Company Profile
公司簡介

城邦精密工業股份有限公司自1990年創立以來，以誠懇、信賴、創新、諮詢為經營理念先進的廠房設備做基礎，以實力第一、信譽第一來打造城邦人自己的品牌。公司主要生產標準三相減速機型、標準三相縮框機型、標準單相減速機型、標準單相縮框機型及其他配合傳動機型。


台灣廠房 TAIWAN FACTORY


舊廠房 OLD FACTORY

CHENG PANG precision Corp., Since its inception in 1990, has created CPG own brand by sincerity, trust, innovation and consultation for the concept of business, advanced plant and equipments for foundation and the priority of strength and reputation for the target. Our company mainly produces three-phase geared-motor reducer, light duty type of three-phase geared-motor reducer, single-phase geared-motor reducer, light duty type of single-phase geared-motor reducer, and other relative transmission type.

Business Concept
經營理念

誠懇、信賴、創新、諮詢
Honest.Trust.Create.Consult

蘇州廠房 SUZHOU FACTORY

History
辛苦耕耘

1990 成立城邦企業股份有限公司,職工共計4人
Estiblished Cheng Pang Enterprise Co.Total 4 Workers

1992 成立cnc銑床及車床加工部門
Set Miller & Lathe Department

1993 建立全省經銷體系
Developed Marketing NetWork For Whole Taiwan

1995 改組為城邦精密工業股份有限公司
Modified Company Name To Cheng Pang Precision Corp

1996 成功外銷敘利亞市場及東南亞市場
Exported To Syria And Asia Market

1999 遷入南山路城邦新廠房,職工共計35人
Moved To New Factory. Total 35 Workers

1999 拓展中國大陸市場
Exported To Mainland China

2002 更新城邦識別體系為 CPG
Modified Logo As CPG

2003 在蘇州落地生根,開始華東市場
Set Up Suzhou Office And Developed East China Market.

2004 建立蘇州廠區,達到自我加工、生產
Established Suzhou Factory To Achieve Self-processing And Producing.

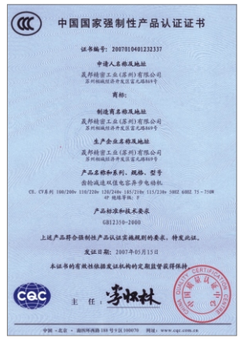
2010 成功遷入蘇州漕湖產業園,職工共計350人
Successfully Moved Into Caohu Industrial Park, Suzhou City. Total 350 Workers.

Certificates

榮譽認證

中國國家強制性產品認證證書 (Certificate for China compulsory product certification)

CCC 三相 (CCC 3-PHASE)



CCC 雙值電容
CCC Two-value capacitor

CCC 電容運轉
CCC Capacitor run

CE認證證書 (CE Marking)

CQC中的CE認證
(CQC in CE Marking)

TUV中的CE認證
(TUV in CE Marking)

EMC 電磁兼容指令
EMC Electromagnetic
Compatibility Directive

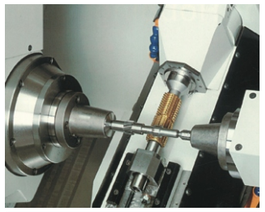
ISO 9001國際品質系統認證標準 (ISO 9001 Quality system certificate)

ISO 9001:2008

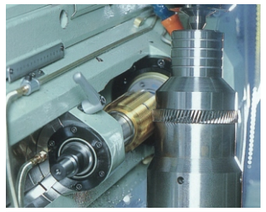
ISO 9001:2008

Facilities

廠房設備



齒軸仿齒加工
PINION SKIVING



滾 齒 機
HOBBING MACHING

銑 床 及 車 床
MILLER & LATHE

齒輪檢驗機
GEAR TESTER

嚙合測試機
GEAR MESH TESTER

零 件 庫 存
INVENTORY

Workshop assembly

現場裝機實配

INDEX
目 錄

1-1 型號說明 (DESCRIPTION OF MODEL)

CH 400 30 SZ B G1 LB

機型代號 TYPE

馬力 CAPACITY : 100W - 3700W

減速比RATIO : 3 , 5 , 10...1800

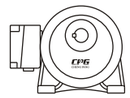
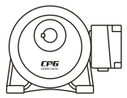
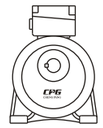
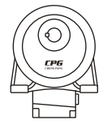
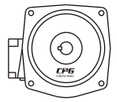
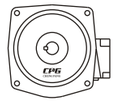
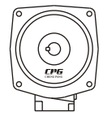
S ：附三相馬達 220,380V/50,60HZ-3 PHASE
K ：附三相馬達 220,440V/50,60HZ-3 PHASE
A ：附單相文電馬達 110,220V/50,60HZ-1 PHASE
AV：附單相離心馬達 110,220V/50,60HZ-1 PHASE
L ： DC直流馬達 DC-MOTOR
P ：東元鐵殼三相馬達 TECO 3-PHASE STEEL PLATE MOTOR
Z ：縮框機型LIGHT DUTY TYPE
□ ：鋁合金馬達 ALUMINUM MOTOR
T ：鐵殼馬達 STEEL PLATE MOTOR
F ：法蘭修平面 FLANGE WITH FLAT SURFACE
Q1:110V 強制風扇 EXTERNAL FAN 110V
Q2:220V 強制風扇 EXTERNAL FAN 220V

B ：DC90V安全剎車器 BRAKE UNIT
YB: 手釋放剎車器 WITH RELEASE BRAKE UNIT
D : DC24V送電剎車器 DC24V BRAKE
W : 蝸輪減速機 WORM GEAR REDUCER

依出力軸看配線盒方向.
VIEW FROM OUTPUT SHAFT
G1 : 左方向LEFT (標準型) (STD)
G2 : 右方向RIGHT
G3 : 上方向 UPPER
G4 : 下方向 LOWER

入線口方向WIRE INLET
T ：向上TOP
D : 向下DOWN
F ：向前FORWARD
B : 向後BACK
L : 向左LEFT
R : 向右RIGHT

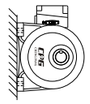
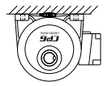
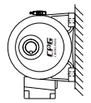
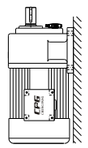
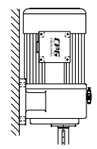
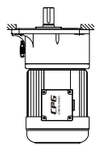
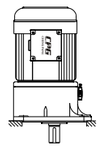
1-2 配線盒方向選定 (TERMINAL BOX DIRECTION)

