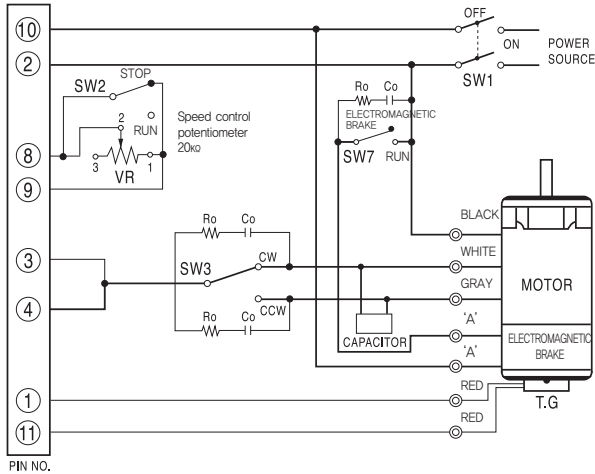


+ SCHEMATIC DIAGRAM (E · S MOTOR)

3-1 Reverse + Variable Speed (6W~40W)

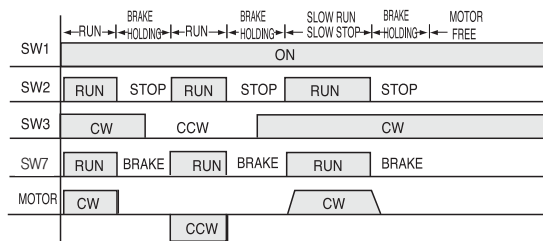


VOLTAGE	LEAD WIRE 'A'
SINGLE PHASE AC100V~110V	Blue
SINGLE PHASE AC200V~240V	Orange

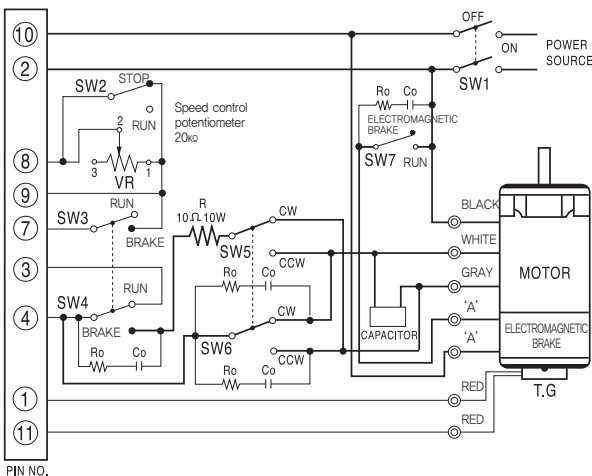
SW1,3,7	AC125V or AC 250V	MIN. 5A
SW2	DC 20V 10mA	
Ro,Co	Ro = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125WV, AC 250WV)	

◀ For wiring of 220V~240V, 50Hz motor, change gray to brown. Here, VR is 10kΩ.

◆ Example of operation



3-2 Reverse + Variable Speed + Brake (6W~25W)

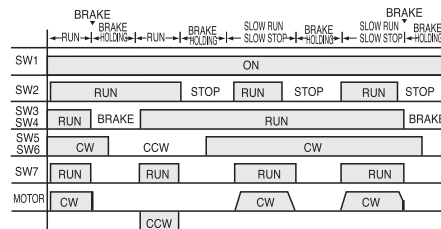


SW1,4,5,6,7	AC125V or AC250V	MIN. 5A
SW2,3	DC 20V 10mA	
Ro,Co	Ro=10~200Ω (MIN. 1/4W) Co=0.1~0.2μF (AC125WV, AC250WV)	
R: Braking external resistor	10Ω, MIN. 10W	

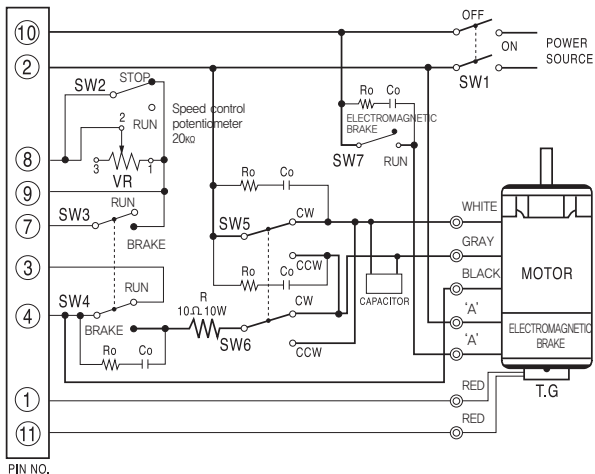
VOLTAGE	LEAD WIRE 'A'
SINGLE PHASE AC100V~110V	Blue
SINGLE PHASE AC200V~240V	Orange

◀ For wiring of 220V~240V, 50Hz motor, change gray to brown. Here, VR is 10kΩ.

◆ Example of operation



3-3 Reverse + Variable Speed + Brake (40W)

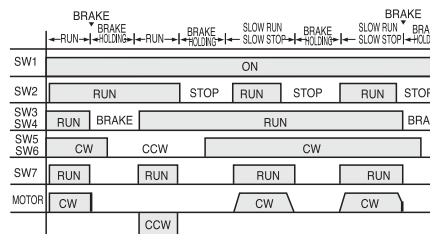


SW1,4,5,6,7	AC125V or AC250V MIN. 5A
SW2,3	DC 20V 10mA
R0,Co	R0 = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125WV, AC 250WV)
R: Braking external resistor	10Ω, MIN. 10W

◀ For wiring of 220V~240V, 50Hz motor, change gray to brown. Here, VR is 10kΩ.

VOLTAGE	LEAD WIRE 'A'
SINGLE PHASE AC100V~110V	Blue
SINGLE PHASE AC200V~240V	Orange

◆ Example of operation



3-4 Instruction (E.S MOTOR)

● Run/Stop function

If SW7 is switched to "RUN" and then switch SW2 to run from section 3-1,2 and 3, the motor will rotate per fixed speed set by external speed controller. When switched to "STOP" rotation will spontaneously stop by inertia force. (When SW2 and SW7 is to be linked and used braking and keeping position will be done by electromagnetic brake.)

● Run/Brake function

If SW3, SW4 and SW7 is linked and set to brake while SW2 is on RUN position from the basic diagram of section 3-2,3 electric brake will function for 0.5 seconds to stop motor instantaneously and will keep position by electromagnetic brake. Please do not tamper with SW5 or SW6 for 0.5 seconds while brake is functioning.

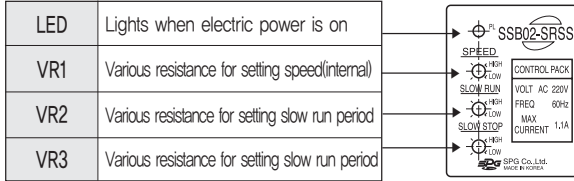
● Slow Run/Slow Stop function

- When SW2 is switched to Run/Stop after slow run, slow stop is set by the volume of controller, the motor will slowly start and slowly stop per set time.
- The speed of slow run and slow stop changes in rectilinearly against set time and the slope can be controlled within 0.5sec~15sec/1200rpm.
- Slow stop cannot be set for shorter period than natural stopping period of motor.

※ Turn SW1 off to prevent control pack from generating heat when not used for a long period.

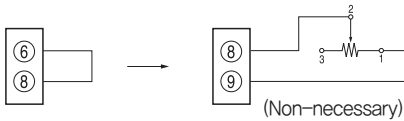
+ WIDE APPLICATION OF ELECTRIC WIRING

Panel Layout



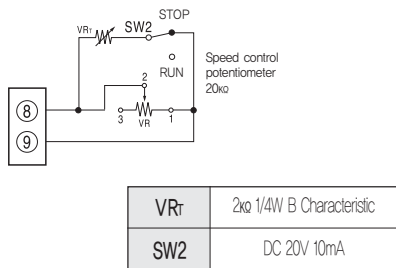
Using Internal Volume

SS TYPE has various internal resistance for speed setting device installed. Therefore, it is possible to use without external variable resistor for speed setting. When pin no.⑥ and ⑧ of 11pin plug is connected, it is possible to use internal volume. Wiring diagram is the same except wiring for variable resistor for speed setting is not required.



How to Speed Up Operation

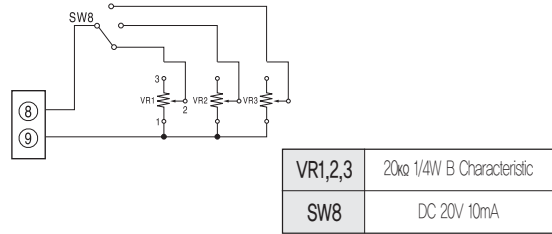
To quicken operating speed, as the set speed is decelerated, there are more delays to start rotation when switch is turned ON. If this causes problems, refer to following diagram and connect VRT.(Variable resistor for operating time control.)



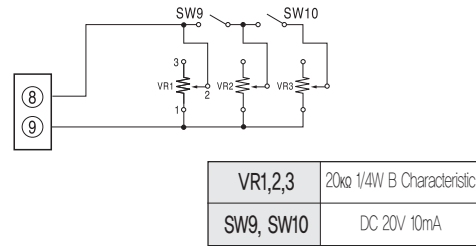
- ※ For instantaneous stop, operate both RUN/BRAKE switch and RUN/STOP switch above.
- ※ Place RUN/STOP switch to stop and control VRT until motor starts.

Multistage Speed Control

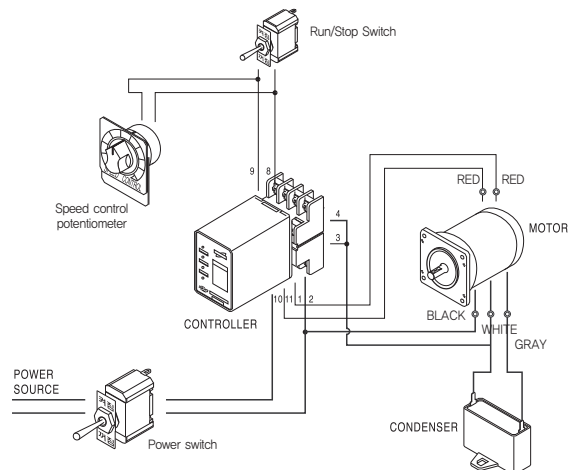
1. When multistage speed control is required, set each VR1, VR2 and VR3 and then use SW8 to convert.



2. When converting time is slow as rotating switch SW8, converting speed is possible by connecting SW9, SW10 as following diagram since motor rotates with full speed momentarily.



Total system



1. If the power switch (SW1) is turned on, the power lamp of the control pack will be lighted.
2. Speed of motor can be controlled without steps by using variable speed resistor for external speed setting. Turn to (HIGH) for high speed, and (LOW) for low speed.
3. There are operating current flowing on thick line. Use cable with 0.75mm² for thick line and 0.5mm² for thin line.

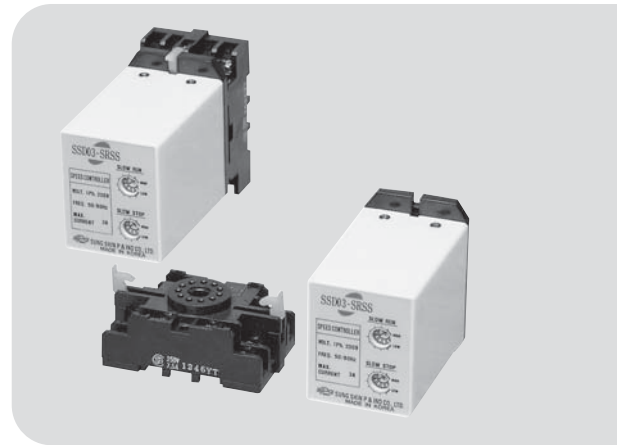


SPEED CONTROLLER

: SS HIGH OUTPUT TYPE

Characteristics

- Used for induction speed control motors of 6W~90W, reversible speed control motors of 6W~40W and electromagnetic brake speed control motors of 6W~40W.
 - Built-in speed setting device on the case enables to control and set the speed of motors.
 - Instantaneous stop function is possible by electric brake.
 - It is a compact plug-in type with 11pins so it is easy to set and use.
 - It has slow run and slow stop functions, so operating and braking are not working rapidly, instead slowly.
 - There is time (period) setting device installed to control easily slow run and slow stop function.
 - Parallel operation is possible.
- ※ Parallel operation means that with one speed control volume, it can control plural speed controller at same time at same speed.



