

## Reversible Motor 60W(□ 90mm)

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### Motor 사양

Model		Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque		Rated Load			Capacitor μF / VAC	
9RDG*-60F(-T): Gear Type Shaft 9RDD*-60F(-T): D-Cut Type Shaft 9RDK*-60F(-T): Key Type Shaft	Lead Wire Type						Terminal Box Type	kgfcm	N.m	Speed r/min	Current A		Torque kgfcm N.m
9RDG1(A)-60F □	9RDG1(A)-60F □-T	60	1 φ 110	60	4	30min.	5.20	0.520	1600	1.60	3.65	0.365	20.0 / 250
9RDG2(D)-60F □	9RDG2(D)-60F □-T	60	1 φ 220	60	4	30min.	5.19	0.519	1600	0.75	3.65	0.365	5.0 / 450
9RDGE-60F □	9RDGE-60F □-T	60	1 φ 220	50	4	30min.	5.52	0.552	1300	0.59	4.50	0.450	5.0 / 450
			1 φ 240				6.52	0.652		0.64	4.50	0.450	

- 1) 모터 모델명 \* 자리에는 전압코드가, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다.
- 2) 전압코드 A, D, E, G, K, L은 TP(Thermal Protector) 부착 사양입니다.
- 3) Gear Type Shaft는 감속기 부착용이며 D-Cut 및 Key Type Shaft는 모터 단독 사용시의 출력축입니다.

### 감속기 부착 시 최대허용토크

#### 60Hz

Motor Model	Gearbox Model	감속비	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	
9RDG*-60FP	9PBK □ BH 9PFK □ BH	kgfcm	5.9	8.9	10.7	14.8	17.8	22.2	26.6	29.6	33.3	40.0	48.0	53.3	60.3	72.3	86.8	96.4	120.5	144.6	161.6	193.9	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	0.58	0.87	1.04	1.45	1.74	2.17	2.61	2.90	3.27	3.92	4.70	5.23	5.91	7.09	8.50	9.45	11.81	14.17	15.84	19.01	19.60	19.60	19.60	19.60	19.60	19.60
9RDG*-60FH	9HBK □ BH 9HFK □ BH	kgfcm	-	8.9	10.7	14.8	17.8	22.2	26.6	29.6	33.3	40.0	48.0	53.3	60.3	72.3	86.8	96.4	120.5	144.6	161.6	193.9	215.5	258.6	300.0	300.0	300.0	300.0
		N.m	-	0.87	1.04	1.45	1.74	2.17	2.61	2.90	3.27	3.92	4.70	5.23	5.91	7.09	8.50	9.45	11.81	14.17	15.84	19.01	21.12	25.34	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	감속비	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비	5	7.5	10	15	20	25	30	40	50	60	80		
9RDG*-60FW	9WD □ BL/ □ BR/ □ BRL	kgfcm	30.0	35.1	42.2	48.7	63.9	72.3	84.2	109.6	120.5	9RDG*-60FWH	9WHD □ -030	kgfcm	12.7	18.4	23.7	33.3	42.1	48.2	56.1	69.0	78.9	87.7	102.9		
		N.m	2.94	3.44	4.13	4.77	6.26	7.09	8.25	10.74	11.81			N.m	1.25	1.80	2.32	3.26	4.12	4.72	5.50	6.76	7.73	8.59	10.08		

#### 50Hz

Motor Model	Gearbox Model	감속비	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	
9RDG*-60FP	9PBK □ BH 9PFK □ BH	kgfcm	7.3	10.9	13.1	18.2	21.8	27.3	32.8	36.4	41.0	49.2	59.1	65.6	74.2	89.0	106.8	118.7	148.3	178.0	198.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	0.71	1.07	1.28	1.78	2.14	2.68	3.21	3.57	4.02	4.82	5.79	6.43	7.27	8.72	10.47	11.63	14.54	17.45	19.49	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG*-60FH	9HBK □ BH 9HFK □ BH	kgfcm	-	10.9	13.1	18.2	21.8	27.3	32.8	36.4	41.0	49.2	59.1	65.6	74.2	89.0	106.8	118.7	148.3	178.0	198.9	238.7	265.2	300.0	300.0	300.0	300.0	
		N.m	-	1.07	1.28	1.78	2.14	2.68	3.21	3.57	4.02	4.82	5.79	6.43	7.27	8.72	10.47	11.63	14.54	17.45	19.49	23.39	25.99	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	감속비	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비	5	7.5	10	15	20	25	30	40	50	60	80		
9RDG*-60FW	9WD □ BL/ □ BR/ □ BRL	kgfcm	36.9	43.2	51.9	59.9	78.7	89.0	103.6	134.9	122.4	9RDG*-60FWH	9WHD □ -030	kgfcm	15.1	21.8	28.1	39.5	49.9	57.1	66.5	81.7	93.5	103.9	121.9		
		N.m	3.61	4.23	5.09	5.87	7.71	8.72	10.15	13.22	12.00			N.m	1.48	2.14	2.75	3.87	4.89	5.60	6.52	8.01	9.16	10.18	11.95		