TYPE	G1-左方向 LEFT SIDE	G2-右方向 RIGHT SIDE	G3-上方向 UPPER SIDE	G4-下方向 LOWER SIDE
CH 型 CH TYPE				
	G1	G2	G3	G4
CV 型 CV TYPE				
	G1	G2	G3	G4

1-3 入線口方向 (WIRE INLET DIRECTION)

							
LD	LT	RD	RT	TL	TR	DL	DR
							
LF	LB	RF	RB	TF	TB	DF	DB

1-4 減速機與透氣塞安裝位置示意圖 (REDUCER AND VENTILATION INSTALLATION)

CH 機型安裝範例 CH INSTALLATION EXAMPLES			
	H0標準STANDARD(CPG正立 CPG STAND)	H3(左側LEFT SIDE)	H6(倒裝INVERT)
			
	H9(右側RIGHT SIDE)	HU(軸向上SHAFT UP)	HD(軸向下SHAFT DOWN)
CV 機型安裝範例 CV INSTALLATION EXAMPLES			
	V0標準STANDARD(CPG正立 CPG STAND)	V3(CPG順轉90° CPG CLOCKWISE 90°)	V6(CPG順轉180° CPG CLOCKWISE 180°)
			
	V9(CPG逆轉90° CPG LEFT TURN90°)	VU(軸向上SHAFT UP)	VD(軸向下SHAFT DOWN)

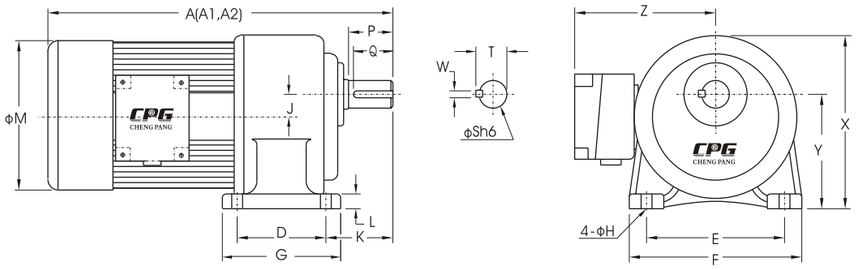
備註：1. 除標準安裝方式外，其餘安裝方式均需先告知本司。
NOTE: 1. IN ADDITION TO THE STANDARD INSTALLATION,THE OTHER INSTALLATION IS REQUIRED PRIOR NOTICE OF THE COMPANY.

2-1 附三相鋁/鐵殼(剎車)馬達減速機
WITH ALUMINUM / STEEL PALTE 3-PHASE(BRAKE) MOTOR.

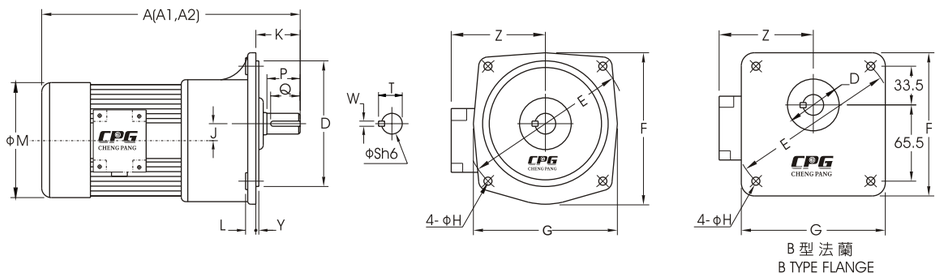
CH..S 臥式
CH..S HORIZONTAL TYPE

CV..S 立式
CV..S VERTICAL TYPE

臥式附三相 HORIZONTAL TYPE



立式附三相 VERTICAL TYPE



B 型 法 蘭
B TYPE FLANGE

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5 * 5 * 27
22	ϕ22	40	7	25	35	7 * 7 * 35
28	ϕ28	45	7	31.1	40	7 * 7 * 40
32	ϕ32	55	10	35.5	50	10 * 8 * 50
40	ϕ40	65	10	43.5	60	10 * 8 * 60
50	ϕ50	80	14	54	75	14 * 9 * 75

適用機型 APPLICABLE MODELS : CH..S , CH..ST , CH..SB , CH..STB , CV..S , CV..ST , CV..SB , CV..STB

臥式 HORIZONTAL TYPE (Dimension in mm)

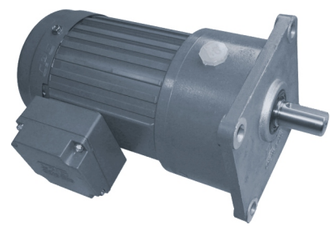
馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8 HP	3-50	1 #	18	250	250	250	40	110	135	65	9	16	50	10	133	138	88.5	120
	60-200	2 #	22	280	280	280	65	130	158	90	11	17.5	60	13	133	152	97.5	120
200W 1/4 HP	3-10	1 #	18	285	285	285	40	110	135	65	9	16	50	10	133	138	88.5	120
	15-90	2 #	22	315	315	315	65	130	158	90	11	17.5	60	13	133	152	97.5	120
	100-200	3 #	28	350	350	350	90	140	178	120	11	23	68	17	133	178	116	120
400W 1/2 HP	3-10	2 #	22	330	330	330	65	130	158	90	11	17.5	60	13	167	152	97.5	135
	15-90	3 #	28	360	360	360	90	140	178	120	11	23	68	17	167	178	116	135
	100-200	4 #	32	395	395	395	130	170	210	165	13	30	70	23	167	212	140	135
750W 1 HP	3-25	3 #	28	380	380	380	90	140	178	120	11	23	68	17	167	178	116	135
	30-120	4 #	32	410	410	410	130	170	210	165	13	30	70	23	167	212	140	135
	125-200	5 #	40	465	465	465	150	210	265	198	15	36	89	24	167	250	162	135
1500W 2 HP	3-30	4 #	32	450	450	450	130	170	210	165	13	30	70	23	192	212	140	146
	40-100	5 #	40	510	510	510	150	210	265	198	15	36	89	24	192	250	162	146
	110-180	6 #	50	560	560	560	170	265	321	238	18	51	120	31.5	192	308	200	146
2200W 3 HP	3-40	5 #	40	520	520	520	150	210	265	198	15	36	89	24	220	250	162	160
	45-100	6 #	50	580	580	580	170	265	321	238	18	51	120	31.5	220	308	200	160
3700W 5 HP	3-10	5 #	40	560	560	560	150	210	265	198	15	36	89	24	220	250	162	160
	15-60	6 #	50	620	620	620	170	265	321	238	18	51	120	31.5	220	308	200	160