SPECIFICATIONS

MODEL		SS TYPE				
		SSA03-SRSS	SSB03-SRSS	SSC03-SRSS	SSD03-SRSS	SSX03-SRSS
SPEC		SINGLE-PHASE AC110V	SINGLE-PHASE AC220V	SINGLE-PHASE AC100V	SINGLE-PHASE AC200V	SINGLE-PHASE AC220V~240V
Rated Voltage						
Operation Voltage Range		±10%				
Power Source Frequency		60Hz		50/60Hz		50Hz
Rated Current		3.0A				
※ 1 APPLICABLE MOTOR OUTPUT	Induction	6W~90W	6W~90W	6W~90W	6W~90W	6W~90W
	Reversible	6W~40W	6W~40W	6W~40W	6W~40W	6W~40W
	E·S	6W~40W	6W~40W	6W~40W	6W~40W	6W~40W
Speed control range		90~1700rpm		90~1400rpm/90~1700rpm		90~1400rpm
Speed variation		5%(standard)				
Speed setting device		Built in external speed setting device attachable				
Braking		possible to stop for certain period by electric brake				
※ 2	Braking period	0,5초(standard)				
	Parallel operation	Possible				
Slow Run, Slow Stop		Possible(0,5sec~15sec/1200rpm)				
Operation Temperature		-10°C~50°C				
Operation humidity		85% Max(non condensing)				
Storage Temperature		-20°C~60°C				
Insulation resistance		100M Ω or more when 500V megger is applied between the pin and the housing at ambient temperature and humidity				
Dielectric strength		No abnormality after input of 1500V 50/60Hz between the pin and the housing at ambient temperature and humidity for 1min				

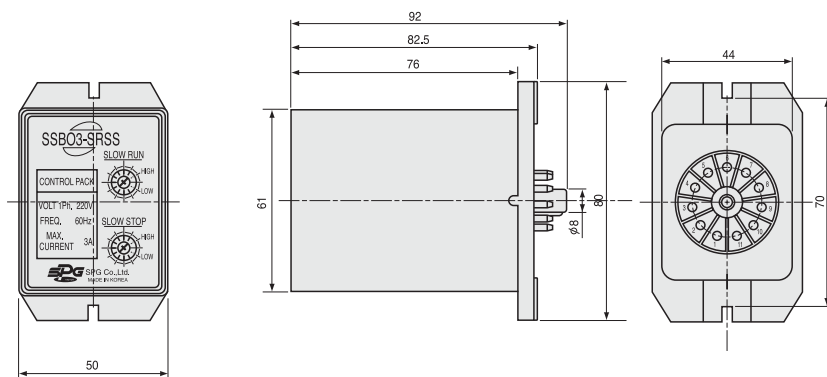
※ 1. : Applicable motors are socket type control motors of SPG. (Use for 24V motor T.G)

※ 2. : There are no holding torque on electric brake.

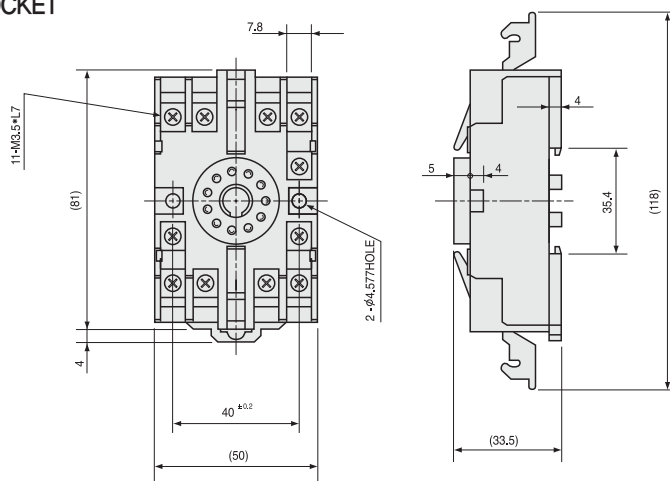
DIMENSIONS

■ SS TYPE (HIGH OUTPUT) SPEED CONTROLLER

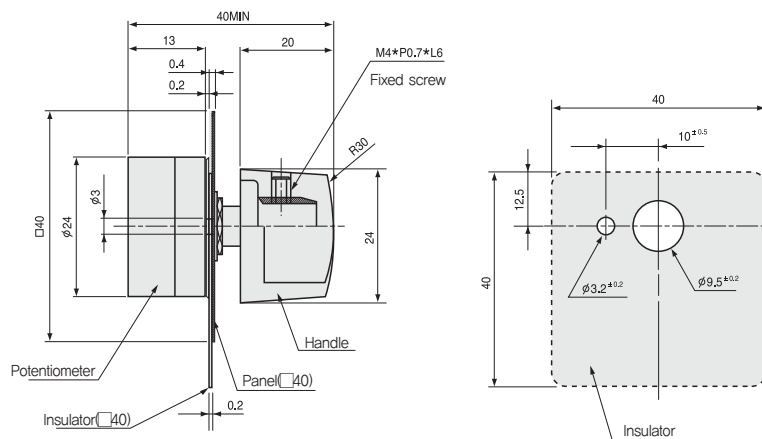
+ CONTROLLER



+ 11PIN SOCKET

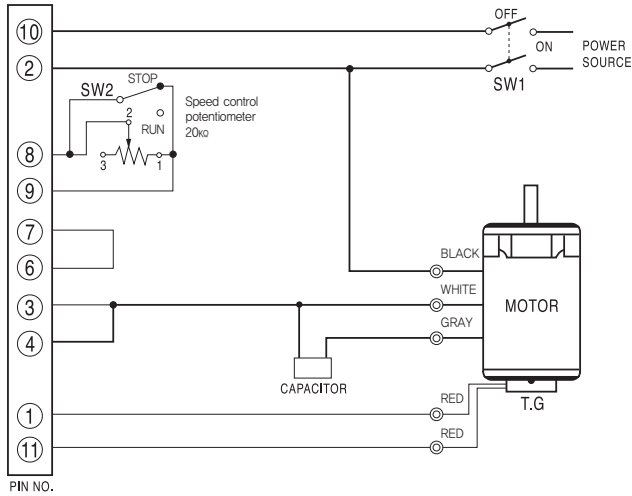


+ VARIABLE RESISTOR 20k Ω 1/4W



+ SCHEMATIC DIAGRAM (INDUCTION MOTOR)

1-1 Uni Direction + Variable Speed (6W~90W)

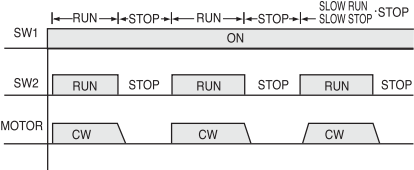


◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

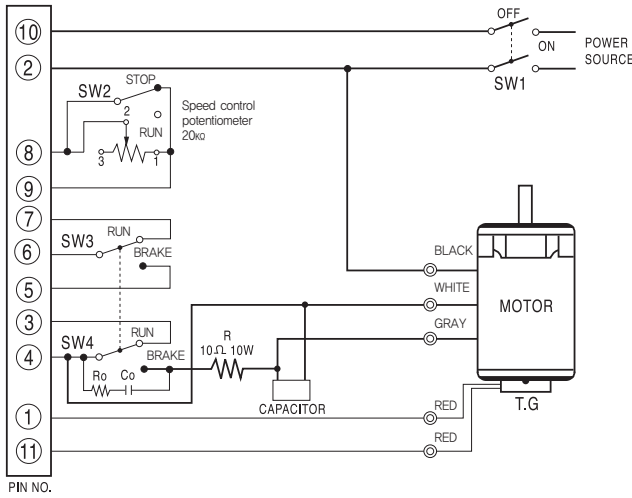
SW1	AC125V or AC 250V MIN. 5A
SW2	DC 20V 10mA

- Note) 1. The motors, rotating direction is CW when viewed from output shaft. When adjusting to CCW direction, exchange white wire to gray.
 2. The connection of a fan motor is applicable only if the output of the motor is greater than 60W and refer to page 208 for the connection method.

◆ Example of operation



1-2 Uni Direction + Variable Speed + Brake (6W~25W)

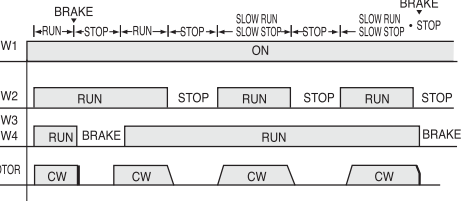


◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

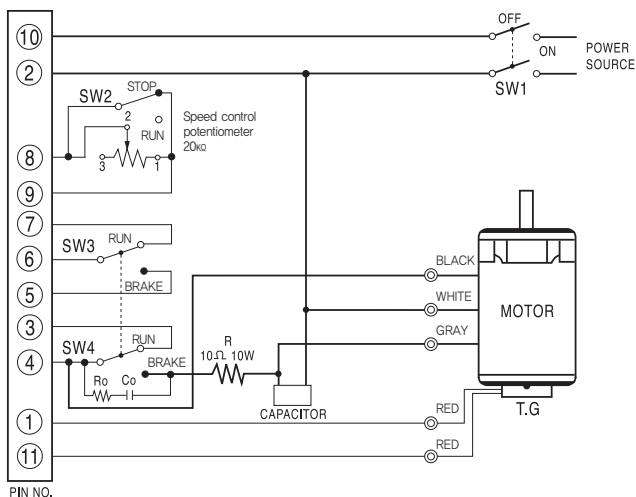
SW1,4	AC125V or AC 250V MIN. 5A
SW2,3	DC 20V 10mA
Ro,Co	Ro = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125WV, AC 250WV)
R : Braking external resistor	10Ω, MIN. 10W

- Note) 1. The motor rotating direction is CW when viewed from output shaft. When adjusting to CCW direction, exchange white wire to gray.

◆ Example of operation



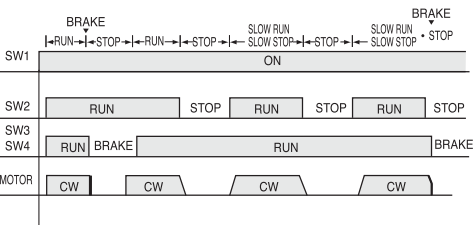
1-3 Uni Direction + Variable Speed + Brake (40W~90W)



◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

SW1,4	AC125V or AC 250V	MIN. 5A
SW2,3	DC 20V 10mA	
Ro,Co	Ro = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125V, AC 250V)	
R : Braking external resistor	10Ω, MIN. 10W	

◆ Example of operation



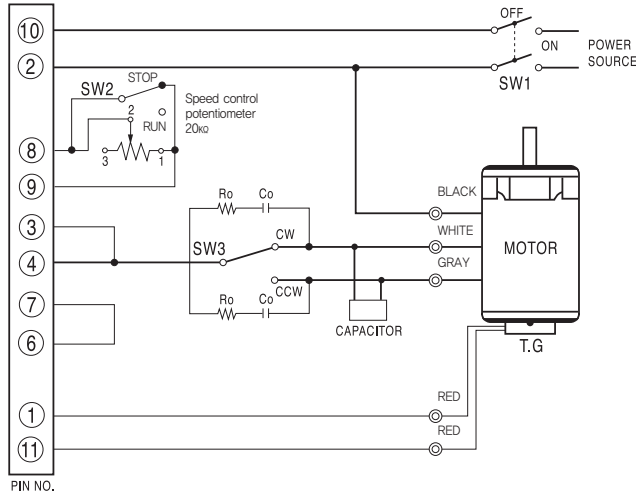
- Note) 1. The motor's rotating direction is CW when viewed from output shaft. When adjusting to CCW direction, exchange white wire to gray.
 2. The connection of a fan motor is applicable only if the output of the motor is greater than 60W and refer to page 208 for the connection method.

1-4 Instruction (INDUCTION MOTOR)

- **Run/Stop function**
 If SW2 is switched to "RUN" as section 1-1,2,3, the motor will rotate at a fixed speed set by an external speed controller. When switched to "STOP", rotation will spontaneously stop by inertia force.
- **Run/Brake function**
 If SW3 and SW4 are turned to stop while SW2 is on a RUN condition, the brake will function for about 0.5 seconds and stop the motor instantaneously.
- **Slow Run/Slow Stop function**
 - When SW2 is switched to Run/Stop after slow run, slow stop is set by the volume of the controller; the motor will slowly start and slowly stop per set time.
 - The speed of slow run and slow stop changes in a rectilinearly against set time, and the slope can be controlled within 0.5sec ~15sec/1200rpm.
 - Slow stop cannot be set for a shorter period than the natural stopping period of the motor.
 - ※ Turn SW1 off to prevent the control pack from generating heat when not used for a long period.

