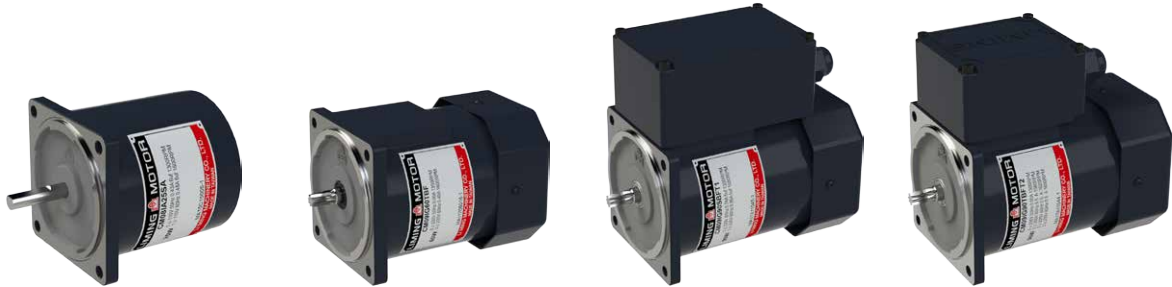


三相可逆式馬達 3-Phase Reversible Motor



■ 三相可逆式馬達 3-Phase Reversible Motor

可逆式馬達特徵：適用於三相馬達頻繁正逆轉操作 (30 分鐘額定)。

Characteristics of reversible motor: Applicable to 3-phase motor frequently cw / ccw operation (30 minutes rating).

■ 馬達一般規格 Motor General Specification

絕緣阻抗：在馬達的線圈與外殼間以 DC500V 高阻計測定，其數值在 100MΩ 以上。

絕緣耐壓：在馬達的線圈與外殼間施加 50Hz 或 60Hz、1.5KV、1 分鐘無發生異常現象。

溫度上升：於馬達額定運轉後以電阻法測定，溫度上升值在 80°C 以下。

絕緣等級：B 種 (130°C)

保護等級：導線型 IP20，端子盒型 IP54。

使用溫度：-10°C ~+50°C (電容連續運轉馬達 -10°C ~+40°C) (不結凍狀態)。

使用濕度：85% 以下 (不結露狀態)。

Insulation impedance: Measure with DC500V high resistance gauge between the coil and casing of motor, the reading is 100M or higher.

Insulation resistance to pressure: Apply 50Hz or 60Hz, 1.5V between the coil and casing of motor for one minute without irregularity resulted.

Temperature rise: To specify by resistance method after motor reaches rated operation, temperature is less than 80°C.

Insulation: B (130°C)

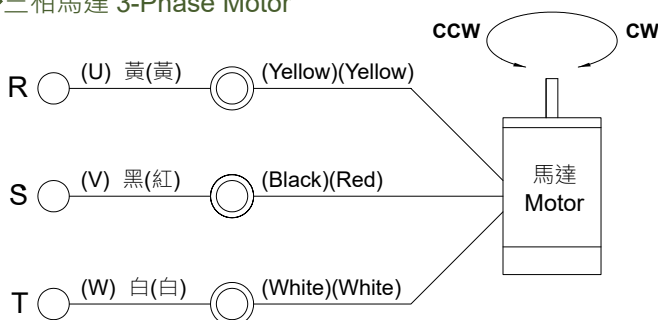
Protection: Motor with conductive wire is IP20; motor with terminal box is IP54.

Operating temperature: -10°C ~+50°C (Capacitor operation motor -10°C ~+40°C) (No freezing)

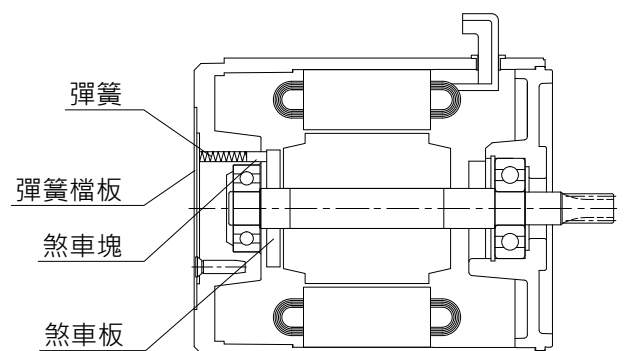
Operating humidity: 85% or less (No condensation)

