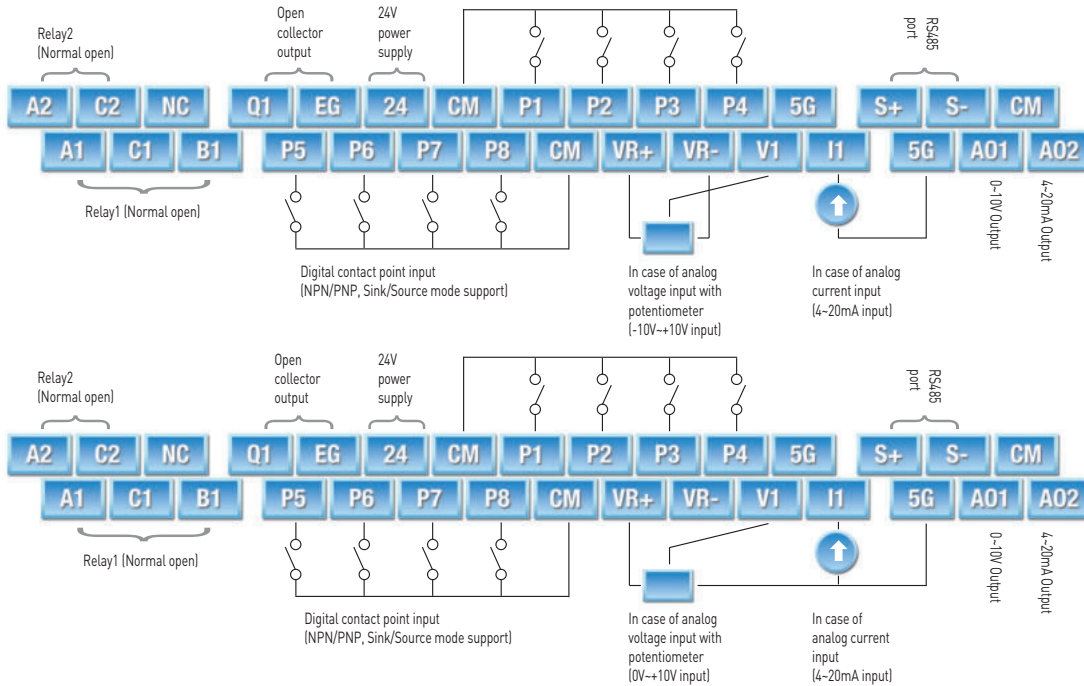


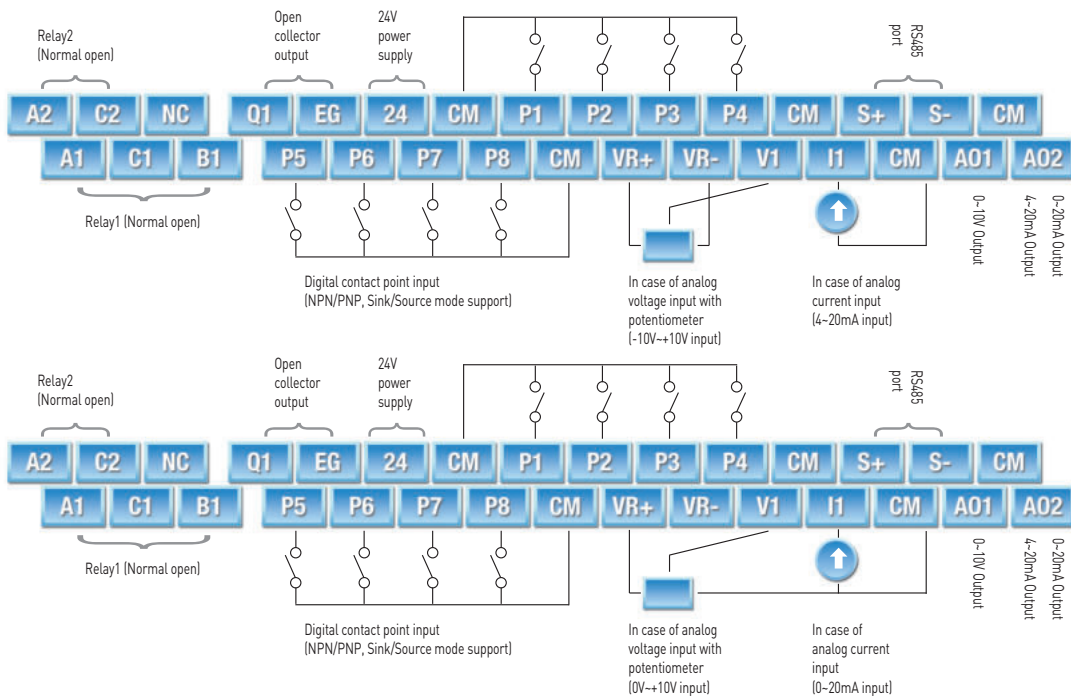
0.75~22kW (Basic I/O)