+ SCHEMATIC DIAGRAM (INDUCTION MOTOR)

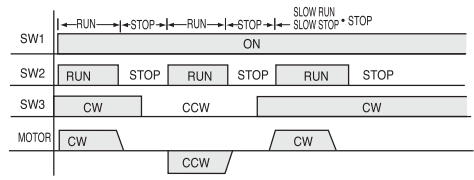
2-1 Reverse + Variable Speed (6W~40W)



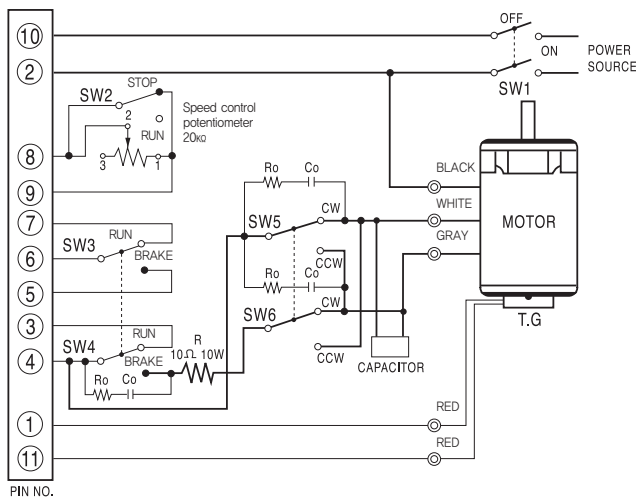
◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

SW1,3	AC125V or AC 250V	MIN. 5A
SW2	DC 20V 10mA	
Ro,Co	Ro=10~200Ω (MIN. 1/4W)	
	Co=0.1~0.2μF (AC 125WV, AC 250WV)	

◆ Example of operation



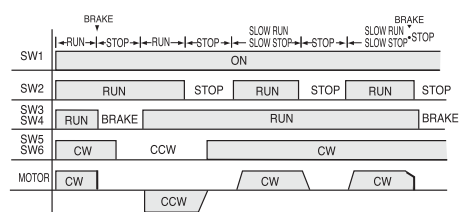
2-2 Reverse + Variable Speed + Brake (6W~25W)



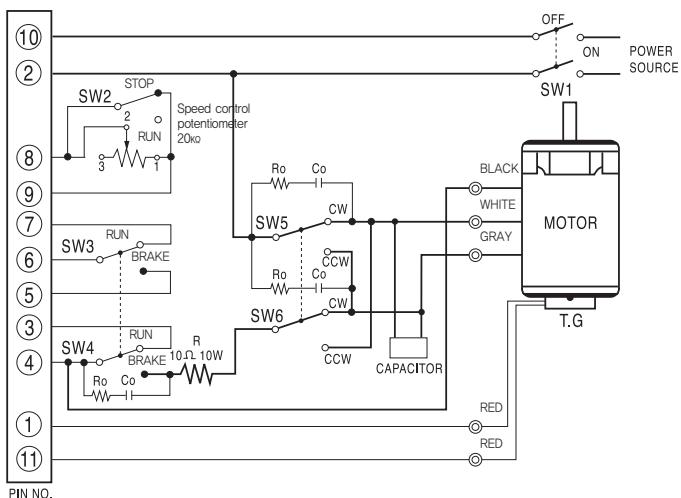
◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

SW1,4,5,6	AC125V or AC 250V	MIN. 5A
SW2,3	DC 20V 10mA	
Ro,Co	Ro=10~200Ω (MIN. 1/4W)	
	Co=0.1~0.2μF (AC 125WV, AC 250WV)	
R: Braking external resistor	10Ω, MIN. 10W	

◆ Example of operation



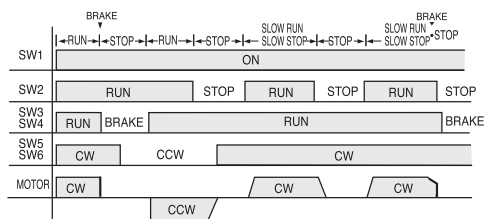
2-3 Reverse + Variable Speed + Brake (40W)



◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

SW1,4,5,6	AC125V or AC 250V	MIN. 5A
SW2,3	DC 20V 10mA	
Ro,Co	Ro = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125VV, AC 250VV)	
R : Braking external resistor	10Ω, MIN. 10W	

◆ Example of operation



2-4 Instruction (INDUCTION MOTOR)

● Run/Stop function

If SW2 is switched to "RUN" as section 2-1,2,3, the motor will rotate per fixed speed set by external speed controller. When switched to "STOP" rotation will spontaneously stop by inertia force.

● Run/Brake function

If SW3 and SW4 is turned to stop while SW2 is on RUN condition, the brake will function for about 0.5 seconds and stop the motor instantaneously.

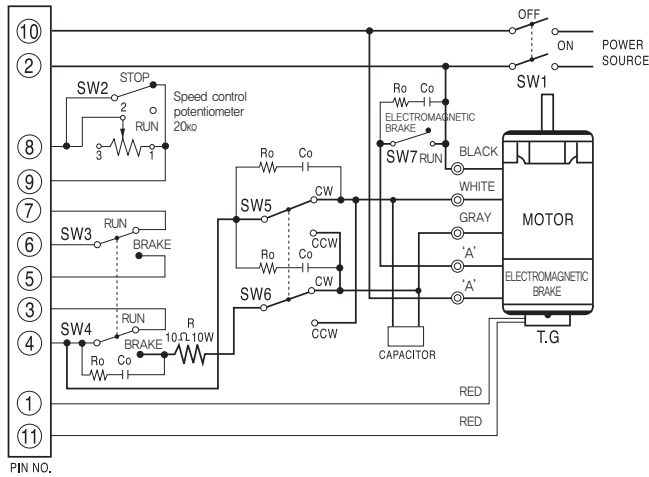
● Slow Run/Slow Stop function

- When SW2 is switched to Run/Stop after slow run, slow stop is set by the volume of controller, the motor will slowly start and slowly stop per set time.
- The speed of slow run and slow stop changes in rectilinearly against set time and the slope can be controlled within 0.5sec~15sec/1200rpm.
- Slow stop cannot be set for shorter period than natural stopping period of motor.

※ Turn SW1 off to prevent control pack from generating heat when not used for a long period.

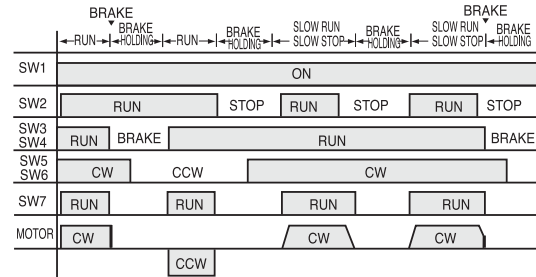
+ SCHEMATIC DIAGRAM (E · S MOTOR)

3-1 Reverse + Variable Speed (6W~40W)

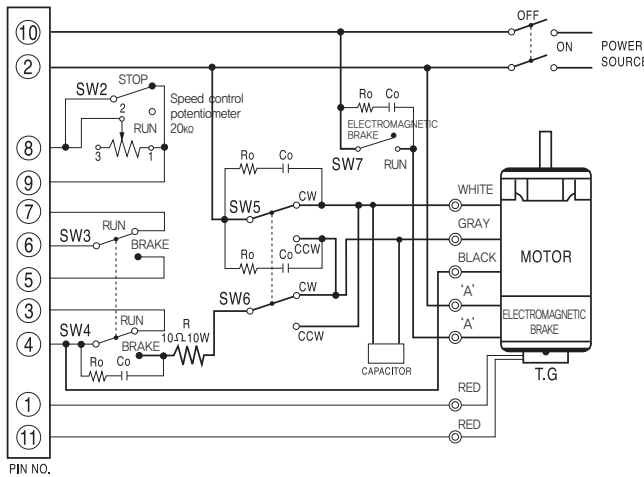


VOLTAGE	LEAD WIRE 'A'	SW1,4,5,6,7	AC125V or AC 250V	MIN. 5A
SINGLE PHASE AC100V~110V	Blue	SW2,3	DC 20V	10mA
SINGLE PHASE AC200V~240V	Orange	R0,Co	R0=10~200Ω (MIN. 1/4W) Co=0.1~0.2μF (AC125V, AC250V)	
◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.		R: Braking external resistor	10Ω, MIN. 10W	

◆ Example of operation

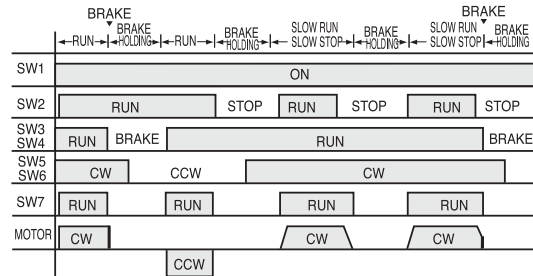


3-2 Reverse + Variable Speed + Brake (6W~25W)



VOLTAGE	LEAD WIRE 'A'	SW1,4,5,6,7	AC125V Or AC 250V	MIN. 5A
SINGLE PHASE AC100V~110V	Blue	SW2,3	DC20V	10mA
SINGLE PHASE AC200V~240V	Orange	R0,Co	R0 = 10~200Ω (MIN. 1/4W) Co = 0.1~0.2μF (AC 125V, AC 250V)	
◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.		R: Braking external resistor	10Ω, MIN. 10W	

◆ Example of operation



3-3 Instruction (E · S MOTOR)

- **Run/Stop function**

If SW2 is switched to "RUN" as section 3-1,2,3, the motor will rotate per fixed speed set by external speed controller. When switched to "STOP" rotation will spontaneously stop by inertia force.

- **Run/Brake function**

If SW3 and SW4 is turned to stop while SW2 is on RUN condition, the brake will function for about 0.5 seconds and stop the motor instantaneously.

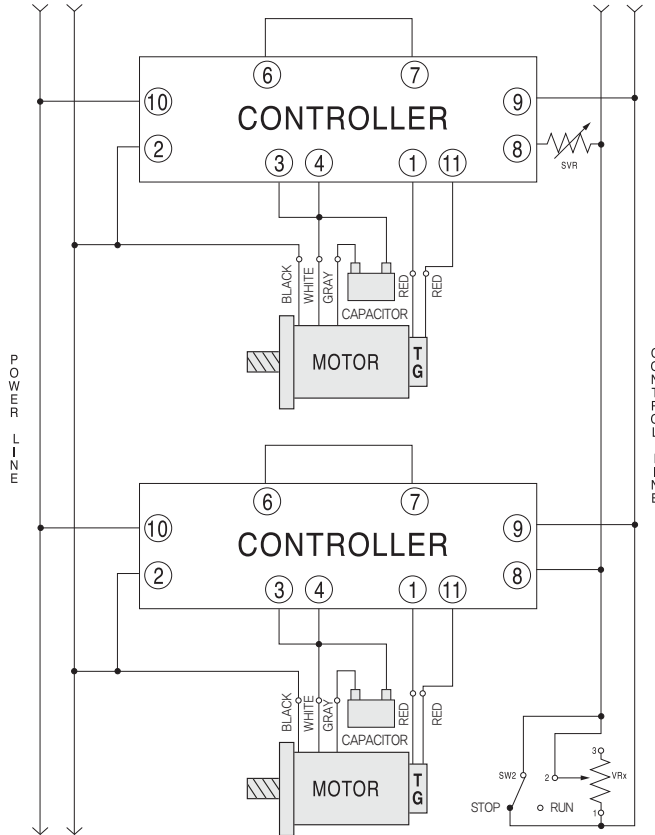
- **Slow Run/Slow Stop function**

- When SW2 is switched to Run/Stop after slow run, slow stop is set by the volume of controller, the motor will slowly start and slowly stop per set time.
 - The speed of slow run and slow stop changes in rectilinearly against set time and the slope can be controlled within 0.5sec~15sec/1200rpm.
 - Slow stop cannot be set for shorter period than natural stopping period of motor.
- ※ Turn SW1 off to prevent control pack from generating heat when not used for a long period.

+ APPLICATION OF SCHEMATIC DIAGRAM

Parallel operation

SS TYPE high output controller can control speed of multiple motors using one variable resistor as per following diagram at same speed.



Usage(Parallel operation)

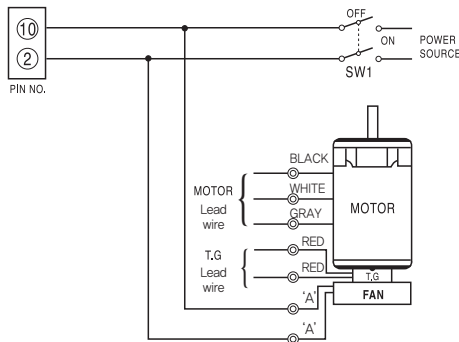
Connect power supply line(Terminal No. ②,⑩)& control line (Terminal No. ⑧, ⑨) for same line like the side wiring. In case of other motor and control pack, set power line and control line for parallel operation.

Warning

- Connect to correct pin numbers for power line and control line.
- The capacity of variable resistor for speed setting is calculated as follows.
 $VRX = 20/N \text{ k}\Omega$, $N/4W$ (N : Quantity of motor)
 eg) For 2EA of motors, it is $10\text{k}\Omega$ 1/2W
- Although every motor runs at almost the same speed, there could be slight error due to difference of load and variation of products. To prevent this phenomenon, prepare 5~10% of resistance and 1/4 capacity of VR×(Variable resistance for speed setting)with SVR(Variable resistor for precise control) of terminal ⑧.

