

**- Wiring of main circuit**

**Circuit Breaker (MCCB)**  
Protects the power lines. Shuts off the circuit when overcurrent passes.

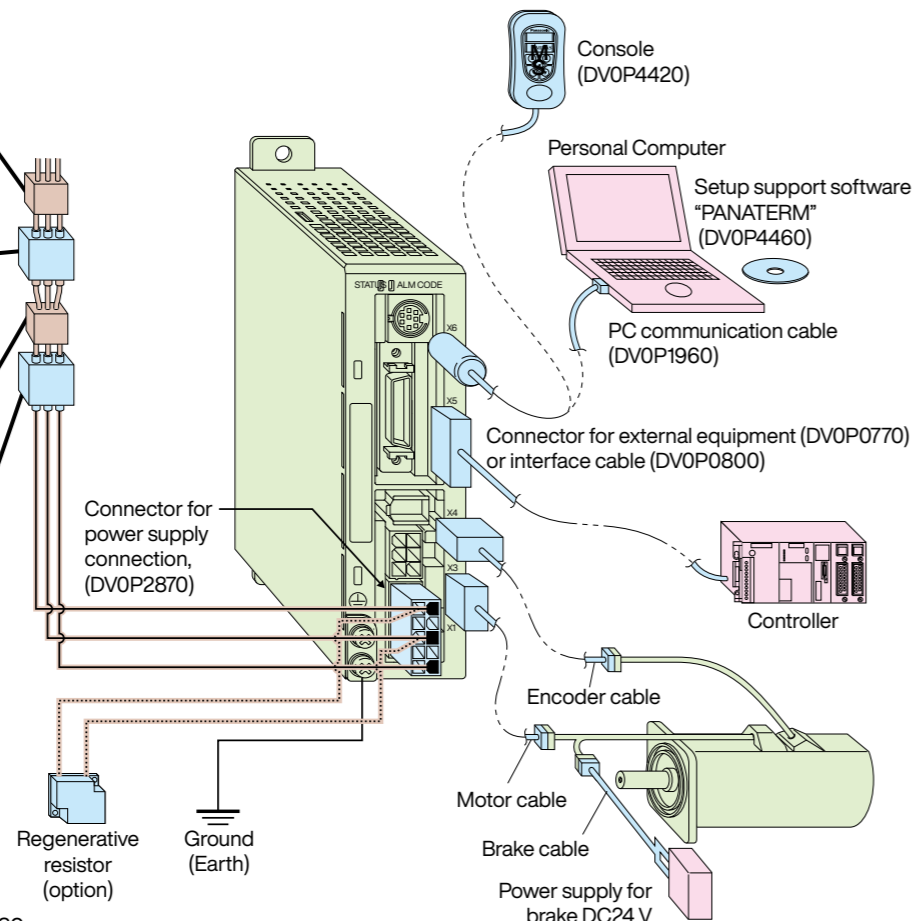
**Noise Filter (NF)**  
Prevents external noise from the power lines. And reduces an effect of the noise generated by the servo driver.

**Magnetic Contactor (MC)**  
Turns on/off the main power of the servo driver. Surge absorber to be used together with this.

**Reactor (L)**  
Reduces harmonic current of the main power.

**Pin-5 and Pin-3 of CN POWER**

Connect an external regenerative resistor (option) between P(pin-5) and B(pin-3) of connector, CN X1, when regenerative energy is large. (Refer to P.404 for regenerative resistor.)



Motor	to P.389
Driver	to P.385
Option	to P.398
Recommended equipments	
Parts customer to prepare	

**Table of Part Numbers and Options**

Power supply	Output (W)	2500P/r, Incremental				Option					
		Motor <sup>Note 1</sup>	Rating/Spec. (page)	Driver	Dimensions (Frame symbol)	Encoder Cable <sup>Note 2</sup>	Motor Cable <sup>Note 2</sup>	Brake Cable <sup>Note 2</sup>	External Regenerative Resistor	Reactor	Noise Filter
Single phase 100 V	50	MUMA5AZP1 □	389	MKDET1105P	388 (K)	MFECA0 * * 0EAM	MFMCA0 * * 0AEB		DV0P2890	DV0P227	DV0P228
	100	MUMA011P1 □	389	MKDET1110P	388 (K)						
	200	MUMA021P1 □	389	MLDET2110P	388 (L)						
Single phase 200 V	50	MUMA5AZP1 □	391	MKDET1505P	388 (K)						
	100	MUMA012P1 □	391	MKDET1505P	388 (K)						
	200	MUMA022P1 □	391	MLDET2210P	388 (L)						
3-phase 200 V	400	MUMA042P1 □	391	MLDET2510P	388 (L)						
	50	MUMA5AZP1 □	391	MKDET1505P	388 (K)						
	100	MUMA012P1 □	391	MKDET1505P	388 (K)						
	200	MUMA022P1 □	391	MKDET1310P	388 (K)						
	400	MUMA042P1 □	391	MLDET2510P	388 (L)						
			MLDET2310P								

