

ANALOGUE SPEED CONTROLLER DSA Instruction Manual

We appreciate you for purchasing products of DKM Motor Co., Ltd. Before using the product you have purchased, check to make sure that it is exactly what you ordered. Then, Please use it following the instructions below.



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Safety Information

Alerts declared in the manual are classified to Danger, Warning and Caution by their criticality

⚠ DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury
⚠ WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury
⚠ CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury

⚠ DANGER

There is a danger of occurring electric shock in the input/output terminals so please never let your body touched to the conductive substance.

⚠ WARNING

- * Do not use the product in an explosive or flammable atmosphere. fire may occur.
- * Only qualified installers should be assigned to the work of installation, connection, running, operation and inspection. This is intended to prevent fire, electric shock and injury.
- * Before starting the work, turn off the speed controller power. Otherwise, electric shock may occur.
- * Be sure to keep power input voltage of the speed controller within the rated range.
- * Electrical connections must be done under strict accordance with the connection example. Otherwise, fire and electric shock may occur.
- * After connection, mount the covers of power connection terminal and input/output signal connection terminal. Otherwise, fire or electric shock may occur.

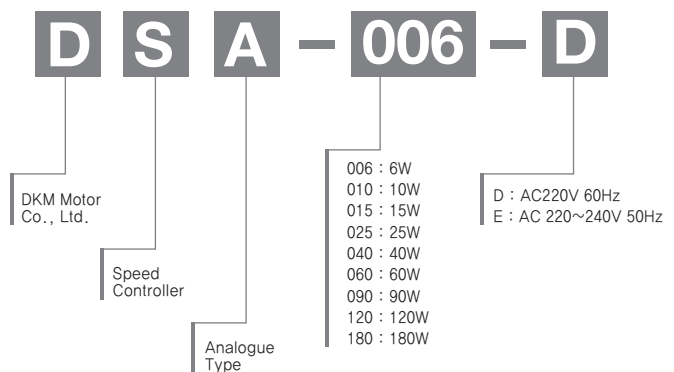
⚠ CAUTION

- * Do not use the motor and speed controller in excess of ratings. Otherwise, electric shock, injury of the operator and damage of the equipment may occur.
- * Do not grip the motor output shaft or lead wires. Otherwise, injury may occur.
- * Do not place combustibles around the motor and speed controller. Otherwise, fire may occur.
- * Do not put any object into the openings of the speed controller. Otherwise, fire, electric shock or damage of the equipment may occur.
- * Be sure to set the switch to the stop position before connection the power supply.
- * The lower RPM setting is, the lower the motor's torque possible to use is. If the surface temperature of the motor is more than 90 degrees depending on the operating conditions of the motor, we recommend using at a higher speed range than the current set speed range.

CAUTION BEFORE USING

- * Before using the product you purchased, make sure that it's exactly what you ordered.
- * Ambient temperature is -10°C ~ +40°C, ambient humidity is Max. 85%. Avoid direct ray of light and install a cover.
- * Avoid the place in vibration, deep impact, lots of dust, inflammable gas and corrosive gas.
- * Install the motor and controller as closely as possible. (2m or less)
- * There is possibility of malfunction in case of parallel connection with controlled device in high-capacity electric circuit. Please wire line with separate circuit.
- * Make sure to protect the motor shaft. A tube should be on it.
- * Do not catch only lead wire when it is carried. It can be snapped.

