

120W Brake Motor 120W(□90mm)

Motor Specification

Model 9BDG*-120F□: Gear Type Shaft 9BDD*-120F: D-Cut Type Shaft 9BDK*-120F: Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque		Rated Load				Capacitor μF / VAC
						kgfcm	N.m	Speed r/min	Current A	Torque		
										kgfcm	N.m	
9BDGA-120F□	120	1φ110	60	4	30min.	7.60	0.760	1550	2.50	7.60	0.760	30.0 / 250
9BDGD-120F□	120	1φ220	60	4	30min.	6.60	0.660	1600	1.10	7.40	0.740	6.5 / 450
9BDGE-120F□	120	1φ220	50	4	30min.	6.40	0.640	1250	1.00	9.40	0.940	6.5 / 450
		1φ240				7.80	0.780			1.10	10.20	
9BDGG-120F□	120	3φ220	50	4	Cont.	22.00	2.200	1300	0.82	9.20	0.920	-
			60			20.00	2.000	1550	0.78	7.80	0.780	
9BDGK-120F□	120	3φ380	50	4	Cont.	25.00	2.500	1300	0.48	9.00	0.900	-
			60			20.00	2.000	1550	0.43	8.00	0.800	
		3φ400	50	4	Cont.	27.40	2.740	1300	0.53	9.80	0.980	
			60			21.80	2.180	1550	0.45	8.60	0.860	
		3φ415	50	4	Cont.	29.80	2.980	1300	0.57	10.00	1.000	
			60			23.80	2.380	1600	0.44	7.80	0.780	
		3φ440	50	4	Cont.	32.00	3.200	1350	0.64	8.80	0.880	
			60			26.80	2.680	1600	0.48	8.60	0.860	

- 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 r/min	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	
9BDG□ -120FP	9PBK□BH 9PFK□BH	kgfcm	12.9	19.4	23.3	32.4	38.8	48.6	58.3	73.1	87.8	105.3	106.1	132.6	159.1	190.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.27	1.90	2.28	3.17	3.81	4.76	5.71	7.17	8.60	10.32	10.40	12.99	15.59	18.71	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9BDG□ -120FH	9HBK□BH 9HFK□BH	kgfcm	19.4	23.3	38.8	58.3	73.1	87.8	105.3	106.1	132.6	159.1	190.9	200.0	265.2	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	1.90	2.28	3.81	5.71	7.17	8.60	10.32	10.40	12.99	15.59	18.71	19.60	25.99	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	Gear Ratio r/min	Gear Ratio										Motor Model	Gearbox Model	Gear Ratio r/min	Gear Ratio								
			10	12	15	18	25	30	36	50	60	7.5				10	15	20	25	30	40	50	60	80
9BDG□ -120FW	9WD□BL/ □BR/□BRL	kgfcm	60.7	71.0	85.5	98.6	129.5	146.5	153.1	142.9	122.4	9BDG□ -120FWH	9WHD□ -030	kgfcm	49.1	63.2	88.9	112.3	128.7	149.8	183.7	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				4.82	6.19	8.71	11.01	12.61	14.68	18.00	17.00	16.00	13.00

50Hz

Motor Model	Gearbox Model	Gear Ratio r/min	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	
9BDG□ -120FP	9PBK□BH 9PFK□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	200.0	200.0
		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	19.60	19.60
9BDG□ -120FH	9HBK□BH 9HFK□BH	kgfcm	23.4	28.1	46.8	70.2	88.1	105.8	126.9	127.8	159.8	191.8	200.0	230.1	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	2.29	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	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	Gear Ratio r/min	Gear Ratio										Motor Model	Gearbox Model	Gear Ratio r/min	Gear Ratio								
			10	12	15	18	25	30	36	50	60	7.5				10	15	20	25	30	40	50	60	80
9BDG□ -120FW	9WD□BL/ □BR/□BRL	kgfcm	77.1	90.2	108.6	125.2	142.9	163.3	153.1	142.9	122.4	9BDG□ -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				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.

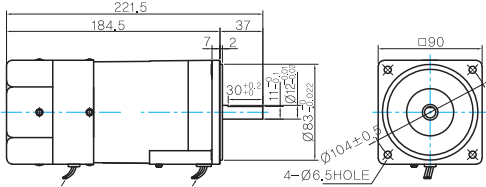
B AC Motors

Brake Motor 120W (□90mm)

Dimensions

MOTOR ONLY

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



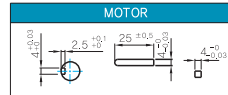
LEAD WIRE (Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