立式 VERTICAL TYPE (Dimension in mm)

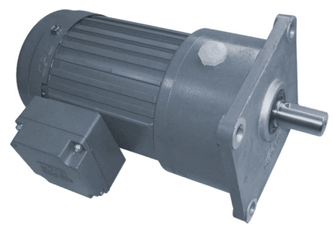
馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8 HP	3-50	1 #	*18	250	250	250	50	140	120	120	9	16	40	12	133	6	120
	60-200	2 #	22	280	280	280	148	185	175	165	11	17.5	48	12	133	3	120
200W 1/4 HP	3-10	1 #	*18	285	285	285	50	140	120	120	9	16	40	12	133	6	120
	15-90	2 #	22	315	315	315	148	185	175	165	11	17.5	48	12	133	3	120
	100-200	3 #	28	350	350	350	170	220	205	195	12	23	58	13	133	3	120
400W 1/2 HP	3-10	2 #	22	330	330	330	148	185	175	165	11	17.5	48	12	167	3	135
	15-90	3 #	28	360	360	360	170	220	205	195	12	23	58	13	167	3	135
	100-200	4 #	32	395	395	395	185	255	248	225	15	30	65	16	167	3	135
750W 1 HP	3-25	3 #	28	380	380	380	170	220	205	195	12	23	58	13	167	3	135
	30-120	4 #	32	410	410	410	185	255	248	225	15	30	65	16	167	3	135
	125-200	5 #	40	465	465	465	230	310	291	272	15	36	85	21	167	5	135
1500W 2 HP	3-30	4 #	32	450	450	450	185	255	248	225	15	30	65	16	192	3	146
	40-100	5 #	40	510	510	510	230	310	291	272	15	36	85	21	192	5	146
	110-180	6 #	50	560	560	560	280	390	372	342	18	51	92	25	192	5	146
2200W 3 HP	3-40	5 #	40	520	520	520	230	310	291	272	15	36	85	21	220	5	160
	45-100	6 #	50	580	580	580	280	390	372	342	18	51	92	25	220	5	160
3700W 5 HP	3-10	5 #	40	560	560	560	230	310	291	272	15	36	85	21	220	5	160
	15-60	6 #	50	620	620	620	280	390	372	342	18	51	92	25	220	5	160

備註 : A ：三相鋁殼馬達 . WITH 3-PHASE ALUMINUM MOTOR.　A1 : 三相鐵殼馬達 . WITH 3-PHASE STEEL PLATE MOTOR.
A2 : 三相馬達附剎車器 . WITH 3-PHASE BRAKE MOTOR .　* ：屬於B型出力法蘭 . BELONG TO B TYPE OUTPUT FLANGE .

2-2 立式附三相(縮框)鋁殼(剎車)馬達減速機——2#本體B型法蘭
VERTICAL (LIGHT DUTY) TYPE WITH ALUMINUM / STEEL PALTE 3-PHASE(BRAKE) MOTOR—— 2# CODE B TYPE FLANGE

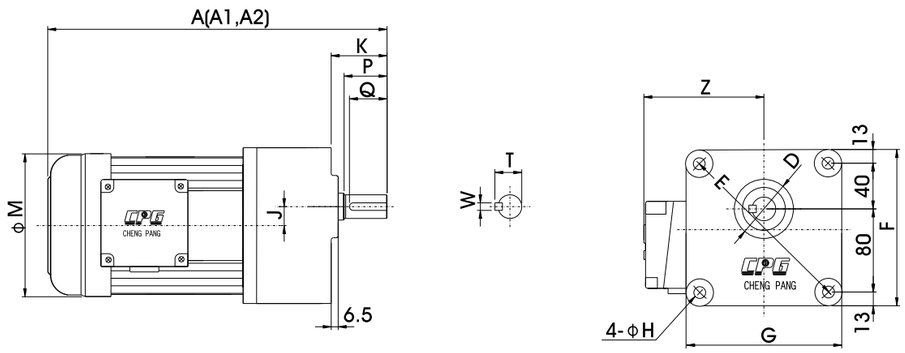


CV..S (CV..SB) 附三相鋁殼
CV..S (CV..SB) VERTICAL TYPE

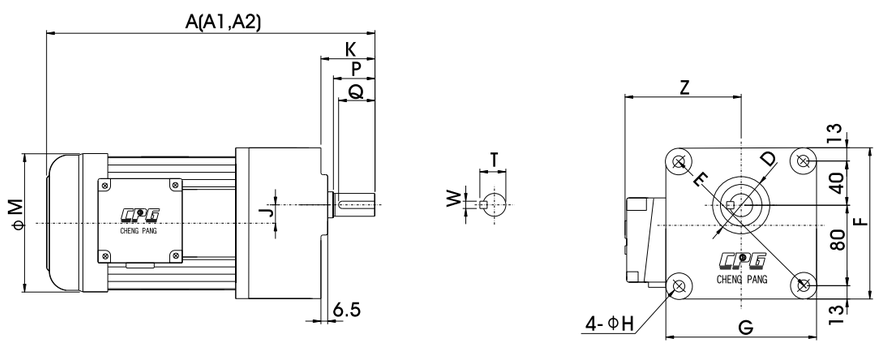


CV..SZ (CV..SZB) 附三相縮框鋁殼
CV..SZ (CV..SZB) VERTICAL LIGHT DUTY TYPE

附三相鋁殼 VERTICAL TYPE



附三相縮框鋁殼 VERTICAL LIGHT DUTY TYPE



出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
22	ϕ22	40	7	25	35	7 * 7 * 35

適用機型 APPLICABLE MODELS : CV..S , CV..ST , CV..SB , CV..STB , CV..SZ , CV..STZ , CV..SZB , CV..STZB

附三相鋁殼 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	M	Z
100W 1/8 HP	60-200	2#	*22	278	278	278	55	170	146	146	11	19.662	50	133	120
200W 1/4 HP	15-90	2#	*22	315	315	315	55	170	146	146	11	19.662	50	133	120
400W 1/2 HP	3-10	2#	*22	330	330	330	55	170	146	146	11	19.662	50	167	135

附三相縮框鋁殼 VERTICAL LIGHT DUTY TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	M	Z
200W 1/4 HP	100-200	2#	*22	315	315	315	55	170	146	146	11	19.662	50	133	120
400W 1/2 HP	15-90	2#	*22	330	330	330	55	170	146	146	11	19.662	50	167	135
750W 1 HP	3-25	2#	*22	350	350	350	55	170	146	146	11	19.662	50	167	135

備註：A ：三相鋁殼馬達 . WITH 3-PHASE ALUMINUM MOTOR.　A1：三相鐵殼馬達 . WITH 3-PHASE STEEL PLATE MOTOR.
A2：三相馬達附剎車器 . WITH 3-PHASE BRAKE MOTOR .　* ：屬於B型出力法蘭 . BELONG TO B TYPE OUTPUT FLANGE .