TR terminal located on the above the right side of terminal block is for the terminal resistor of RS485 communication(120Ω)
We recommend the potentiometer for 1/2W, 1kΩ.

* Description of TR terminal and variable resistance are same as those of insulated I/O.

30~375kW (Insulated I/O)



TR terminal located on the above the right side of terminal block is for the terminal resistor of RS485 communication(120Ω)

AC Reactor Specifications / 200V 30~75kW

Capacity of Drive	Specifications of the AC Reactor			
	Heavy Duty		Normal Duty	
	mH	A	mH	A
0008iS7-2	2.13	5.7	1.20	10
0015iS7-2	1.20	10	0.88	14
0022iS7-2	0.88	14	0.56	20
0037iS7-2	0.56	20	0.39	30
0055iS7-2	0.39	30	0.28	40
0075iS7-2	0.28	40	0.20	59
0110iS7-2	0.20	59	0.15	75
0150iS7-2	0.15	75	0.12	96
0185iS7-2	0.12	96	0.10	112
0220iS7-2	0.10	112	0.07	160
0300iS7-2	0.07	160	0.05	200
0370iS7-2	0.05	200	0.044	240
0450iS7-2	0.044	240	0.038	280
0550iS7-2	0.038	280	0.026	360
0750iS7-2	0.026	360	0.02	500
0008iS7-4	8.63	2.8	4.81	4.8
0015iS7-4	4.81	4.8	3.23	7.5
0022iS7-4	3.23	7.5	2.34	10
0037iS7-4	2.34	10	1.22	15
0055iS7-4	1.22	15	1.14	20
0075iS7-4	1.14	20	0.81	30
0110iS7-4	0.81	30	0.61	38
0150iS7-4	0.61	38	0.45	50
0185iS7-4	0.45	50	0.39	58
0220iS7-4	0.39	58	0.287	80
0300iS7-4	0.287	80	0.232	98
0370iS7-4	0.232	98	0.195	118
0450iS7-4	0.195	118	0.157	142
0550iS7-4	0.157	142	0.122	196
0750iS7-4	0.122	196	0.096	237
0900iS7-4	0.096	237	0.081	289
1100iS7-4	0.081	289	0.069	341
1320iS7-4	0.069	341	0.057	420
1600iS7-4	0.057	420	0.042	558
1850iS7-4	0.042	558	0.042	558
2200iS7-4	0.042	558	0.029	799
2800iS7-4	0.029	799	0.029	799
3150iS7-4	0.029	799	0.024	952
3750iS7-4	0.024	952	0.024	952

DC Reactor Specifications

200V 30~75kW

Capacity of Drive	Specifications of the DC Reactor	
	mH	A
0300iS7-2	0.24	200
0370iS7-2	0.2	240
0450iS7-2	0.17	280
0550iS7-2	0.12	360
0750iS7-2	0.1	500

400V 280~375kW

Capacity of Drive	Specifications of the DC Reactor	
	mH	A
2800iS7-4	0.09	836
3150iS7-4	0.076	996
3750iS7-4	0.064	1195

400V/30~75kW (For Non-DCR products, remove the P1 and P2 shorting pins to install the DC reactor.)

