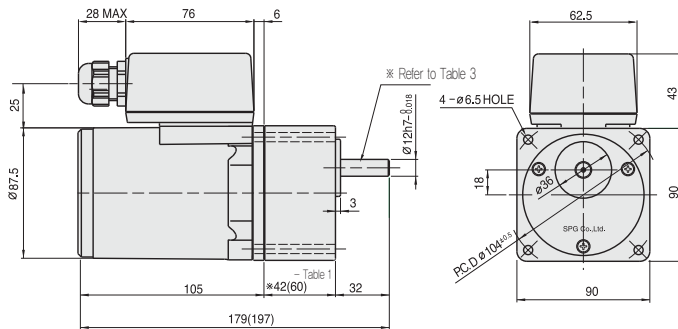
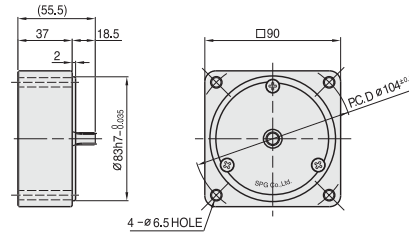


DIMENSIONS

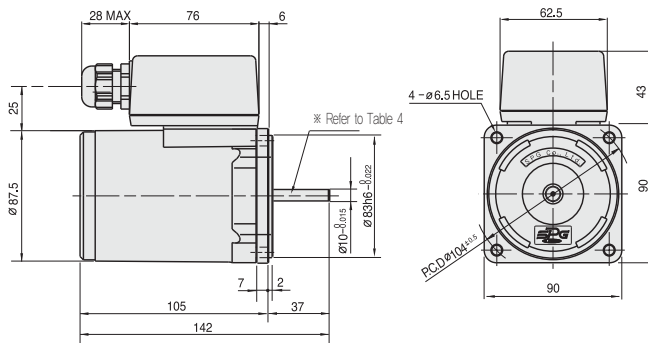
+ GEARED MOTOR * MOTOR MODEL : S9(I,R)40G□□-T
 * HEAD MODEL : S9□B3□□~S9□B200□□



+ INTER-DECIMAL GEAR HEAD
 * MODEL : S9GX10B(H,L)



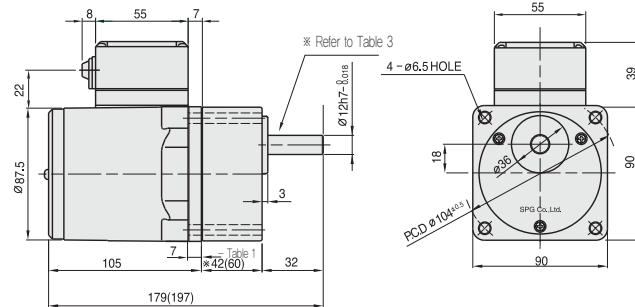
+ MOTOR * MOTOR MODEL : S9(I,R)40□□□-T



+ WEIGHT - (Table 2)

PART		WEIGHT(kg)
MOTOR		2.45
REVERSIBLE MOTOR		2.50
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

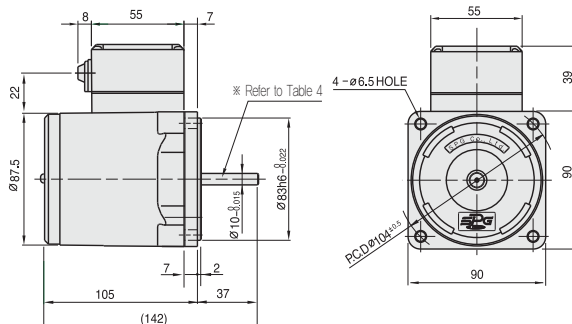
+ GEARED MOTOR * MOTOR MODEL : S9(I,R)40G□□-T1
 * HEAD MODEL : S9□B3□□~S9□B200□□



+ INTER-DECIMAL GEAR HEAD
 * MODEL : S9GX10B(H,L)



+ MOTOR * MOTOR MODEL : S9(I,R)40□□□-T1



+ WEIGHT - (Table 2)

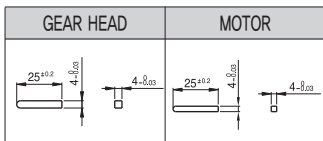
PART		WEIGHT(kg)
MOTOR		2.40
REVERSIBLE MOTOR		2.45
DECIMAL GEAR HEAD		0.60
GEAR HEAD	S9□B3□□ ~S9□B18□□	0.73
	S9□B20□□ ~S9□B40□□	1.03
	S9□B50□□ ~S9□B200□□	1.13

DIMENSIONS

※26(35) - (Table1)

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

KEY SPEC



✦ SPEC for output shaft of gearhead - (Table3)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S9SB3□□ ~S9SB200□□	
D-CUT TYPE	
S9DB3□□ ~S9DB200□□	
KEY TYPE	
S9IRB3□□ ~S9IR200□□	

✦ SPEC for output shaft of motor - (Table4)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9(I,R)40G□□-T S9(I,R)40G□□-T1	
STRAIGHT TYPE	
S9(I,R)40S□□-T S9(I,R)40S□□-T1	
D-CUT TYPE	
S9(I,R)40D□□-T S9(I,R)40D□□-T1	
KEY TYPE	
S9(I,R)40K□□-T S9(I,R)40K□□-T1	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.
Circled number is the terminal number inside terminal box.

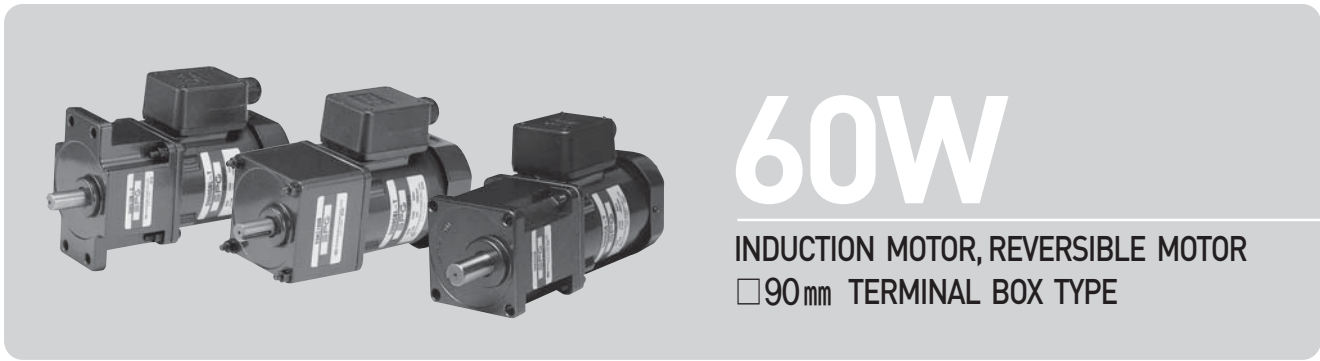
■INDUCTION MOTOR

S9I40GA()-T S9I40GB()-T S9I40GC()-T S9I40GD()-T S9I40GA()-T1 S9I40GB()-T1 S9I40GC()-T1 S9I40GD()-T1		S9I40GX()-T S9I40GX()-TCE S9I40GX()-T1 S9I40GX()-T1CE		S9I40GU()-T S9I40GT()-T S9I40GU()-T1 S9I40GT()-T1		S9I40GU()-TCE S9I40GU()-T1CE S9I40GT()-TCE S9I40GT()-T1CE	
CW	CCW	CW,CCW	CW	CCW	CW	CCW	

