

Induction Motor 90W(□ 90mm)

90W Induction Motor 90W(□ 90mm)

Motor 사양

Model		Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque		Rated Load			Capacitor μF / VAC	
Lead Wire Type	Terminal Box Type						kgfcm	N.m	Speed r/min	Current A	Torque kgfcm N.m		
91DG1(A)-90F □	91DG1(A)-90F □-T	90	1 φ 110	60	4	Cont.	5.00	0.500	1600	1.80	5.48	0.548	20.0 / 250
91DG2(D)-90F □	91DG2(D)-90F □-T	90	1 φ 220	60	4	Cont.	5.00	0.500	1600	1.00	5.48	0.548	5.0 / 450
91DGE-90F □	91DGE-90F □-T	90	1 φ 220	50	4	Cont.	5.30	0.530	1300	0.70	6.74	0.674	5.0 / 450
			1 φ 240				6.30	0.630		0.76	6.74	0.674	
91DG3(G)-90F □	91DG3(G)-90F □-T	90	3 φ 220	50	4	Cont.	20.50	2.050	1350	0.65	6.49	0.649	-
				60			16.20	1.620	1600	0.60	5.48	0.548	
			3 φ 230	50	4	Cont.	22.00	2.200	1350	0.68	6.49	0.649	
				60			17.60	1.760	1600	0.63	5.48	0.548	
91DG4(K)-90F □	91DG4(K)-90F □-T	90	3 φ 380	50	4	Cont.	20.00	2.000	1350	0.35	6.49	0.649	-
				60			15.70	1.570	1600	0.33	5.48	0.548	
			3 φ 400	50	4	Cont.	21.80	2.180	1350	0.37	6.49	0.649	
				60			17.30	1.730	1600	0.35	5.48	0.548	
91DG5(L)-90F □	91DG5(L)-90F □-T	90	3 φ 415	50	4	Cont.	20.50	2.050	1350	0.33	6.49	0.649	-
				60			16.20	1.620	1600	0.31	5.48	0.548	
			3 φ 440	50	4	Cont.	22.70	2.270	1350	0.36	6.49	0.649	
				60			18.10	1.810	1600	0.33	5.48	0.548	

- 1) 모터 모델명 * 안에는 전압코드가, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다. 2) 전압코드 A, D, E, G, K는 TP(Thermal Protector) 부착 사양입니다.
- 3) Gear Type Shaft는 감속기 부착용이며 D-Cut Type Shaft는 모터 단독 사용시의 출력축입니다.
- 4) 삼상 380V~440V 모터에서는 인버터 사용을 할 수 없습니다. 인버터 사용시 권선의 절연이 열화되어 모터가 파손될 수 있습니다.

감속기 부착 시 최대허용토크

60Hz

Motor Model	Gearbox Model	감속비 r/min	2	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		
91DG*-90FP	9PBK □ BH 9PFB □ BH	kgfcm	8.9	13.3	16.0	22.2	26.6	33.3	39.9	44.4	50.0	60.0	72.0	80.0	90.4	108.5	130.2	144.6	180.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	0.87	1.30	1.57	2.17	2.61	3.26	3.91	4.35	4.90	5.88	7.06	7.84	8.86	10.63	12.76	14.17	17.72	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
91DG*-90FH	9HBK □ BH 9HFK □ BH	kgfcm	-	13.3	16.0	22.2	26.6	33.3	39.9	44.4	50.0	60.0	72.0	80.0	90.4	108.5	130.2	144.6	180.8	217.0	242.4	290.9	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	-	1.30	1.57	2.17	2.61	3.26	3.91	4.35	4.90	5.88	7.06	7.84	8.86	10.63	12.76	14.17	17.72	21.26	23.76	28.51	29.40	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비 r/min	7.5	10	15	20	25	30	40	50	60	80	
91DG*-90FW	9WD □ BL/□ BR/□ BRL	kgfcm	44.9	52.6	63.3	73.0	95.9	108.5	126.2	142.9	122.4	91DG*-90FWH	9WHD □ -030	kgfcm	27.6	35.5	50.0	63.1	72.3	84.2	103.4	118.3	131.5	132.7	
		N.m	4.40	5.15	6.20	7.15	9.40	10.63	12.37	14.00	12.00			N.m	2.71	3.48	4.90	6.19	7.09	8.25	10.14	11.60	12.89	13.00	