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

MOTOR OUTPUT SHAFT

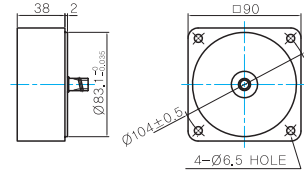
MODEL	SPEC
D-CUT TYPE	
9BDD□-120F	
KEY TYPE	
9BDD□-120F	

KEY SPEC



INTER-DECIMAL GEARBOX

- MODEL:
9XD10□□



GEARED MOTOR

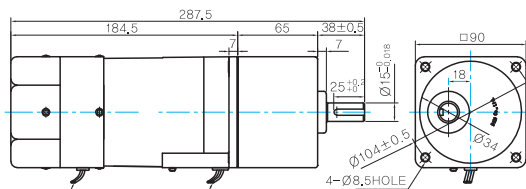
P TYPE GEARBOX

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

- GEARBOX MODEL:
9PBK□BH

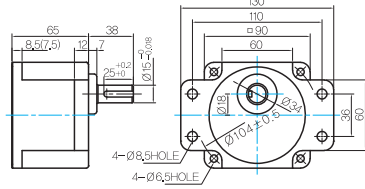
- GEARBOX MODEL:
9PFK□BH

GEARBOX OUTPUT SHAFT



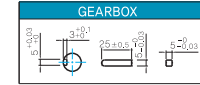
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UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

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



MODEL	SPEC
KEY TYPE	
9PBK□BH	
9PFK□BH	

KEY SPEC



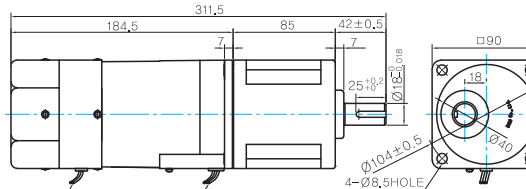
H TYPE GEARHEAD

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

- GEARBOX MODEL:
9HBK□BH

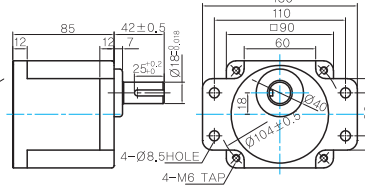
- GEARBOX MODEL:
9HFK□BH

GEARBOX OUTPUT SHAFT



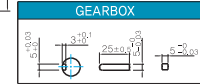
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UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

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



MODEL	SPEC
KEY TYPE	
9HBK□BH	
9HFK□BH	

KEY SPEC

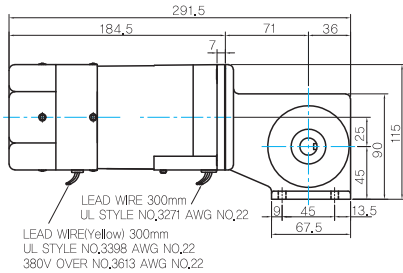


W TYPE GEARBOX

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

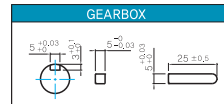
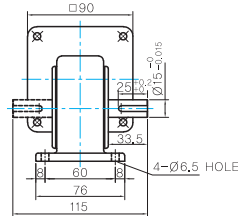
- GEARBOX MODEL:
9WD□BL/BR/BRL

KEY SPEC



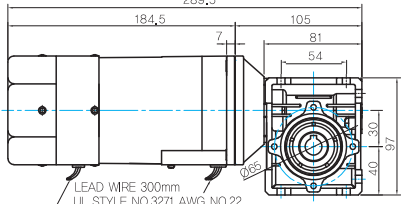
LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

LEAD WIRE (Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22



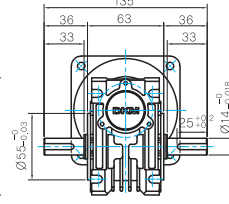
WH TYPE GEARBOX

- MOTOR MODEL:
9BDG□-120FWH (GENERAL FAN)
289,5

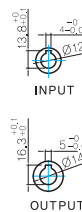
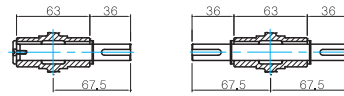


LEAD WIRE 300mm
UL STYLE NO,3271 AWG NO,22
LEAD WIRE(Yellow) 300mm
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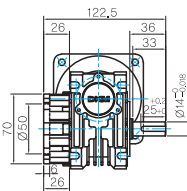
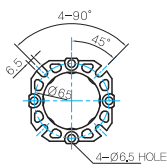
- GEARBOX MODEL:
9WHD□-030
135



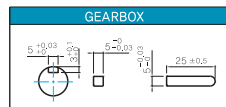
- SHAFT(Unidirectional, Bi-directional)



- FLANGE



- KEY SPEC



WEIGHT

	PART	WEIGHT(Kg)
GEAR BOX	MOTOR	3,5
	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

* The output flange and shafts are sold separately.

Motor Images

