

B AC Motors

S.C. Induction Motor 180W (□90mm)

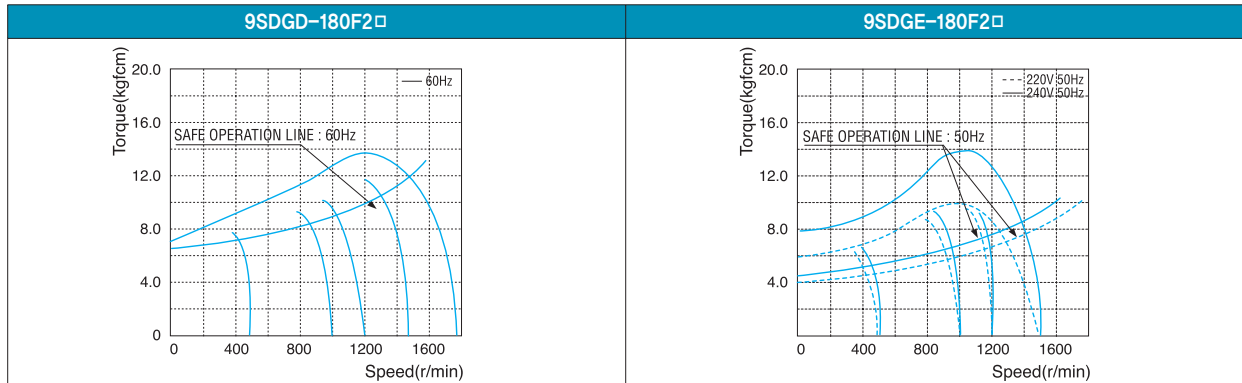
180W Speed Control Induction Motor 180W(□90mm)

Motor Specification

Model 9SDG*-180F2□: Gear Type Shaft 9SDD*-180F2: D-Cut Type Shaft 9SDK*-180F2: Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque		Permissible Torque				Capacitor μF / VAC
							kgfcm	N.m	1200r/min		90r/min		
									kgfcm	N.m	kgfcm	N.m	
9SDGD-180F2□	180	1ø220	60	4	Cont.	90-1700	8.40	0.840	10.00	1.000	6.60	0.660	8.0 / 400
9SDGE-180F2□	180	1ø220	50	4	Cont.	90-1400	6.20	0.620	10.00	1.000	6.60	0.660	8.0 / 400
		7.10					0.710	12.00	1.200	7.50	0.750		

- 1) Enter the phase & voltage code in the place * and enter the model type of attaching Gearbox in the box (□) within the motor model name.
- 2) All models contain a built-in thermal protector.
- 3) Gear Type Shaft are for attaching Gearbox and D-Cut & Key Type Shaft are for using motor only.

Speed-Torque Characteristics



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	6	9	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200		
9SDG□ -180F2H	9HBK□ BH	1200	220	60	kgfcm	24.9	29.9	49.8	74.7	93.8	112.5	135.0	136.0	170.0	204.0	244.8	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
			N.m	2.44	2.93	4.88	7.32	9.19	11.03	13.23	13.33	16.66	19.99	23.99	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		220/240	50	kgfcm	29.9	35.9	59.8	89.6	124.5	149.4	179.28	199.2	249	298.8	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	2.93	3.51	5.86	8.78	12.20	14.64	17.57	19.52	24.40	29.28	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
	9HFK□ BH	90	220	60	kgfcm	16.4	19.7	32.9	49.3	61.9	74.3	89.1	89.8	112.2	134.6	161.6	224.4	269.3	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
			N.m	1.61	1.93	3.22	4.83	6.06	7.28	8.73	8.80	11.00	13.19	15.83	21.99	26.39	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		220/240	50	kgfcm	18.7	22.4	37.4	56.0	70.3	84.4	101.3	102.0	127.5	153.0	183.6	255.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	1.83	2.20	3.66	5.49	6.89	8.27	9.92	10.00	12.50	14.99	17.99	24.99	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	