◀ For wiring of 220V~240V, 50Hz motor, change gray to brown.

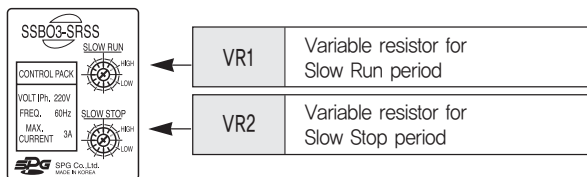
Box Fan Motor Connection



VOLTAGE	LEAD WIRE COLOR 'A'
SINGLE PHASE AC100V~110V	Brown
SINGLE PHASE AC200V~240V	Yellow

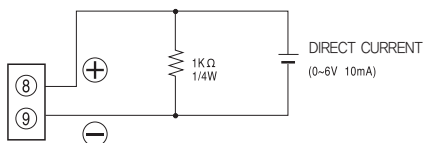
※ For the connection of something other than the box fan, refer to the electrical wiring diagram for the corresponding connection.

Panel



Speed control using external direct current

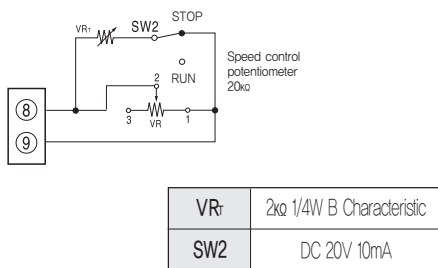
When speed is controlled by external direct current instead of supplied variable resistor for external speed setting, connect the wires of direct current with control pack as following diagram. (However, output of direct current has to be separated and insulated with alternative current input and avoid changing polarity.)



(The connection of speed control using external direct current)

Increasing operating speed

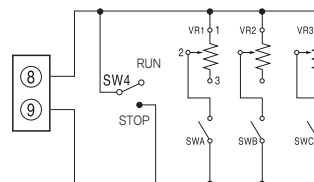
To quicken operating speed, as the set speed is decelerated, there are more delays to start rotations when switch is turned 'ON'. If this causes problems, please refer to following diagram and connect VRT (Variable resistor for operating time control)



- ※ For instantaneous stop, operate both RUN/BRAKE switch and RUN/STOP switch above.
- ※ Place RUN/STOP switch to stop and control VRT until motor starts.

Multistage speed conversion

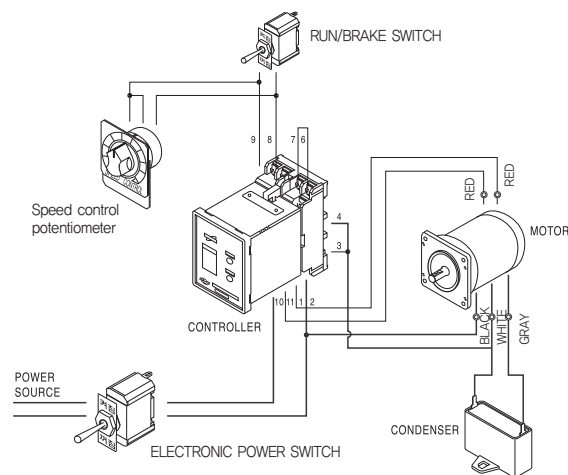
1. When multistage speed control is required, set each VR1, VR2 & VR3 and conversion is possible by using SWA, SWB, and SWC. Switch conversion time should be maintained similar to the operating time of relay operation.



VR1,2,3	20k Ω 1/4W B Characteristic
SW1,2,3,4	DC 20V 10mA

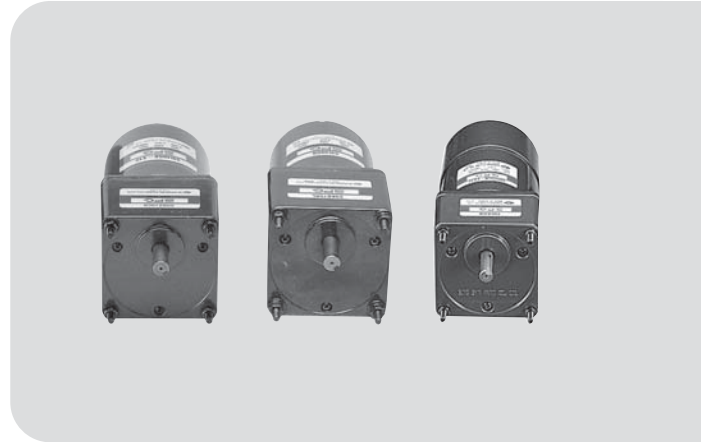
2. One external speed setting volume is included in a control pack. If additional external speed setting volume is required, please purchase SVR20KH.

Total system



- Speed of motor can be controlled without steps by using variable speed resistor for external speed setting. Turn to (HIGH) for high speed, and (LOW) for low speed.
- There are operating current flowing on thick line. Use cable with 0.75mm² for thick line and 0.5mm² for thin line.
- For single-phase AC220V~240V 50Hz motors, change gray wire to brown.

PACK TYPE SPEED CONTROL MOTORS



Characteristics

- Variable speed conversion is possible using speed controller. (50Hz: 90~1400rpm, 60Hz: 90~1700rpm)
- Variable operation is possible such as speed conversion, braking, reversion. (Slow Run/Slow Stop is possible when SS type controller is used)
- Tacho Generator is installed to control feedback, so even when Hz changes, rpm remains the same.
- Applicable motors include Induction Motors, Reversible Motors, and Electromagnetic Brake Motors
- Motor capacity for induction motor is 6W~90W, reversible motor and electromagnetic brake motor is 6W~40W(6W~90W for SR type).

SPECIFICATIONS OF SOCKET TYPE SPEED CONTROL MOTORS

GENERAL Built-in thermal protector OF SPEED CONTROL MOTORS

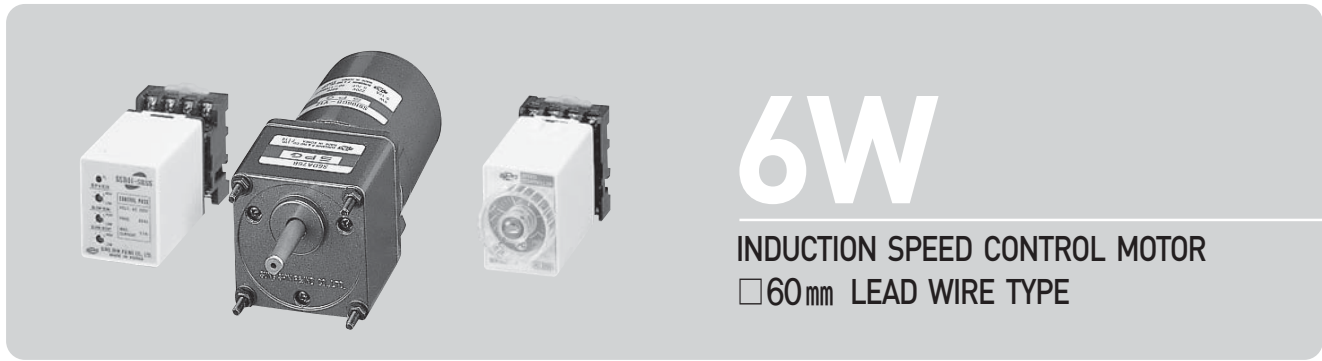
ITEM	Specification
Insulation Resistance	100M Ω or more when 500V megger is applied between the windings and the housing after rated motor operation under normal ambient temperature and humidity
Dielectric Strength	Sufficient to withstand 1.5V at 50/60Hz applied between the windings and the case after rated motor operation under normal ambient temperature and humidity for 1min.
Temperature Rise	80°C or less increase measured by thermometer after rated operation. (less than 45°C for motors with fan)
Insulation Class	Class B(130°C)
Overheat Protection Device	THERMAL PROTECTOR 내장 (automatic return type) : Open 120°C \pm 5°C, Close 76°C \pm 15°C
Ambient Temperature	-10°C ~ +40°C
Ambient Humidity	85% maximum(non condensing)

SPEED CONTROL INDUCTION MOTORS

INDEX

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SPEED CONTROL INDUCTION MOTOR 90W(□90mm)	230





SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
60	S6I06GA-S12 S6I06GA-S12CE	SRA01 SRA01CE	4	6	1 ϕ 110	60	Cont.	90-1700	0.55	0.055	0.40	0.040	0.52	0.052	2.5
	S6I06GB-S12 S6I06GB-S12CE	SRB01 SRB01CE	4	6	1 ϕ 220	60	Cont.	90-1700	0.55	0.055	0.40	0.040	0.52	0.052	0.7
	S6I06GC-S12 S6I06GC-S12CE	SRC01 SRC01CE	4	6	1 ϕ 100	50 60	Cont.	90-1400 90-1700	0.48	0.048	0.30	0.030	0.40	0.040	2.5
	S6I06GD-S12 S6I06GD-S12CE	SRD01 SRD01CE	4	6	1 ϕ 200	50 60	Cont.	90-1400 90-1700	0.48	0.048	0.30	0.030	0.40	0.040	0.7
	S6I06GX-S12 S6I06GX-S12CE	SRX01 SRX01CE	4	6	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	0.35 0.45	0.035 0.045	0.22 0.22	0.022 0.022	0.35 0.42	0.035 0.042	0.7

- ❖ CE marked at the end of motor model name indicates that it is impedance protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
60	S6I06GA-S24 S6I06GA-S24CE	SSA01-SRSS SSA03-SRSS	4	6	1 ϕ 110	60	Cont.	90-1700	0.55	0.055	0.40	0.040	0.52	0.052	2.5
	S6I06GB-S24 S6I06GB-S24CE	SSB01-SRSS SSB03-SRSS	4	6	1 ϕ 220	60	Cont.	90-1700	0.55	0.055	0.40	0.040	0.52	0.052	0.7
	S6I06GC-S24 S6I06GC-S24CE	SSC01-SRSS SSC03-SRSS	4	6	1 ϕ 100	50 60	Cont.	90-1400 90-1700	0.48	0.048	0.30	0.030	0.40	0.040	2.5
	S6I06GD-S24 S6I06GD-S24CE	SSD01-SRSS SSD03-SRSS	4	6	1 ϕ 200	50 60	Cont.	90-1400 90-1700	0.48	0.048	0.30	0.030	0.40	0.040	0.7
	S6I06GX-S24 S6I06GX-S24CE	SSX01-SRSS SSX03-SRSS	4	6	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	0.35 0.45	0.035 0.045	0.22 0.22	0.022 0.022	0.35 0.42	0.035 0.042	0.7

- ❖ CE marked at the end of motor model name indicates that it is impedance protected type which has received CE.
- ❖ "L" or "H" type does not apply to motors under 40W.

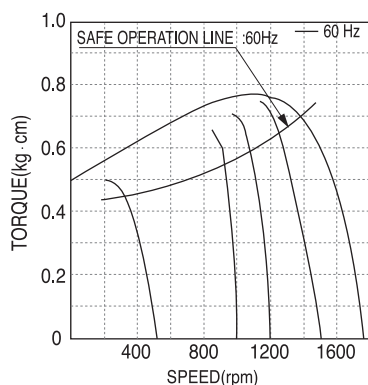
50Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5	6
S6DA□B	kg-cm	1.3	1.5	2.1	2.6	3.2	3.9	4.3	5.4	6.4	7.7	7.7	9.7	11.6	13.9	15.5	17.5	21.0	26.2	30.0	30.0	30.0	30.0	30.0	30.0	30.0
	Nm	0.127	0.147	0.206	0.255	0.314	0.382	0.421	0.529	0.627	0.755	0.755	0.951	1.137	1.362	1.519	1.715	2.058	2.568	2.942	2.942	2.942	2.942	2.942	2.942	2.942

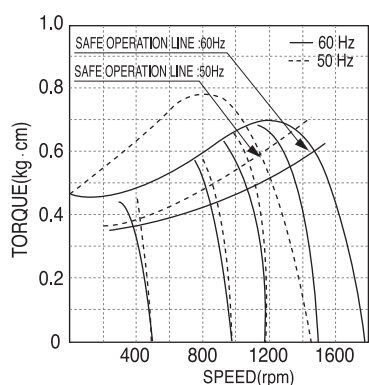
60Hz

MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	7.2
S6DA□B	kg-cm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	30.0	30.0	30.0	30.0	30.0
	Nm	0.098	0.127	0.167	0.206	0.255	0.304	0.343	0.431	0.510	0.617	0.617	0.764	0.921	1.107	1.235	1.392	1.666	2.087	2.499	2.783	2.942	2.942	2.942	2.942	2.942

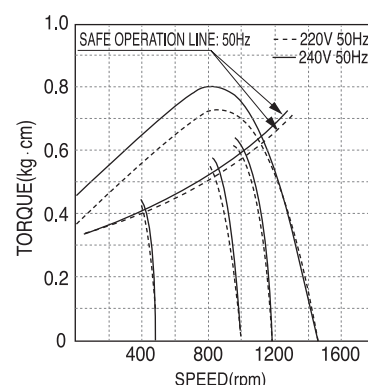
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 30 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ "L" or "H" type does not apply to motors under 40W.