■ 馬達接線圖 Motor Wiring Diagram

◆ 三相馬達 3-Phase Motor



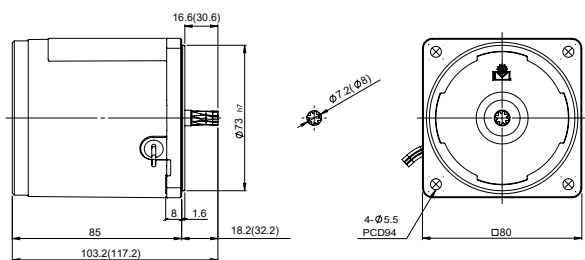
■ 可逆馬達機構 Reversible Motor Machinery



馬達線圖 Motor

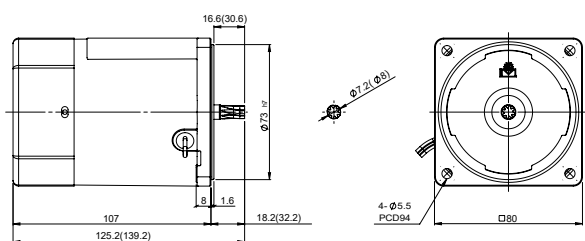
CM08 □ 25

註：IA (*) 為 IA 型相關尺寸



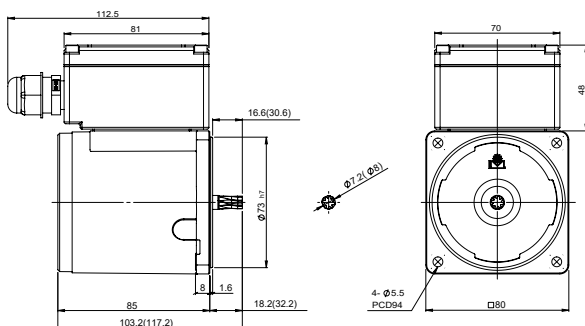
重量 Weight : 1.5kg $\pm 5\%$

CM08 □ 25F



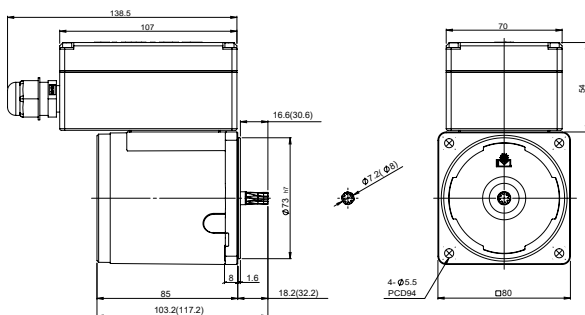
重量 Weight : 1.6kg $\pm 5\%$

CM08 □ 25T



重量 Weight : 2kg $\pm 5\%$

CM08 □ 25T1

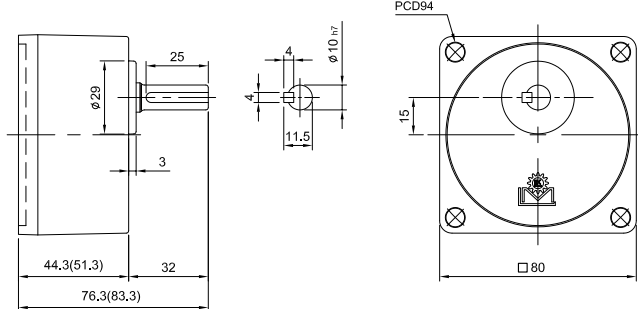


重量 Weight : 1.7kg $\pm 5\%$

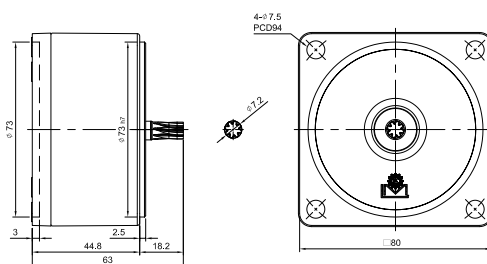
減速機線圖 Gear Head

CG08B □ S □

註：(*) 為 1/90~1/300 之尺寸



CG08B □ X



直接連結減速馬達時之容許轉矩 Permissible Torque of Direct Link Gearmotor

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio	轉速 Speed (RPM)		容許 Permissible (kgf·cm)		減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer
				50Hz	60Hz	50Hz	60Hz	
25W	CM08RG25	CG08 □	3	500	600	5.0	4.1	(A) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			5	300	360	7.8	6.3	
			6	250	300	9.4	7.6	
			7.5	200	240	11.8	9.5	
			9	166	200	14.1	11.4	
			12.5	120	144	19.6	16	
			15	100	120	23	19	
			18	83	100	28	23	(B) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor
			25	60	72	38	31	
			30	50	60	46	37	
			36	42	50	55	45	
			50	30	36	76	62	
			60	25	30	80	75	
			75	20	24	80	80	
			90	17	20	80	80	(C) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			100	15	18	80	80	
			120	12.5	15	80	80	
			150	10	12	80	80	
			180	8.3	10	80	80	
			200	7.5	9	80	80	
			240	6.25	7.5	80	80	
			300	5	6	80	80	