Controller Coding System



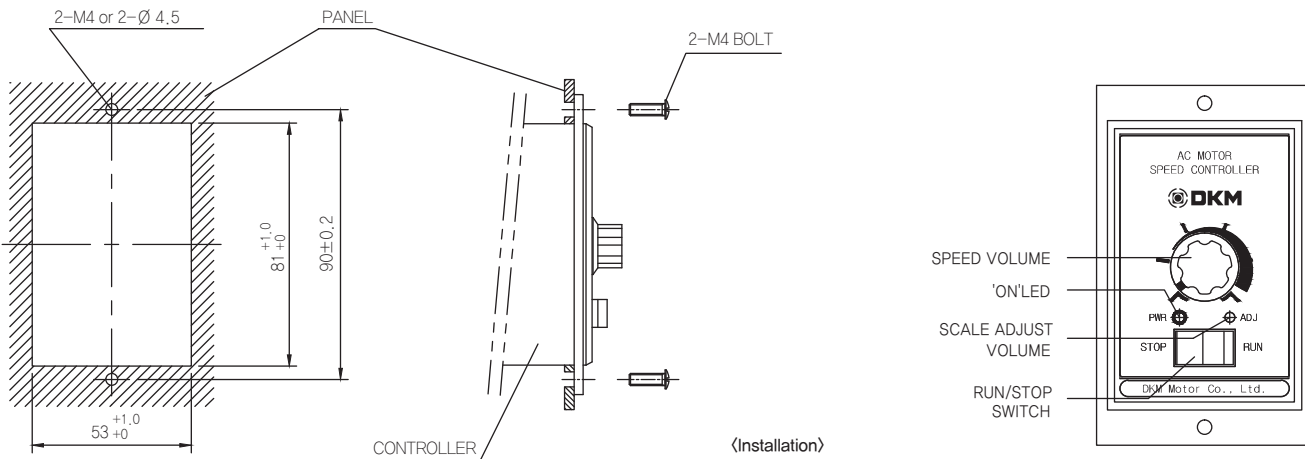
Characteristics

- DSA is unit type speed controller.
- It is easy to control the speed of the motor by connector motor and controller unit as using dedicated connector and by connecting AC terminal to power source.
- Variable speed range: 50Hz: 90~1400rpm, 60Hz: 90~1700rpm
- When the switch sets to RUN, the motor operates at the set rotation speed and when the switch sets to STOP, motor stops.

Specification

Model	DSA-□□□□
Rated voltage	AC 220~240V 50/60Hz
Ambient voltage range	±10 %
Allowable current	Below 5A
Control	Phase control
Range of speed control	50Hz : 90~1400r/min 60Hz : 90~1700r/min
speed control	Operate with volume
Changing rate of speed	±5%(Standard)
Output	6W~180W
Ambient temperature	-10°C ~ 40°C
Ambient humidity	35~85%RH
Insulation resistance	Over 100MΩ(Base on 500VDC mega)
Dielectric strength	1500VAC 50/60 for 1minute

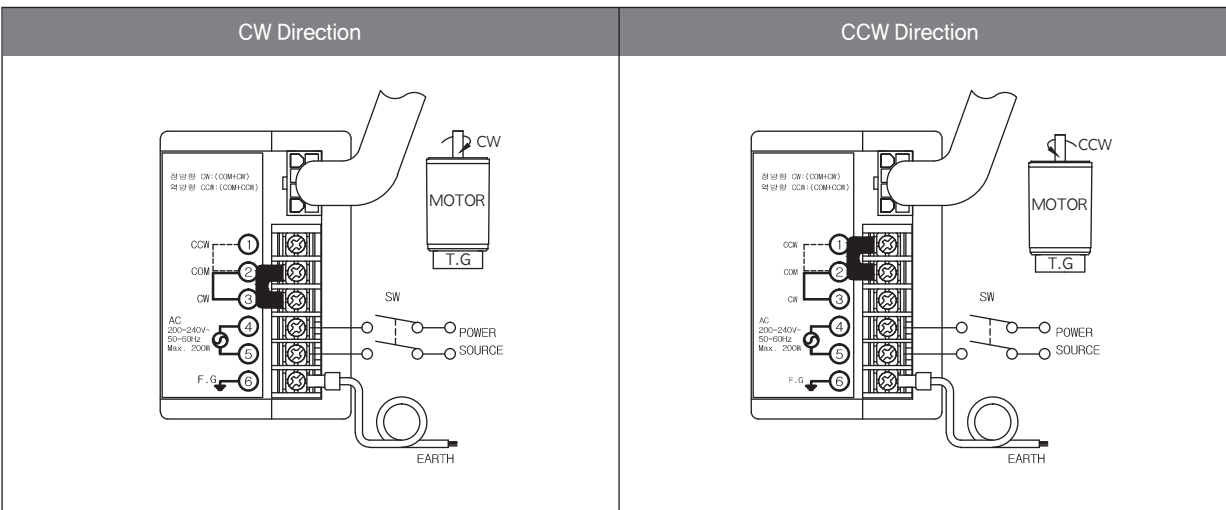
Installation



(Installation)