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
91DG*-90FHC	9HC □ □	kgfcm	60	80	100	120	160	200	240	320	400	480	640	800	900	960
		N.m	5.88	7.84	9.8	11.8	15.7	19.6	23.5	31.4	39.2	47	62.7	78.4	88.2	94.1

50Hz

Motor Model	Gearbox Model	감속비 r/min	2	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	
91DG*-90FP	9PBK □ BH 9PFB □ BH	kgfcm	10.5	15.8	18.9	26.3	31.6	39.4	47.3	52.6	59.3	71.1	85.3	94.8	107.1	128.6	154.3	171.4	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.03	1.55	1.86	2.58	3.09	3.87	4.64	5.15	5.81	6.97	8.36	9.29	10.50	12.60	15.12	16.80	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
91DG*-90FH	9HBK □ BH 9HFK □ BH	kgfcm	-	15.8	18.9	26.3	31.6	39.4	47.3	52.6	59.3	71.1	85.3	94.8	107.1	128.6	154.3	171.4	214.3	257.1	287.3	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	-	1.55	1.86	2.58	3.09	3.87	4.64	5.15	5.81	6.97	8.36	9.29	10.50	12.60	15.12	16.80	21.00	25.20	28.16	29.40	29.40	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비 r/min	7.5	10	15	20	25	30	40	50	60	80
91DG*-90FW	9WD □ BL/□ BR/□ BRL	kgfcm	53.2	62.3	75.0	86.5	113.6	128.6	149.6	142.9	122.4	91DG*-90FWH	9WHD □ -030	kgfcm	32.7	42.1	59.2	74.8	85.7	99.7	122.6	140.3	155.8	132.7
		N.m	5.22	6.11	7.35	8.48	11.14	12.60	14.66	14.00	12.00			N.m	3.21	4.12	5.80	7.33	8.40	9.77	12.01	13.75	15.27	13.00

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
91DG*-90FHC	9HC □ □	kgfcm	71.1	94.8	119	142	190	237	284	379	474	569	758	948	1067	1138
		N.m	6.97	9.28	11.7	13.9	18.6	23.2	27.8	37.1	46.5	55.8	74.3	92.9	105	112

- 1) 모터 모델명 * 자리에는 전압코드가 들어갑니다. 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
- 3) 위의 표에서 색깔된 범위의 감속비를 선택했을 때 감속기의 출력축은 모터의 출력축과 같은 방향으로 회전합니다. 흰색 바탕 범위의 감속비에서는 감속기 출력축은 모터 출력축의 회전방향과 반대방향으로 회전합니다.
- 4) 회전속도(r/min)는 모터의 동기회전속도(50Hz:1500r/min, 60Hz:1800r/min)를 감속비로 나누어 계산합니다. 실제 회전속도는 부하의 크기에 따라 표시보다 2~20% 정도 느립니다.

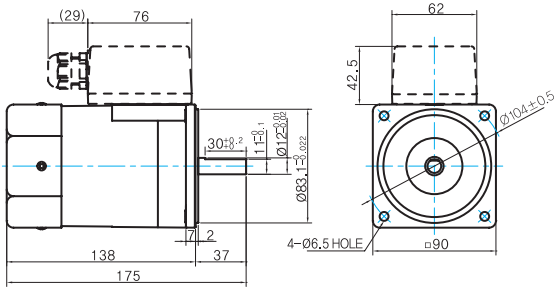
B AC Motors

Induction Motor 90W(□ 90mm)

Dimensions

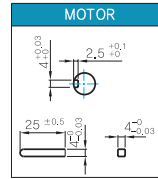
MOTOR ONLY

- MOTOR MODEL: 9IDD□-90F(-T) (GENERAL FAN)