- 1) 모터 모델명 \* 자리에는 전압코드가 들어갑니다.
- 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
- 3) 위의 표에서 색칠된 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.

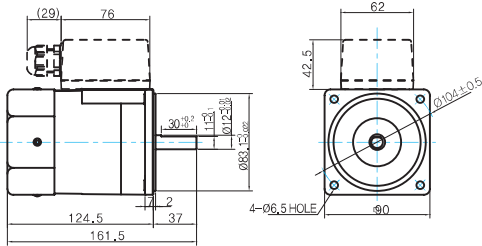
# B AC Motors

## Reversible Motor 60W(□ 90mm)

### Dimensions

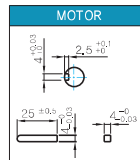
#### MOTOR ONLY

- MOTOR MODEL:  
9RDD□-60F(-T) (GENERAL FAN)



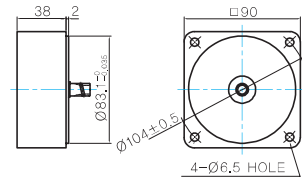
#### MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	37 30 $^{+0.03}$ 11.5 $^{+0.03}$ $\phi 25.03 \pm 0.01$
9RDD□-60F	
KEY TYPE	37 25 $^{+0.03}$ $\phi 25.03 \pm 0.01$
9RDK□-60F	



#### 중간감속기

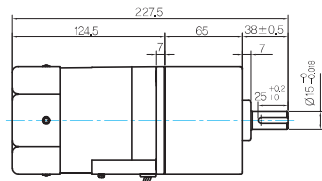
- MODEL: 9XD10□□



### GEARED MOTOR

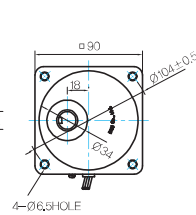
#### P TYPE GEARBOX

- MOTOR MODEL:  
9RDG□-60FP (GENERAL FAN)

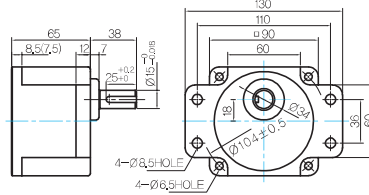


LEAD WIRE 300mm  
UL STYLE NO.3271 AWG NO.20

- GEARBOX MODEL:  
9PBK□BH



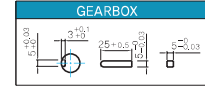
- GEARBOX MODEL:  
9PFK□BH



#### GEARBOX OUTPUT SHAFT

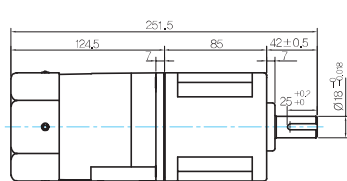
MODEL	SPEC
KEY TYPE	38 25 $^{+0.03}$ 11.5 $^{+0.03}$ $\phi 25.03 \pm 0.01$
9PBK□BH	
9PFK□BH	

#### KEY SPEC



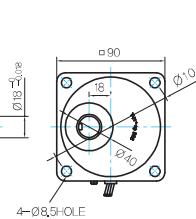
#### H TYPE GEARBOX

- MOTOR MODEL:  
9RDG□-60FH (GENERAL FAN)

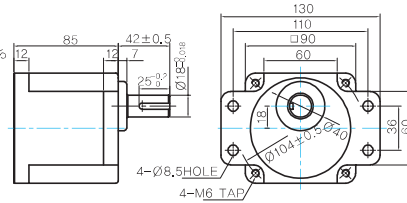


LEAD WIRE 300mm  
UL STYLE NO.3271 AWG NO.20

- GEARBOX MODEL:  
9HBK□BH



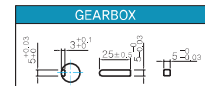
- GEARBOX MODEL:  
9HFK□BH



#### GEARBOX OUTPUT SHAFT

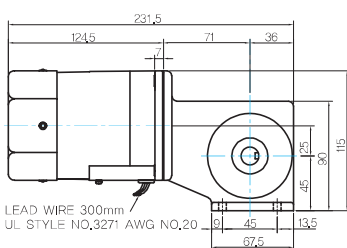
MODEL	SPEC
KEY TYPE	42 25 $^{+0.03}$ 11.5 $^{+0.03}$ $\phi 25.03 \pm 0.01$
9HBK□BH	
9HFK□BH	