Inverter capacity	DC reactor specifications	
	mH	A
0300iS7-4	0.98	75
0370iS7-4	0.87	90
0450iS7-4	0.55	110
0550iS7-4	0.47	150
0750iS7-4	0.48	180

Dynamic Braking Unit

UL Form	Type	Voltage	Capacity of Applied Motor	Braking Unit	Braking Unit		
UL Type	Type A	200V	30 ~ 37kW	SV370DBU-2U	Refer to the appearance of group 1		
			45 ~ 55kW	SV550DBU-2U			
			75kW	SV370DBU-2U, 2Set			
		400V	30 ~ 37kW	SV370DBU-4U			
			45 ~ 55kW	SV550DBU-4U			
			75kW	SV750DBU-4U			
			90kW	SV550DBU-4U, 2Set			
			110 ~ 132kW	SV750DBU-4U, 2Set			
			160kW	SV750DBU-4U, 3Set			
Non UL Type	Type A	200V	30 ~ 37kW	SV037DBH-2	Refer to the appearance of group 2		
			30 ~ 37kW	SV037DBH-4			
		400V	45 ~ 55kW, 75kW	SV075DB-4	Refer to the appearance of group 3		
				185 ~ 220kW	SV2200DB-4 ¹⁾	Refer to the appearance of group 4	
			280 ~ 375kW	SV2200DB-4, 2Set			
			200V	30 ~ 37kW	LSLV0370DBU-2LN	Group 5	
		LSLV0370DBU-2HN			Group 6		
		45 ~ 55kW, 75kW		LSLV0750DBU-2LN	Group 5		
				LSLV0750DBU-2HN	Group 6		
				400V	30 ~ 37kW	LSLV0370DBU-4LN	Group 5
					45 ~ 55kW, 75kW	LSLV0370DBU-4HN	Group 6
		90kW	LSLV0900DBU-4HN		Group 6		
		110 ~ 132kW	LSLV1320DBU-4HN				
		160kW	LSLV1600DBU-4HN				
		185 ~ 220kW	LSLV2200DBU-4HN				
		280 ~ 375kW	LSLV2200DBU-4HN, 2Set				

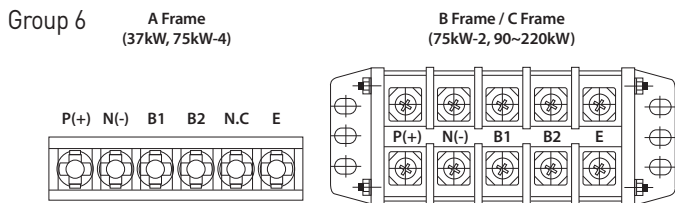
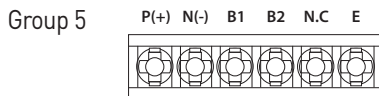
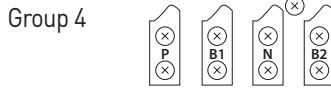
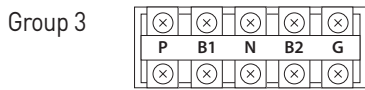
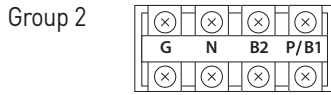
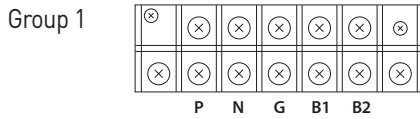
*1) It is not necessary to option type dynamic braking unit for IS7 0.75~22kW(200V, 400V) because basically the dynamic braking unit is built in.

*2) You must refer to dynamic braking unit manual for usage recommended dynamic braking unit in the table above due to changeable table.

*3) Resistance/watt/breaking torque/%ED of DB Resistor for type A DB Unit refer to the table of "6)DB Resistors". And in case of Type B&C refer to the manual of DB Unit.

* Please refer to the manual for dimensions of DB unit.