25W 可逆馬達規格表

框號尺寸 SIZE (mm)	極數 Poles (P)	輸出功率 Output (W)	規格 Type	電壓 Voltage (V)	頻率 Frequency (Hz)	負荷 Duty (min)	額定 Rated Load				啟動電流 Starting Current (A)	啟動轉矩 Starting Torque (kgf·cm)
							輸入功率 Input (W)	電流 Current (A)	轉速 Speed (RPM/min)	轉矩 Torque (kgf·cm)		
80	4	25	CM08RG25TB CM08RA25TB	220	50	30	54	0.24	1250	1.9	0.48	5.4
				220	60	30	52	0.2	1500	1.6	0.46	4.3
				230	50	30	56	0.25	1250	1.9	0.52	6.2
				230	60	30	52	0.21	1500	1.6	0.49	4.8
			CM08RG25TC CM08RA25TC	380	50	30	53	0.13	1250	1.9	0.27	5.4
				380	60	30	49	0.11	1500	1.6	0.26	4.2
			CM08RG25TJ CM08RA25TJ	220	50	30	54	0.24	1250	1.9	0.48	5.4
				220	60	30	49	0.2	1500	1.5	0.45	4.2
				230	50	30	56	0.24	1250	1.9	0.5	5.9
				230	60	30	52	0.21	1500	1.6	0.47	4.6
				380	50	30	52	0.13	1250	1.9	0.27	5.3
				380	60	30	48	0.11	1500	1.5	0.26	4.1

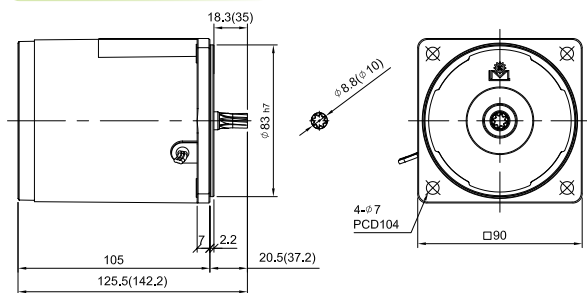
如馬達特性變更，恕不另行通知，以馬達銘牌為準。

In case of change of motor characteristics, no further notice shall be given. The information shown on the nameplate of motor is taken as standard.