▲ S6I06GA-S12 S6I06GA-S24
 S6I06GA-S12CE S6I06GA-S24CE
 S6I06GB-S12 S6I06GB-S24
 S6I06GB-S12CE S6I06GB-S24



▲ S6I06GC-S12 S6I06GC-S24
 S6I06GC-S12CE S6I06GC-S24CE
 S6I06GD-S12 S6I06GD-S24
 S6I06GD-S12CE S6I06GD-S24

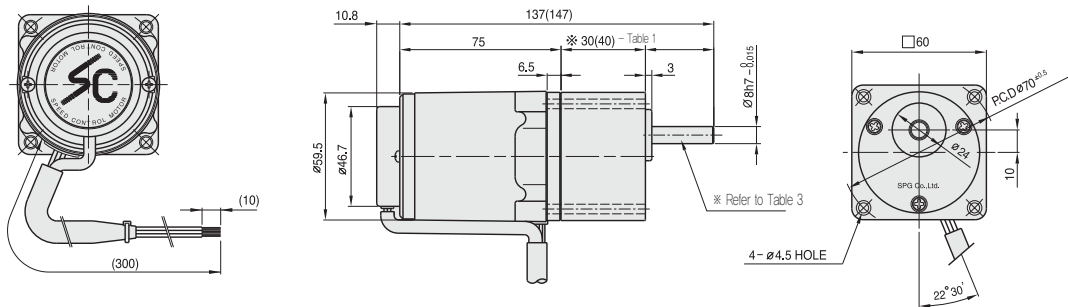


▲ S6I06GX-S12 S6I06GX-S24
 S6I06GX-S12CE S6I06GX-S24CE

DIMENSIONS

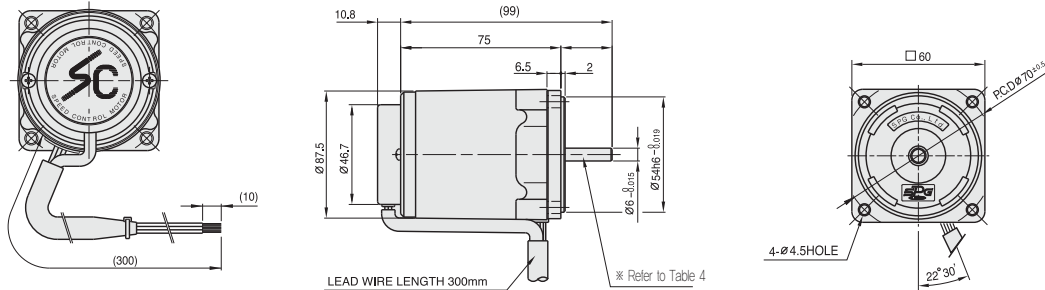
+ GEARED MOTOR

* MOTOR MODEL : S6I06G□-S12, S6I06G□-S24
 * HEAD MODEL : S6□A3□~S6□A250□



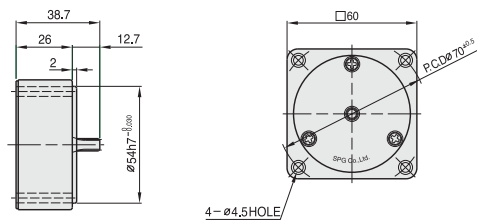
+ MOTOR

* MOTOR MODEL : S6I06□□-S12
 S6I06□□-S24

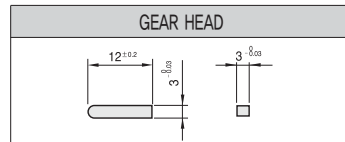


+ INTER-DECIMAL GEAR HEAD

* MODEL : S6GX10B



+ KEY SPEC



+ ※26(35) - (Table 1)

GEAR RATIO	SIZE(mm)
S6□A3□ ~ S6□A18□	30
S6□A20□ ~ S6□A250□	40

+ WEIGHT - (Table 2)

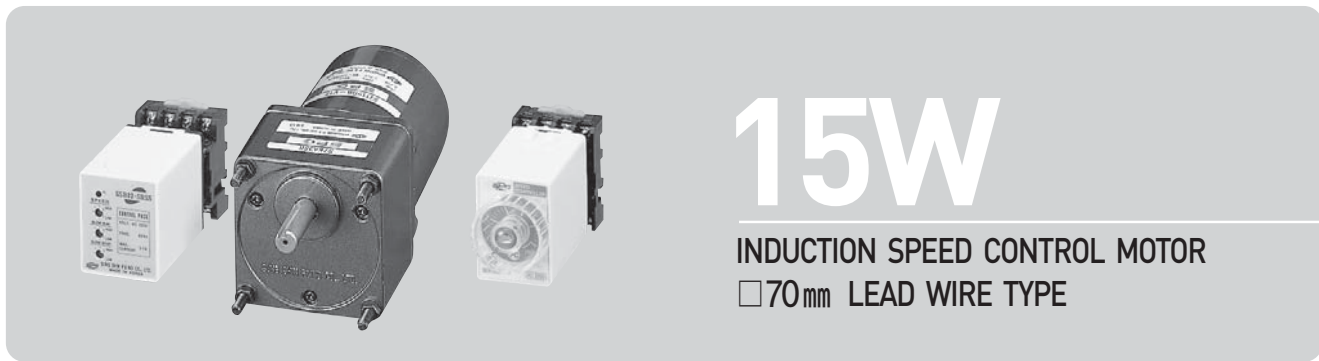
PART	WEIGHT(kg)	
MOTOR	0.76	
DECIMAL GEAR HEAD	0.18	
GEAR HEAD	S6□A3□ ~S6□A18B□	0.24
	S6□A20□ ~S6□A40□	0.30
	S6□A50□ ~S6□A250□	0.33

+ SPEC for output shaft of gear head - (Table 3)

MODEL	TYPES OF OUTPUT SHAFT
S6SA3□ ~S6SA250B□	STRAIGHT TYPE
	D-CUT TYPE
S6DA3□ ~S6DA250□	STRAIGHT TYPE
	KEY TYPE

+ SPEC for output shaft of motor - (Table 4)

MODEL	TYPES OF OUTPUT SHAFT
S6I06G□-S12 S6I06G□-S24	GEAR TYPE
	STRAIGHT TYPE S6I06S□-S24 S6I06SQ□-S24
S6I06D□-S12 S6I06D□-S24	D-CUT TYPE



SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (w)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
70	S7115GA-S12 S7115GA-S12(TP) S7115GA-S12CE	SRA02 SRA02CE	4	15	1 ϕ 110	60	Cont.	90-1700	1.15	0.115	0.60	0.060	0.90	0.090	5.0
	S7115GB-S12 S7115GB-S12(TP) S7115GB-S12CE	SRB02 SRB02CE	4	15	1 ϕ 220	60	Cont.	90-1700	1.15	0.115	0.60	0.060	0.90	0.090	1.2
	S7115GC-S12 S7115GC-S12(TP) S7115GC-S12CE	SRC02 SRC02CE	4	15	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.10 1.00	0.110 0.100	0.40	0.040	0.75	0.075	5.0
	S7115GD-S12 S7115GD-S12(TP) S7115GD-S12CE	SRD02 SRD02CE	4	15	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.10 1.00	0.110 0.100	0.40	0.040	0.75	0.075	1.2
	S7115GX-S12 S7115GX-S12CE	SRX02 SRX02CE	4	15	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.05 1.25	0.105 0.125	0.50 0.60	0.050 0.060	0.70 0.85	0.070 0.085	0.9

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S7115GX-S12, S7115GX-S12CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (w)	Voltage (V)	Freq. (Hz)	Duty	Seed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
70	S7115GA-S24 S7115GA-S24(TP) S7115GA-S24CE	SSA02-SRSS SSA03-SRSS	4	15	1 ϕ 110	60	Cont.	90-1700	1.15	0.115	0.60	0.060	0.90	0.090	5.0
	S7115GB-S24 S7115GB-S24(TP) S7115GB-S24CE	SSB02-SRSS SSB03-SRSS	4	15	1 ϕ 220	60	Cont.	90-1700	1.15	0.115	0.60	0.060	0.90	0.090	1.2
	S7115GC-S24 S7115GC-S24(TP) S7115GC-S24CE	SSC02-SRSS SSC03-SRSS	4	15	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.10 1.00	0.110 0.100	0.40	0.040	0.75	0.075	5.0
	S7115GD-S24 S7115GD-S24(TP) S7115GD-S24CE	SSD02-SRSS SSD03-SRSS	4	15	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.10 1.00	0.110 0.100	0.40	0.040	0.75	0.075	1.2
	S7115GX-S24 S7115GX-S24CE	SSX02-SRSS SSX03-SRSS	4	15	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.05 1.25	0.105 0.125	0.50 0.60	0.050 0.060	0.70 0.85	0.070 0.085	0.9

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S7115GX-S24, S7115GX-S24CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

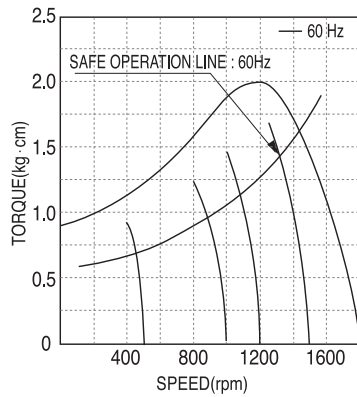
50Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
	kg-cm	3.2	3.9	5.4	6.5	8.1	9.7	10.8	13.5	16.2	19.4	19.4	24.2	29.1	34.9	38.8	43.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
S7KA□B	N·m	0.314	0.382	0.530	0.637	0.794	0.951	1.059	1.324	1.587	1.902	1.902	2.373	2.854	3.423	3.805	4.276	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900

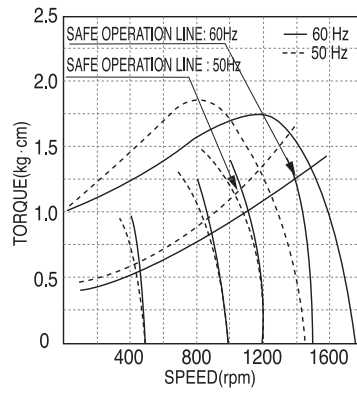
60Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	kg-cm	3.0	3.6	5.1	6.1	7.6	9.1	10.1	12.7	15.2	18.2	18.2	22.8	27.3	32.8	36.5	41.0	49.2	50.0	50.0	50.0	50.0	50.0	50.0	50.0
S7KA□B	N·m	0.294	0.353	0.500	0.598	0.745	0.892	0.990	1.245	1.491	1.785	1.785	2.236	2.677	3.217	3.579	4.021	4.825	4.900	4.900	4.900	4.900	4.900	4.900	4.900

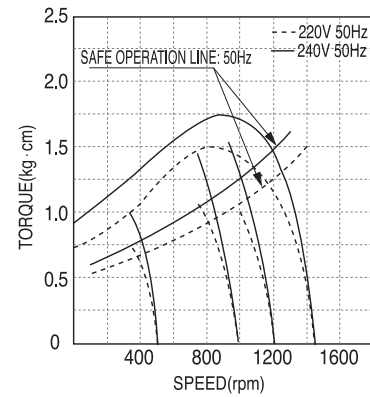
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 50 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ "L" or "H" type does not apply to motors under 40W.