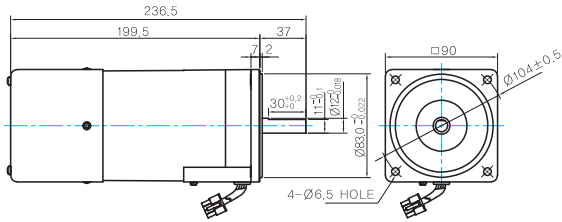
- 1) Enter the phase & voltage code in the box (□) within the motor model name.
- 2) Enter the gear ratio in the box (□) within the Gearbox model name.
- 3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
- 4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
9SDG□ -180F2WH	9WHD□-030 9WHD□-040	1200	220	60	kgfcm	63.0	81.0	114.0	144.0	165.0	192.0	183.7	173.5	163.3	132.7
			N.m	6.17	7.94	11.17	14.11	16.17	18.82	18.00	17.00	16.00	13.00		
		220/240	50	kgfcm	75.6	97.2	136.8	172.8	198.0	204.1	183.7	173.5	163.3	132.7	
		N.m	7.41	9.53	13.41	16.93	19.40	20.00	18.00	17.00	16.00	13.00			
	90	220	60	kgfcm	41.6	53.5	75.2	95.0	108.9	126.7	155.8	173.5	163.3	132.7	
		N.m	4.07	5.24	7.37	9.31	10.67	12.42	15.26	17.00	16.00	13.00			
		220/240	50	kgfcm	47.3	60.8	85.5	108.0	123.8	144.0	177.0	173.5	163.3	132.7	
		N.m	4.63	5.95	8.38	10.58	12.13	14.11	17.35	17.00	16.00	13.00			

Dimensions

MOTOR ONLY

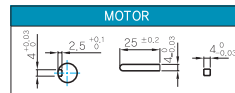
- MOTOR MODEL:
9SDD□-180F2 (POWERFUL FAN)



MOTOR OUTPUT SHAFT

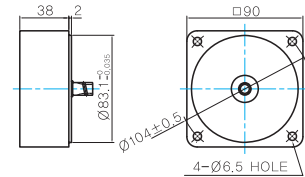
MODEL	SPEC
D-CUT TYPE	37 30 11.2 11.2 8.3 ± 0.02
9SDD□-180F2	
KEY TYPE	37 25 12.2 ± 0.04
9SDK□-180F2	

KEY SPEC



INTER-DECIMAL GEARBOX

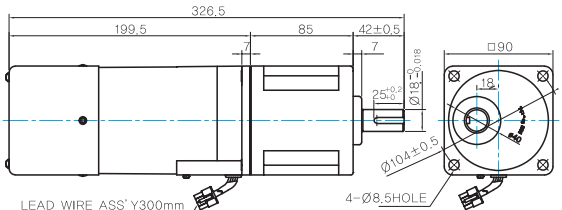
- MODEL: 9XD10□□



GEARED MOTOR

H TYPE GEARBOX

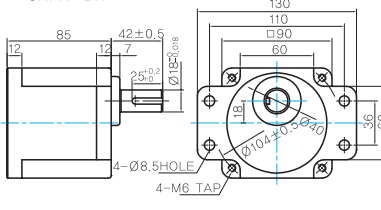
- MOTOR MODEL:
9SDG□-180F2H (POWERFUL FAN)



LEAD WIRE ASS' Y300mm
MOTOR UL STYLE NO.3271 AWG NO.22
TG UL STYLE NO.1430 AWG NO.24

- GEARBOX MODEL:
9HBK□BH

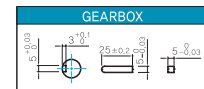
- GEARBOX MODEL:
9HFK□BH



GEARBOX OUTPUT SHAFT

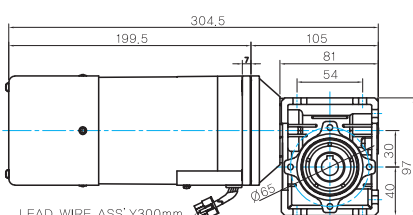
MODEL	SPEC
KEY TYPE	42 25 12.2 ± 0.04
9HBK□BH	
9HFK□BH	

KEY SPEC



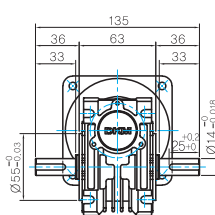
WH TYPE GEARBOX

- MOTOR MODEL:
9SDG□-180F2WH (POWERFUL FAN)

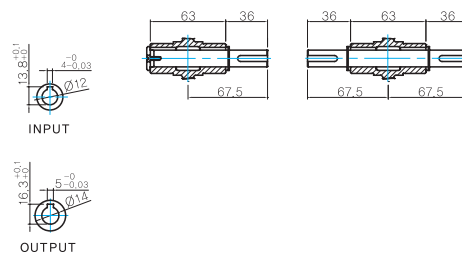


LEAD WIRE ASS' Y300mm
MOTOR UL STYLE NO.3271 AWG NO.22
TG UL STYLE NO.1430 AWG NO.24

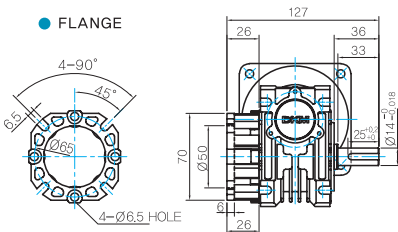
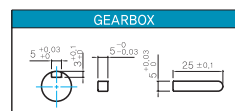
- GEARBOX MODEL:
9WHD□-030