馬達線圖 Motor

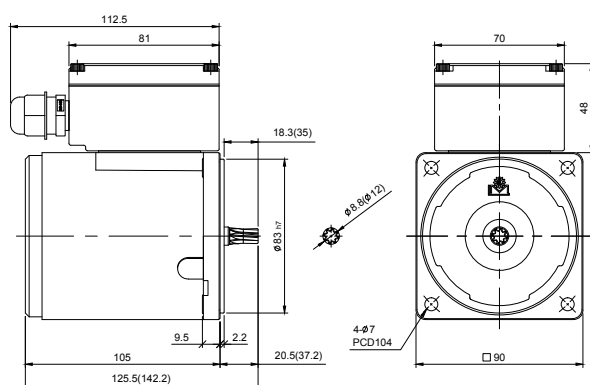
CM09 □ 40

註：IA (*) 為 IA 型相關尺寸



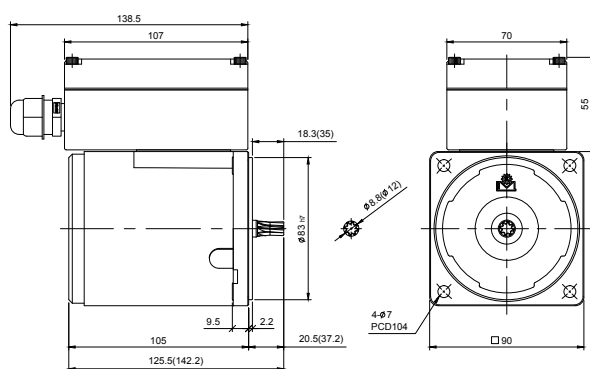
重量 Weight : 2.3kg ±5%

CM09 □ 40T



重量 Weight : 2.7kg ±5%

CM09 □ 40T1

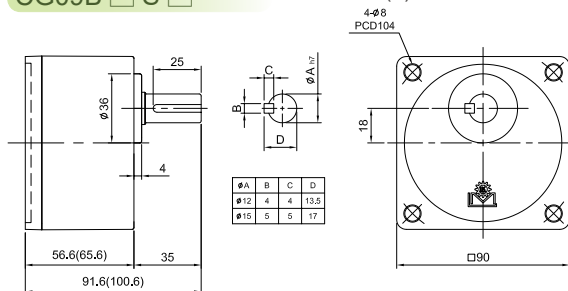


重量 Weight : 2.5kg ±5%

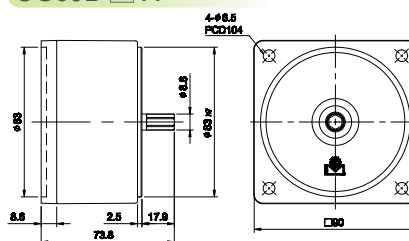
減速機線圖 Gear Head

CG09B □ S □

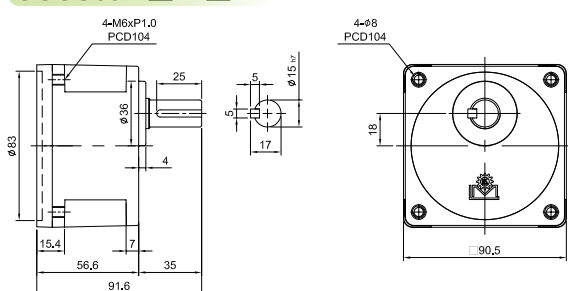
註：(*) 為 1/90~1/240 之尺寸



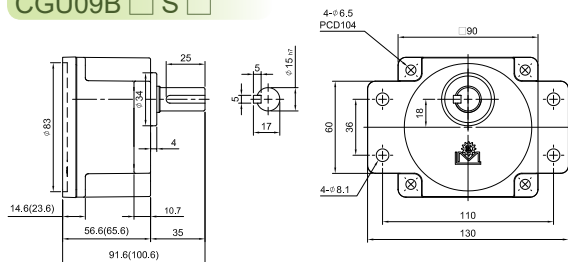
CG09B □ X



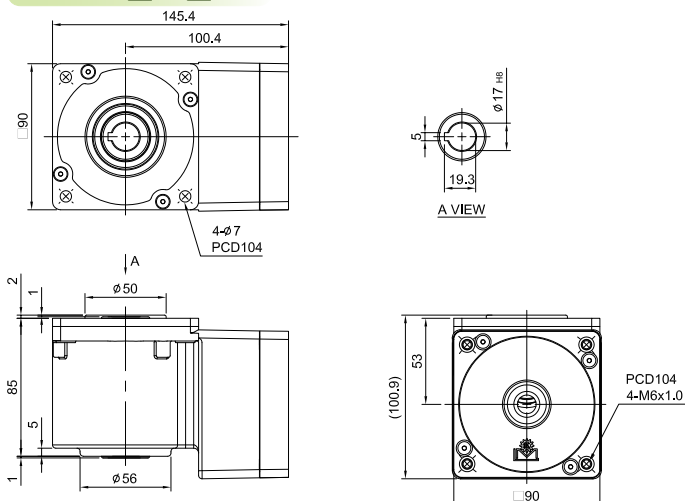
CGCU09B □ S □



CGU09B □ S □



CGB09B □ H □



■ 直接連結減速馬達時之容許轉矩 Permissible Torque of Direct Link Gearmotor

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio	轉速 Speed (RPM)		容許 Permissible (kgf·cm)		減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer
				50Hz	60Hz	50Hz	60Hz	
40W	CM09RG40	CG09 □	3	500	600	7.3	6.3	(A) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			5	300	360	12	10	
			6	250	300	14.7	12	
			7.5	200	240	18	15	
			9	166	200	22	19	
			12.5	120	144	30	26	
			15	100	120	36	30	
			18	83	100	43	37	(B) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor
			25	60	72	54	45	
			30	50	60	65	54	
			36	42	50	77	65	
			50	30	36	100	90	
			60	25	30	100	100	
			75	20	24	100	100	
			90	17	20	100	100	(C) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			100	15	18	100	100	
			120	12.5	15	100	100	
			150	10	12	100	100	
			180	8.3	10	100	100	
			200	7.5	9	100	100	
			240	6.25	7.5	100	100	

■ 直接連結減速馬達時之容許轉矩 (中空軸) Permissible Torque of Direct Link Gearmotor (Hollow Output Shaft)

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio / 頻率 (Hz)	9	15	18	22.5	27	37.5	45	54	75	90	108	150	180	225	
40W	CM09RG40	CGB09 ☐	50Hz	轉速 RPM	166	100	83	66	55	40	33	27	20	16	13	10	8.3	6.6
				容許 Nm	2	3.4	4	5.1	6.1	8.5	10.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
			60Hz	轉速 RPM	200	120	100	80	66	48	40	33	24	20	16	12	10	8
				容許 Nm	1.6	2.7	3.3	4.1	5	6.9	8.3	10	10	10	10	10	10	10
減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer				(A) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor									(B) 與馬達同一方向旋轉 Rotating in the same direction as the motor					

■ 40W 可逆馬達規格表

框號尺寸 SIZE (mm)	極數 Poles (P)	輸出功率 Output (W)	規格 Type	電壓 Voltage (V)	頻率 Frequency (Hz)	負荷 Duty (min)	額定 Rated Load				啟動電流 Starting Current (A)	啟動轉矩 Starting Torque (kgf·cm)
							輸入功率 Input (W)	電流 Current (A)	轉速 Speed (RPM/min)	轉矩 Torque (kgf·cm)		
90	4	40	CM09RG40TB CM09RA40TB	200	50	30	73	0.29	1300	2.95	0.76	7
				200	60	30	71	0.26	1550	2.4	0.71	5.4
				220	50	30	81	0.31	1300	3.2	0.84	8.8
				220	60	30	74	0.27	1600	2.4	0.78	6.5
				230	50	30	77	0.31	1350	3	0.89	9.8
				230	60	30	72	0.27	1600	2.4	0.83	7.4
			CM09RG40TC CM09RA40TC	380	50	30	75	0.17	1300	3	0.47	8.7
				380	60	30	73	0.15	1600	2.4	0.44	6.5
			CM09RG40TJ CM09RA40TJ	200	50	30	68	0.27	1250	3	0.72	7.1
				200	60	30	64	0.24	1550	2.4	0.67	5.4
				220	50	30	74	0.29	1300	3.2	0.8	8.8
				220	60	30	65	0.24	1600	2.4	0.75	6.7
				230	50	30	77	0.29	1300	3.5	0.8	8.8
				230	60	30	70	0.25	1600	2.6	0.79	7.3
				380	50	30	77	0.17	1300	3.4	0.46	8.8
				380	60	30	65	0.14	1600	2.4	0.43	6.6