- ▲ S7I15GA-S12 S7I15GA-S24
- S7I15GA-S12(TP) S7I15GA-S24(TP)
- S7I15GA-S12CE S7I15GA-S24CE
- S7I15GB-S12 S7I15GB-S24
- S7I15GB-S12(TP) S7I15GB-S24(TP)
- S7I15GB-S12CE S7I15GB-S24



- ▲ S7I15GC-S12 S7I15GC-S24
- S7I15GC-S12(TP) S7I15GC-S24(TP)
- S7I15GC-S12CE S7I15GC-S24CE
- S7I15GD-S12 S7I15GD-S24
- S7I15GD-S12(TP) S7I15GD-S24(TP)
- S7I15GD-S12CE S7I15GD-S24

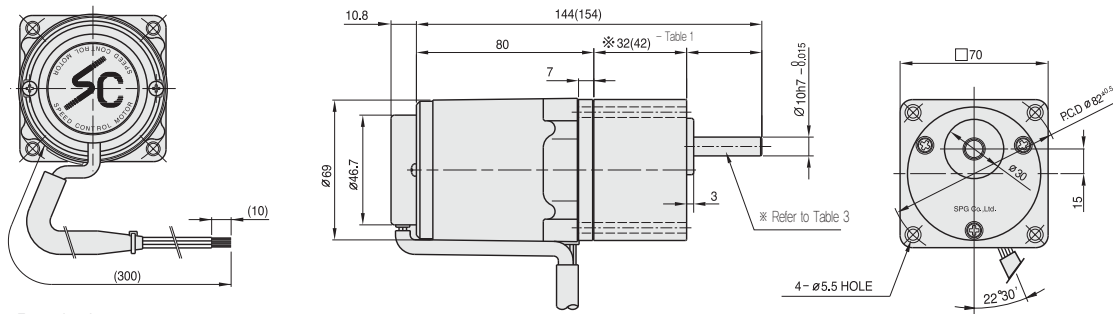


- ▲ S7I15GX-S12 S7I15GX-S24
- S7I15GX-S12CE S7I15GX-S24CE

DIMENSIONS

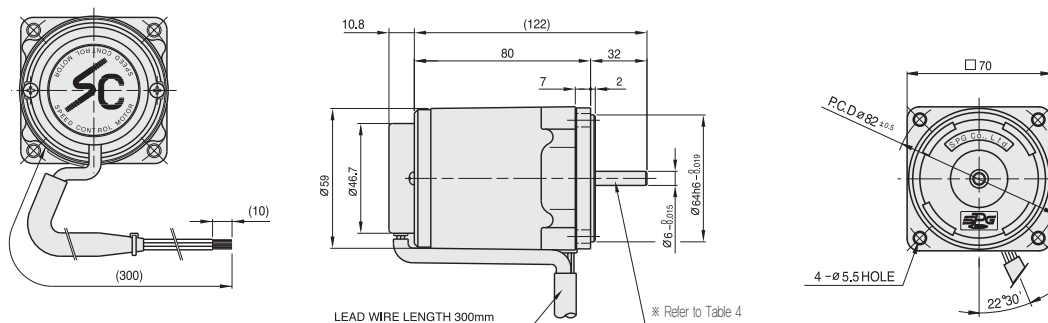
+ GEARED MOTOR

* MOTOR MODEL : S7H15G□-S12, S7H15G□-S24
 * HEAD MODEL : S7□A3□-S7□A200□



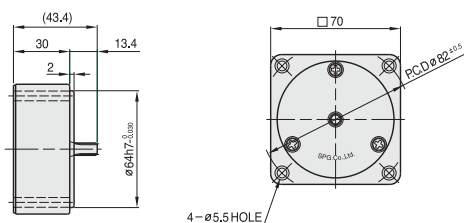
+ MOTOR

* MOTOR MODEL : S7H15□□-S12, S7H15□□-S24

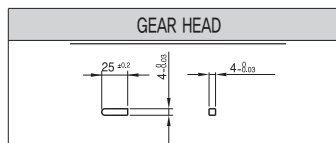


+ INTER-DECIMAL GEAR HEAD

* MODEL : S7GX10B



+ KEY SPEC



+ ※26(35) - (Table 1)

GEAR RATIO	SIZE(mm)
S7□A3□ ~ S7□A18□	32
S7□A20□ ~ S7□A200□	42

+ WEIGHT - (Table 2)

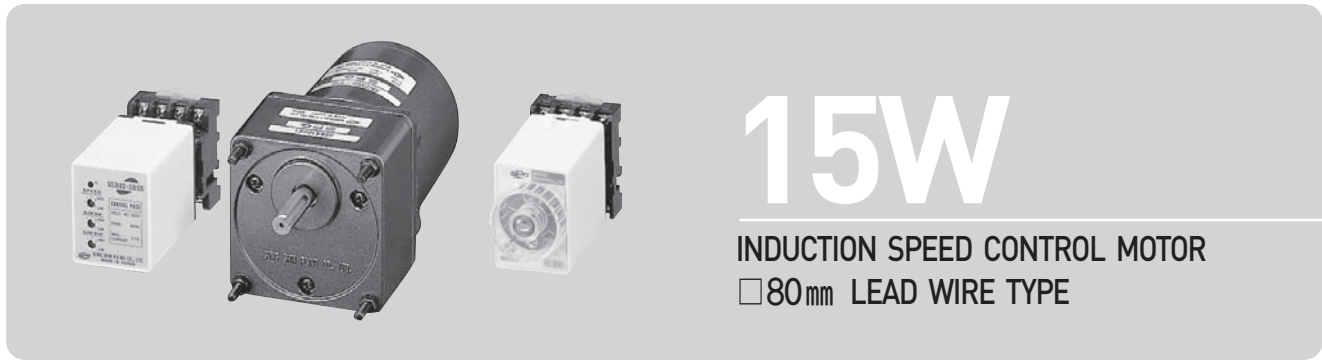
PART	WEIGHT(kg)	
MOTOR	1.04	
DECIMAL GEAR HEAD	0.32	
GEAR HEAD	S7□A3□ ~ S7□A40□	0.38
	S7□A20□ ~ S7□A40□	0.47
	S7□A50□ ~ S7□A200□	0.52

+ SPEC for output shaft of gear head - (Table 3)

MODEL	TYPES OF OUTPUT SHAFT
S7SA3□ ~S7SA200□	STRAIGHT TYPE
	D-CUT TYPE
S7DA3□ ~S7DA200□	STRAIGHT TYPE
	D-CUT TYPE
S7KA3□ ~S7KA200□	STRAIGHT TYPE
	D-CUT TYPE

+ SPEC for output shaft of motor - (Table 4)

MODEL	TYPES OF OUTPUT SHAFT
S7H15G□-S12 S7H15G□-S24	GEAR TYPE
	STRAIGHT TYPE
S7H15D□-S12 S7H15D□-S24	STRAIGHT TYPE
	D-CUT TYPE



SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8I15GA-S12 S8I15GA-S12(TP) S8I15GA-S12CE	SRA02 SRA02CE	4	15	1 ϕ 110	60	Cont.	90-1700	1.50	0.150	0.35	0.035	0.75	0.075	4.0
	S8I15GB-S12 S8I15GB-S12(TP) S8I15GB-S12CE	SRB02 SRB02CE	4	15	1 ϕ 220	60	Cont.	90-1700	1.50	0.150	0.35	0.035	0.75	0.075	1.0
	S8I15GC-S12 S8I15GC-S12(TP) S8I15GC-S12CE	SRC02 SRC02CE	4	15	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.20 1.00	0.120 0.100	0.32	0.032	0.60	0.060	4.0
	S8I15GD-S12 S8I15GD-S12(TP) S8I15GD-S12CE	SRD02 SRD02CE	4	15	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.20 1.00	0.120 0.100	0.32	0.032	0.60	0.060	1.0
	S8I15GX-S12 S8I15GX-S12CE	SRX02 SRX02CE	4	15	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.20 1.40	0.120 0.140	0.35 0.35	0.035 0.035	0.55 0.60	0.055 0.060	1.0

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S8I15GX-S12, S8I15GX-S12CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Seed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8I15GA-S24 S8I15GA-S24(TP) S8I15GA-S24CE	SSA02-SRSS SSA03-SRSS	4	15	1 ϕ 110	60	Cont.	90-1700	1.50	0.150	0.35	0.035	0.75	0.075	4.0
	S8I15GB-S24 S8I15GB-S24(TP) S8I15GB-S24CE	SSB02-SRSS SSB03-SRSS	4	15	1 ϕ 220	60	Cont.	90-1700	1.50	0.150	0.35	0.035	0.75	0.075	1.0
	S8I15GC-S24 S8I15GC-S24(TP) S8I15GC-S24CE	SSC02-SRSS SSC03-SRSS	4	15	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.20 1.00	0.120 0.100	0.32	0.032	0.60	0.060	4.0
	S8I15GD-S24 S8I15GD-S24(TP) S8I15GD-S24CE	SSD02-SRSS SSD03-SRSS	4	15	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.20 1.00	0.120 0.100	0.32	0.032	0.60	0.060	1.0
	S8I15GX-S24 S8I15GX-S24CE	SSX02-SRSS SSX03-SRSS	4	15	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.20 1.40	0.120 0.140	0.35 0.35	0.035 0.035	0.55 0.60	0.055 0.060	1.0

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S8I15GX-S24, S8I15GX-S24CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

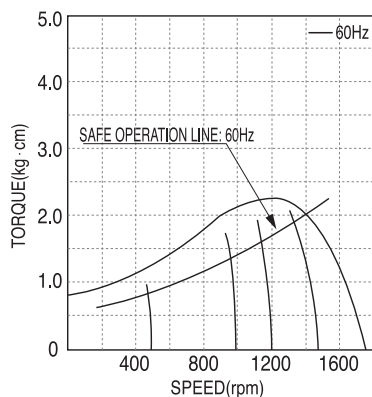
50Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
	kg-cm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.2	80	80	80	80	80	80
S8KA□B	N·m	0.333	0.402	0.559	0.666	0.833	1.000	1.107	1.392	1.666	1.999	1.999	2.509	3.009	3.606	4.008	4.530	5.433	6.786	7.840	7.840	7.840	7.840	7.840	7.840

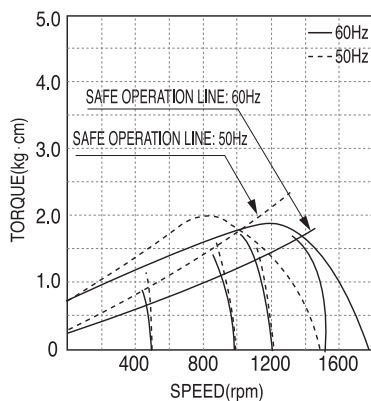
60Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	kg-cm	2.9	3.5	4.9	5.8	7.3	8.7	9.7	12.2	14.6	17.5	17.5	21.9	26.3	31.5	35.0	39.6	47.5	59.4	71.3	79.2	80	80	80	80
S8KA□B	N·m	0.284	0.343	0.481	0.568	0.715	0.853	0.951	1.196	1.432	1.715	1.715	2.146	2.577	3.087	3.430	3.881	4.658	5.825	6.992	7.767	7.840	7.840	7.840	7.840

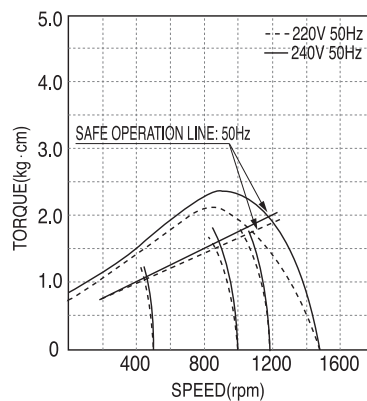
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ "L" or "H" type does not apply to motors under 40W.



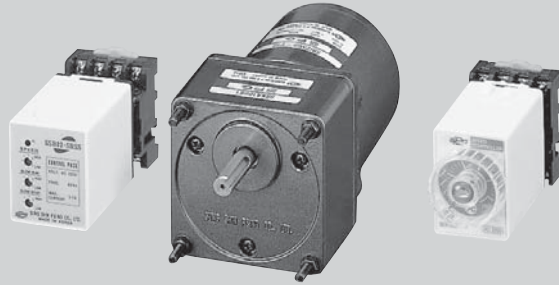
- ▲ S8I15GA-S12 S8I15GA-S24
- S8I15GA-S12(TP) S8I15GA-S24(TP)
- S8I15GA-S12CE S8I15GA-S24CE
- S8I15GB-S12 S8I15GB-S24
- S8I15GB-S12(TP) S8I15GB-S24(TP)
- S8I15GB-S12CE S8I15GB-S24



- ▲ S8I15GC-S12 S8I15GC-S24
- S8I15GC-S12(TP) S8I15GC-S24(TP)
- S8I15GC-S12CE S8I15GC-S24CE
- S8I15GD-S12 S8I15GD-S24
- S8I15GD-S12(TP) S8I15GD-S24(TP)
- S8I15GD-S12CE S8I15GD-S24



- ▲ S8I15GX-S12 S8I15GX-S24
- S8I15GX-S12CE S8I15GX-S24CE



25W

INDUCTION SPEED CONTROL MOTOR

□ 80mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8I25GA-S12 S8I25GA-S12(TP) S8I25GA-S12CE	SRA02 SRA02CE	4	25	1 ϕ 110	60	Cont.	90-1700	1.70	0.170	0.80	0.080	1.50	0.150	6.0
	S8I25GB-S12 S8I25GB-S12(TP) S8I25GB-S12CE	SRB02 SRB02CE	4	25	1 ϕ 220	60	Cont.	90-1700	1.70	0.170	0.80	0.080	1.50	0.150	1.5
	S8I25GC-S12 S8I25GC-S12(TP) S8I25GC-S12CE	SRC02 SRC02CE	4	25	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.60 1.50	0.160 0.150	0.55	0.055	1.10	0.110	6.0
	S8I25GD-S12 S8I25GD-S12(TP) S8I25GD-S12CE	SRD02 SRD02CE	4	25	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.60 1.50	0.160 0.150	0.55	0.055	1.10	0.110	1.5
	S8I25GX-S12 S8I25GX-S12CE	SRX02 SRX02CE	4	25	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.50 1.80	0.150 0.180	0.50 0.50	0.050 0.050	1.00 1.20	0.100 0.120	1.5

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- S8I25GX-S12, S8I25GX-S12CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
80	S8I25GA-S24 S8I25GA-S24(TP) S8I25GA-S24CE	SSA02-SRSS SSA03-SRSS	4	25	1 ϕ 110	60	Cont.	90-1700	1.70	0.170	0.80	0.080	1.50	0.150	6.0
	S8I25GB-S24 S8I25GB-S24(TP) S8I25GB-S24CE	SSB02-SRSS SSB03-SRSS	4	25	1 ϕ 220	60	Cont.	90-1700	1.70	0.170	0.80	0.080	1.50	0.150	1.5
	S8I25GC-S24 S8I25GC-S24(TP) S8I25GC-S24CE	SSC02-SRSS SSC03-SRSS	4	25	1 ϕ 100	50 60	Cont.	90-1400 90-1700	1.60 1.50	0.160 0.150	0.55	0.055	1.10	0.110	6.0
	S8I25GD-S24 S8I25GD-S24(TP) S8I25GD-S24CE	SSD02-SRSS SSD03-SRSS	4	25	1 ϕ 200	50 60	Cont.	90-1400 90-1700	1.60 1.50	0.160 0.150	0.55	0.055	1.10	0.110	1.5
	S8I25GX-S24 S8I25GX-S24CE	SSX02-SRSS SSX03-SRSS	4	25	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	1.50 1.80	0.150 0.180	0.50 0.50	0.050 0.050	1.00 1.20	0.100 0.120	1.5

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- S8I25GX-S24, S8I25GX-S24CE is thermally protected type with TP mounted.
- ❖ "L" or "H" type does not apply to motors under 40W.

