DV0P4285	DV0P225	DV0PM20040	124											
		4000	MSME402□1*	49	MFDHTB3A2	MFDHTB3A2E		Approx. 6kVA		DV0P4285						DV0P225	DV0PM20041	124												
		5000	MSME502□1*	50	MFDHTB3A2	MFDHTB3A2E		Approx. 7.5kVA		DV0P4285						DV0P225	DV0PM20042	124												
		1000	MSME104□1*	82	MDDHT3420	MDDHT3420E		D-frame	Approx. 1.8kVA							DV0P4285	DV0P225	DV0PM20043	124											
		1500	MSME154□1*	83	MDDHT3420	MDDHT3420E		D-frame	Approx. 2.3kVA							DV0P4285	DV0P225	DV0PM20044	124											
	2000	MSME204□1*	84	MEDHT4430	MEDHT4430E	E-frame		Approx. 3.3kVA		DV0P4285	DV0P225	DV0PM20045	121																	
3-phase 400V	3000	MSME304□1*	85	MFDHT5440	MFDHT5440E	F-frame	Approx. 4.5kVA		DV0P4285	DV0P225	DV0PM20046	122																		
	4000	MSME404□1*	86	MFDHTA464	MFDHTA464E		Approx. 6.8kVA		DV0P4285	DV0P225	DV0PM20047	122																		
	5000	MSME504□1*	87	MFDHTA464	MFDHTA464E		Approx. 7.5kVA		DV0P4285	DV0P225	DV0PM20048	122																		
	1000	MSME104□1*	82	MDDHT3420	MDDHT3420E		D-frame	Approx. 1.8kVA		DV0P4285	DV0P225	DV0PM20049	122																	
	1500	MSME154□1*	83	MDDHT3420	MDDHT3420E		D-frame	Approx. 2.3kVA		DV0P4285	DV0P225	DV0PM20050	109																	
	2000	MSME204□1*	84	MEDHT4430	MEDHT4430E		E-frame	Approx. 3.3kVA		DV0P4285	DV0P225	DV0PM20051	109																	
Middle inertia	MDME 2000r/min	Single phase/ 3-phase 200V	1000	MDME102□1*	51	MDDHT3530	MDDHT3530E	D-frame	Approx. 1.8kVA		MFECA 0**0ETD	MFECA 0**0ETE	MFMCA 0**0NJD	-	MFMCB 0**0PJT	DV0P4284	DV0P222	DV0P4220	Connector Kit for Motor/Encoder Connection	DV0P4285	DV0P223	DV0PM20043	DV0P4290	122						
			1500	MDME152□1*	52	MDDHT5540	MDDHT5540E		Approx. 2.3kVA							DV0P4285	DV0P223	DV0PM20043		DV0P4380	122									
			2000	MDME202□1*	53	MEDHT7364	MEDHT7364E		E-frame	Approx. 3.3kVA						DV0P4285	DV0P224	DV0PM20035		123										
			3000	MDME302□1*	54	MFDHTA390	MFDHTA390E		F-frame	Approx. 4.5kVA						DV0P4285	DV0P225	DV0PM20036		123										
			4000	MDME402□1*	55	MFDHTB3A2	MFDHTB3A2E			Approx. 6kVA						DV0P4285	DV0P225	DV0PM20037		123										
			5000	MDME502□1*	56	MFDHTB3A2	MFDHTB3A2E			Approx. 7.5kVA						DV0P4285	DV0P225	DV0PM20038		124										
		1000	MDME104□1*	88	MDDHT2412	MDDHT2412E	D-frame	Approx. 1.8kVA		DV0P4285						DV0P225	DV0PM20039	124												
		1500	MDME154□1*	89	MDDHT3420	MDDHT3420E	D-frame	Approx. 2.3kVA		DV0P4285						DV0P225	DV0PM20040	124												
		3-phase 200V	3000	MDME302□1*	54	MFDHTA390	MFDHTA390E	F-frame		Approx. 4.5kVA						DV0P4285	DV0P225	DV0PM20041	124											
			4000	MDME402□1*	55	MFDHTB3A2	MFDHTB3A2E		Approx. 6kVA							DV0P4285	DV0P225	DV0PM20042	124											
			5000	MDME502□1*	56	MFDHTB3A2	MFDHTB3A2E		Approx. 7.5kVA							DV0P4285	DV0P225	DV0PM20043	124											
			1000	MDME104□1*	88	MDDHT2412	MDDHT2412E		D-frame	Approx. 1.8kVA						DV0P4285	DV0P225	DV0PM20044	124											
	1500		MDME154□1*	89	MDDHT3420	MDDHT3420E	D-frame		Approx. 2.3kVA		DV0P4285	DV0P225	DV0PM20045	121																
	2000		MDME204□1*	90	MEDHT4430	MEDHT4430E	E-frame		Approx. 3.3kVA		DV0P4285	DV0P225	DV0PM20046	122																
	3-phase 400V	3000	MDME304□1*	91	MFDHT5440	MFDHT5440E	F-frame	Approx. 4.5kVA		DV0P4285	DV0P225	DV0PM20047	122																	
		4000	MDME404□1*	92	MFDHTA464	MFDHTA464E		Approx. 6.8kVA		DV0P4285	DV0P225	DV0PM20048	122																	