■REVERSIBLE MOTOR

S9I40GS()-TCE S9I40GS()-T S9I40GS()-T1CE S9I40GS()-T1		S9R40GA()-T, S9R40GB()-T S9R40GA()-T1, S9R40GB()-T1 S9R40GC()-T, S9R40GD()-T S9R40GC()-T1, S9R40GD()-T1		S9R40GX()-T, S9R40GX()-TCE S9R40GX()-T1, S9R40GX()-T1CE		S9R40GA()-T(TP), S9R40GB()-T(TP), S9R40GC()-T(TP), S9R40GD()-T(TP), S9R40GA()-T1(TP), S9R40GB()-T1(TP), S9R40GC()-T1(TP), S9R40GD()-T1(TP), S9R40GA()-TCE, S9R40GB()-TCE, S9R40GC()-TCE S9R40GD()-TCE, S9R40GE()-T, S9R40GE()-TCE S9R40GA()-T1CE, S9R40GB()-T1CE, S9R40GC()-T1CE S9R40GD()-T1CE, S9R40GE()-T1, S9R40GE()-T1CE	
CW	CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW		

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



INDUCTION MOTOR - CONTINUOUS RATING

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load				Starting Torque		Capacitor (uF)	
							Current (A)	Speed (rpm)	Torque (kg-cm) (N-m)		(kg-cm)	(N-m)		
90	S9I60GA()-T S9I60GA()-T1	4	60	1 ø 110	60	Cont.	1.35	1600	3.80	0.380	4.80	0.480	15.0	
	S9I60GB()-T S9I60GB()-T1	4	60	1 ø 220	60	Cont.	0.68	1600	3.90	0.390	4.80	0.480	4.0	
	S9I60GC()-T S9I60GC()-T1	4	60	1 ø 100	50 60	Cont.	1.26 1.37	1300 1550	4.60 3.90	0.460 0.390	3.40	0.340	15.0	
	S9I60GD()-T S9I60GD()-T1	4	60	1 ø 200	50 60	Cont.	0.65 0.70	1300 1550	4.70 4.00	0.470 0.400	3.85	0.385	4.0	
	S9I60GX()-T S9I60GX()-T1 S9I60GX()-TCE S9I60GX()-T1CE	4	60	1 ø 220 1 ø 240	50	Cont.	0.47 0.50	1300	4.60 4.90	0.460 0.490	3.20 3.90	0.320 0.390	3.5	
	S9I60GU()-T S9I60GU()-T1 S9I60GU()-TCE S9I60GU()-T1CE	4	60	3 ø 200	50 60	Cont.	0.60 0.50	1300 1550	4.60 3.90	0.460 0.390	9.30 8.00	0.930 0.800	—	
	S9I60GT()-T S9I60GT()-T1 S9I60GT()-TCE S9I60GT()-T1CE	4	60	3 ø 220	50 60	Cont.	0.80 0.57	1350 1600	4.40 3.90	0.440 0.390	11.35 9.30	1.135 0.930	—	
	S9I60GS()-T S9I60GS()-T1 S9I60GS()-TCE S9I60GS()-T1CE	4	60	3 ø 380	50	Cont.	0.27	1300	4.60	0.460	8.25	0.825	—	
					60		0.24	1550	3.90	0.390	6.50	0.650		
					3 ø 400	50	Cont.	0.29	1300	4.70	0.470	9.30		0.930
						60		0.25	1550	4.00	0.400	7.35		0.735
					3 ø 415	50	Cont.	0.27	1350	4.60	0.460	9.95		0.995
						60		0.23	1600	3.80	0.380	7.50		0.750
	3 ø 440	50	Cont.	0.31	1350	4.70	0.470	10.75	1.075					
60		0.25		1600	3.90	0.390	8.40	0.840						

- ❖ CE marked at the end of the model name indicates that it is thermally protected type which has received CE with built-in TP.
- ❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S9I40GX, S9I40GX-T, S9I40GS-T 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'.
- ❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

REVERSIBLE MOTOR - 30MINUTES RATING

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load				Starting Torque		Capacitor (uF)
							Current (A)	Speed (rpm)	Torque (kg-cm) (N-m)		(kg-cm)	(N-m)	
90	S9R60GA()-T S9R60GA()-T1 S9R60GA()-T1(TP) S9R60GA()-T1(TP) S9R60GA()-TCE S9R60GA()-T1CE	4	60	1 ∅ 110	60	30min.	1.60	1600	3.80	0.380	7.00	0.700	25.0
	S9R60GB()-T S9R60GB()-T1 S9R60GB()-T1(TP) S9R60GB()-T1(TP) S9R60GB()-TCE S9R60GB()-T1CE	4	60	1 ∅ 220	60	30min.	0.75	1600	3.80	0.380	7.00	0.700	6.0
	S9R60GC()-T S9R60GC()-T1 S9R60GC()-T1(TP) S9R60GC()-T1(TP) S9R60GC()-TCE S9R60GC()-T1CE	4	60	1 ∅ 100	50 60	30min.	1.40 1.60	1250 1550	4.80 3.90	0.480 0.390	6.00	0.600	25.0
	S9R60GD()-T S9R60GD()-T1 S9R60GD()-T1(TP) S9R60GD()-T1(TP) S9R60GD()-TCE S9R60GD()-T1CE	4	60	1 ∅ 200	50 60	30min.	0.70 0.76	1250 1550	4.80 3.90	0.480 0.390	5.50	0.550	6.0
	S9R60GE()-T S9R60GE()-T1 S9R60GE()-TCE S9R60GE()-T1CE	4	60	1 ∅ 100 1 ∅ 115	50 60 60	30min.	1.40 1.60 1.30	1250 1550 1600	4.80 3.90 3.90	0.480 0.390 0.390	5.90 6.00	0.590 0.600	25.0 20.0
	S9R60GX()-T S9R60GX()-T1CE S9R60GX()-TCE S9R60GX()-T1CE	4	60	1 ∅ 220 1 ∅ 240	50	30min.	0.63 0.67	1250	4.80 5.00	0.480 0.500	5.90 6.30	0.590 0.630	5.0