此本體同樣適用機型 APPLICABLE MODELS : CVM 立式入力法蘭齒輪減速機 CVM FLANGE TYPE WITH VERTICAL MOTOR
CVD 立式雙軸齒輪減速機 CVD DOUBLE SHAFT TYPE WITH VERTICAL MOTOR

【窮之本】

多因放蕩不經營　逐漸窮
不惜錢財手頭鬆　容易窮
朝朝睡到日頭紅　邋遢窮
家有田地不務農　懶惰窮
結識富豪為親朋　攀尚窮
好打官司逞英雄　鬥氣窮
借債納利裝門風　自弄窮
妻孥饞懶子飄蓬　命當窮
子孫相交不良朋　局騙窮
好賭貪花戀酒國　徹底窮

【富之由】

不辭辛苦走道路　勤儉富
買賣公平多主顧　忠厚富
聽得雞鳴離床舖　留心富
手足不停理家務　終久富
常防火盜管門户　謹慎富
不去為非犯法度　守分富
合家大小相幫忙　同心富
妻兒賢慧無欺妒　幫家富
教子訓孫立門户　後代富
存心積德天佑護　為善富

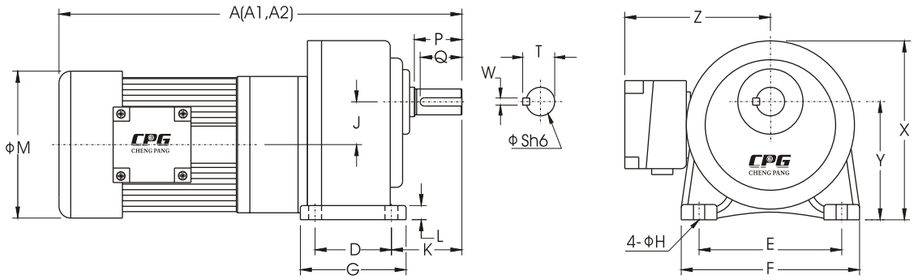
逃避不一定能夠躲的過 .
面對不一定就會最難過 .
得到不一定就會最滿足 .
失去不一定就是最損失 .
轉身不一定就是最軟弱 .
挺身不一定就是最堅強 .

2-3 高速比附三相鋁 / 鐵殼(剎車)馬達減速機
HIGH RATIO TYPE WITH ALUMINUM / STEEL PLATE 3-PHASE (BRAKE) MOTOR

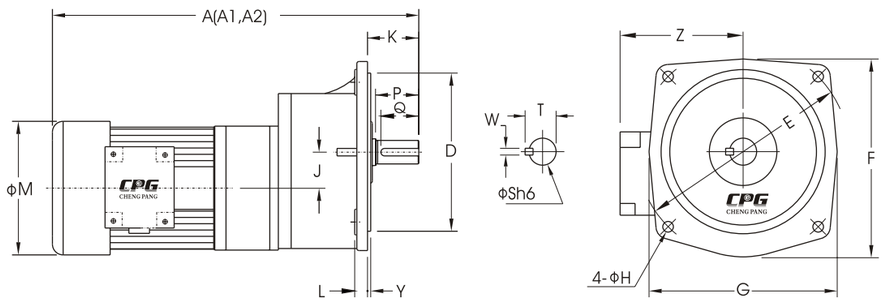
CH..S 臥式
CH..S HORIZONTAL HIGH RATIO TYPE

CV..S 立式
CV..S VERTICAL HIGH RATIO TYPE

臥式高速比 HORIZONTAL HIGH RATIO TYPE



立式高速比 VERTICAL HIGH RATIO TYPE



出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
28	§ 28	45	7	31.1	40	7 * 7 * 40
32	§ 32	55	10	35.5	50	10 * 8 * 50
40	§ 40	65	10	43.5	60	10 * 8 * 60
50	§ 50	80	14	54	75	14 * 9 * 75

適用機型 APPLICABLE MODELS : CH..S , CH..ST , CH..SB , CH..STB , CV..S , CV..ST , CV..SB , CV..STB ,

臥式高速比 HORIZONTAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8 HP	250-1800	1#+3#	28	370	370	370	90	140	178	120	11	39	68	17	133	178	116	120
200W 1/4 HP	250-1800	2#+4#	32	470	470	470	130	170	210	165	13	47.5	70	23	133	212	140	120
400W 1/2 HP	250-1800	3#+5#	40	550	550	550	150	210	265	198	15	59	89	24	167	250	162	135
750W 1 HP	250-1800	3#+6#	50	620	620	620	170	265	321	238	18	74	120	31.5	167	308	200	135
1500W 2HP	250-1800	4#+6#	50	690	690	690	170	265	321	238	18	81	120	31.5	192	308	200	146

立式高速比 VERTICAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8 HP	250-1800	1#+3#	28	370	370	370	170	220	205	195	12	39	58	13	133	3	120
200W 1/4 HP	250-1800	2#+4#	32	470	470	470	185	255	248	225	15	47.5	65	16	133	3	120
400W 1/2 HP	250-1800	3#+5#	40	550	550	550	230	310	291	272	15	59	85	21	167	5	135
750W 1 HP	250-1800	3#+6#	50	620	620	620	280	390	372	342	18	74	92	25	167	5	135
1500W 2HP	250-1800	4#+6#	50	690	690	690	280	390	372	342	18	81	92	25	192	5	146

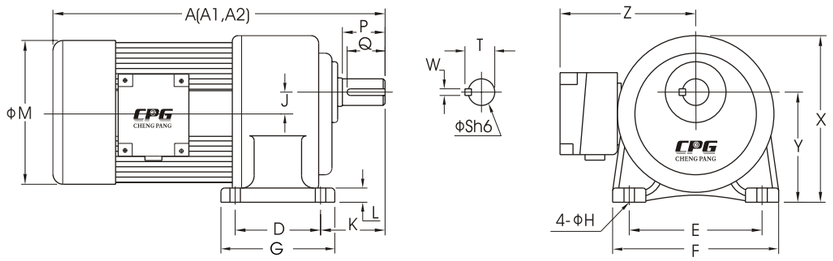
備註 : A ：三相鋁殼馬達 . WITH 3-PHASE ALUMINUM MOTOR.
A1 : 三相鐵殼馬達 . WITH 3-PHASE STEEL PLATE MOTOR.
A2 : 三相馬達附剎車器 . WITH 3-PHASE BRAKE MOTOR .