		5000	MDME504□1*	93	MFDHTA464	MFDHTA464E		Approx. 7.5kVA		DV0P4285	DV0P225	DV0PM20049	122																	
		1000	MDME104□1*	88	MDDHT2412	MDDHT2412E		D-frame	Approx. 1.8kVA		DV0P4285	DV0P225	DV0PM20050	109																
		1500	MDME154□1*	89	MDDHT3420	MDDHT3420E		D-frame	Approx. 2.3kVA		DV0P4285	DV0P225	DV0PM20051	109																
		2000	MDME204□1*	90	MEDHT4430	MEDHT4430E		E-frame	Approx. 3.3kVA		DV0P4285	DV0P225	DV0PM20052	109																
	MGME 1000r/min	Single phase/ 3-phase 200V	900	MGME092□1*	57	MDDHT5540	MDDHT5540E	D-frame	Approx. 1.8kVA		MFECA 0**0ETD	MFECA 0**0ETE	MFMCA 0**0NJD	-	MFMCB 0**0PJT	DV0P4284	DV0P222	DV0P4220	Connector Kit for Motor/Encoder Connection	DV0P4285	DV0P223	DV0PM20043	DV0P4290	122						
			2000	MGME202□1*	58	MFDHTA390	MFDHTA390E		Approx. 3.8kVA							DV0P4285	DV0P223	DV0PM20043		DV0P4380	122									
			3000	MGME302□1*	59	MFDHTB3A2	MFDHTB3A2E		F-frame	Approx. 4.5kVA						DV0P4285	DV0P224	DV0PM20035		123										
			900	MGME094□1*	94	MDDHT3420	MDDHT3420E			D-frame						Approx. 1.8kVA		DV0P4285		DV0P224	DV0PM20036	123								
2000			MGME204□1*	95	MFDHT5440	MFDHT5440E	F-frame			Approx. 3.8kVA						DV0P4285	DV0P224	DV0PM20037		123										
3000			MGME304□1*	96	MFDHTA464	MFDHTA464E				Approx. 4.5kVA						DV0P4285	DV0P224	DV0PM20038		124										
1000		MGME104□1*	94	MDDHT3420	MDDHT3420E	D-frame		Approx. 1.8kVA		DV0P4285						DV0P224	DV0PM20039	124												
2000		MGME204□1*	95	MFDHT5440	MFDHT5440E	F-frame		Approx. 3.8kVA		DV0P4285						DV0P224	DV0PM20040	124												
3000		MGME304□1*	96	MFDHTA464	MFDHTA464E			Approx. 4.5kVA		DV0P4285						DV0P224	DV0PM20041	124												
MHMD (Leadwire type) 3000r/min		Single phase 100V	200	MHMD021□1*	76			MBDHT2110	MBDHT2110E	B-frame						Approx. 0.5kVA		MFECA 0**0EAM	MFECA 0**0EAE	MFMCA 0**0EED	-	MFMCB 0**0GET	DV0P4283	DV0P228	DV0P4170	Connector for Power Supply Input Connection	DV0P4282	DV0P228	DV0PM20042	DV0P4190
			400	MHMD041□1*	78		MCDHT3120	MCDHT3120E	C-frame							Approx. 0.9kVA							DV0P4283	DV0P228	DV0PM20042		DV0P4150	109		
			200	MHMD022□1*	77		MADHT1507	MADHT1507E	A-frame	Approx. 0.5kVA						DV0P4283	DV0P220						DV0PM20051	121						
	400		MHMD042□1*	79	MBDHT2510		MBDHT2510E	B-frame		Approx. 0.9kVA		DV0P4283	DV0P221	DV0PM20052	121															
	750		MHMD082□1*	80	MCDHT3520	MCDHT3520E	C-frame	Approx. 1.3kVA		DV0P4283	DV0P221	DV0PM20053	121																	
	1000		MHME102□1*	60	MDDHT3530	MDDHT3530E	D-frame	Approx. 1.8kVA		DV0P4283	DV0P221	DV0PM20054	122																	
	1500	MHME152□1*	61	MDDHT5540	MDDHT5540E	Approx. 2.3kVA		DV0P4283		DV0P221	DV0PM20055	121																		
	2000	MHME202□1*	62	MEDHT7364	MEDHT7364E	E-frame		Approx. 3.3kVA		DV0P4283	DV0P221	DV0PM20056	121																	
	3000	MHME302□1*	63	MFDHTA390	MFDHTA390E	F-frame		Approx. 4.5kVA		DV0P4283	DV0P221	DV0PM20057	121																	
	4000	MHME402□1*	64	MFDHTB3A2	MFDHTB3A2E			Approx. 6kVA		DV0P4283	DV0P221	DV0PM20058	121																	
	5000	MHME502□1*	65	MFDHTB3A2	MFDHTB3A2E			Approx. 7.5kVA		DV0P4283	DV0P221	DV0PM20059	121																	
	1000	MHME104□1*	98	MDDHT2412	MDDHT2412E		D-frame	Approx. 1.8kVA		DV0P4283	DV0P221	DV0PM20060	121																	
1500	MHME154□1*	99	MDDHT3420	MDDHT3420E	D-frame		Approx. 2.3kVA		DV0P4283	DV0P221	DV0PM20061	121																		
3-phase 200V	2000	MHME204□1*	100	MEDHT4430	MEDHT4430E																									