#### KEY SPEC



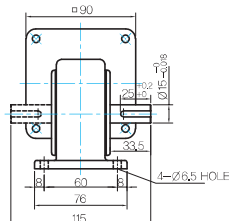
#### W TYPE GEARBOX

- MOTOR MODEL:  
9RDG□-60FW (GENERAL FAN)

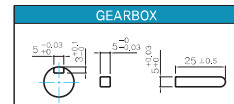


LEAD WIRE 300mm  
UL STYLE NO.3271 AWG NO.20

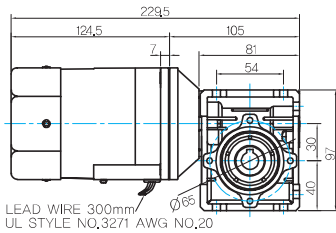
- GEARBOX MODEL:  
9WD□BL/BR/BRL

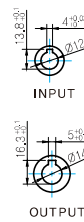
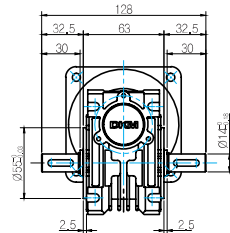


#### KEY SPEC

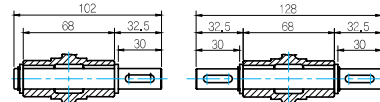


**WH TYPE GEARBOX**

 ● MOTOR MODEL:  
9RDG□-60FWH (GENERAL FAN)

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

 ● GEARBOX MODEL:  
9WHD□-030


● SHAFT



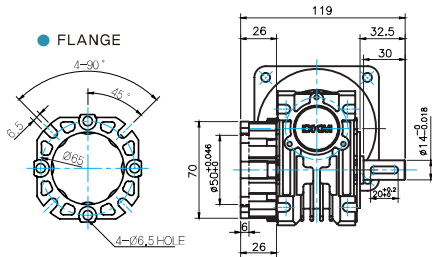
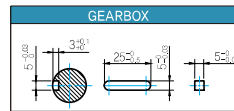
한방향

양방향

**WEIGHT**

PART	WEIGHT(kg)
MOTOR	2.65
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
9XD10□	0.6

\* 출력 FLANGE와 SHAFT는 별매입니다.

**FLANGE**

**KEY SPEC**

**Motor Images**

9RDD□-60F	9RDD□-60F-T	9RDG□-60FP+9PBK□BH	9RDG□-60FP+9PFK□BH
9RDG□-60FH+9HBK□BH	9RDG□-60FH+9HFK□BH	9RDG□-60FW+9WD□BL	9RDG□-60FWH+9WHD□

# B AC Motors

Reversible Motor 60W(□ 90mm)

## 결선도

Lead Wire Type	Terminal Box Type						
	<table border="1"> <thead> <tr> <th style="background-color: #0070C0; color: white;">기호</th> <th style="background-color: #0070C0; color: white;">접점용량</th> </tr> </thead> <tbody> <tr> <td style="background-color: #D9E1F2;">SW</td> <td>AC125V 5A 이상 또는 AC250V 5A 이상 (유도부하)</td> </tr> <tr> <td style="background-color: #D9E1F2;">Ro, Co</td> <td>Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)</td> </tr> </tbody> </table> <p>* 정역전 전환 스위치에는 접점보호를 위해 그림과 같이 Sugar 전압 흡수용 CR회로를 접속해 사용하여 주십시오.</p>	기호	접점용량	SW	AC125V 5A 이상 또는 AC250V 5A 이상 (유도부하)	Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)
기호	접점용량						
SW	AC125V 5A 이상 또는 AC250V 5A 이상 (유도부하)						
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)						

- 1) 회전방향은 모터 축 측에서 본 방향을 나타냅니다.
- 2) CW는 시계방향, CCW는 반시계방향입니다.
- 3) 모터 운전중에 회전방향 전환이 가능합니다. 스위치를 CW 쪽으로 하면 모터는 시계방향으로, CCW 쪽으로 하면 반시계방향으로 회전합니다.