

Reversible Motor 120W(□90mm)

120W

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Motor Specification

Model		Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque		Rated Load				Capacitor μF / VAC
9RDG*-120F□(-T): Gear Type Shaft 9RDD*-120F(-T): D-Cut Type Shaft 9RDK*-120F(-T): Key Type Shaft	Lead Wire Type						Terminal Box Type	kgfcm	N.m	Speed r/min	Current A	Torque kgfcm N.m	
9RDGA-120F□	9RDGA-120F□-T	120	1∅110	60	4	30min.	7.60	0.760	1550	2.50	7.60	0.760	30.0 / 250
9RDGD-120F□	9RDGD-120F□-T	120	1∅220	60	4	30min.	6.60	0.660	1600	1.10	7.40	0.740	6.5 / 450
9RDGE-120F□	9RDGE-120F□-T	120	1∅220	50	4	30min.	6.40	0.640	1250	1.10	9.40	0.940	6.5 / 450
			1∅240				7.80	0.780			10.20	1.020	

- 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 is for attaching Gearbox and D-Cut & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio																							
			2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9RDG□ -120FP	9PBK□BH	kgfcm	12.3	18.4	22.1	30.7	36.9	46.1	55.3	69.4	83.3	99.9	100.6	125.8	151.0	181.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
	9PFK□BH	N.m	1.20	1.81	2.17	3.01	3.61	4.51	5.42	6.80	8.16	9.79	9.86	12.33	14.79	17.75	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -120FH	9HBK□BH	kgfcm	-	18.4	22.1	-	36.9	-	55.3	69.4	83.3	99.9	100.6	125.8	151.0	181.2	-	251.6	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
	9HFK□BH	N.m	-	1.81	2.17	-	3.61	-	5.42	6.80	8.16	9.79	9.86	12.33	14.79	17.75	-	24.66	29.40	29.40	29.40	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio								Motor Model	Gearbox Model	Gear Ratio	Gear Ratio										
			10	12	15	18	25	30	36	50				60	7.5	10	15	20	25	30	40	50	60	80
9RDG□ -120FW	9WD□BL/ □BR/□BRL	kgfcm	60.7	71.0	85.5	98.6	129.5	146.5	153.1	142.9	122.4	9RDG□ -120FWH	9WHD□ -030	kgfcm	46.6	59.9	84.4	106.6	122.1	142.1	174.6	173.5	163.3	132.7
	N.m	5.95	6.96	8.38	9.66	12.69	14.36	15.00	14.00	12.00	N.m			4.57	5.87	8.27	10.44	11.97	13.92	17.11	17.00	16.00	13.00	

50Hz

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio																							
			2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9RDG□ -120FP	9PBK□BH	kgfcm	15.6	23.4	28.1	39.0	46.8	58.5	70.2	88.1	105.8	126.9	127.8	159.8	191.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	
	9PFK□BH	N.m	1.53	2.29	2.75	3.82	4.59	5.73	6.88	8.64	10.36	12.44	12.53	15.66	18.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	
9RDG□ -120FH	9HBK□BH	kgfcm	-	23.4	28.1	-	46.8	-	70.2	88.1	105.8	126.9	127.8	159.8	191.8	230.1	-	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
	9HFK□BH	N.m	-	2.29	2.75	-	4.59	-	6.88	8.64	10.36	12.44	12.53	15.66	18.79	22.55	-	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio								Motor Model	Gearbox Model	Gear Ratio	Gear Ratio										
			10	12	15	18	25	30	36	50				60	7.5	10	15	20	25	30	40	50	60	80
9RDG□ -90FW	9WD□BL/ □BR/□BRL	kgfcm	77.1	90.2	108.6	125.2	142.9	163.3	153.1	142.9	122.4	9RDG□ -120FWH	9WHD□ -030	kgfcm	59.2	76.1	107.2	135.4	155.1	180.5	183.7	173.5	163.3	132.7
	N.m	7.55	8.84	10.64	12.27	14.00	16.00	15.00	14.00	12.00	N.m			5.80	7.46	10.50	13.27	15.20	17.69	18.00	17.00	16.00	13.00	

- 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.

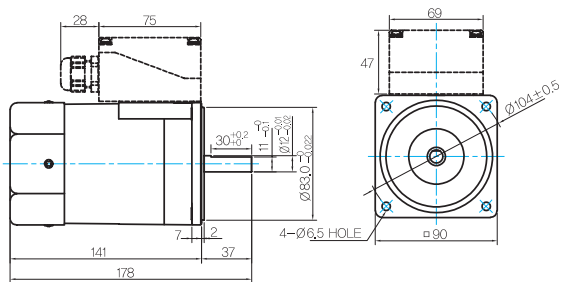
B AC Motors

Reversible Motor 120W(□90mm)

Dimensions

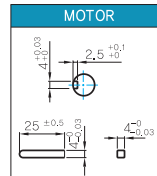
MOTOR ONLY

- MOTOR MODEL:
9RDD□-120F(-T) (GENERAL FAN)



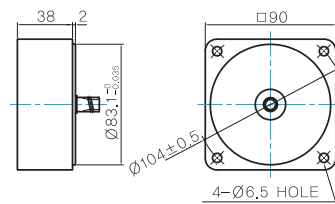
MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	37 30 ^{+0.2} 11 ^{+0.05} Ø12 ^{+0.05}
KEY TYPE	37 25 ^{+0.2} 11 ^{+0.05} Ø12 ^{+0.05}
9RDD□-120F	
9RDK□-120F	