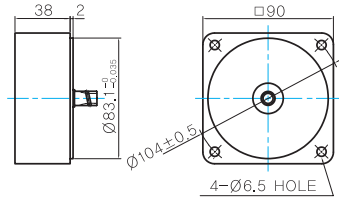
MOTOR OUTPUT SHAFT KEY SPEC

MODEL	SPEC
D-CUT TYPE	
9RDD□-120F	37 30 ^{+0.2} _{-0.1} Ø12 ^{+0.016}
KEY TYPE	
9RDK□-120F	37 25 ^{+0.2} _{-0.1} Ø12 ^{+0.016}



중간감속기

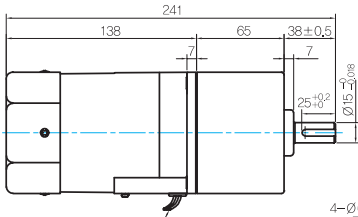
- MODEL: 9XD10□□



GEARED MOTOR

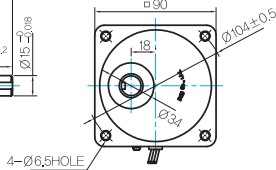
P TYPE GEARBOX

- MOTOR MODEL: 9IDG□-90FP (GENERAL FAN)

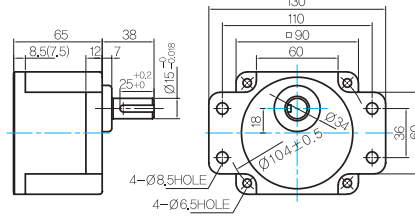


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

- GEARBOX MODEL: 9PBK□BH



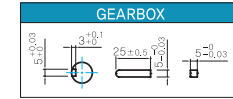
- GEARBOX MODEL: 9PFK□BH



GEARBOX OUTPUT SHAFT

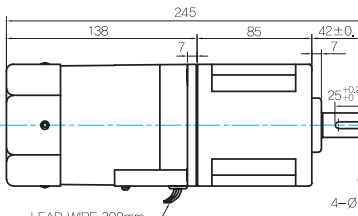
MODEL	SPEC
KEY TYPE	
9PBK□BH	38 25 ^{+0.2} _{-0.1} Ø15 ^{+0.016}
9PFK□BH	

KEY SPEC



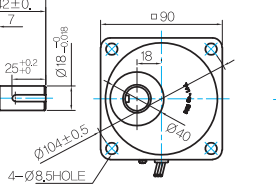
H TYPE GEARBOX

- MOTOR MODEL: 9IDG□-90FH (GENERAL FAN)

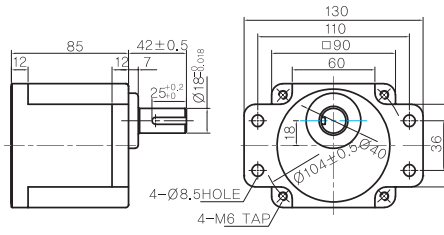


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

- GEARBOX MODEL: 9HBK□BH



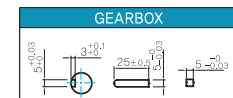
- GEARBOX MODEL: 9HFK□BH



GEARBOX OUTPUT SHAFT

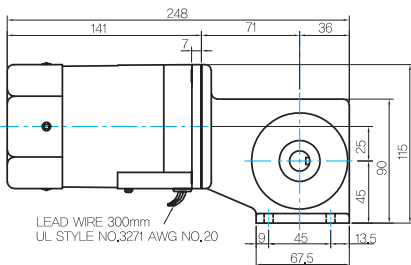
MODEL	SPEC
KEY TYPE	
9HBK□BH	42 25 ^{+0.2} _{-0.1} Ø15 ^{+0.016}
9HFK□BH	

KEY SPEC



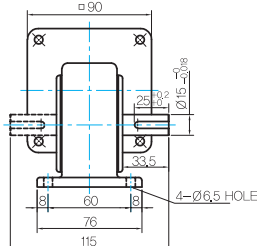
W TYPE GEARBOX

- MOTOR MODEL: 9IDG□-90FW (GENERAL FAN)

