

INDUCTION MOTOR 200W

□90mm(3.54in.)



LEAD WIRE TYPE MOTOR
+ PB TYPE GEARHEAD



LEAD WIRE TYPE MOTOR
+ PF TYPE GEARHEAD



TERMINAL BOX TYPE MOTOR
+ PF TYPE GEARHEAD



LEAD WIRE TYPE MOTOR
+ HB TYPE GEARHEAD

Motor Specification



Model		Output	Voltage	Freq.	Current	Starting Torque			Rated Torque			Rated Speed	Capacitor				
91DG□-200FP(H) : Pinion Shaft Type 91DD□-200F : D-Cut Shaft Type						HP	W	VAC	Hz	A	gfcM		mNm	oz-in	gfcM	mNm	oz-in
Lead Wire Type	Terminal Box Type																
ⓉP 91DG(D)G-200FP(H)	91DG(D)G-200FP(H)-T	1/4	200	Three phase 220	50	1.60	14500	1450	205	15000	1500	212	1300				
ⓉP 91DG(D)H-200FP(H)	91DG(D)H-200FP(H)-T			Three phase 220	60					12500	1250	177	1550				
ⓉP 91DG(D)I-200FP(H)	91DG(D)I-200FP(H)-T			Three phase 230	50					15000	1500	212	1300				
ⓉP 91DG(D)J-200FP(H)	91DG(D)J-200FP(H)-T			Three phase 230	60	12500	1250	177	1550								
ⓉP 91DG(D)K-200FP(H)	91DG(D)K-200FP(H)-T			Three phase 380	50	0.90	14500	1450	205	15000	1500	212	1300				
ⓉP 91DG(D)L-200FP(H)	91DG(D)L-200FP(H)-T			Three phase 380	60					12500	1250	177	1550				
ⓉP 91DG(D)M-200FP(H)	91DG(D)M-200FP(H)-T			Three phase 400	50	0.68	14500	1450	205	15000	1500	212	1300				
ⓉP 91DG(D)N-200FP(H)	91DG(D)N-200FP(H)-T			Three phase 440	50					15000	1500	212	1300				
ⓉP 91DG(D)O-200FP(H)	91DG(D)O-200FP(H)-T			Three phase 440	60					12500	1250	177	1550				

* Enter the 'Phase & Voltage' code in the box(□) within the motor model name.

* 'Pinion Shaft' is for attaching gearhead and 'D-Cut Shaft' is for using motor only.

ⓉP : Contains a built-in thermal protector. If a motor overheats for any reason the thermal protector opened and the motor stops. When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

Permissible Torque When using gearhead

60Hz

Model	speed RPM (r/min)	900	600	500	360	300	240	200	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	
Motor/Gearhead	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	
91DG□-200FP	9PBK□BH 9PFK□BH	kgf cm	28	30	36	51	61	76	91	114	137	164	200	200	200	200	200	200	200	200	200	200	200	200	200
		N.m	2.8	3	4	5	6	8	9	11	14	16	20	20	20	20	20	20	20	20	20	20	20	20	20
		lb-in	25	27	32	45	54	67	81	101	121	145	177	177	177	177	177	177	177	177	177	177	177	177	177
91DG□-200FH	9HBK□BH	kgf cm	-	32	38.3	-	64	-	96	120	144	173	-	216	259	300	-	300	300	300	300	300	300	300	300
		N.m	-	3	4	-	6	-	10	12	14	17	-	22	26	30	-	30	30	30	30	30	30	30	30
		lb-in	-	28	34	-	57	-	85	106	127	153	-	191	229	265	-	265	265	265	265	265	265	265	265