- SHAFT (Unidirectional, Bi-directional)



KEY SPEC



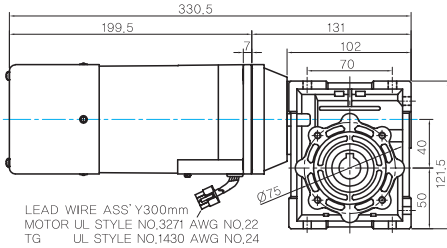
FLANGE

B AC Motors

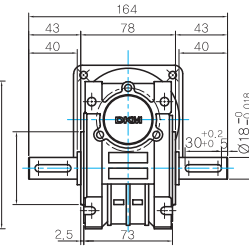
S.C. Induction Motor 180W (□90mm)

Dimensions

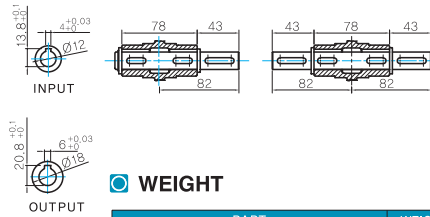
● MOTOR MODEL:
9SDG□-180F2WH (GENERAL FAN)



● GEARBOX MODEL:
9WHD□-040



● SHAFT(Unidirectional, Bi-directional)

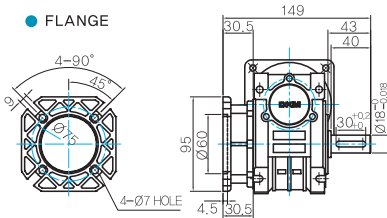


WEIGHT

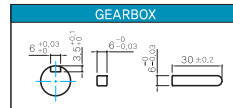
PART		WEIGHT(Kg)
MOTOR		3.0
GEAR BOX	9HB(F)K3BH ~ 9HB(F)K9BH	1.45
	9HB(F)K12.5BH ~ 9HB(F)K18BH	1.5
	9HB(F)K20BH ~ 9HB(F)K60BH	1.7
	9HB(F)K75BH ~ 9HB(F)K200BH	1.8
	9WHD□-030	1.13
	9WHD□-040	2.2
	9XD10□□	0.5

* The output flange and shafts are sold separately.

● FLANGE



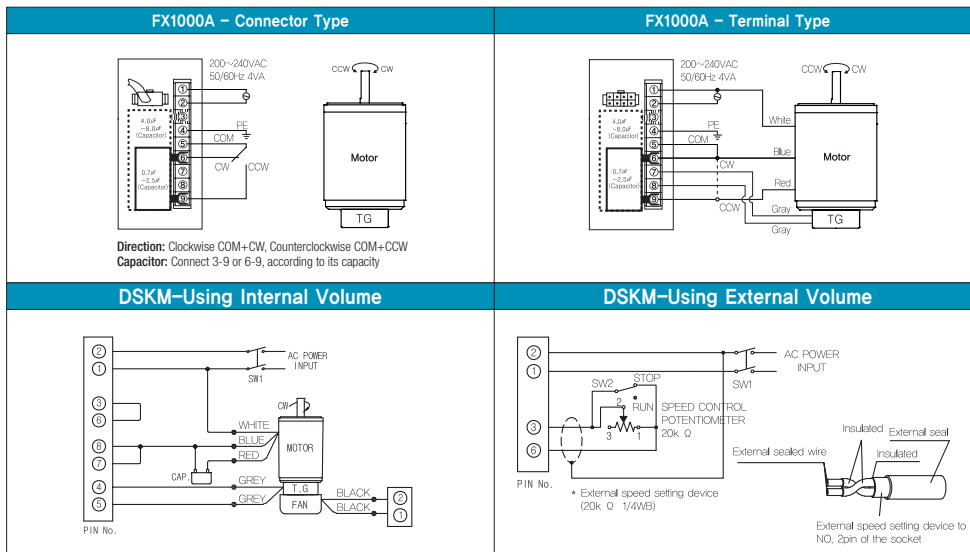
● KEY SPEC



Motor Images



Connection Diagrams



1) At first connect the speed controller with the motor as instructed in connection diagrams. And then input the external power to both of the terminal 'AC' for the rated speed operation.
Now you can adjust the main volume to control the output speed of motor.
2) The direction of motor rotation is as viewed from the shaft end of the motor.
3) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
4) When using powerful fan (F2 type) attached motor, connect two black wires of the fan to No.1 and No.2 terminals in order to supply power.