Terminal Arrangement of Dynamic Braking Unit



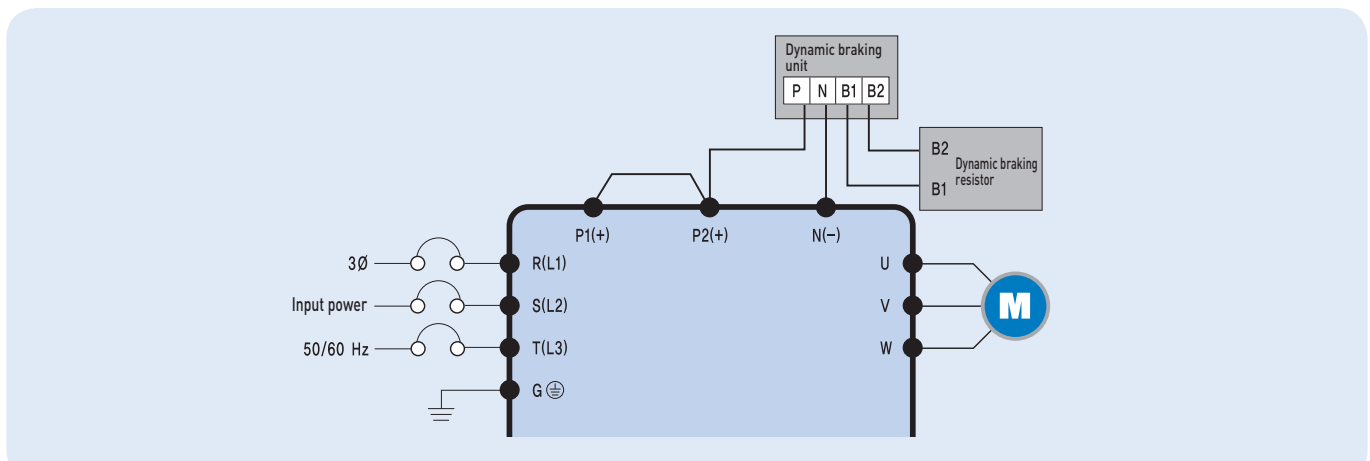
Terminal	Function
G	Ground terminal
B2	Terminal for connection with B2 of DBU
B1	Terminal for connection with B1 of DBU
N	Terminal for connection with N of drive
P	Terminal for connection with P1 of drive

*Note: READ DBU User manual certainly when selecting DB resistors.

Terminal	Function
P	Terminal for connection with P of drive
B1	Terminal for connection with B1 of DBU
N	Terminal for connection with N of drive
B2	Terminal for connection with B2 of DBU
G	Ground terminal

Terminal	Function
P(+)	Terminal for connection with P of drive
N(-)	Terminal for connection with N of drive
B1	Terminal for connection with B1 of DBU
B2	Terminal for connection with B2 of DBU
N.C	Unused
E	Ground terminal

Dynamic Braking Unit (DBU) & DB Resistor Wiring Layout



DBU Terminals	Description
B1, B2	Wire correctly referring to diagram. DB Resistors connect with B1,B2 of DB Unit

Dynamic Braking Resistor (Option)

Resistance/watt/breaking torque/%ED of DB resistor for type A DB Unit refer to the table of "6) DB resistors".
And in case of type B&C refer to the manual of unit. Rating watt of DBU has to be doubled when %ED is doubled.

Voltage	Applied Drive Capacity [kW]	Resistance [ohm]	Watt [W]	Appearance	Reference	Wiring [mm ²]	Model
200V Class	0.75	150	150	-	150% Braking Torque, 5%ED	1.25	-
	1.5	60	300	-		1.25	-
	2.2	50	400	TYPE 1		2.5	MCRF400W50
	3.7	33	600	TYPE 2		2.5	MCRF600W33
	5.5	20	800	TYPE 3		2.5	MCRF800W20
	7.5	15	1200	TYPE 5		4	MCRF1200W15
	11	10	2400	TYPE 6		4	MCRF-ST2400W10
	15	8	2400	TYPE 6		10	MCRF-ST2400W8
	18.5	5	3600	TYPE 7		20	MCRF-ST3600W5
	22	5	3600	TYPE 7		20	MCRF-ST3600W5
	30	5	5000	-	-	-	
	37	4.5	7000	-	100% Braking Torque, 10%ED	-	-
	45	3.5	10000	-		-	-
	55	3	15000	-		-	-
	75	2.5	20000	-		-	-
75	2.5	20000	-	-		-	
400V Class	0.75	600	150	-	150% Braking Torque, 5%ED	1.25	-
	1.5	300	300	-		2	-
	2.2	200	400	TYPE 1		2.5	MCRF400W200
	3.7	130	600	TYPE 2		2.5	MCRF600W130
	5.5	85	1000	TYPE 4		2.5	MCRF1000W85
	7.5	60	1200	TYPE 5		2.5	MCRF1200W60
	11	40	2000	TYPE 6		2.5	MCRF-ST2000W40
	15	30	2400	TYPE 6		4	MCRF-ST2400W30
	18.5	20	3600	TYPE 7		6	MCRF-ST3600W20
	22	20	3600	TYPE 7		6	MCRF-ST3600W20
	30	16.9	6,400	-	100% Braking Torque, 10%ED	-	-
	37	16.9	6,400	-		-	-
	45	11.4	9,600	-		-	-
	55	11.4	9,600	-		-	-
	75	8.4	12,800	-		-	-
	90	4.5	15,000	-		-	-
	110	3.5	17,000	-		-	-
	132	3.0	20,000	-		-	-
	160	2.5	25,000	-		-	-
	185	2	30,000	-		-	-
	220	2	30,000	-		-	-
280	1.5	40,000	-	-	-		
315	1	60,000	-	-	-		
375	1	60,000	-	-	-		

Please refer the following if you use option type dynamic braking unit to IS7.