- ❖ Appropriate capacitors shall be used according to the voltage for S9R60GE-T type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
- ❖ CE marked at the end of the model name indicates that it is thermally protected type which has received CE. S9R60GE-TCE is available only for 115V specification.
- ❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted. S9R60GE-T, S9R60GX-T is thermally protected type with TP mounted.
- ❖ Above data is measured with friction brake 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	12.2	14.6	20.3	24.3	30.4	36.5	40.5	45.6	54.8	65.7	73.0	82.5	99.0	119	132	165	198	200	200	200	200	200	200	200
S9KC□()	N-m	1.196	1.431	1.989	2.381	2.989	3.577	3.969	4.469	5.370	6.439	7.154	8.085	9.702	11.66	12.94	16.17	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60

60Hz

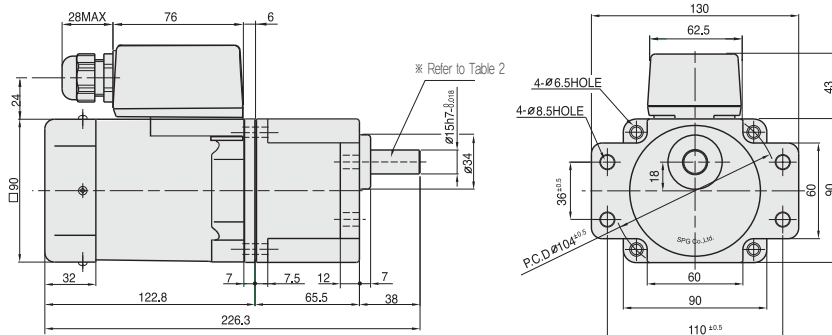
GEAR RATIO		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	kg-cm	9.72	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	106	132	158	177	200	200	200	200	200	200
S9KC□()-S	N-m	0.953	1.147	1.588	1.901	2.381	2.862	3.175	3.577	4.292	5.155	5.723	6.468	7.762	9.310	10.39	12.94	15.48	17.35	19.60	19.60	19.60	19.60	19.60	19.60

- ❖ 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 200 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'.

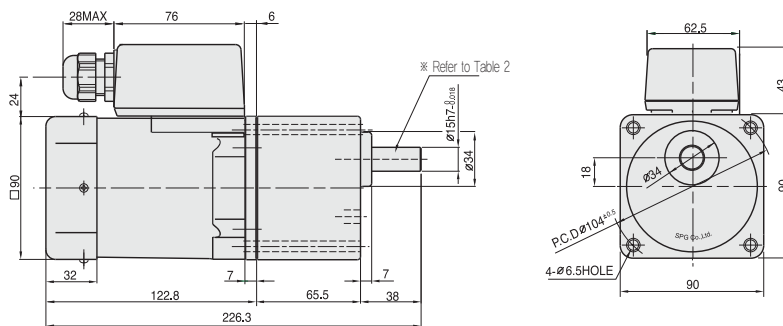
DIMENSIONS

+ GEARED MOTOR

* MOTOR MODEL : S9(I,R)60G□□-T
 * HEAD MODEL □ : S9□C3B□-S~S9□C200B□-S

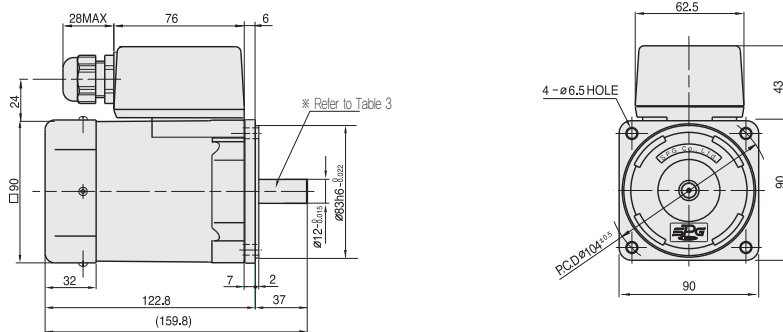


* HEAD MODEL : S9□C3B□~S9□C200B□



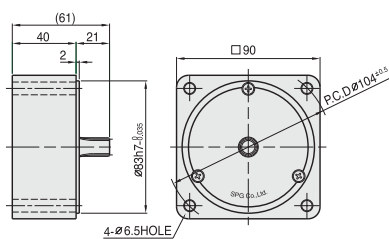
+ MOTOR

* MOTOR MODEL : S9(I,R)60□□□-T



+ INTER-DECIMAL GEAR HEAD

* MODEL : S9GX10B(H,L)-S



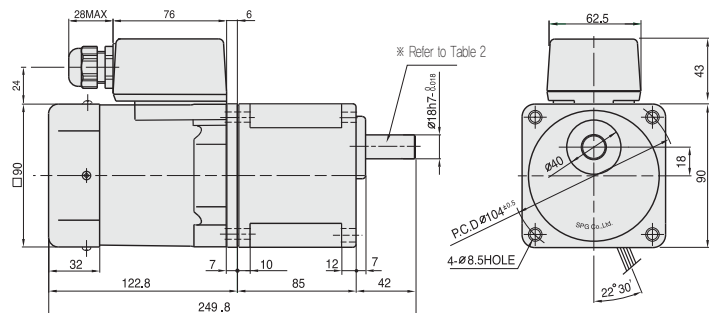
+ WEIGHT - (Table 1)

PART	WEIGHT(kg)	
MOTOR	2.60	
REVERSIBLE MOTOR	2.65	
DECIMAL GEAR HEAD	0.65	
GEAR HEAD	S9□C3B□ ~S9□C10B□	1.21
	S9□C12.5B□ ~S9□C20B□	1.30
	S9□C25B□ ~S9□C60B□	1.40
	S9□C75B□ ~S9□C200B□	1.45

DIMENSIONS

+ GEARED MOTOR

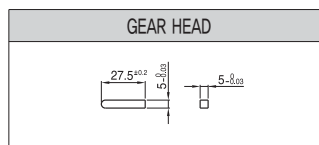
※ MOTOR MODEL : S9(I,R)60G□H-T
 ※ HEAD MODEL : S9□D3B-S9□D200B



+ WEIGHT - (Table 2)

PART		WEIGHT(kg)
MOTOR		2,60
GEAR HEAD	S9□D3B ~S9□D10B	1,65
	S9□D12.5B ~S9□D20B	1,80
	S9□D25B ~S9□D60B	1,90
	S9□D75B ~S9□D200B	1,95

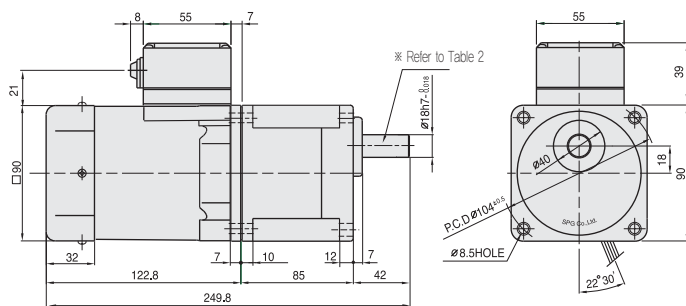
+ KEY SPEC



DIMENSIONS

+ GEARED MOTOR

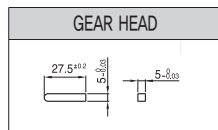
※ MOTOR MODEL : S9(I,R)60G□H-T1
 ※ HEAD MODEL : S9□D3B-S9□D200B