INTER-DECIMAL GEARBOX

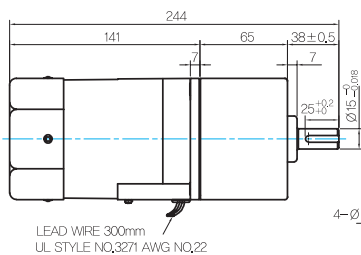
- MODEL: 9XD10□□



GEARED MOTOR

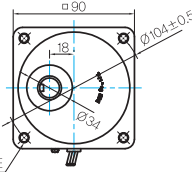
P TYPE GEARBOX

- MOTOR MODEL:
9RDG□-120FP (GENERAL FAN)

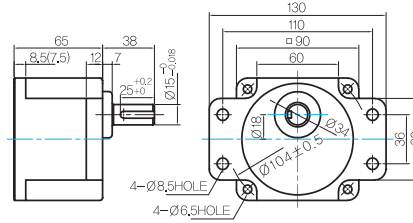


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

- GEARBOX MODEL:
9PBK□BH



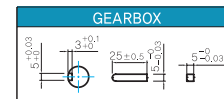
- GEARBOX MODEL:
9PFK□BHI



GEARBOX OUTPUT SHAFT

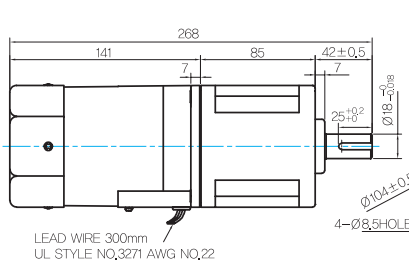
MODEL	SPEC
KEY TYPE	38 25 ^{+0.5} 11 ^{+0.05} Ø15 ^{+0.08}
9PBK□BH	
9PFK□BHI	

KEY SPEC



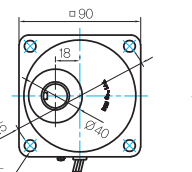
H TYPE GEARBOX

- MOTOR MODEL:
9RDG□-120FH (GENERAL FAN)

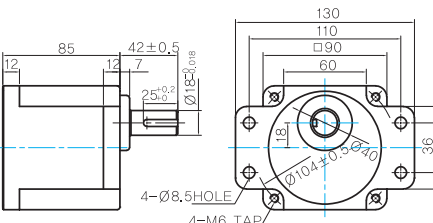


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

- GEARBOX MODEL:
9HBK□BH



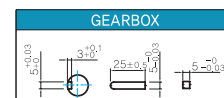
- GEARBOX MODEL:
9HFK□BH



GEARBOX OUTPUT SHAFT

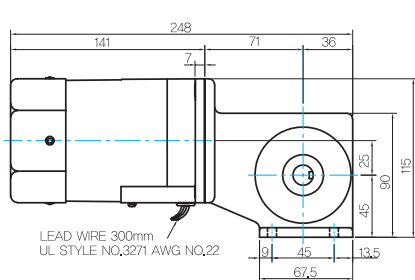
MODEL	SPEC
KEY TYPE	42 25 ^{+0.5} 11 ^{+0.05} Ø18 ^{+0.08}
9HBK□BH	
9HFK□BH	

KEY SPEC



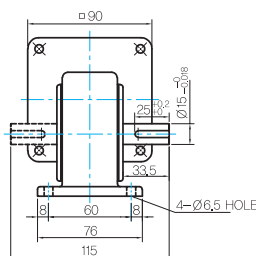
W TYPE GEARBOX

- MOTOR MODEL:
9RDG□-120FW (GENERAL FAN)

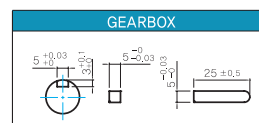


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

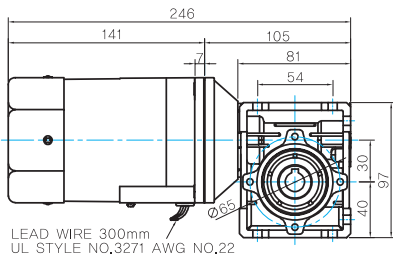
- GEARBOX MODEL:
9WD□BL/BR/BRL



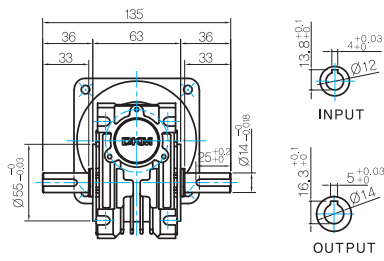
KEY SPEC



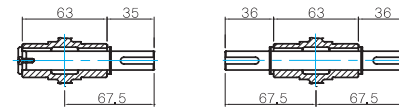
● MOTOR MODEL:
9RDG□-120FWH (GENERAL FAN)



● GEARBOX MODEL:
9WHD□-030



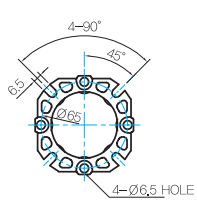
● SHAFT(Unidirectional, Bi-directional)



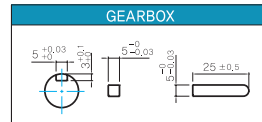
● WEIGHT

PART	WEIGHT(Kg)	
MOTOR	3.0	
GEAR BOX	9PB(F)K2BH ~ 9PB(F)K18BH	1.3
	9PB(F)K20BH ~ 9PB(F)K200BH	1.4
	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
	9WD□BL/BR/BRL	1.0
	9WHD□-030	1.13
	9XD10□□	0.5

● FLANGE



● KEY SPEC



* The output flange and shafts are sold separately.

Motor Images

9RDD□-120F 	9RDD□-120F-T 	9RDG□-120FP+9PBK□BH 	9RDG□-120FP+9PFK□BH
9RDG□-120FH+9HBK□BH 	9RDG□-120FH+9HFK□BH 	9RDG□-120FW+9WD□BL 	9RDG□-120FWH+9WHD□