2-4 附三相縮框鋁 / 鐵殼(剎車)馬達減速機
LIGHT DUTY TYPE WITH ALUMINUM / STEEL PLATE 3-PHASE (BRAKE) MOTOR

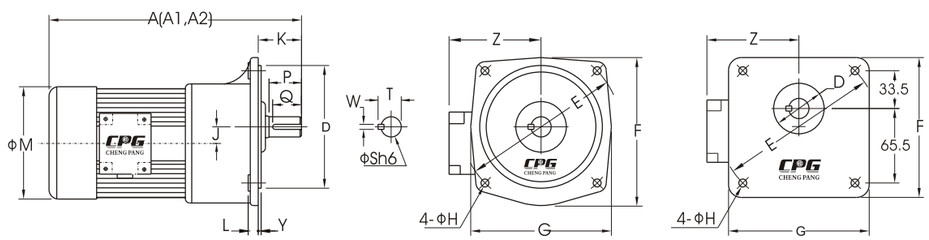
CH..SZ 臥式附三相縮框
CH..SZ HORIZONTAL LIGHT DUTY TYPE

CV..SZ 立式附三相縮框
CV..SZ VERTICAL LIGHT DUTY TYPE

臥式附三相縮框 HORIZONTAL LIGHT DUTY TYPE



立式附三相縮框 VERTICAL LIGHT DUTY TYPE



B型法蘭 B TYPE FLANGE

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5*5*27
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60

適用機型 APPLICABLE MODELS : CH..SZ,CH..STZ,CH..SZB,CH..STZB,CV..SZ,CV..STZ,CV..SZB,CV..STZB

臥式附三相縮框 HORIZONTAL LIGHT DUTY TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8HP	60-200	1#	18	250	250	250	40	110	135	65	9	16	50	10	133	138	88.5	120
200W 1/4HP	15-90	1#	18	285	285	285	40	110	135	65	9	16	50	10	133	138	88.5	120
	100-200	2#	22	315	315	315	65	130	158	90	11	17.5	60	13	133	152	97.5	120
400W 1/2HP	15-90	2#	22	330	330	330	65	130	158	90	11	17.5	60	13	167	152	97.5	135
	100-200	3#	28	360	360	360	90	140	178	120	11	23	68	17	167	178	116	135
750W 1HP	3-25	2#	22	330	330	330	65	130	158	90	11	17.5	60	13	167	152	97.5	135
	30-120	3#	28	380	380	380	90	140	178	120	11	23	68	17	167	178	116	135
	125-200	4#	32	410	410	410	130	170	210	165	13	30	70	23	167	212	140	135
1500W 2HP	3-30	3#	28	420	420	420	90	140	178	120	11	23	68	17	192	178	116	146
	40-100	4#	32	450	450	450	130	170	210	165	13	30	70	23	192	212	140	146
	110-150	5#	40	510	510	510	150	210	265	198	15	36	89	24	192	250	162	146
2200W 3HP	45-80	5#	40	520	520	520	150	210	265	198	15	36	89	24	220	250	162	160
3700W 5HP	15-60	5#	40	560	560	560	150	210	265	198	15	36	89	24	220	250	162	160

立式附三相縮框 VERTICAL LIGHT DUTY TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8HP	60-200	1#	*18	250	250	250	50	140	120	120	9	16	40	12	133	6	120
200W 1/4HP	15-90	1#	*18	285	285	285	50	140	120	120	9	16	40	12	133	6	120
	100-200	2#	22	315	315	315	148	185	175	165	11	17.5	48	12	133	3	120
400W 1/2HP	15-90	2#	22	330	330	330	148	185	175	165	11	17.5	48	12	167	3	135
	100-200	3#	28	360	360	360	170	220	205	195	12	23	58	13	167	3	135
750W 1HP	3-25	2#	22	330	330	330	148	185	175	165	11	17.5	48	12	167	3	135
	30-120	3#	28	380	380	380	170	220	205	195	12	23	58	13	167	3	135
	125-200	4#	32	410	410	410	185	255	248	225	15	30	65	16	167	3	135
1500W 2HP	3-30	3#	28	420	420	420	170	220	205	195	12	23	58	13	192	3	146
	40-100	4#	32	450	450	450	185	255	248	225	15	30	65	16	192	3	146
	110-150	5#	40	510	510	510	230	310	291	272	15	36	85	21	192	5	146
2200W 3HP	45-80	5#	40	520	520	520	230	310	291	272	15	36	85	21	220	5	160
3700W 5HP	15-60	5#	40	560	560	560	230	310	291	272	15	36	85	21	220	5	160

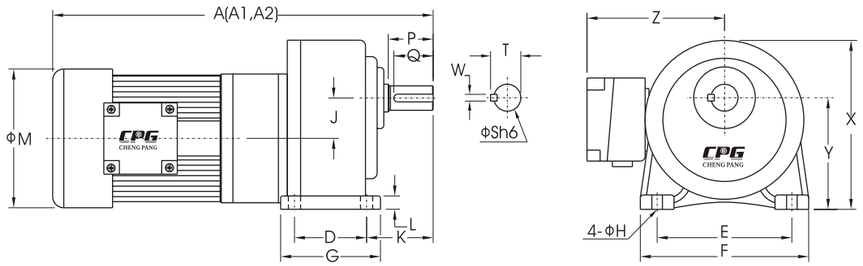
備註：A ：三相鋁殼馬達. WITH 3-PHASE ALUMINUM MOTOR.
A1：三相鐵殼馬達. WITH 3-PHASE STEEL PLATE MOTOR.
A2：三相馬達附剎車器. WITH 3-PHASE BRAKE MOTIOR.
*：屬於B型出力法蘭. BELONG TO B TYPE OUTPUT FLANGE.