+ WEIGHT - (Table 1)

PART		WEIGHT(kg)
MOTOR		2,55
GEAR HEAD	S9□D3B ~S9□D10B	1,65
	S9□D12.5B ~S9□D20B	1,80
	S9□D25B ~S9□D60B	1,90
	S9□D75B ~S9□D200B	1,95

+ KEY SPEC



+ SPEC for output shaft of gearhead - (Table 2)

MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF
STRAIGHT TYPE		D-CUT TYPE		KEY TYPE	
S9SD3B ~S9SD200B		S9DD3B ~S9DD200B		S9KDB ~S9KD200B	

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
	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
S9KD□B	kg-cm	12.2	14.6	20.3	24.3	30.4	36.5	40.5	45.6	54.8	65.7	73.0	82.5	99.0	119	132	165	198	221	266	295	300	300	300	300
	N·m	1.196	1.431	1.989	2.381	2.989	3.577	3.969	4.469	5.370	6.439	7.154	8.085	9.702	11.66	12.94	16.17	19.40	21.67	26.09	28.93	29.42	29.42	29.42	29.42

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
	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
S9KD□B	kg-cm	9.72	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	106	132	158	177	212	236	283	300	300	300
	N·m	0.953	1.147	1.588	1.901	2.381	2.862	3.175	3.577	4.292	5.155	5.723	6.468	7.762	9.310	10.39	12.94	15.48	17.35	20.79	23.14	27.75	29.42	29.42	29.42

- ❖ 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 300 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.
- ❖ Only "H" type is applicable. Please use "H" type motor.

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor. Circled number is the terminal number inside terminal box.

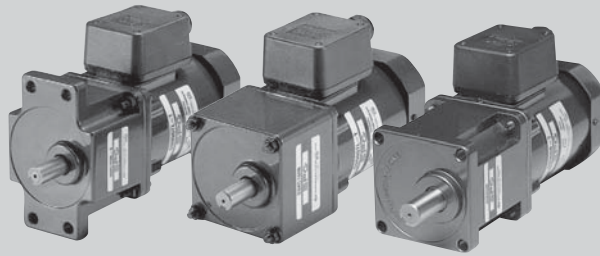
INDUCTION MOTOR

S9160GA()-T S9160GB()-T S9160GC()-T S9160GD()-T S9160GA()-T1 S9160GB()-T1 S9160GC()-T1 S9160GD()-T1		S9160GX()-T S9160GX()-TCE S9160GX()-T1 S9160GX()-T1CE		S9160GU()-T S9160GT()-T S9160GU()-T1 S9160GT()-T1		S9160GU()-TCE S9160GT()-TCE S9160GU()-T1CE S9160GT()-T1CE	
CW	CCW	CW,CCW	CW	CCW	CW	CCW	

REVERSIBLE MOTOR

S9160GS()-TCE S9160GS()-T S9160GS()-T1CE S9160GS()-T1		S9R60GA()-T, S9R60GB()-T S9R60GA()-T1, S9R60GB()-T1 S9R60GC()-T, S9R60GD()-T S9R60GC()-T1, S9R60GD()-T1		S9R60GX()-T, S9R60GX()-TCE S9R60GX()-T1, S9R60GX()-T1CE		S9R60GA()-T(TP), S9R60GB()-T(TP), S9R60GC()-T(TP), S9R60GD()-T(TP), S9R60GA()-T1(TP), S9R60GB()-T1(TP), S9R60GC()-T1(TP), S9R60GD()-T1(TP), S9R60GA()-TCE, S9R60GB()-TCE, S9R60GC()-TCE S9R60GD()-TCE, S9R60GE()-T, S9R60GE()-TCE S9R60GA()-T1CE, S9R60GB()-T1CE, S9R60GC()-T1CE S9R60GD()-T1CE, S9R60GE()-T1, S9R60GE()-T1CE	
CW	CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW		

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



90W

INDUCTION MOTOR, REVERSIBLE MOTOR

□ 90 mm TERMINAL BOX TYPE

INDUCTION MOTOR - CONTINUOUS RATING

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load				Starting (kg-cm)	Torque (N-m)	Capacitor (uF)
							Current (A)	Speed (rpm)	Torque (kg-cm) (N-m)				
90	S9190GA()-T S9190GA()-T1	4	90	1 ∅ 110	60	Cont.	2.00	1600	5.60	0.560	5.70	0.570	25.0
	S9190GB()-T S9190GB()-T1	4	90	1 ∅ 220	60	Cont.	1.00	1600	5.60	0.560	5.70	0.570	6.0
	S9190GC()-T S9190GC()-T1	4	90	1 ∅ 100	50 60	Cont.	1.80 2.00	1300 1550	6.90 5.80	0.690 0.580	5.00	0.500	25.0
	S9190GD()-T S9190GD()-T1	4	90	1 ∅ 200	50 60	Cont.	0.90 1.00	1300 1550	6.90 5.80	0.690 0.580	5.00	0.500	6.0
	S9190GX()-T S9190GX()-T1 S9190GX()-TCE S9190GX()-T1CE	4	90	1 ∅ 220 1 ∅ 240	50	Cont.	0.68 0.72	1300	6.90 7.20	0.690 0.720	4.80 5.20	0.480 0.520	5.0
	S9190GU()-T S9190GU()-T1 S9190GU()-TCE S9190GU()-T1CE	4	90	3 ∅ 200	50 60	Cont.	0.63 0.60	1300 1550	6.90 6.00	0.690 0.600	10.60 8.90	1.060 0.890	—
	S9190GT()-T S9190GT()-T1 S9190GT()-TCE S9190GT()-T1CE1	4	90	3 ∅ 220	50 60	Cont.	0.68 0.55	1350 1600	6.80 5.70	0.680 0.570	13.00 10.50	1.300 1.050	—
	S9190GS()-T S9190GS()-T1 S9190GS()-TCE S9190GS()-T1CE	4	90	3 ∅ 380	50	Cont.	0.32	1300	6.80	0.680	10.55	1.055	—
					60		0.30	1550	5.70	0.570	8.20	0.820	
					50	Cont.	0.35	1300	6.90	0.690	11.70	1.170	
					60		0.32	1550	5.80	0.580	8.90	0.890	
					50	Cont.	0.33	1350	6.80	0.680	12.00	1.200	
					60		0.29	1600	5.70	0.570	9.50	0.950	
					50	Cont.	0.35	1350	6.90	0.690	13.30	1.330	
					60		0.31	1600	5.80	0.580	10.50	1.050	

❖ CE marked at the end of the model name indicates that it is thermally protected type which has received CE with built-in TP.

❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.

S9140GX, S9140GX-T, S9140GS-T 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'.

❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

REVERSIBLE MOTOR-30MINUTES RATING

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load				Starting Torque		Capacitor (uF)
							Current (A)	Speed (rpm)	Torque		(kg-cm)	(N-m)	
									(kg-cm)	(N-m)			
90	S9R90GA()-T S9R90GA()-T1 S9R90GA()-T1(TP) S9R90GA()-TCE S9R90GA()-T1CE	4	90	1 ∅ 110	60	30min.	2.25	1550	5.80	0.580	8.50	0.850	30.0
	S9R90GB()-T S9R90GB()-T1 S9R90GB()-T1(TP) S9R90GB()-TCE S9R90GB()-T1CE	4	90	1 ∅ 220	60	30min.	1.00	1550	5.80	0.580	8.50	0.850	7.0
	S9R90GC()-T S9R90GC()-T1 S9R90GC()-T1(TP) S9R90GC()-TCE S9R90GC()-T1CE	4	90	1 ∅ 100	50	30min.	2.10	1200	7.50	0.750	6.50	0.650	30.0
	60				2.25		1500	6.00	0.600				
	S9R90GD()-T S9R90GD()-T1 S9R90GD()-T1(TP) S9R90GD()-TCE S9R90GD()-T1CE	4	90	1 ∅ 200	50	30min.	0.90	1200	7.50	0.750	6.50	0.650	7.0
	60				1.00		1500	6.00	0.600				
	S9R90GE()-T S9R90GE()-T1 S9R90GE()-TCE S9R90GE()-T1CE	4	90	1 ∅ 100	50	30min.	1.80	1200	7.50	0.750	6.50	0.650	30.0
	60				1.90		1500	6.00	0.600				
	1 ∅ 115				60		1.80	1550	6.00	0.600			
	S9R90GX()-T S9R90GX()-T1 S9R90GX()-TCE S9R90GX()-T1CE	4	90	1 ∅ 220	50	30min.	0.82	1250	7.20	0.720	6.50	0.650	6.0
	1 ∅ 240						0.86		7.40	0.740			

- ❖ Appropriate capacitors shall be used according to the voltage for S9R60GE-T type since the size of the capacitor differs by different voltages. Malfunction may occur when not used properly. Capacitor for 115V will be delivered otherwise the required voltage is informed.
- ❖ CE marked at the end of the model name indicates that it is thermally protected type which has received CE.
S9R60GE-TCE is available only for 115V specification.
- ❖ TP marked at the end of the model name indicates that it is standard motor with Thermal Protector mounted.
S9R60GE-T, S9R60GX-T is thermally protected type with TP mounted.
- ❖ Above data is measured with friction brake 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
S9KC□B()	kg-cm	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	110	124	149	178	198	200	200	200	200	200	200	200	200	200
S9KC□B()-S	N-m	1.784	2.146	2.979	3.577	4.469	5.361	5.958	6.703	8.046	9.663	10.78	12.15	14.60	17.44	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60

60Hz

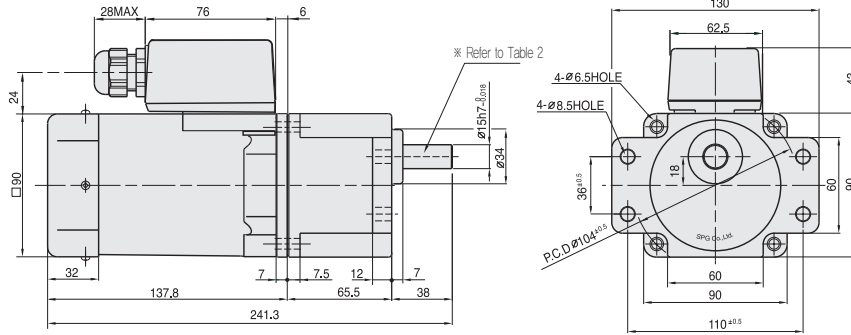
GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	
	MODEL	rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
S9KC□B()	kg-cm	14.6	17.5	24.3	29.2	36.5	43.7	48.6	54.8	65.7	78.8	87.6	99.0	119	143	158	198	200	200	200	200	200	200	200	200
S9KC□B()-S	N-m	1.431	1.715	2.381	2.862	3.577	4.675	4.763	5.370	6.439	7.722	8.585	9.702	11.66	14.01	15.48	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60

- ❖ 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 200 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'.

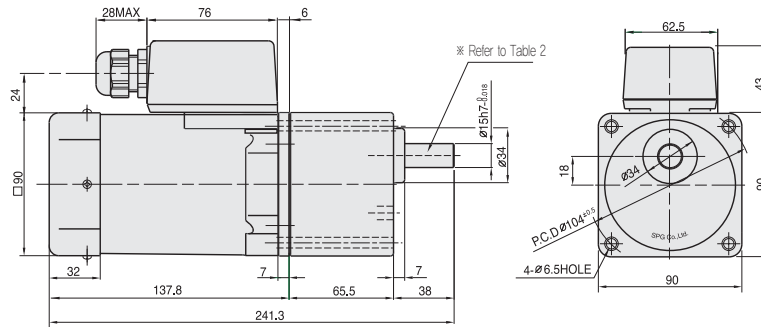
DIMENSIONS

+ GEARED MOTOR

* MOTOR MODEL : S9(I,R)90G□□-T
 * HEAD MODEL : S9□C3B□-S~S9□C200B□-S

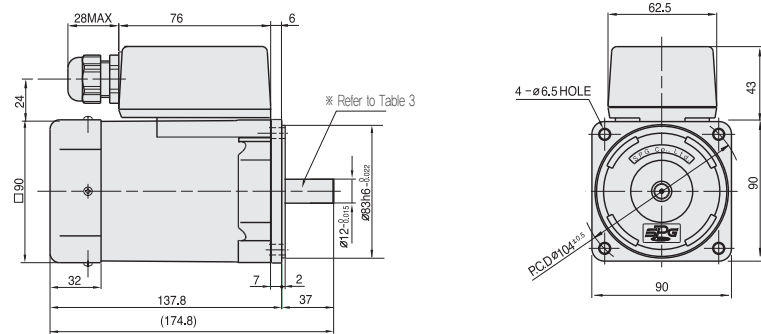


* HEAD MODEL □ : S9□C3B□~S9□C200B□



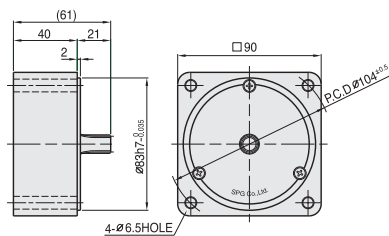
+ MOTOR

* MOTOR MODEL : S9(I,R)90□□□-T



+ INTER-DECIMAL GEAR HEAD

* MODEL : S9GX10B(H,L)-S



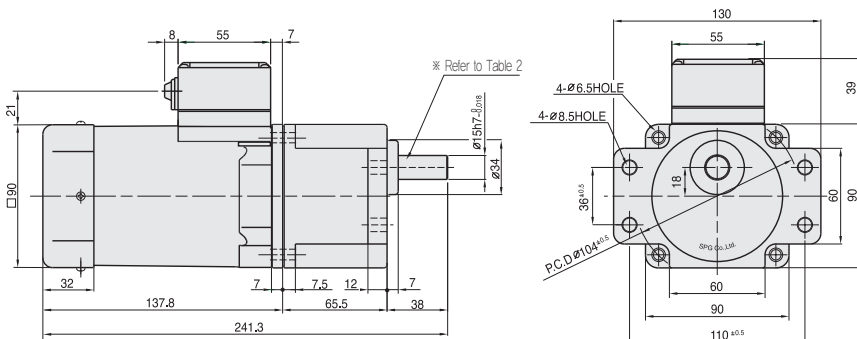
+ WEIGHT - (Table1)