1) If you use the DB Unit in parallel, the combined resistance value must be the resistance value in the table above.

2) If the braking resistor type name is not listed in the table above, purchase separately a braking resistor reference to resistance and wattage in the table above.

* Please refer to the manual for dimensions of DB Resistor.

Specifications of Wiring Switch and Electronic Contactor

Drive Capacity	Wiring Switch				Short Circuit Switch		Electronic Contactor	
	METASOL		SUSOL					
	Model	Rated Current [A]	Model	Rated Current [A]	Model	Rated Current [A]	Model	Rated Current [A]
0008iS7-2	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	11
0015iS7-2	ABS33c	15	UTE100	15	EBS33c	15	MC-12b	12
0022iS7-2	ABS33c	30	UTE100	30	EBS33c	30	MC-18b	18
0037iS7-2	ABS33c	30	UTE100	30	EBS33c	30	MC-32a	32
0055iS7-2	ABS53c	50	UTE150	50	EBS53c	50	MC-40a	40
0075iS7-2	ABS63c	60	UTE150	60	EBS63c	60	MC-50a	55
0110iS7-2	ABS103c	100	UTE150	100	EBS103c	100	MC-65a	65
0150iS7-2	ABS103c	125	UTE150	125	EBS103c	125	MC-100a	105
0185iS7-2	ABS203c	150	UTE150	150	EBS203c	150	MC-130a	130
0220iS7-2	ABS203c	175	UTE250	175	EBS203c	175	MC-150a	150
0300iS7-2	ABS203c	225	UTE250	225	EBS203c	225	MC-150a	150
0370iS7-2	ABS403c	300	UTE400	300	EBS403c	300	MC-225a	225
0450iS7-2	ABS403c	350	UTE400	350	EBS403c	350	MC-330a	330
0550iS7-2	ABS603c	500	UTE600	500	EBS603c	500	MC-400a	400
0750iS7-2	ABS603c	630	UTE600	600	EBS603c	630	MC-630a	630
0008iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	15
0015iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	15
0022iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-12b	15
0037iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-18b	15
0055iS7-4	ABS33c	30	UTE100	30	EBS33c	30	MC-22b	30
0075iS7-4	ABS33c	30	UTE100	30	EBS33c	30	MC-32a	30
0110iS7-4	ABS53c	50	UTE150	50	EBS53c	50	MC-40a	50
0150iS7-4	ABS63c	60	UTE150	60	EBS63c	60	MC-50a	60
0185iS7-4	ABS103c	80	UTE150	80	EBS103c	80	MC-65a	80
0220iS7-4	ABS103c	100	UTE150	100	EBS103c	100	MC-65a	100
0300iS7-4	ABS103c	125	UTE150	125	EBS203c	125	MC-100a	125
0370iS7-4	ABS203c	150	UTE150	150	EBS203c	150	MC-130a	150
0450iS7-4	ABS203c	175	UTE250	175	EBS203c	175	MC-150a	175
0550iS7-4	ABS203c	225	UTE250	225	EBS203c	225	MC-185a	225
0750iS7-4	ABS403c	300	UTE400	300	EBS403c	300	MC-225a	300
0900iS7-4	ABS403c	400	UTE400	400	EBS403c	400	MC-330a	400
1100iS7-4	ABS603c	500	UTE600	500	EBS603c	500	MC-400a	500
1320iS7-4	ABS603c	630	UTE600	600	EBS603c	630	MC-400a	600
1600iS7-4	ABS603c	630	UTE600	600	EBS603c	630	MC-630a	600
1850iS7-4	ABS803c	800	UTE800	800	EBS803c	800	MC-630a	800
2200iS7-4	ABS803c	800	UTE800	800	EBS803c	800	MC-800a	800
2800iS7-4	ABS1003b	1000	UTE1200	1000	EBS1003c	1000	1000A	1000
3150iS7-4	ABS1203b	1200	UTE1200	1200	EBS1203c	1200	1200A	1200
3750iS7-4	1400A	1400	1400A	1400	1400A	1400	1400A	1400