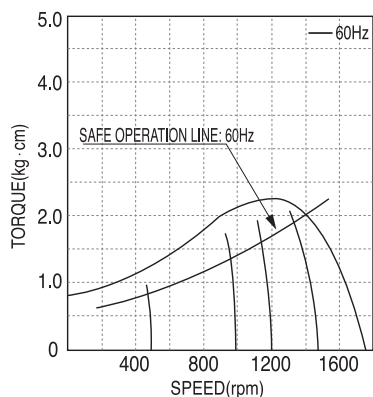
50Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
	kg-cm	5.3	6.4	8.9	10.7	13.4	16.0	17.8	22.3	26.7	32.1	32.1	40.2	48.2	57.8	64.2	72.6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
S8KA□B	N·m	0.519	0.627	0.872	1.049	1.313	1.568	1.744	2.185	2.617	3.146	3.146	3.940	4.724	5.664	6.292	7.115	7.840	7.840	7.840	7.840	7.840	7.840	7.840	7.840

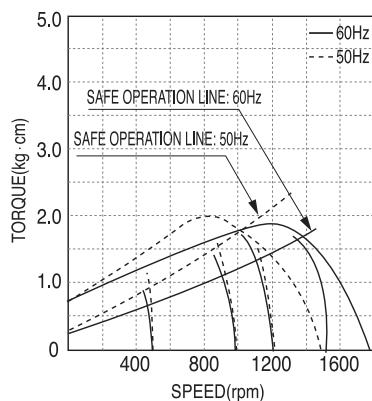
60Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	kg-cm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4	47.3	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
S8KA□B	N·m	0.431	0.510	0.715	0.853	1.068	1.284	1.431	1.784	2.146	2.568	2.577	3.224	3.861	4.635	5.155	5.821	6.987	7.840	7.840	7.840	7.840	7.840	7.840	7.840

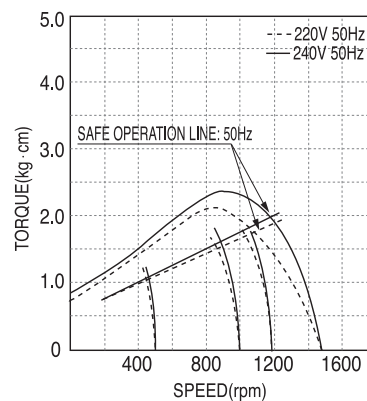
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 80 kg-cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ "L" or "H" type does not apply to motors under 40W.



- ▲ S8I25GA-S12 S8I25GA-S24
- S8I25GA-S12(TP) S8I25GA-S24(TP)
- S8I25GA-S12CE S8I25GA-S24CE
- S8I25GB-S12 S8I25GB-S24
- S8I25GB-S12(TP) S8I25GB-S24(TP)
- S8I25GB-S12CE S8I25GB-S24



- ▲ S8I25GC-S12 S8I25GC-S24
- S8I25GC-S12(TP) S8I25GC-S24(TP)
- S8I25GC-S12CE S8I25GC-S24CE
- S8I25GD-S12 S8I25GD-S24
- S8I25GD-S12(TP) S8I25GD-S24(TP)
- S8I25GD-S12CE S8I25GD-S24

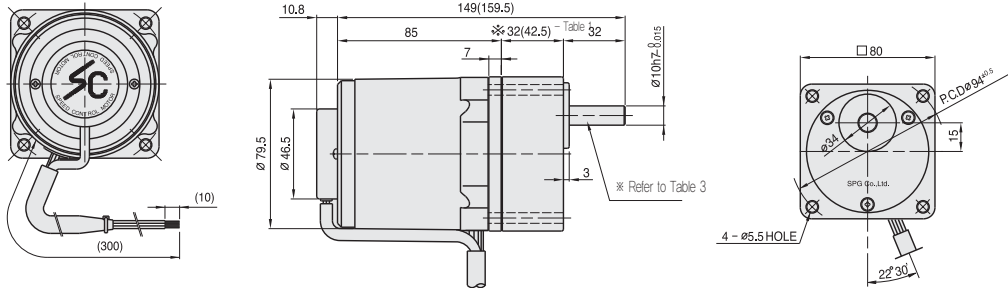


- ▲ S8I25GX-S12 S8I25GX-S24
- S8I25GX-S12CE S8I25GX-S24CE

DIMENSIONS

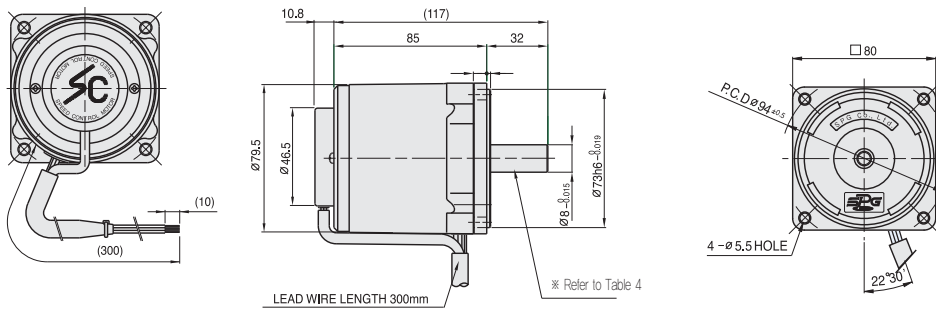
+ GEARED MOTOR

※ MOTOR MODEL : S8(15,25)G□-S12, S8(15,25)G□-S24
 ※ HEAD MODEL : S8□A3□~S8□A200□



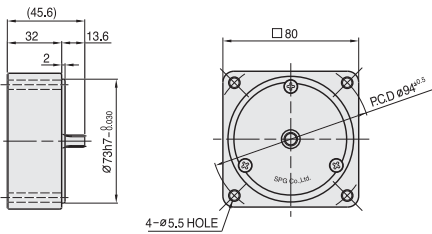
+ MOTOR

※ MOTOR MODEL : S8(15,25)□□-S12, S8(15,25)□□-S24



+ INTER-DECIMAL GEAR HEAD

※ MODEL : S8GX10B



+ ※26(35) - (Table1)

GEAR RATIO	SIZE(mm)
S8□A3□ ~ S8□A18□	32
S8□A20□ ~ S8□A200□	42.5

+ WEIGHT - (Table2)

PART	WEIGHT(kg)	
15W MOTOR	1.6	
25W MOTOR	1.6	
DECIMAL GEAR HEAD	0.43	
GEAR HEAD	S8□A3□ ~ S8□A18□	0.43
	S8□A20□ ~ S8□A40□	0.57
	S8□A50□ ~ S8□A200□	0.61

+ SPEC for output shaft of gearhead - (Table3)

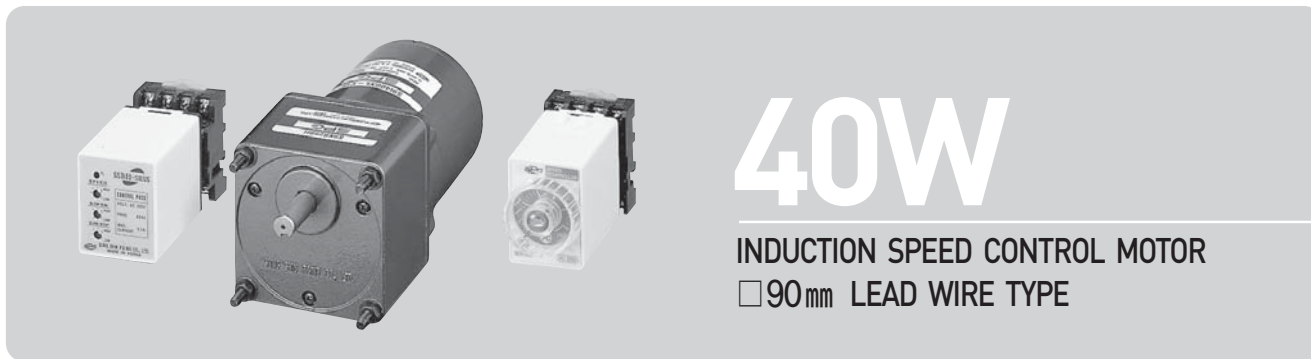
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S8SA3□ ~ S8SA200□	
D-CUT TYPE	
S8DA3□ ~ S8DA200□	
KEY TYPE	
S8KA3□ ~ S8KA200□	

+ KEY SPEC

GEAR HEAD	MOTOR

+ SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S8H15G□-S12 S8I25G□-S12 S8H15G□-S24 S8I25G□-S24	
STRAIGHT TYPE	
S8H15S□-S12 S8I25S□-S12 S8H15S□-S24 S8I25S□-S24	
D-CUT TYPE	
S8H15D□-S12 S8I25D□-S12 S8H15D□-S24 S8I25D□-S24	
KEY TYPE	
S8H15K□-S12 S8I25K□-S12 S8H15K□-S24 S8I25K□-S24	



40W

INDUCTION SPEED CONTROL MOTOR

□ 90mm LEAD WIRE TYPE

SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
90	S9I40GA()-S12 S9I40GA()-S12(TP) S9I40GA()-S12CE	SRA02 SRA02CE	4	40	1 ϕ 110	60	Cont.	90-1700	2.70	0.270	1.00	0.100	2.20	0.220	10.0
	S9I40GB()-S12 S9I40GB()-S12(TP) S9I40GB()-S12CE	SRB02 SRB02CE	4	40	1 ϕ 220	60	Cont.	90-1700	2.70	0.270	1.00	0.100	2.20	0.220	2.5
	S9I40GC()-S12 S9I40GC()-S12(TP) S9I40GC()-S12CE	SRC02 SRC02CE	4	40	1 ϕ 100	50 60	Cont.	90-1400 90-1700	2.70 2.00	0.270 0.200	0.90	0.090	1.80	0.180	10.0
	S9I40GD()-S12 S9I40GD()-S12(TP) S9I40GD()-S12CE	SRD02 SRD02CE	4	40	1 ϕ 200	50 60	Cont.	90-1400 90-1700	2.70 2.00	0.270 0.200	0.90	0.090	1.80	0.180	2.5
	S9I40GX()-S12 S9I40GX()-S12CE	SRX02 SRX02CE	4	40	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	2.50 3.00	0.250 0.300	0.70 0.70	0.070 0.070	1.70 2.10	0.170 0.210	2.0

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S9I40GX-S12, S9I40GX-S12CE is thermally protected type with TP mounted.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
90	S9I40GA()-S24 S9I40GA()-S24(TP) S9I40GA()-S24CE	SSA02-SRSS SSA03-SRSS	4	40	1 ϕ 110	60	Cont.	90-1700	2.70	0.270	1.00	0.100	2.20	0.220	10.0
	S9I40GB()-S24 S9I40GB()-S24(TP) S9I40GB()-S24CE	SSB02-SRSS SSB03-SRSS	4	40	1 ϕ 220	60	Cont.	90-1700	2.70	0.270	1.00	0.100	2.20	0.220	2.5
	S9I40GC()-S24 S9I40GC()-S24(TP) S9I40GC()-S24CE	SSC02-SRSS SSC03-SRSS	4	40	1 ϕ 100	50 60	Cont.	90-1400 90-1700	2.70 2.00	0.270 0.200	0.90	0.090	1.80	0.180	10.0
	S9I40GD()-S24 S9I40GD()-S24(TP) S9I40GD()-S24CE	SSD02-SRSS SSD03-SRSS	4	40	1 ϕ 200	50 60	Cont.	90-1400 90-1700	2.70 2.00	0.270 0.200	0.90	0.090	1.80	0.180	2.5
	S9I40GX()-S24 S9I40GX()-S24CE	SSX02-SRSS SSX03-SRSS	4	40	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	2.50 3.00	0.250 0.300	0.70 0.70	0.070 0.070	1.70 2.10	0.170 0.210	2.0