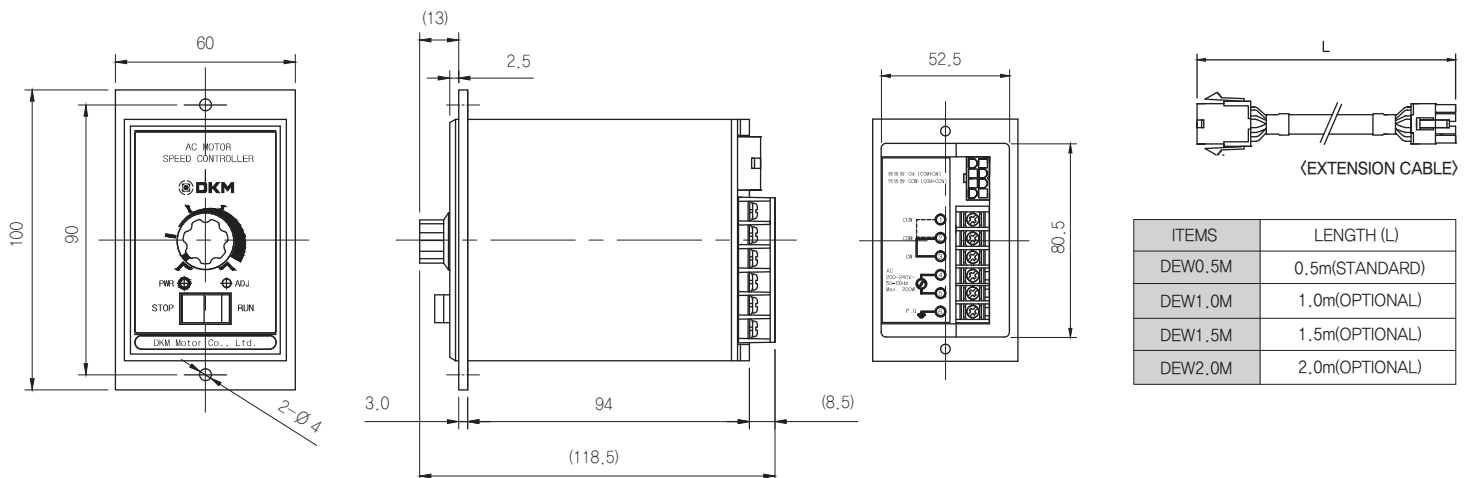
- 1) Make holes on the panel like the drawing.
- 2) Fix the controller and front cover with screws and nuts.

How to Use



- 1) Connect control unit and lead wire connector of motor.
- 2) Press stop button before connecting AC power to ④, ⑤ terminals.
- 3) When AC power input, LED lights on.
- 4) CW Direction – Connect ② COM, ③ CW / CCW Direction – Connect ② COM, ① CCW
- 5) When RUN/STOP switch is set to 'RUN' and speed volume is turned to clockwise, the rotation speed of motor will be faster and vice versa.
- 6) If operate 'RUN/STOP' switch to STOP, motor is stopped. RUN/STOP switch isn't ON/OFF power supply, so install a separate power switch when stopping the motor for a long time.

Dimension



ITEMS	LENGTH (L)
DEW0.5M	0.5m(STANDARD)
DEW1.0M	1.0m(OPTIONAL)
DEW1.5M	1.5m(OPTIONAL)
DEW2.0M	2.0m(OPTIONAL)