

# Powermec



# 40W

## ELECTROMAGNETIC BRAKE MOTOR

□ 90mm LEAD WIRE TYPE

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	S9R40GA( )-E S9R40GA( )-E(TP) S9R40GA( )-ECE	4	40	1 ∅ 110	60	30min.	1.00	1600	2.50	0.250	4.00	0.400	15.0	
	S9R40GB( )-E S9R40GB( )-E(TP) S9R40GB( )-ECE	4	40	1 ∅ 220	60	30min.	0.48	1600	2.50	0.250	4.00	0.400	3.5	
	S9R40GC( )-E S9R40GC( )-E(TP) S9R40GC( )-ECE	4	40	1 ∅ 100	50	30min.	0.85	1300	3.10	0.310	3.50	0.350	15.0	
				60	1.00		1550	2.60	0.260					
	S9R40GD( )-E S9R40GD( )-E(TP) S9R40GD( )-ECE	4	40	1 ∅ 200	50	30min.	0.40	1300	3.10	0.310	3.35	0.335	3.5	
				60	0.48		1550	2.60	0.260					
	S9R40GE( )-E S9R40GE( )-ECE	4	40	1 ∅ 100	50	30min.	0.85	1300	3.10	0.310	3.45	0.345	15.0	
				60	1.00		1550	2.60	0.260					
				1 ∅ 115	60		0.86	1600	2.60	0.260			12.0	
	S9R40GX( )-E S9R40GX( )-ECE	4	40	1 ∅ 220 1 ∅ 240	50	30min.	0.40	1250	3.20	0.320	3.30	0.330	3.0	
					0.43		3.40		0.340	4.00	0.400			
	S9I40GU( )-E S9I40GU( )-ECE	4	40	3 ∅ 200	50	Cont.	0.36	1300	3.10	0.310	6.30	0.630	—	
				60	0.33		1550	2.60	0.260	5.20	0.520			
	S9I40GT( )-E S9I40GT( )-ECE	4	40	3 ∅ 220	50	Cont.	0.39	1350	3.00	0.300	7.60	0.760	—	
				60	0.33		1600	2.50	0.250	6.10	0.610			
	S9I40GS( )-E S9I40GS( )-ECE	4	40	3 ∅ 380	50	Cont.	0.21	1300	3.20	0.320	6.30	0.630	—	
					60		0.19	1550	2.70	0.270	4.85	0.485		
					3 ∅ 400	50	Cont.	0.21	1300	3.30	0.330	6.90		0.690
					60	0.19		1550	2.80	0.280	5.25	0.525		
					3 ∅ 415	50	Cont.	0.21	1350	3.10	0.310	7.30		0.730
60					0.19	1600		2.60	0.260	5.70	0.570			
3 ∅ 440					50	Cont.	0.21	1350	3.20	0.320	8.20	0.820		
60					0.19		1600	2.70	0.270	6.30	0.630			

- ❖ S9R40GE-E is UL approved(UL FILE NO. E172720) thermally protected type.
- ❖ Appropriate capacitors shall be used according to the voltage for S9R40GE-E 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 model name indicates that it is thermally protected type which has received CE with built-in TP.  
S9R40GE( )-ECE 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.  
S9R40GE-E, S9R40GX-E is thermally protected type with TP mounted.
- ❖ Above data is measured with brake removed from electromagnetic brake motor.
- ❖ ( ) 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.

## 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
S9KB□B( )	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
	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

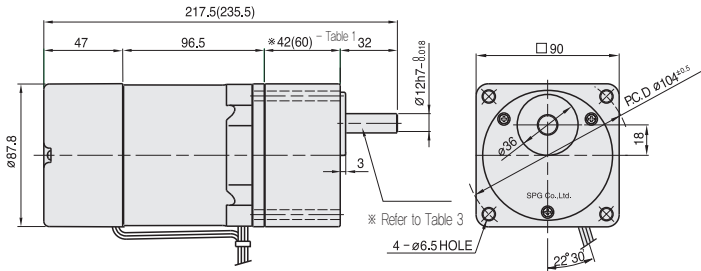
## 60Hz

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
S9KB□B( )	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
	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'.