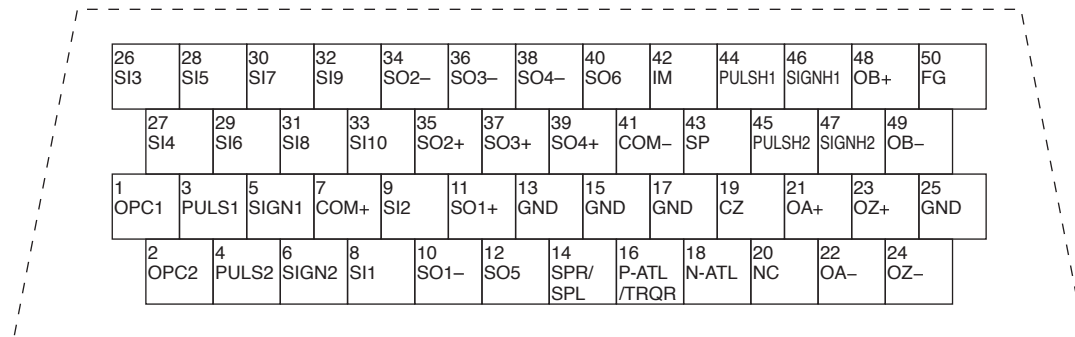
## Connector Kit for Interface

Part No. DV0P4350

### • Components

Title	Part No.	Number	Manufacturer	Note
Connector	54306-5011	1	Molex Inc	For Connector X4 (50-pins)
Connector cover	54331-0501	1		

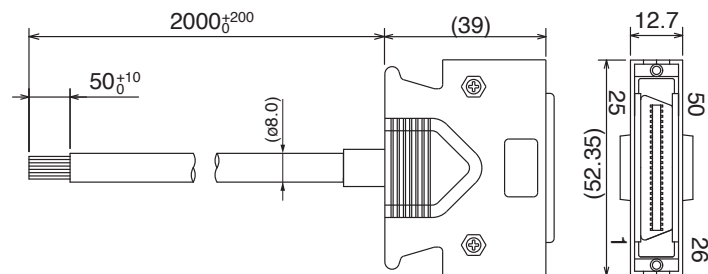
### • Pin disposition (50 pins) (viewed from the soldering side)



- 1) Check the stamped pin-No. on the connector body while making a wiring.
- 2) For the function of each signal title or its symbol, refer to the wiring example of the connector X4.
- 3) Do not connect anything to NC pins in the above table.