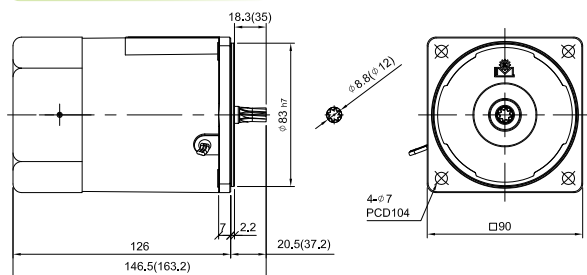
如馬達特性變更，恕不另行通知，以馬達銘牌為準。

In case of change of motor characteristics, no further notice shall be given. The information shown on the nameplate of motor is taken as standard.

馬達線圖 Motor

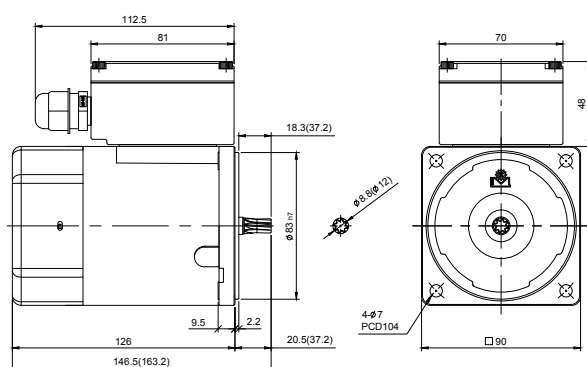
CM09 □ 60F

註：IA (*) 為 IA 型相關尺寸



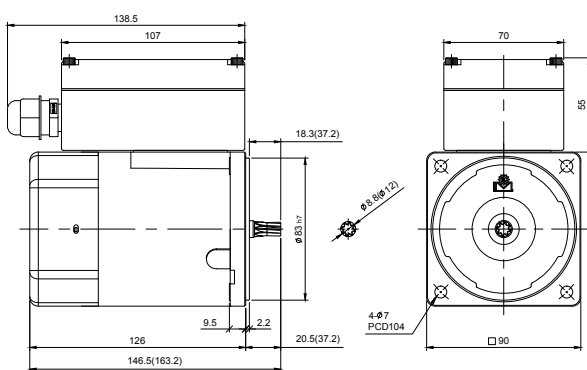
重量 Weight : 2.5kg ±5%

CM09 □ 60 □ FT



重量 Weight : 2.8kg ±5%

CM09 □ 60 □ FT1

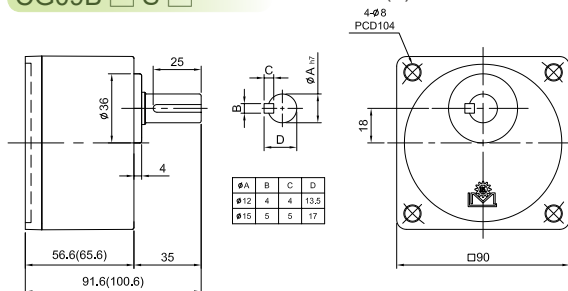


重量 Weight : 2.7kg ±5%

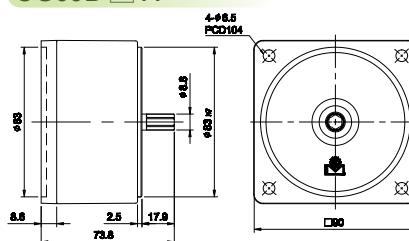
減速機線圖 Gear Head

CG09B □ S □

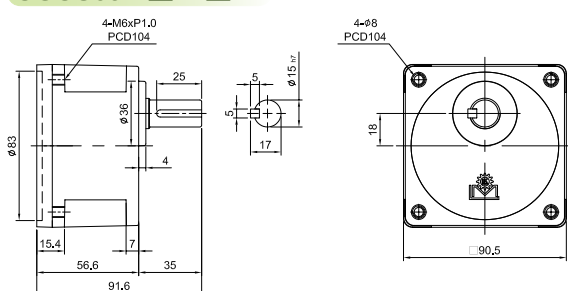
註：(*) 為 1/90~1/240 之尺寸



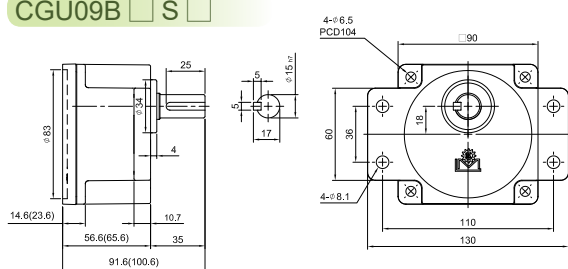
CG09B □ X



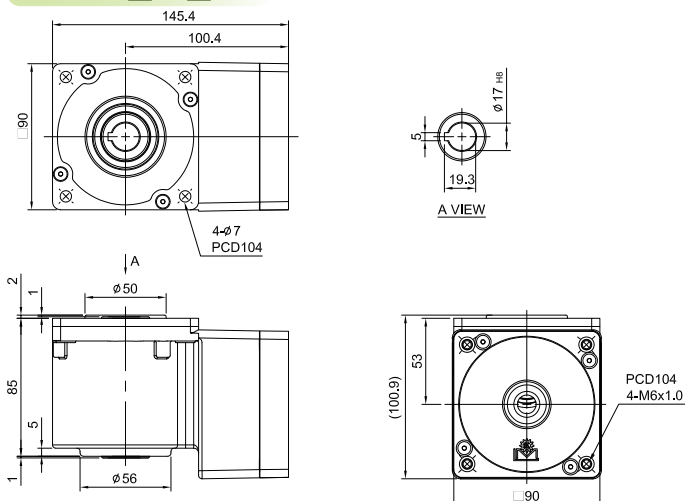
CGCU09B □ S □



CGU09B □ S □



CGB09B □ H □



■ 直接連結減速馬達時之容許轉矩 Permissible Torque of Direct Link Gearmotor

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio	轉速 Speed (RPM)		容許 Permissible (kgf-cm)		減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer
				50Hz	60Hz	50Hz	60Hz	
60W	CM09RG60	CG09 □	3	500	600	12	9.8	(A) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			5	300	360	19	16	
			6	250	300	22	19	
			7.5	200	240	28	24	
			9	166	200	34	28	
			12.5	120	144	48	40	
			15	100	120	55	47	
			18	83	100	62	55	(B) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor
			25	60	72	82	69	
			30	50	60	98	83	
			36	42	50	118	100	
			50	30	36	164	138	
			60	25	30	196	160	
			75	20	24	200	175	
			90	17	20	200	200	(C) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			100	15	18	200	200	
			120	12.5	15	200	200	
			150	10	12	200	200	
			180	8.3	10	200	200	
			200	7.5	9	200	200	
			240	6.25	7.5	200	200	