PART	WEIGHT(kg)	
MOTOR	3.10	
REVERSIBLE MOTOR	3.15	
DECIMAL GEAR HEAD	0.65	
GEAR HEAD	S9□C3B□ ~S9□C10B□	1.21
	S9□C12.5B□ ~S9□C20B□	1.30
	S9□C25B□ ~S9□C60B□	1.40
	S9□C75B□ ~S9□C200B□	1.45

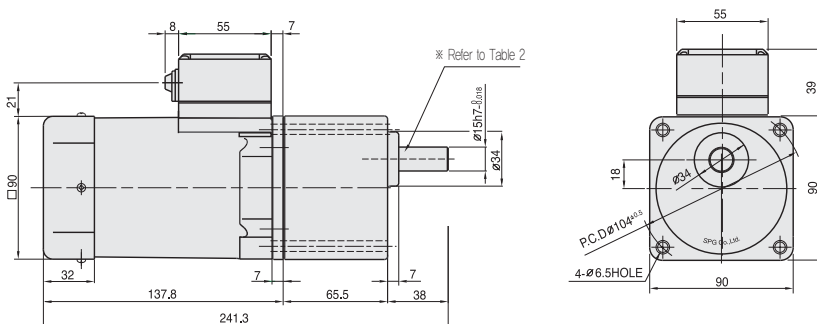
DIMENSIONS

+ GEARED MOTOR

* MOTOR MODEL : S9(I,R)90G□□-T1
 * HEAD MODEL : S9□C3B□-S~S9□C200B□-S

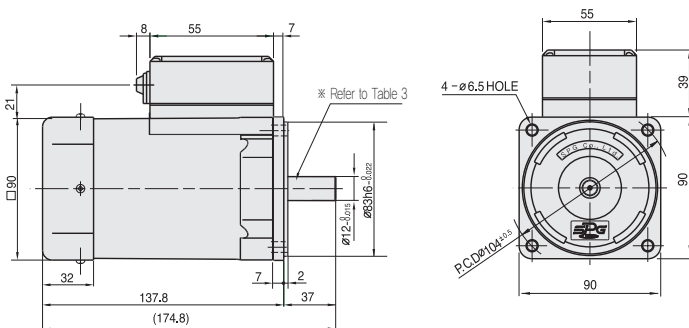


* HEAD MODEL : S9□C3B□~S9□C200B□



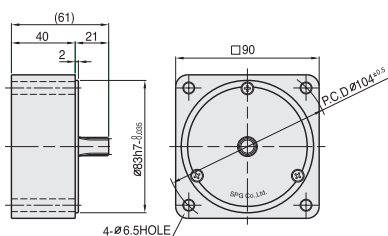
+ MOTOR

* MOTOR MODEL : S9(I,R)90□□□-T1



+ INTER-DECIMAL GEAR HEAD

* MODEL : S9GX10B(H,L)-S



+ WEIGHT - (Table 1)

PART	WEIGHT(kg)	
MOTOR	3.05	
REVERSIBLE MOTOR	3.10	
DECIMAL GEAR HEAD	0.65	
GEAR HEAD	S9□C3B□ ~S9□C10B□	1.21
	S9□C12.5B□ ~S9□C20B□	1.30
	S9□C25B□ ~S9□C60B□	1.40
	S9□C75B□ ~S9□C200B□	1.45

+ KEY SPEC

GEAR HEAD	MOTOR

+ SPEC for output shaft of gearhead - (Table 2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S9SC3B□ ~S9SC200B□	
D-CUT TYPE	
S9DC3B□ ~S9DC200B□	
KEY TYPE	
S9KC3B□ ~S9KC200B□	

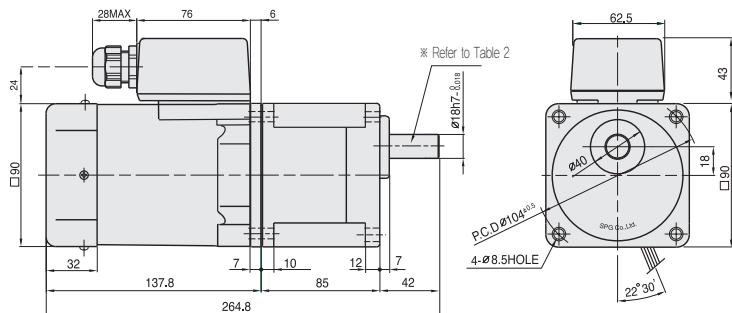
+ SPEC for output shaft of motor - (Table 3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9(I,R)90G□□-T S9(I,R)90G□□-T1	
STRAIGHT TYPE	
S9(I,R)90S□-T S9(I,R)90S□-T1	
D-CUT TYPE	
S9(I,R)90D□-T S9(I,R)90D□-T1	
KEY TYPE	
S9(I,R)90K□-T S9(I,R)90K□-T1	

DIMENSIONS

+ GEARED MOTOR

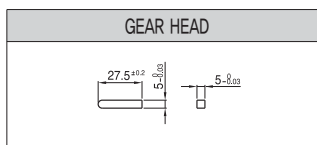
* MOTOR MODEL : S9(I,R)90G□H-T
 * HEAD MODEL : S9□D3B~S9□D200B



+ WEIGHT - (Table 2)

PART		WEIGHT(kg)
MOTOR		3.10
GEAR HEAD	S9□D3B ~S9□D10B	1.65
	S9□D12.5B ~S9□D20B	1.80
	S9□D25B ~S9□D60B	1.90
	S9□D75B ~S9□D200B	1.95

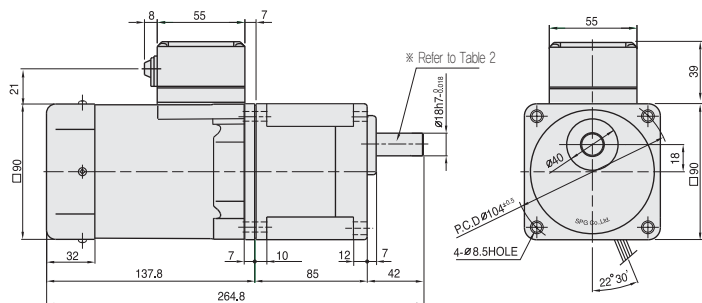
+ KEY SPEC



DIMENSIONS

+ GEARED MOTOR

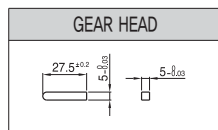
* MOTOR MODEL : S9(I,R)90G□H-T1
 * HEAD MODEL : S9□D3B~S9□D200B