Option Slot #1) Fieldbus Options

High Performance Standard
AC Drive iS7

Profibus-DP

- Profibus dedicated connector
- Max. 12Mbps communication speed
- Max. 32 stations per segment
- Bus topology
- Enhanced on-line diagnosis



Devicenet

- Communication speed: 125kbps, 250kbps, 500kbps
- Free/Bus topology
- Max. 64 node connection points
- Max. 500m (1640 ft.) transmission distance (125kbps)



Can Open

- 1Mbps communication speed
- Bus Topology
- Max. 64 node connection points (include master)
- PDO, SDO, Sync, NMC communication support
- Support profile: PDO1 (CiA402 drive & motion control device profile), PDO3 (LS Profile)



CC-Link

- 10Mbps communication speed
- Connecting up to 42 AC drives
- Station type: Remote device station
- 1 connection point for 1 AC drive



2-Port Ethernet

- Modbus TCP, Ethernet IP protocol support (Rapienet available soon)
- Ring type topology support
- 100Mbps communication speed
- Half duplex, Full duplex support
- Auto negotiation support
- Maximum 100m [328ft.] transmission distance
- CSMA/CD communication access method



Lonworks

- 78kbps communication speed
- Free/bus topology
- Resistance built-in per topology
- Max. 2700m (8858 ft.) connection distance (bus topology)



R-Net/F-Net

- 1Mbps communication speed
- Manchester biphasic-L frame synchronization
- Max. 64 node connection points
- Max. 750m transmission distance (segment each)



RAPIenet

- RAPIenet protocol support
- 100Mbps communication speed
- Full duplex support
- High speed link(8 WORD), P2P(2 WORD) support
- Max. 64 connection points
- Topology : Line/Ring topology



PROFInet

- PROFInet protocol support
- PROFInet IO CC-A
- 100Mbps communication speed
- Full duplex support
- PROFIdrive class 1
- Max. 64 connection points
- Topology : Line topology



CC-LINK IE Field

- CC-LINK IE field protocol support
- 1Gbps transmission speed
- Intelligent device station
- Max. number of stations: 120
- RX/Y 32bits, RWr/w 8words support
- Ring/Line/Star topology



PLC

- Master-K 120S platform
- Normal input 6 points (Sink/Source selectable), Max. input 14 points when expanded
- Normal output 4 points (N.O. Relay), Max. output 7 points when expanded
- RTC (Real time clock)
- KGL WIN operating system



I/O Expansion

- Insulated I/O 3 points each
- Ext-1 - Analog Input : voltage (-10V~10V) 1 point, current (0~20mV) 1 point analog output : voltage (-10V~10V) 1 point, current (0~20mV) 1 point digital Input 3 points / Digital output (Relay) 3 points
- Ext-2 - analog Input : 4points (voltage (-10V~10V) & current (0~20mV) selectable) analog output : voltage (-10V~10V) 2 point, current (0~20mV) 2 point digital output (TR) 2 points

Ext-2 is available for web customized version only



Safety

- 2-Channel STO function (STO : Safety torque off)
- Safety standard certified

* For 0.75~160kW, Safety option is provided as built-in form from manufacturer.

For 185~375kW, customer can purchase Safety option and install on product by himself.



Synchronization Option

- Closed loop control
- 100kHz Max. input frequency
- Position/Speed synchronization
- Synchronization hold (only slave)
- 15 slaves per master (3 serial - 5 parallel max)
- Open collector output : 26V/100mA (2 points)
- Synchronization option card is only available for synchronization version product.



Binary Input

- Operating frequency setting with digital input (NPN/PNP)
- Max. 16bit digital input (8bit / 12bit / 16bit)
- Frequency setting with bias-gain or BCD
- Frequency resolution (0.01Hz~10Hz)
- Digital input filter function Input signal read timing terminal



Option Slot #3) Encoder Options

Encoder

- Closed loop control
- Pulse train reference
- 5/12/15 V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection



24V Encoder

- Closed loop control
- Pulse train reference
- 24V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection



Position Control Option

- Closed loop control
- Pulse train reference
- 5/12/15V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection
- External brake control
- Position control option card is only available for synchronization version product.