■ 直接連結減速馬達時之容許轉矩 (中空軸) Permissible Torque of Direct Link Gearmotor (Hollow Output Shaft)

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio / 頻率 (Hz)	9	15	18	22.5	27	37.5	45	54	75	90	108	150	180	225	
60W	CM09RG60	CGB09 ☐	50Hz	轉速 RPM	166	100	83	66	55	40	33	27	20	16	13	10	8.3	6.6
				容許 Nm	3.2	5.4	6.5	8.2	9.8	13.6	16.4	19.6	19.6	19.6	19.6	19.6	19.6	19.6
			60Hz	轉速 RPM	200	120	100	80	66	48	40	33	24	20	16	12	10	8
				容許 Nm	2.6	4.3	5.2	6.5	7.8	10.9	13.1	15.7	15.7	15.7	15.7	15.7	15.7	15.7
減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer				(A) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor									(B) 與馬達同一方向旋轉 Rotating in the same direction as the motor					

■ 60W 可逆馬達規格表

框號尺寸 SIZE (mm)	極數 Poles (P)	輸出功率 Output (W)	規格 Type	電壓 Voltage (V)	頻率 Frequency (Hz)	負荷 Duty (min)	額定 Rated Load				啟動電流 Starting Current (A)	啟動轉矩 Starting Torque (kgf-cm)
							輸入功率 Input (W)	電流 Current (A)	轉速 Speed (RPM/min)	轉矩 Torque (kgf-cm)		
90	4	60	CM09RG60TBF CM09RA60TBF	200	50	30	102	0.43	1300	4.6	1.1	10.8
				200	60	30	98	0.38	1550	3.7	1	8.3
				220	50	30	107	0.45	1300	4.5	1.2	13.2
				220	60	30	100	0.38	1600	3.7	1.1	10
				230	50	30	107	0.46	1350	4.3	1.2	14.2
				230	60	30	100	0.38	1600	3.6	1.2	10
			CM09RG60TCF CM09RA60TCF	380	50	30	105	0.25	1300	4.4	0.7	13.2
				380	60	30	98	0.21	1600	3.6	0.65	10
			CM09RG60TJF CM09RA60TJF	200	50	30	107	0.43	1250	4.6	1	10.3
				200	60	30	106	0.39	1500	3.9	1	7.8
				220	50	30	118	0.46	1300	4.9	1.2	12.7
				220	60	30	99	0.37	1600	3.6	1.1	9.7
				230	50	30	109	0.47	1350	4.3	1.2	14
				230	60	30	101	0.39	1600	3.6	1.2	10
				380	50	30	108	0.26	1300	4.5	0.71	12.9
				380	60	30	100	0.22	1600	3.6	0.65	9.7