+ WEIGHT - (Table 1)

PART		WEIGHT(kg)
MOTOR		3.05
GEAR HEAD	S9□D3B ~S9□D10B	1.65
	S9□D12.5B ~S9□D20B	1.80
	S9□D25B ~S9□D60B	1.90
	S9□D75B ~S9□D200B	1.95

+ KEY SPEC



+ SPEC for output shaft of gearhead - (Table 2)

MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF	MODEL	TYPES OF OUTPUT SHAF
STRAIGHT TYPE		D-CUT TYPE		KEY TYPE	
S9SD3B ~S9SD200B		S9DD3B ~S9DD200B		S9KDB ~S9KD200B	

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	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	110	124	149	178	198	248	297	300	300	300	300	300	300	300
S9KD□B	N·m	1.784	2.146	2.979	3.577	4.469	5.361	5.958	6.703	8.046	9.663	10.78	12.15	14.60	17.44	19.40	24.32	29.13	29.42	29.42	29.42	29.42	29.42	29.42	29.42

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	14.6	17.5	24.3	29.2	36.5	43.7	48.6	54.8	65.7	78.8	87.6	99.0	119	143	158	198	238	266	300	300	300	300	300	300
S9KD□B	N·m	1.431	1.715	2.381	2.862	3.577	4.675	4.763	5.370	6.439	7.722	8.585	9.702	11.66	14.01	15.48	19.40	23.34	26.09	29.42	29.42	29.42	29.42	29.42	29.42

- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque (in small letters to be consistent with others) of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 300 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.
- ❖ Only "H" type is applicable. Please use "H" type motor.

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor. Circled number is the terminal number inside terminal box.

■ INDUCTION MOTOR

S9I90GA()-T S9I90GB()-T S9I90GC()-T S9I90GD()-T S9I90GA()-T1 S9I90GB()-T1 S9I90GC()-T1 S9I90GD()-T1		S9I90GX()-T S9I90CX()-TCE S9I90GX()-T1 S9I90CX()-T1CE		S9I90GU()-T S9I90GT()-T S9I90GU()-T1 S9I90GT()-T1		S9I90GU()-TCE S9I90GU()-T1CE		S9I90GT()-TCE S9I90GT()-T1CE	
CW		CCW		CW,CCW		CW		CCW	

■ REVERSIBLE MOTOR

S9I90GS()-TCE S9I90GS()-T S9I90GS()-T1CE S9I90GS()-T1		S9R90GA()-T, S9R90GB()-T S9R90GA()-T1, S9R90GB()-T1 S9R90GC()-T, S9R90GD()-T S9R90GC()-T1, S9R90GD()-T1		S9R90CX()-T, S9R90CX()-TCE S9R90CX()-T1, S9R90CX()-T1CE		S9R90GA()-T(TP), S9R90GB()-T(TP), S9R90GC()-T(TP), S9R90GD()-T(TP), S9R90GA()-T1(TP), S9R90GB()-T1(TP), S9R90GC()-T1(TP), S9R90GD()-T1(TP), S9R90GA()-TCE, S9R90GB()-TCE, S9R90GC()-TCE S9R90GD()-TCE, S9R90GE()-T, S9R90GE()-TCE S9R90GA()-T1CE, S9R90GB()-T1CE, S9R90GC()-T1CE S9R90GD()-T1CE, S9R90GE()-T1, S9R90GE()-T1CE	
CW		CCW		CW,CCW		CW,CCW	

Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.



150W

INDUCTION MOTOR

□ 90mm TERMINAL BOX TYPE

INDUCTION MOTOR - CONTINUOUS RATING

SIZE mm sq.	Type	Poles	Output (W)	Voltage (V)	Frequency (Hz)	Duty	Rated Load				Starting Torque (kg-cm)	Torque (N-m)	Capacitor (uF)					
							Current (A)	Speed (rpm)	Torque (kg-cm) (N-m)									
90	S9I150GU-T S9I150GU-T1 S9I150GU-TCE S9I150GU-T1CE	4	150	3 ∅ 200	50	Cont.	1.0	1250	11.70	1.170	18.0	1.800	-					
					60		0.9	1500	9.70	0.970	15.0	1.500						
					S9I150GT-T S9I150GT-T1 S9I150GT-TCE S9I150GT-T1CE	4	150	3 ∅ 220	50	Cont.	1.0	1300		11.30	1.130	22.0	2.200	-
									60		0.9	1550		9.40	0.940	19.0	1.900	
	S9I150GS-T S9I150GS-T1 S9I150GS-TCE S9I150GS-T1CE	4	150	3 ∅ 380	50	Cont.	0.46	1250	11.70	1.170	18.00	1.800	-					
					60		0.42	1500	9.70	0.970	15.00	1.500						
				3 ∅ 400	50	Cont.	0.49	1250	11.70	1.170	19.00	1.900						
					60		0.43	1500	9.70	0.970	16.00	1.900						

- ❖ Above model is a TP embeded and thermally protected type.
- ❖ CE marked at the end of the model name indicates that it is thermally protected type which has received CE with built-in TP.
- ❖ Only "H" type is applicable.
- ❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

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
		rpm	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8
S9KH□B	kg-cm	23.1	27.7	38.5	46.2	57.7	69.3	77.0	86.6	104	125	139	156	187	224	249	300	300	300	300	300	300	300	300	300
	N·m	2.26	2.72	3.77	4.53	5.66	6.79	7.55	8.49	10.24	12.29	13.65	15.36	18.34	21.97	24.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

60Hz

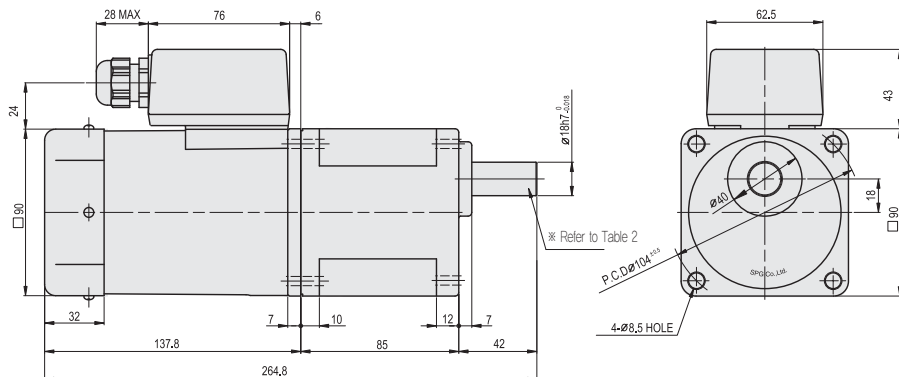
MODEL	GEAR RATIO	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
		rpm	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
S9KH□B	kg-cm	23.2	27.8	38.7	46.4	58.0	69.6	77.4	87.0	104	125	139	156	188	225	250	300	300	300	300	300	300	300	300	300
	N·m	2.28	2.73	3.79	4.55	5.69	6.83	7.59	8.53	10.24	12.29	13.65	15.36	18.43	22.06	24.52	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42	29.42

- ❖ The code in □ of gearhead model is for gear ratio.
- ❖ It is the permissible torque (in small letters to be consistent with others) of the assembled motor and gearhead.
- ❖ The permissible torque of the motor and inter-decimal gearhead is 200 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.
- ❖ For a three-phase 380V~440V motor, be cautious when using the inverter. When inverter is used, the insulation of winding becomes hot and may cause damage to motor.