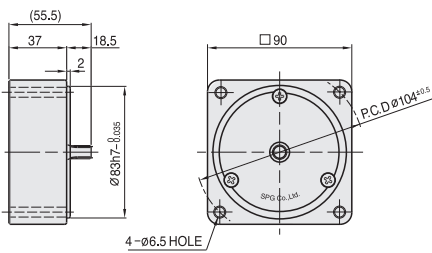
# DIMENSIONS

**GEARED MOTOR** \* MOTOR MODEL : S9R40G□□-E  
 \* HEAD MODEL : S9□B3□□~S9□B200□□

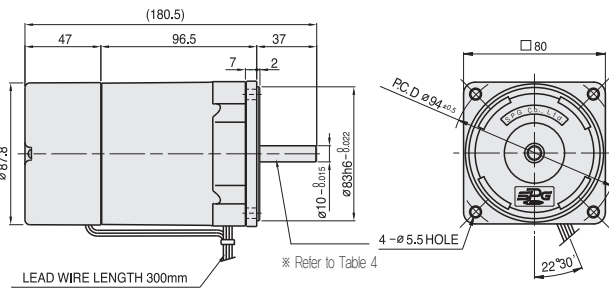


**INTER-DECIMAL GEAR HEAD**

\* MODEL : S9GX10B(H,L)



**MOTOR** \* MOTOR MODEL : S9R40□□□-E



**SPEC for output shaft of gearhead - (Table3)**

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

**\*26(35) - (Table1)**

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

**WEIGHT - (Table2)**

PART	WEIGHT(kg)	
MOTOR	2.74	
DECIMAL GEAR HEAD	0.59	
GEAR HEAD	S9□B3□□ ~S9□B18□□	0.73
	S9□B20□□ ~S9□B40□□	1.03
	S9□B50□□ ~S9□B200□□	1.13

**KEY SPEC**

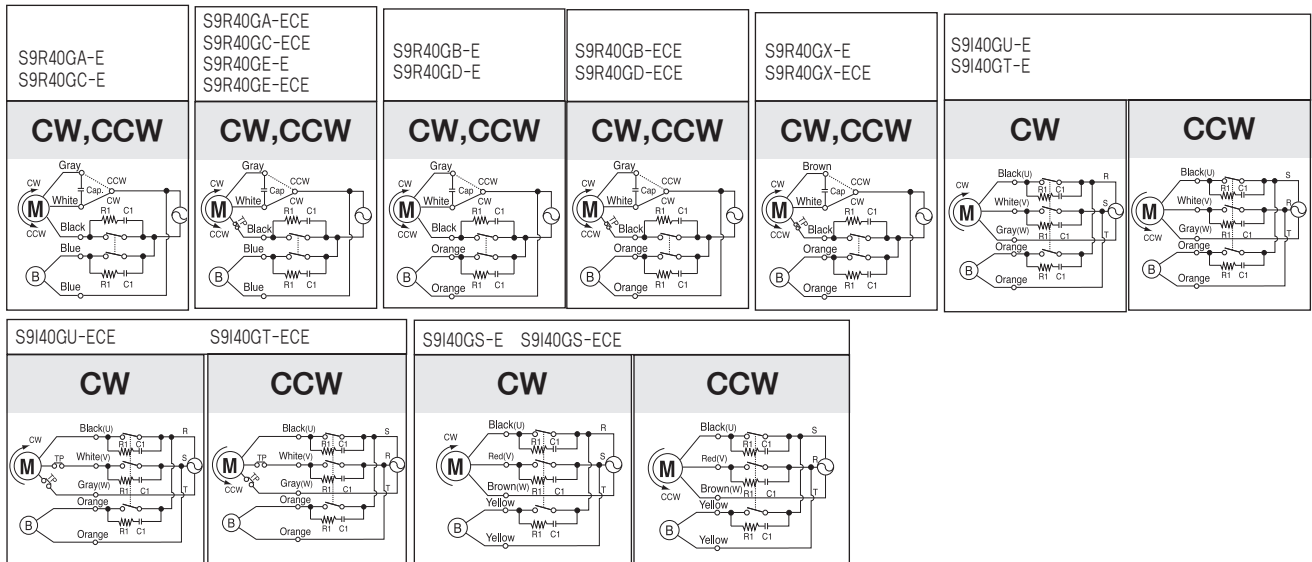
GEAR HEAD	MOTOR

**SPEC for output shaft of motor - (Table4)**

MODEL	TYPES OF OUTPUT SHAFT
GEAR TYPE	
S9R40G□□-E	
STRAIGHT TYPE	
S9R40S□□-E	
D-CUT TYPE	
S9R40D□□-E	
KEY TYPE	
S9R40K□□-E	

# SCHEMATIC DIAGRAMS

The direction of motor rotation is as viewed from the front shaft end of the motor.



R<sub>1</sub> = 10 ~ 200 Ω (Min. 1/4W) C<sub>1</sub> = 0.1 ~ 0.33 μF (AC125WV or AC250WV)