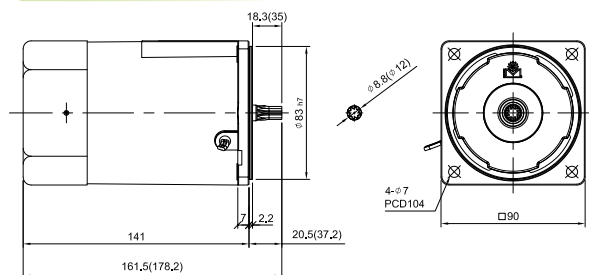
如馬達特性變更，恕不另行通知，以馬達銘牌為準。

In case of change of motor characteristics, no further notice shall be given. The information shown on the nameplate of motor is taken as standard.

馬達線圖 Motor

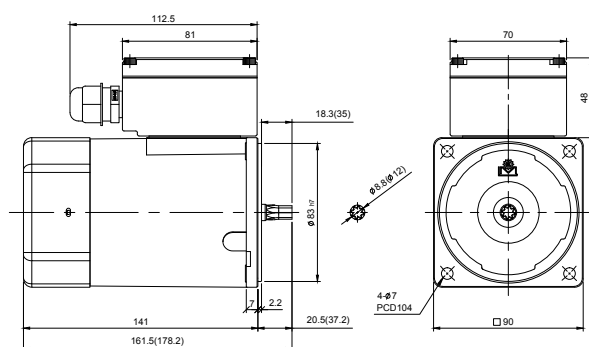
CM09 □ 90F

註：IA (*) 為 IA 型相關尺寸



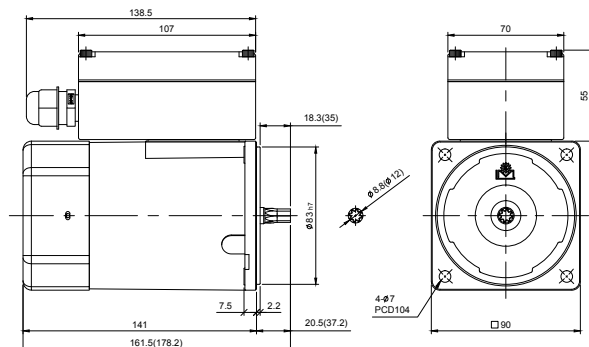
重量 Weight : 3.1kg ±5%

CM09 □ 90FT



重量 Weight : 3.5kg ±5%

CM09 □ 90FT1

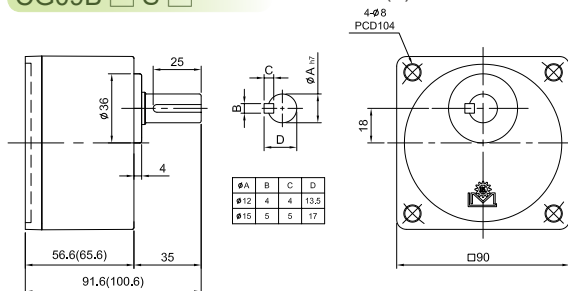


重量 Weight : 3.3kg ±5%

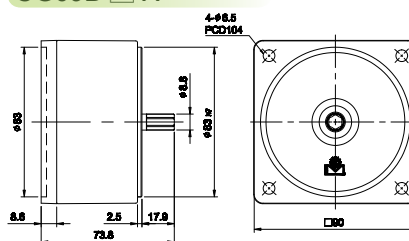
減速機線圖 Gear Head

CG09B □ S □

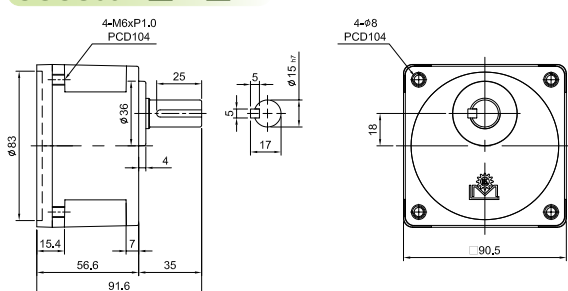
註：(*) 為 1/90~1/240 之尺寸



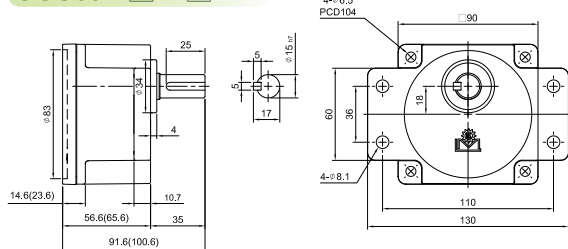
CG09B □ X



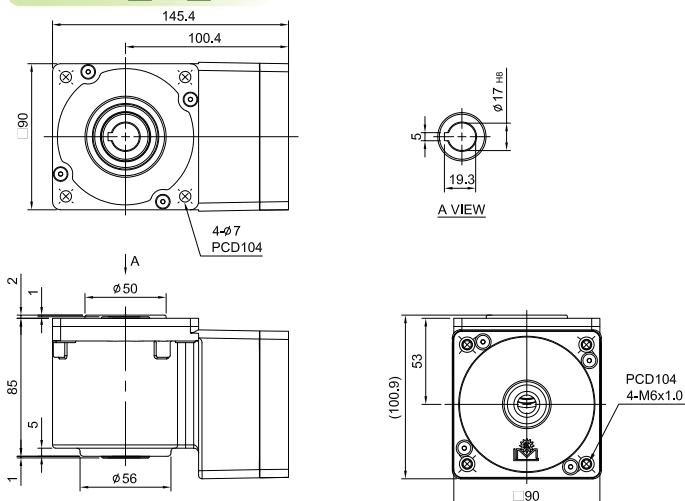
CGCU09B □ S □



CGU09B □ S □



CGB09B □ H □



直接連結減速馬達時之容許轉矩 Permissible Torque of Direct Link Gearmotor

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio	轉速 Speed (RPM)		容許 Permissible (kgf·cm)		減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer
				50Hz	60Hz	50Hz	60Hz	
90W	CM09IG90	CG09 □	3	500	600	18	14	(A) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			5	300	360	28	24	
			6	250	300	34	28	
			7.5	200	240	43	35	
			9	166	200	51	42	
			12.5	120	144	71	60	
			15	100	120	85	70	
			18	83	100	96	80	(B) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor
			25	60	72	125	103	
			30	50	60	150	124	
			36	42	50	178	149	
			50	30	36	200	200	
			60	25	30	200	200	
			75	20	24	200	200	
			90	17	20	200	200	(C) 與馬達同一方向旋轉 Rotating in the same direction as the motor
			100	15	18	200	200	
			120	12.5	15	200	200	
			150	10	12	200	200	
			180	8.3	10	200	200	
			200	7.5	9	200	200	
			240	6.25	7.5	200	200	

直接連結減速馬達時之容許轉矩 (中空軸) Permissible Torque of Direct Link Gearmotor (Hollow Output Shaft)