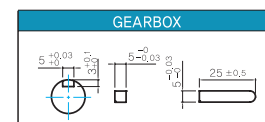


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

- GEARBOX MODEL: 9WD□BL/BR/BRL

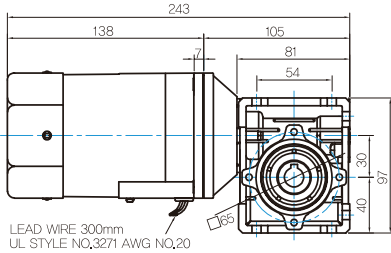


KEY SPEC

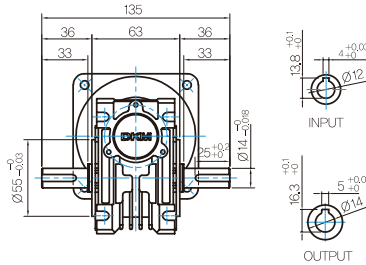


WH TYPE GEARBOX

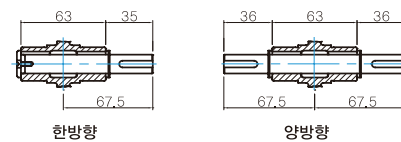
MOTOR MODEL:
91DG□-90FWH (GENERAL FAN)



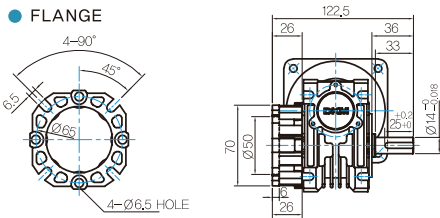
GEARBOX MODEL:
9WHD□-030



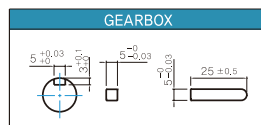
SHAFT



FLANGE

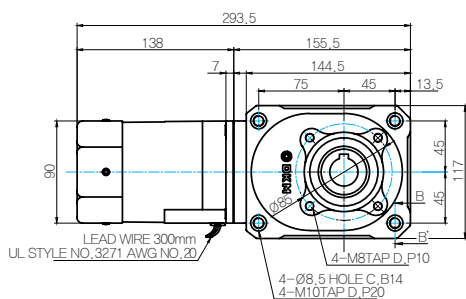


KEY SPEC

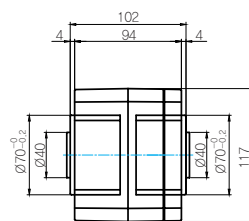


HC TYPE GEARBOX

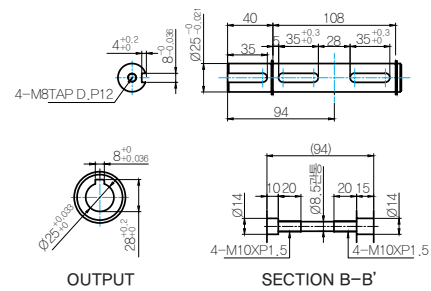
MOTOR MODEL:
91DG□-90FHC (GENERAL FAN)



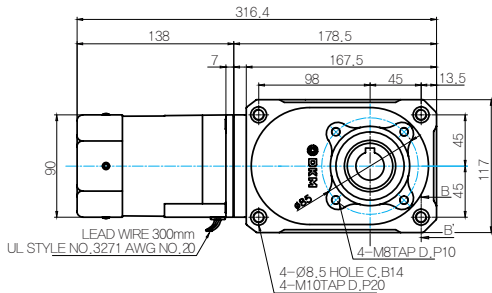
GEARBOX MODEL:
9HC(15 ~ 60) □



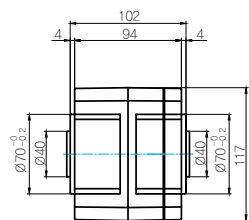
SHAFT



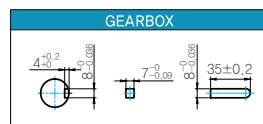
MOTOR MODEL:
91DG□-90FHC (GENERAL FAN)