DIMENSIONS

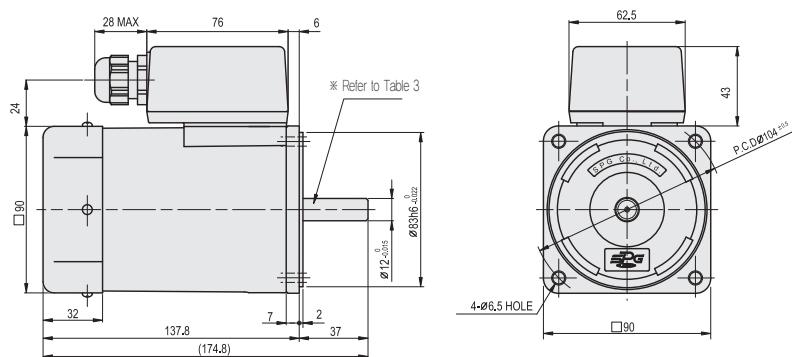
+ GEARED MOTOR

※ MOTOR MODEL : S9I150G□-T
 ※ HEAD MODEL : S9□H3B~S9□H200B



+ MOTOR

※ MOTOR MODEL : S9I150□□-T



+ WEIGHT - (Table 1)

PART		WEIGHT(kg)
MOTOR		3.10
GEAR HEAD	S9□H3B ~S9□H10B	1.65
	S9□H12.5B ~S9□H20 B	1.80
	S9□H25B ~S9□H60B	1.90
	S9□H75B ~S9□H200B	1.95

+ KEY SPEC

GEAR HEAD	MOTOR

+ SPEC for output shaft of gearhead - (Table 2)

MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S9SH3B ~S9SH200B	
D-CUT TYPE	
S9DH3B ~S9DH200B	
KEY TYPE	
S9KH3B ~S9KH200B	

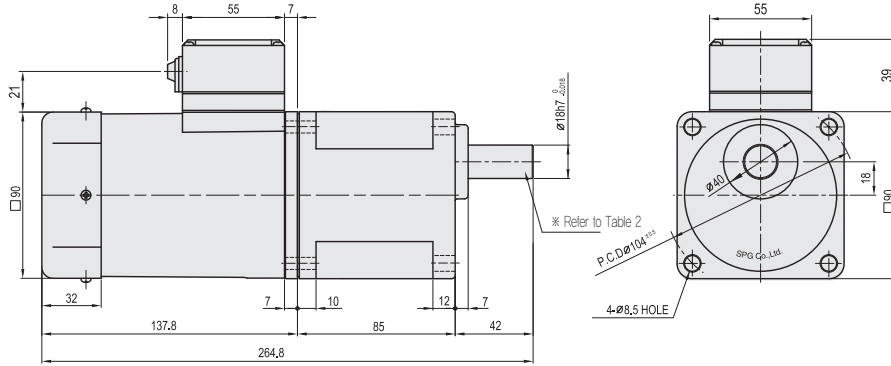
+ SPEC for output shaft of motor - (Table 3)

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9I150G□-T	
STRAIGHT TYPE	
S9I150S□-T	
D-CUT TYPE	
S9I150D□-T	
KEY TYPE	
S9I150K□-T	

DIMENSIONS

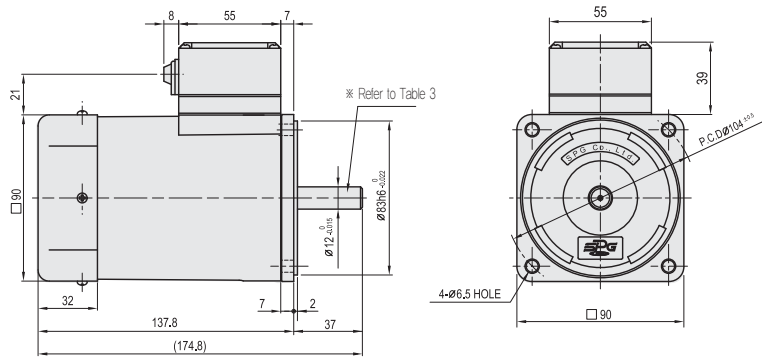
+ GEARED MOTOR

* MOTOR MODEL : S9I150G□-T1
 * HEAD MODEL : S9□H3B~S9□H200B



+ MOTOR

* MOTOR MODEL : S9I150□□-T1



+ WEIGHT - (Table 1)

PART		WEIGHT(kg)
MOTOR		3.05
GEAR HEAD	S9□H3B ~S9□H10B	1.65
	S9□H12.5B ~S9□H20B	1.80
	S9□H25B ~S9□H60B	1.90
	S9□H75B ~S9□H200B	1.95

+ KEY SPEC

GEAR HEAD	MOTOR

+ SPEC for output shaft of gearhead - (Table 2)

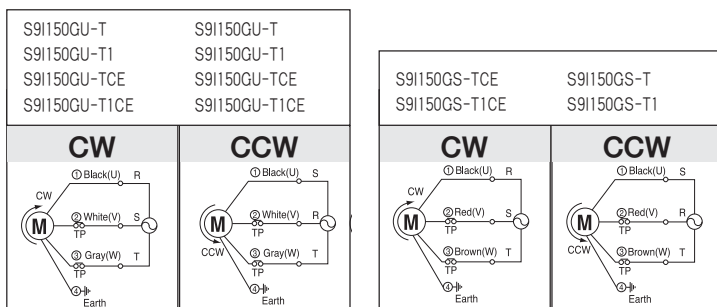
MODEL	TYPES OF OUTPUT SHAFT
STRAIGHT TYPE	
S9SH3B ~S9SH200B	
D-CUT TYPE	
S9DH3B ~S9DH200B	
KEY TYPE	
S9KH3B ~S9KH200B	

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

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9I150G□-T1	
STRAIGHT TYPE	
S9I150S□-T1	
D-CUT TYPE	
S9I150D□-T1	
KEY TYPE	
S9I150K□-T1	

SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.
Circled number is the terminal number inside terminal box.



Change the direction of motor rotation only after the motor stops completely. If an attempt is made to change the direction of rotation while the motor is running, the motor may ignore the reversing command or change its direction of rotation after some delay.