輸出功率 Output Power	馬達型號 Motor Model	減速機型號 Reducer Model	減速比 Ratio / 頻率 (Hz)	9	15	18	22.5	27	37.5	45	54	75	90	108	150	180	225	
90W	CM09RG90	CGB09 ☐	50Hz	轉速 RPM	166	100	83	66	55	40	33	27	20	16	13	10	8.3	6.6
				容許 Nm	4.8	8	9.6	12	14.4	20	24	28.8	28.8	28.8	28.8	28.8	28.8	28.8
			60Hz	轉速 RPM	200	120	100	80	66	48	40	33	24	20	16	12	10	8
				容許 Nm	3.9	6.5	7.8	9.8	11.8	16.4	19.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
減速機出力軸旋轉方向 Rotating direction of output shaft of speed reducer				(A) 與馬達相反方向旋轉 Rotating in the opposite direction to the motor									(B) 與馬達同一方向旋轉 Rotating in the same direction as the motor					

90W 可逆馬達規格表

框號尺寸 SIZE (mm)	極數 Poles (P)	輸出功率 Output (W)	規格 Type	電壓 Voltage (V)	頻率 Frequency (Hz)	負荷 Duty (min)	額定 Rated Load				啟動電流 Starting Current (A)	啟動轉矩 Starting Torque (kgf·cm)
							輸入功率 Input (W)	電流 Current (A)	轉速 Speed (RPM/min)	轉矩 Torque (kgf·cm)		
90	4	90	CM09RG90TBF CM09RA90TBF	200	50	30	138	0.57	1300	6.7	1.79	19.3
				200	60	30	135	0.51	1550	5.6	1.6	13.8
				220	50	30	133	0.58	1350	6.4	1.96	22.3
				220	60	30	132	0.5	1600	5.4	1.82	17.1
				230	50	30	137	0.6	1350	6.4	2	22.2
				230	60	30	139	0.5	1600	5.8	1.8	18.7
			CM09RG90TCF CM09RA90TCF	380	50	30	148	0.37	1350	6.5	1.1	21.6
				380	60	30	138	0.31	1600	5.5	1	15.9
			CM09RG90TJF CM09RA90TJF	200	50	30	150	0.63	1300	6.6	1.7	16.6
				200	60	30	146	0.56	1550	5.6	1.6	12.5
				220	50	30	158	0.69	1350	6.6	1.9	20
				220	60	30	143	0.56	1600	5.4	1.7	15.3
				230	50	30	163	0.74	1350	6.4	2	22.6
				230	60	30	145	0.57	1600	5.4	1.9	17.5
				380	50	30	154	0.39	1350	6.6	1.1	21.2
				380	60	30	143	0.32	1600	5.4	1	15.5

如馬達特性變更，恕不另行通知，以馬達銘牌為準。

In case of change of motor characteristics, no further notice shall be given. The information shown on the nameplate of motor is taken as standard.