2-5 高速比附三相縮框鋁 / 鐵殼(剎車)減速機
HIGH RATIO LIGHT DUTY TYPE WITH ALUMINUM / STEEL PLATE 3-PHASE (BRAKE) MOTOR

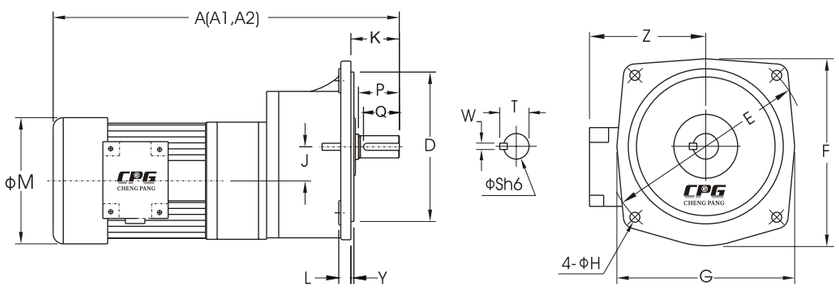
CH..SZ 臥式高速比附三相縮框
CH..SZ HORIZONTAL HIGH RATIO TYPE

CV..SZ 立式高速比附三相縮框
CV..SZ VERTICAL HIGH RATIO TYPE

臥式高速比附三相縮框 HORIZONTAL HIGH RATIO TYPE



立式高速比附三相縮框 VERTICAL HIGH RATIO TYPE



出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60

適用機型 APPLICABLE MODELS : CH..SZ,CH..STZ,CH..SZB,CH..STZB,CV..SZ,CV..STZ,CV..SZB,CV..STZB

臥式高速比附三相縮框 HORIZONTAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8HP	250-1800	1#+2#	22	345	345	345	65	130	158	90	11	33.5	60	13	133	152	97.5	120
200W 1/4HP	250-1800	1#+3#	28	410	410	410	90	140	178	120	11	39	68	17	133	178	116	120
400W 1/2HP	250-1800	2#+4#	32	480	480	480	130	170	210	165	13	47.5	70	23	167	212	140	135
750W 1HP	250-1800	3#+5#	40	570	570	570	150	210	265	198	15	59	89	24	167	250	162	135

立式高速比附三相縮框 VERTICAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	A2	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8HP	250-1800	1#+2#	22	345	345	345	148	185	175	165	11	33.5	48	12	133	3	120
200W 1/4HP	250-1800	1#+3#	28	410	410	410	170	220	205	195	12	39	58	13	133	3	120
400W 1/2HP	250-1800	2#+4#	32	480	480	480	185	255	248	225	15	47.5	65	16	167	3	135
750W 1HP	250-1800	3#+5#	40	570	570	570	230	310	291	272	15	59	85	21	167	5	135

備註：A ：三相鋁殼馬達. WITH 3-PHASE ALUMINUM MOTOR.
A1 : 三相鐵殼馬達. WITH 3-PHASE STEEL PLATE MOTOR.
A2 : 三相馬達附剎車器. WITH 3-PHASE BRAKE MOTIOR.

【生活箴言】

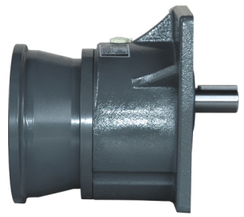
逃避不一定能夠躲的過 .
面對不一定就會最難過 .
得到不一定就會最滿足 .
失去不一定就是最損失 .
轉身不一定就是最軟弱 .
挺身不一定就是最堅強 .

【生活箴言】

一. 認真生活 , 一次就足夠 .
二. 低著頭 , 怎麼看得到太陽 .
三. 心量有多大,世界有多大.
四. 有想法就要行動,有行動才會成功.

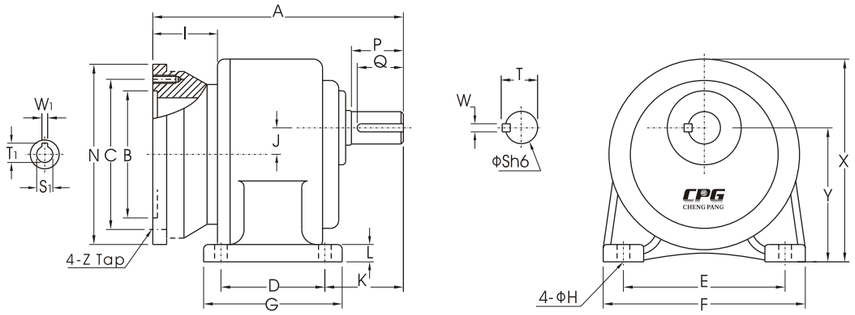
2-6 入力法蘭齒輪減速機
FLANGE TYPE REDUCER WITHOR MOTOR

CHM 臥式入力法蘭
CHM HORIZONTAL TYPE

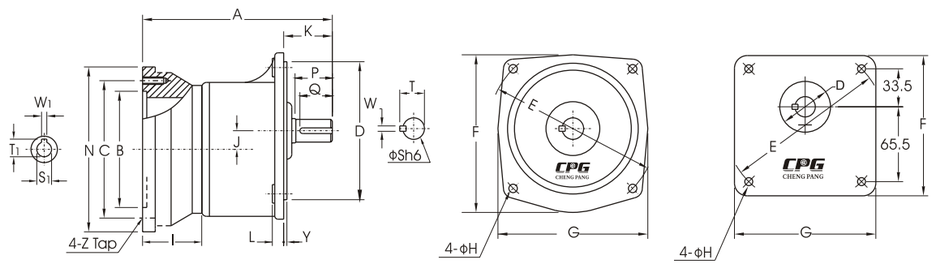


CVM 立式入力法蘭
CVM VERTICAL TYPE

臥式入力法蘭 HORIZONTAL TYPE



立式入力法蘭 VERTICAL TYPE



B型法蘭 B TYPE FLANGE

入力孔尺寸 INPUT BORE

馬力 KW	入力孔 BORE	鍵槽 KEYWAY	
	S1 F7	W1	T1
1/4HP	ϕ11	4	12.8
1/2HP	ϕ14	5	16.3
1HP	ϕ19	6	21.8
2HP	ϕ24	8	27.3
3HP	ϕ28	8	31.3
5HP	ϕ28	8	31.3

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5*5*27
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