GEARBOX MODEL:
9HC(80 ~ 240) □



KEY SPEC



WEIGHT

PART	WEIGHT(Kg)	
MOTOR	3,05	
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1,28
	9PB(F)K12.5BH - 9PB(F)K20BH	1,3
	9PB(F)K25BH - 9PB(F)K60BH	1,45
	9PB(F)K75BH - 9PB(F)K200BH	1,47
	9HB(F)K3BH - 9HB(F)K10BH	1,62
	9HB(F)K12.5BH - 9HB(F)K20BH	1,68
	9HB(F)K25BH - 9HB(F)K60BH	1,73
	9HB(F)K75BH - 9HB(F)K200BH	1,78
	9WD□BL/BR/BRL	1,0
	9WHD□-030	1,2
	9HC15□	4,05
	9HC20□~9HC60□	4,1
9HC80□~9HC240□	4,75	
9XD10□	0,6	

* 출력 FLANGE와 SHAFT는 별매입니다.

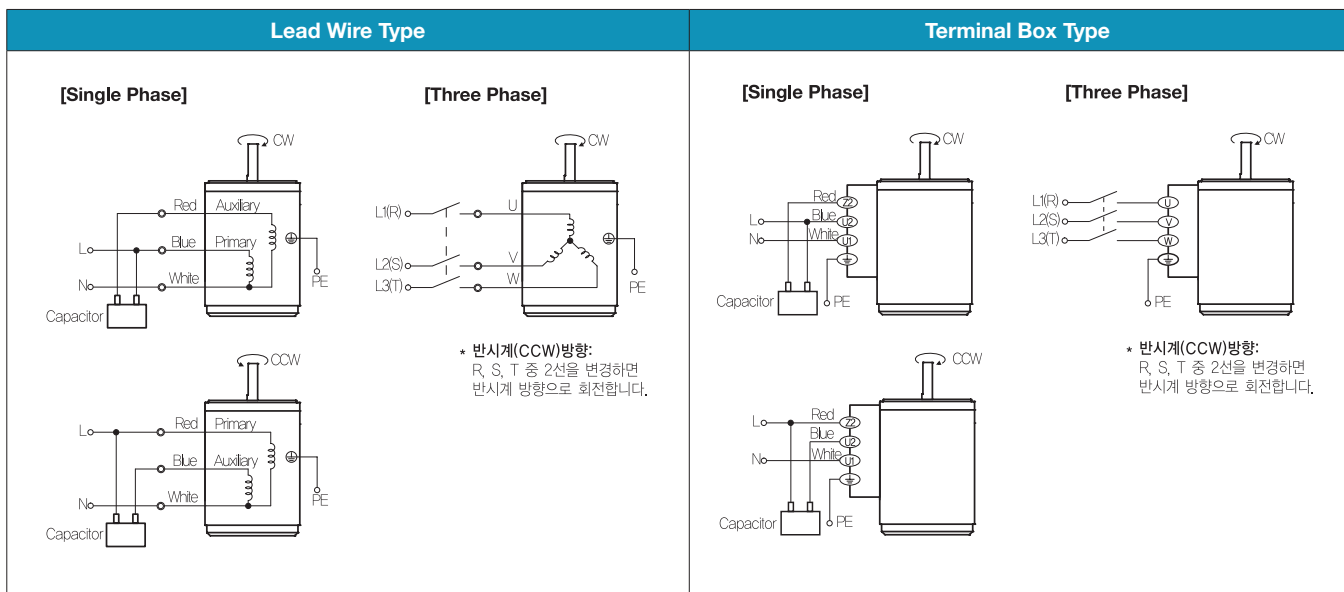
B AC Motors

Induction Motor 90W(□ 90mm)

Motor Images



결선도



1) 회전방향은 모터 축 측에서 본 방향을 나타냅니다.

2) CW는 시계방향, CCW는 반시계방향입니다.

3) 단상 모터의 회전방향 전환은 모터 정지 후에 실시하여 주십시오. 모터 회전 중에 회전방향을 전환하면 방향이 전환되지 않거나 시간이 지체되어 전환되는 경우가 있습니다.