50Hz

Model	speed RPM (r/min)	750	500	417	300	250	200	167	120	100	83	75	60	50	42	38	30	25	20	17	15	13	10	8	
Motor/Gearhead	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	
91DG□-200FP	9PBK□BH 9PFK□BH	kgf cm	33	37	45	62	74	92	111	139	166	200	200	200	200	200	200	200	200	200	200	200	200	200	200
		N.m	3.3	4	4	6	7	9	11	14	17	20	20	20	20	20	20	20	20	20	20	20	20	20	20
		lb-in	29	33	39	54	65	82	98	122	147	176	177	177	177	177	177	177	177	177	177	177	177	177	177
91DG□-200FH	9HBK□BH	kgf cm	-	39	47	-	78	-	117	146	175	210	-	262	300	300	-	300	300	300	300	300	300	300	300
		N.m	-	4	5	-	8	-	12	15	18	21	-	26	30	30	-	30	30	30	30	30	30	30	30
		lb-in	-	34	42	-	69	-	103	129	155	185	-	231	265	265	-	265	265	265	265	265	265	265	265

* Enter the gear ratio in the box(□) within the gearhead model name. A colored background indicates gear shaft rotation in the same direction as the motor shaft ; a white background indicates rotation in the opposite direction.

* The speed is calculated by dividing the motor's synchronous speed (50Hz : 1500 r/min, 60 Hz : 1800 r/min) by the gear ratio.

* The actual speed is 2~20% less than the displayed value, depending on the size of the load.

* If more slow speed is needed than above value, use decimal gearhead with a gear ratio of 10:1 could be used between general gearhead and motor. Even in this case, just speed will be reduced without increase in permissible torque; the maximum permissible torque is 200kgfcm (P type) / 300kgfcm (H type).

Dimension

LEAD WIRE TYPE

GEARED MOTOR

* MOTOR MODEL : 9IDG□-200FP(H) (GENERAL FAN)

* GEARHEAD MODEL :

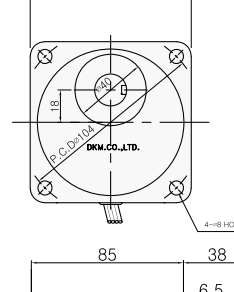
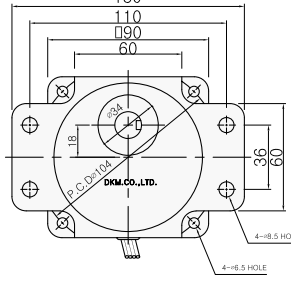
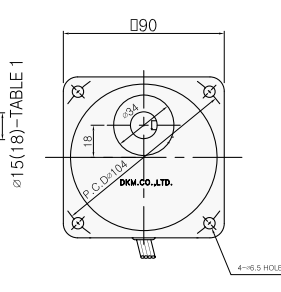
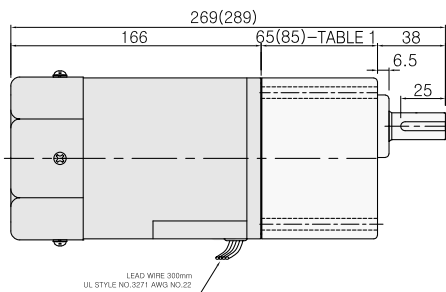
9PB□3BH - 9PB□180BH

* GEARHEAD MODEL :

9PF□3BH - 9PF□180BH

* GEARHEAD MODEL :

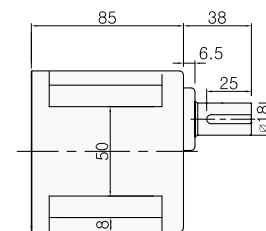
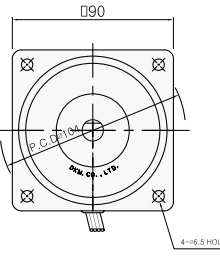
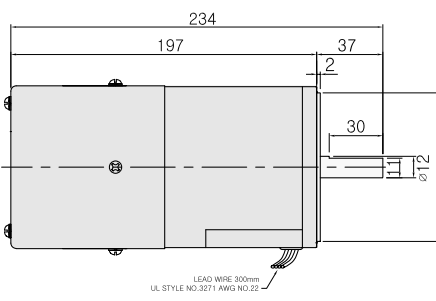
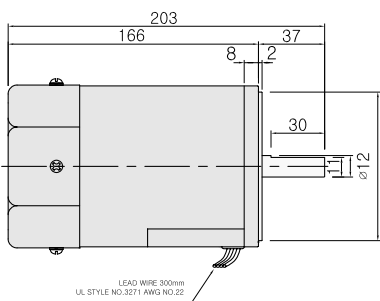
9HB□3BH - 9HB□180BH