Note 1 Motor model number suffix: □  
S: Key way with center tap, without brake  
T: Key way with center tap, with brake  
Note 2 \* \* represents cable length. For details, refer to P.399.

**List of recommended peripheral devices**

Power supply	Motor		Power capacity (at rated output)	Circuit Breaker (Rated current)	Noise Filter	Magnetic Contactor (Contact Composition)	Wire diameter (L1, L2, L3, U, V and W)
	Series	Output					
Single phase, 100 V	MUMA	50 W	0.3 kVA	5 A	DV0P4160	10 A (3P+1a)	0.75 mm <sup>2</sup> to 0.85 mm <sup>2</sup> AWG18
		100 W	0.4 kVA	10 A			
		200 W	0.5 kVA	10 A			
Single phase, 200 V	MUMA	50 W	0.3 kVA	5 A			
		100 W	0.3 kVA	5 A			
		200 W	0.5 kVA	10 A			
3-phase 200 V	MUMA	400 W	0.9 kVA	10 A			
		50 W	0.3 kVA	5 A			
		100 W	0.3 kVA	5 A			
		200 W	0.5 kVA	10 A			
		400 W	0.9 kVA	10 A			

- \* Select the single and 3-phase common specifications corresponding to the power supplies.
- To conform to EC Directives, install a circuit breaker which conforms to IEC and UL Standards (Listed, marked) between noise filter and power supply.
- For details of the noise filters, refer to 416.

**<Remarks>**

- Use a copper conductor cables with temperature rating of 60 °C or higher for main power connector and ground terminal wiring. Use a cable for ground with diameter of 2.0 mm<sup>2</sup> (AWG14) or larger.

**Fastening torque list**

Ground terminal screw		Connector to host controller[X5]	
Nominal size	Fastening torque (N·m) <sup>(Note 3)</sup>	Nominal size	Fastening torque (N·m) <sup>(Note 3)</sup>
M4	0.7~0.8	M2.6	0.2±0.05

(Note 3) **<Caution>**

- Applying fastening torque larger than the maximum value may result in damage to the product.

**<Remarks>**

- To check for looseness, conduct periodic inspection of fastening torque once a year.

**Carrying page**

Options	Part No.	Carrying page
Console	DV0P4420	403
Setup Support Software, PANATERM	Japanese	398
	English	
RS232 Communication Cable (for Connection with PC)	DV0P1960	403
Interface Cable	DV0P0800	403
Connector Kit for Interface	DV0P0770	402
Connector Kit for Motor and Encoder	DV0P3670	401
Connector Kit for Driver Power Supply	DV0P2870	401
Encoder Cable	MFECA0 * * 0EAM	400
Motor Cable	MFMCA0 * * 0AEB	400
Brake Cable	MFMCB0 * * 0GET	400
Cable Set (3 m) <sup>(Note 4)</sup>	DV0P37300	400
Cable Set (5 m) <sup>(Note 4)</sup>	DV0P39200	400
DIN Rail Mount Unit	DV0P3811	404
External Regenerative Resistor	100 V 50 Ω 10 W	404
	200 V 100 Ω 10 W	
Reactor	100 V	405
	DV0P227	
	DV0P228	
	200 V	DV0P220
Noise Filter	DV0P4160	416
Surge Absorber	Single phase 100 V, 200 V	416
	3-phase 200 V	
Ferrite core	DV0P1450	
	DV0P1460	416

(Note 4) Cable set (3 m) contains,  
1) Interface cable: DV0P0800  
2) Encoder cable (3 m): MFECA0030EAM  
3) Motor cable (3 m): MFMCA0030AEB  
4) Connector kit for driver power supply connection: DV0P2870  
Cable set (5 m) contains,  
1) Interface cable: DV0P0800  
2) Encoder cable (5 m): MFECA0050EAM  
3) Motor cable (5 m): MFMCA0050AEB  
4) Connector kit for driver power supply connection: DV0P2870

A6 Series  
 A6N Series  
 A6B Series  
 E Series  
 Information