臥式入力法蘭 HORIZONTAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	B	C	D	E	F	G	H	I	J	K	L	N	X	Y	Z
200W 1/4HP	3-10	18	160	110	130	40	110	135	65	9	55	16	50	10	160	138	88.5	M8
	15-90	22	195	110	130	65	130	158	90	11	55	17.5	60	13	160	152	97.5	M8
	100-200	28	225	110	130	90	140	178	120	11	55	23	68	17	160	178	116	M8
400W 1/2HP	3-10	22	195	110	130	65	130	158	90	11	55	17.5	60	13	160	152	97.5	M8
	15-90	28	225	110	130	90	140	178	120	11	55	23	68	17	160	178	116	M8
	100-200	32	255	110	130	130	170	210	165	13	55	30	70	23	160	212	140	M8
750W 1HP	3-25	28	250	130	165	90	140	178	120	11	82	23	68	17	200	178	116	M10
	30-120	32	285	130	165	130	170	210	165	13	82	30	70	23	200	212	140	M10
	125-200	40	330	130	165	150	210	265	198	15	82	36	89	24	200	250	162	M10
1500W 2HP	3-30	32	285	130	165	130	170	210	165	13	82	30	70	23	200	212	140	M10
	40-100	40	330	130	165	150	210	265	198	15	82	36	89	24	200	250	162	M10
2200W 3HP	3-40	40	355	180	215	150	210	265	198	15	105	36	89	24	250	250	162	M12
	45-100	50	410	180	215	170	265	321	238	18	105	51	120	31.5	250	308	200	M12
3700W 5HP	3-10	40	355	180	215	150	210	265	198	15	105	36	89	24	250	250	162	M12
	15-60	50	410	180	215	170	265	321	238	18	105	51	120	31.5	250	308	200	M12

立式入力法蘭 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	B	C	D	E	F	G	H	I	J	K	L	N	Y	Z
200W 1/4HP	3-10	*18	160	110	130	50	140	120	120	9	55	16	40	12	160	6	M8
	15-90	22	195	110	130	148	185	175	165	11	55	17.5	48	12	160	3	M8
	100-200	28	225	110	130	170	220	205	195	12	55	23	58	13	160	3	M8
400W 1/2HP	3-10	22	195	110	130	148	185	175	165	11	55	17.5	48	12	160	3	M8
	15-90	28	225	110	130	170	220	205	195	12	55	23	58	13	160	3	M8
	100-200	32	255	110	130	185	255	248	225	15	55	30	65	16	160	3	M8
750W 1HP	3-25	28	250	130	165	170	220	205	195	12	82	23	58	13	200	3	M10
	30-120	32	285	130	165	185	255	248	225	15	82	30	65	16	200	3	M10
	125-200	40	330	130	165	230	310	291	272	15	82	36	85	21	200	5	M10
1500W 2HP	3-30	32	285	130	165	185	255	248	225	15	82	30	65	16	200	3	M10
	40-100	40	330	130	165	230	310	291	272	15	82	36	85	21	200	5	M10
2200W 3HP	3-40	40	355	180	215	230	310	291	272	15	105	36	85	21	250	5	M12
	45-100	50	410	180	215	280	390	372	342	18	105	51	92	25	250	5	M12
3700W 5HP	3-10	40	355	180	215	230	310	291	272	15	105	36	85	21	250	5	M12
	15-60	50	410	180	215	280	390	372	342	18	105	51	92	25	250	5	M12

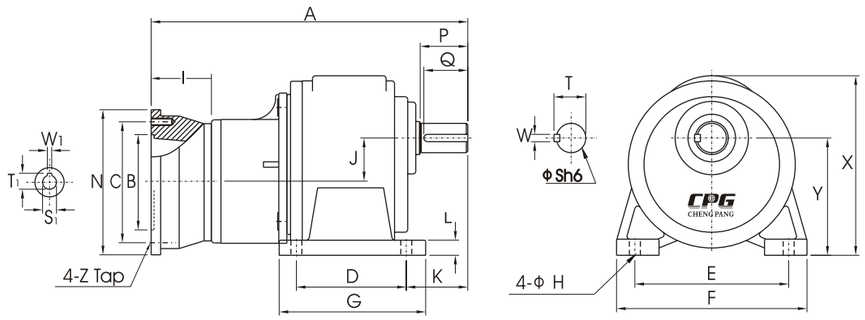
備註：1. 配合IEC馬達為主.AVAILABLE FOR IEC METRIC MOTOR.
2. *屬於B型出力法蘭.*BELONG TO B TYPE OUTPUT FLANGE.

2-7 入力法蘭高速比齒輪減速機
HIGH RATIO FLANGE TYPE REDUCER WITHOR MOTOR

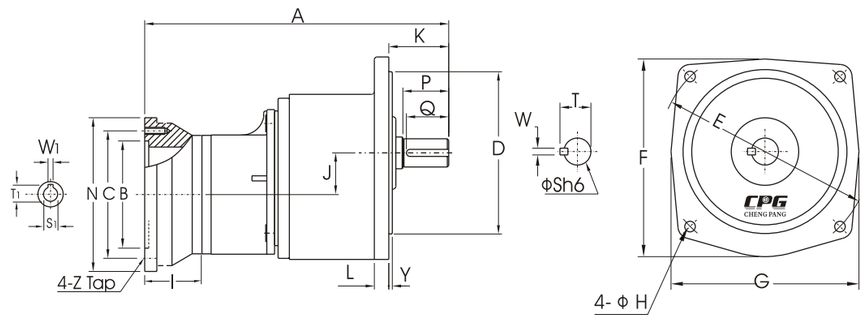
CHM 臥式入力法蘭高速比
CHM HORIZONTAL HIGH RATIO TYPE

CVM 立式入力法蘭高速比
CVM VERTICAL HIGH RATIO TYPE

臥式入力法蘭高速比 CHM HORIZONTAL HIGH RATIO TYPE



立式入力法蘭高速比 VERTICAL HIGH RATIO TYPE



入力孔尺寸 INPUT BORE

馬力 KW	入力孔 BORE	鍵槽 KEYWAY	
	S1 F7	W1	T1
1/4HP	ϕ11	4	12.8
1/2HP	ϕ14	5	16.3
1HP	ϕ19	6	21.8

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

臥式入力法蘭高速比 CHM HORIZONTAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	B	C	D	E	F	G	H	I	J	K	L	N	X	Y	Z
200W 1/4 HP	250-1800	32	335	110	130	130	170	210	165	13	55	47.5	70	23	160	212	140	M8
400W 1/2 HP	250-1800	40	410	110	130	150	210	265	198	15	55	59	89	24	160	250	162	M8
750W 1 HP	250-1800	50	490	130	165	170	265	321	238	18	82	74	120	31.5	200	308	200	M10

立式入力法蘭高速比 VERTICAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	B	C	D	E	F	G	H	I	J	K	L	N	Y	Z
200W 1/4HP	250-1800	32	335	110	130	185	255	248	225	15	55	47.5	65	16	160	3	M8
400W 1/2HP	250-1800	40	410	110	130	230	310	291	272	15	55	59	85	21	160	5	M8
750W 1 HP	250-1800	50	490	130	165	280	390	372	342	18	82	74	92	25	200	5	M10

備註：配合IEC馬達為主. AVAILABLE FOR IEC METRIC MOTOR .