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
S9I40GX-S24, S9I40GX-S24CE is thermally protected type with TP mounted.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'

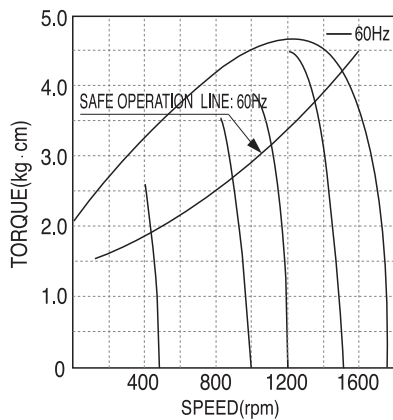
50Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8	7.5
	kg·cm	8.3	9.9	13.8	16.5	20.7	24.8	27.5	34.4	41.3	49.6	49.6	62.1	74.5	89.4	99.3	100	100	100	100	100	100	100	100	100
S9KB□()	N·m	0.813	0.970	1.352	1.617	2.029	2.430	2.695	3.371	4.047	4.861	4.861	6.086	7.301	8.761	9.731	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800

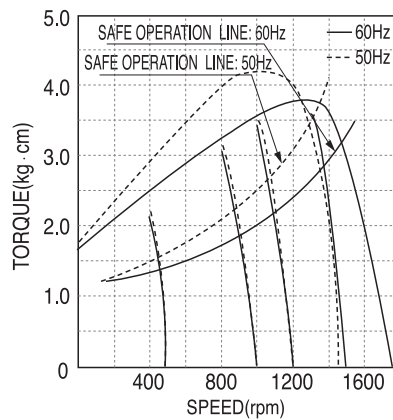
60Hz

GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	kg·cm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	28.4	34.0	40.8	40.9	51.1	61.3	73.6	81.8	100	100	100	100	100	100	100	100	100
S9KB□()	N·m	0.666	0.804	1.107	1.333	1.666	1.999	2.225	2.783	3.332	3.998	4.008	5.008	6.007	7.213	8.016	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800

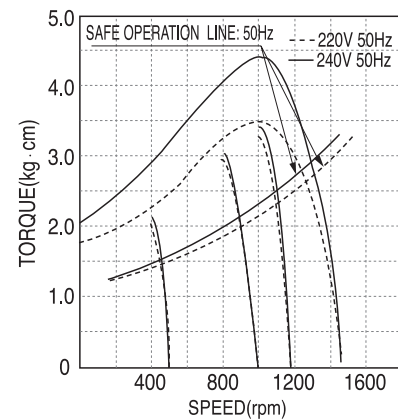
- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 100 kg·cm.
- ❖ ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- ❖ Rpm is based on synchronous speed (50Hz: 1500rpm, 60Hz: 1800rpm) divided by gear ratio. The actual rotation speed can be 2~20% less than displayed value depending on the load.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with motor 'L' and 'H' should be used with motor 'H'.



- ▲ S9I40GA()-S12 S9I40GA()-S24
- S9I40GA()-S12(TP) S9I40GA()-S24(TP)
- S9I40GA()-S12CE S9I40GA()-S24CE
- S9I40GB()-S12 S9I40GB()-S24
- S9I40GB()-S12(TP) S9I40GB()-S24(TP)
- S9I40GB()-S12CE S9I40GB()-S24



- ▲ S9I40GC()-S12 S9I40GC()-S24
- S9I40GC()-S12(TP) S9I40GC()-S24(TP)
- S9I40GC()-S12CE S9I40GC()-S24CE
- S9I40GD()-S12 S9I40GD()-S24
- S9I40GD()-S12(TP) S9I40GD()-S24(TP)
- S9I40GD()-S12CE S9I40GD()-S24

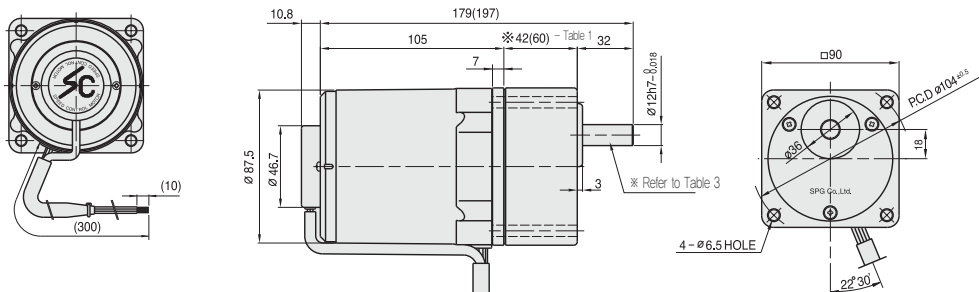


- ▲ S9I40GX()-S12 S9I40GX()-S24
- S9I40GX()-S12CE S9I40GX()-S24CE

DIMENSIONS

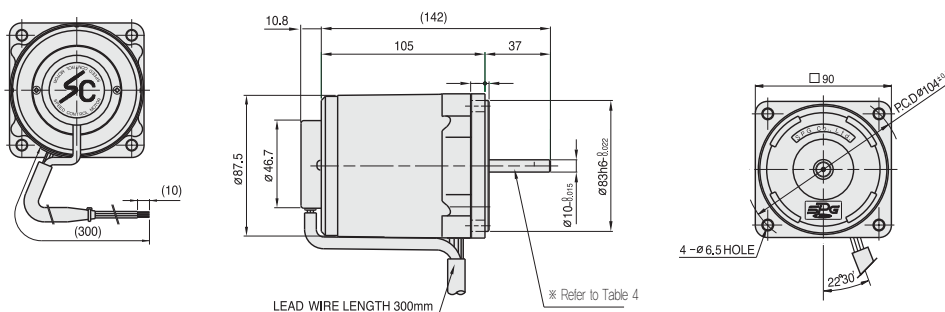
+ GEARED MOTOR

※ MOTOR MODEL : S9I40G□□-S12, S9I40G□□-S24
 ※ HEAD MODEL : S9□B3□□-S9□B200□□



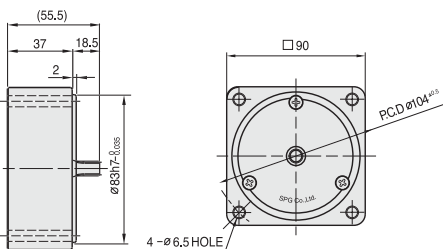
+ MOTOR

※ MOTOR MODEL : S9I40□□□-S12, S9I40□□□-S24



+ INTER-DECIMAL GEAR HEAD

※ MODEL : S9GX10B(H,L)



+ KEY SPEC

GEAR HEAD	MOTOR

+ SPEC for output shaft of motor - (Table 4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE S9I40G□□-S12 S9I40G□□-S24	
STRAIGHT TYPE S9I40S□□-S12 S9I40S□□-S24	
D-CUT TYPE S9I40D□□-S12 S9I40D□□-S24	
KEY TYPE S9I40K□□-S12 S9I40K□□-S24	

+ ※26(35) - (Table 1)

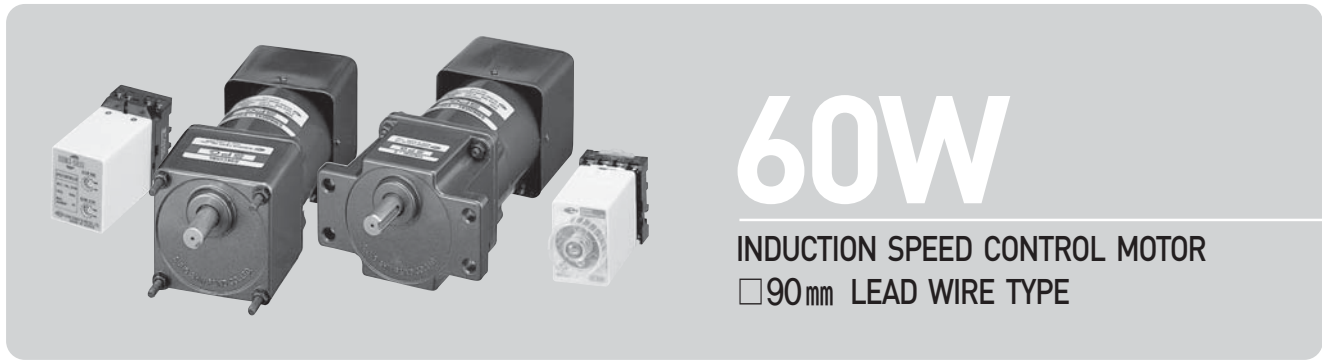
GEAR RATIO	SIZE(mm)
S9□B3□ ~ S9□B18□	42
S9□B20□ ~ S9□B200□	60

+ WEIGHT - (Table 2)

PART	WEIGHT(kg)	
MOTOR	2.42	
DECIMAL GEAR HEAD	0.60	
GEAR HEAD	S9□B3□ ~ S9□B18□	0.73
	S9□B20□ ~ S9□B40□	1.03
	S9□B50□ ~ S9□B200□	1.13

+ SPEC for output shaft of gearhead - (Table 3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE S9SB3□ ~ S9SB200□	
D-CUT TYPE S9DB3□ ~ S9DB200□	
KEY TYPE S9KB3□ ~ S9KB200□	



SPECIFICATION OF SR TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
									(kg-cm)	(N-m)	(kg-cm)	(N-m)			
90	S9160GA()-S12 S9160GA()-S12(TP) S9160GA()-S12CE	SRA02 SRA02CE	4	60	1 ϕ 110	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	20.0
	S9160GB()-S12 S9160GB()-S12(TP) S9160GB()-S12CE	SRB02 SRB02CE	4	60	1 ϕ 220	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	5.0
	S9160GC()-S12 S9160GC()-S12(TP) S9160GC()-S12CE	SRC02 SRC02CE	4	60	1 ϕ 100	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	20.0
	S9160GD()-S12 S9160GD()-S12(TP) S9160GD()-S12CE	SRD02 SRD02CE	4	60	1 ϕ 200	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	5.0
	S9160GX()-S12 S9160GX()-S12CE	SRX02 SRX02CE	4	60	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	5.20 5.80	0.520 0.580	0.90 0.90	0.090 0.090	3.10 3.60	0.310 0.360	3.5

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ SR type controller model with "CE" appeared at the end of motor model name indicates that the product acquired CE MARK certification.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- S9160GX()-S12, S9160GX()-S12CE is thermally protected type with TP mounted.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.

SPECIFICATION OF SS TYPE SPEED CONTROL MOTORS

SIZE mm sq.	Motor Type	Controller Type	Poles	Output (W)	Voltage (V)	Freq. (Hz)	Duty	Speed Range (rpm)	Permissible Torque				Starting Torque		Cap. (μ F)
									at 1200rpm		at 90rpm		(kg-cm)	(N-m)	
									(kg-cm)	(N-m)	(kg-cm)	(N-m)			
90	S9160GA()-S24 S9160GA()-S24(TP) S9160GA()-S24CE	SSA03-SRSS	4	60	1 ϕ 110	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	20.0
	S9160GB()-S24 S9160GB()-S24(TP) S9160GB()-S24CE	SSB03-SRSS	4	60	1 ϕ 220	60	Cont.	90-1700	5.50	0.550	2.00	0.200	5.00	0.500	5.0
	S9160GC()-S24 S9160GC()-S24(TP) S9160GC()-S24CE	SSC03-SRSS	4	60	1 ϕ 100	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	20.0
	S9160GD()-S24 S9160GD()-S24(TP) S9160GD()-S24CE	SSD03-SRSS	4	60	1 ϕ 200	50 60	Cont.	90-1400 90-1700	5.50 5.00	0.550 0.500	1.20	0.120	4.00	0.400	5.0
	S9160GX()-S24 S9160GX()-S24CE	SSX03-SRSS	4	60	1 ϕ 220 1 ϕ 240	50	Cont.	90-1400	5.20 5.80	0.520 0.580	0.90 0.90	0.090 0.090	3.10 3.60	0.310 0.360	3.5

- ❖ CE marked at the end of motor model name indicates that it is thermally protected type which has received CE.
- ❖ TP marked at the end of the motor model name indicates that it is standard motor with Thermal Protector mounted.
- S9160GX()-S24, S9160GX()-S24CE is thermally protected type with TP mounted.
- ❖ () is for marking 'L' type or 'H'. 'L' should be used with gearhead 'L' and 'H' should be used with gearhead 'H'.