MOTOR ONLY

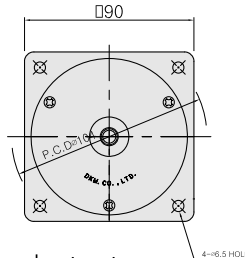
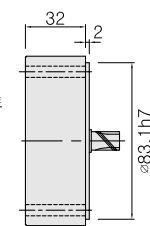
* MOTOR MODEL : 9ID□□-200F (GENERAL FAN)

* MOTOR MODEL : 9ID□□-200F2 (POWERFUL FAN)



INTER-DECIMAL GEARHEAD

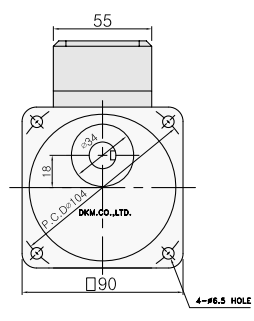
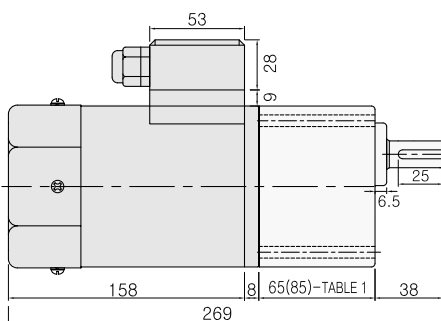
* MODEL : 9XD10M□



TERMINAL BOX TYPE

* MOTOR MODEL :

9IDG□-200FP(H)-T (GENERAL FAN)

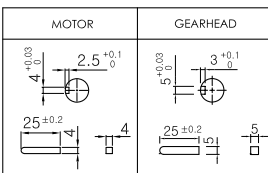


* Note : There are 2 kinds of fan type (General Fan / Powerful Fan). Customer can choose fan type according to wanted rating time.

65(85)-TABLE 1

SIZE(mm)	GEARHEAD TYPE
65 - φ15	P TYPE GEARHEAD
85 - φ18	H TYPE GEARHEAD

KEY SPEC



WEIGHT

PART	WEIGHT(Kg)		
MOTOR	3.8		
DECIMAL GEARHEAD	0.5		
GEAR HEAD	GEARHEAD TYPE	P TYPE	H TYPE
	9P(H)□□3BH - 9P(H)□□9BH	1.3	1.45
	9P(H)□□12.5BH - 9P(H)□□18BH	1.3	1.5
	9P(H)□□25BH - 9P(H)□□60BH	1.4	1.7
	9P(H)□□90BH - 9P(H)□□180BH	1.4	1.8

GEARHEAD OUTPUT

MODEL	P TYPE	H TYPE
ROUND TYPE		
9P(H)□□S3BH ~9P(H)□□S180BH		
D-CUT TYPE		
9P(H)□□D3BH ~9P(H)□□D180BH		
KEY TYPE		
9P(H)□□K3BH ~9P(H)□□K180BH		

MOTOR OUTPUT

MODEL	SHAFT
GEAR TYPE	
9IDG□-200□P(H)	18.5(22) * 18.5 : P TYPE 22 : H TYPE
ROUND TYPE	
9IDS□-200□	37 φ12
D-CUT TYPE	
9IDD□-200□	37 30 φ12
KEY TYPE	
9IDK□-200□	37 25 φ12

* Note : Above table indicates output shaft dimension made by user's request and ★ indicates the basic dimension in factory shipping.

Connection Diagrams

Please refer to page 38.