## Interface Cable

Part No. DV0P4360



This 2 m connector cable contains AWG28 conductors.

### • Table for wiring

Pin No.	color	Pin No.	color	Pin No.	color	Pin No.	color	Pin No.	color
1	Orange (Red1)	11	Orange (Black2)	21	Orange (Red3)	31	Orange (Red4)	41	Orange (Red5)
2	Orange (Black1)	12	Yellow (Black1)	22	Orange (Black3)	32	Orange (Black4)	42	Orange (Black5)
3	Gray (Red1)	13	Gray (Red2)	23	Gray (Red3)	33	Gray (Red4)	43	Gray (Red5)
4	Gray (Black1)	14	Gray (Black2)	24	Gray (Black3)	34	White (Red4)	44	White (Red5)
5	White (Red1)	15	White (Red2)	25	White (Red3)	35	White (Black4)	45	White (Black5)
6	White (Black1)	16	Yellow (Red2)	26	White (Black3)	36	Yellow (Red4)	46	Yellow (Red5)
7	Yellow (Red1)	17	Yel (Blk2)/Pink (Blk2)	27	Yellow (Red3)	37	Yellow (Black4)	47	Yellow (Black5)
8	Pink (Red1)	18	Pink (Red2)	28	Yellow (Black3)	38	Pink (Red4)	48	Pink (Red5)
9	Pink (Black1)	19	White (Black2)	29	Pink (Red3)	39	Pink (Black4)	49	Pink (Black5)
10	Orange (Red2)	20	—	30	Pink (Black3)	40	Gray (Black4)	50	Gray (Black5)

### <Remarks>

Color designation of the cable  
e.g.) Pin-1 Cable color : Orange (Red1) : One red dot on the cable

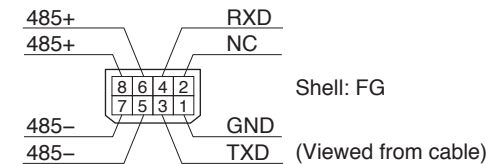
## Connector Kit for Communication Cable (for RS485, RS232) (Excluding A5E Series)

Part No. DV0PM20024

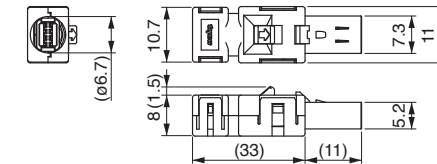
### • Components

Title	Part No.	Manufacturer	Note
Connector	2040008-1	Tyco Electronics AMP	For Connector X2 (8-pins)

### • Pin disposition of connector, connector X2



### • Dimensions



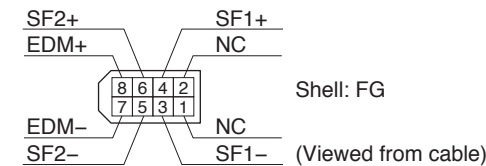
## Connector Kit for Safety (Excluding A5E Series)

Part No. DV0PM20025

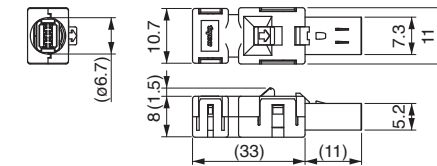
### • Components

Title	Part No.	Manufacturer	Note
Connector	2013595-1	Tyco Electronics AMP	For Connector X3 (8-pins)

### • Pin disposition of connector, connector X3



### • Dimensions



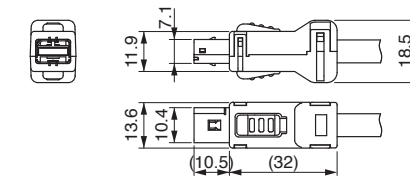
## Connector Kit for External Scale (Excluding A5E Series)

Part No. DV0PM20026

### • Components

Title	Part No.	Manufacturer	Note
Connector	MUF-PK10K-X	J.S.T Mfg. Co., Ltd.	For Connector X5

### • Dimensions



## Connector Kit for Encoder

Part No. DV0PM20010

### • Components

Title	Part No.	Manufacturer	Note
Connector	55100-0670	Molex Inc	For Connector X6

### <Remarks>

Connector X1: use with commercially available cable.

• Configuration of connector X1: USB mini-B