【生活箴言】

運用時間去工作，這是成功的代價。

費點時間去思索，這是力量的泉源。

花點時間去遊樂，這是青春的方法。

抽出時間去閱讀，這是智慧的基礎。

勻出時間去愛人，這是快樂的大道。

【生活箴言】

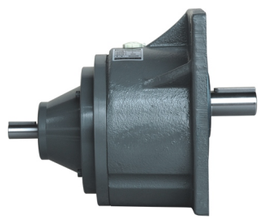
好人藥方

好肚腸一條，慈悲心一片，溫柔半兩，道理三分，信行要緊。

中直一塊，孝順十分，老實一個，陰騭全用， 方便不拘多少。

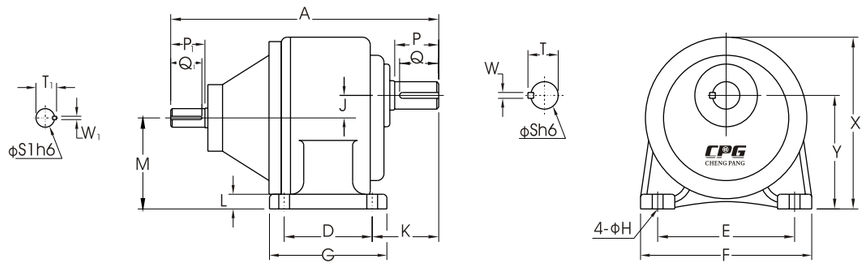
2-8 雙軸齒輪減速機
DOUBLE SHAFT TYPE REDUCER WITHOR MOTOR

CHD 臥式雙軸
CHD HORIZONTAL TYPE

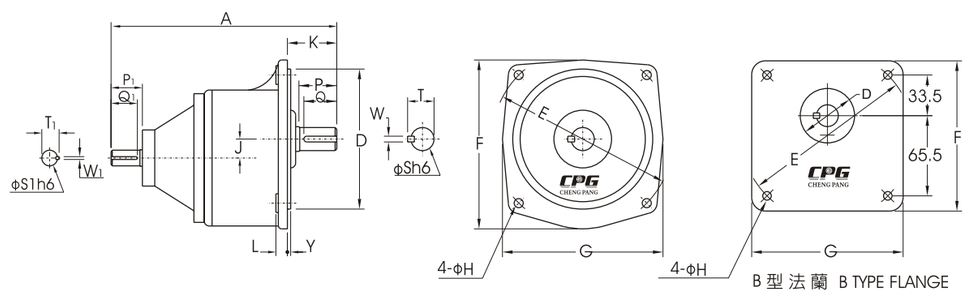


CVD 立式雙軸
CVD VERTICAL TYPE

臥式雙軸 HORIZONTAL TYPE



立式雙軸 VERTICAL TYPE



入力軸尺寸 INPUT SHAFT

入力軸 SHAFT			鍵槽 KEYWAY			鍵 KEY
KW	S1 h6	P1	W1	T1	Q1	SPEC'
0.1/0.2	14	25	5	16.2	22	5*5*22
0.4	16	30	5	18.2	27	5*5*27
0.75	19	40	6	21.7	35	6*6*35
1.5	24	50	8	27.1	45	8*7*45
2.2	28	55	8	31.1	50	8*7*50
3.7	28	55	8	31.1	50	8*7*50

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ 18	30	5	20.2	27	5*5*27
22	ϕ 22	40	7	25	35	7*7*35
28	ϕ 28	45	7	31.1	40	7*7*40
32	ϕ 32	55	10	35.5	50	10*8*50
40	ϕ 40	65	10	43.5	60	10*8*60
50	ϕ 50	80	14	54	75	14*9*75

臥式雙軸 HORIZONTAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	M	X	Y
100W 1/8HP	3-50	18	165	40	110	135	65	9	16	50	10	72.5	138	88.5
	60-200	22	195	65	130	158	90	11	17.5	60	13	80	152	97.5
200W 1/4 HP	3-10	18	165	40	110	135	65	9	16	50	10	72.5	138	88.5
	15-90	22	195	65	130	158	90	11	17.5	60	13	80	152	97.5
	100-200	28	255	90	140	178	120	11	23	68	17	93	178	116
400W 1/2 HP	3-10	22	235	65	130	158	90	11	17.5	60	13	80	152	97.5
	15-90	28	265	90	140	178	120	11	23	68	17	93	178	116
	100-200	32	300	130	170	210	165	13	30	70	23	110	212	140
750W 1 HP	3-25	28	275	90	140	178	120	11	23	68	17	93	178	116
	30-120	32	310	130	170	210	165	13	30	70	23	110	212	140
	125-200	40	365	150	210	265	198	15	36	89	24	126	250	162
1500W 2 HP	3-30	32	320	130	170	210	165	13	30	70	23	110	212	140
	40-100	40	373	150	210	265	198	15	36	89	24	126	250	162
2200W 3 HP	3-40	40	390	150	210	265	198	15	36	89	24	126	250	162
	45-100	50	450	170	265	321	238	18	51	120	31.5	149	308	200
3700W 5 HP	3-10	40	390	150	210	265	198	15	36	89	24	126	250	162
	15-60	50	450	170	265	321	238	18	51	120	31.5	149	308	200

立式雙軸 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	Y
100W 1/8HP	3-50	*18	165	50	140	120	120	9	16	40	12	6
	60-200	22	195	148	185	175	165	11	17.5	48	12	3
200W 1/4 HP	3-10	*18	165	50	140	120	120	9	16	40	12	6
	15-90	22	195	148	185	175	165	11	17.5	48	12	3
	100-200	28	255	170	220	205	195	12	23	58	13	3
400W 1/2 HP	3-10	22	235	148	185	175	165	11	17.5	48	12	3
	15-90	28	265	170	220	205	195	12	23	58	13	3
	100-200	32	300	185	255	248	225	15	30	65	16	3
750W 1 HP	3-25	28	275	170	220	205	195	12	23	58	13	3
	30-120	32	310	185	255	248	225	15	30	65	16	3
	125-200	40	365	230	310	291	272	15	36	85	21	5
1500W 2 HP	3-30	32	320	185	255	248	225	15	30	65	16	3
	40-100	40	373	230	310	291	272	15	36	85	21	5
2200W 3 HP	3-40	40	390	230	310	291	272	15	36	85	21	5
	45-100	50	450	280	390	372	342	18	51	92	25	5
3700W 5 HP	3-10	40	390	230	310	291	272	15	36	85	21	5
	15-60	50	450	280	390	372	342	18	51	92	25	5

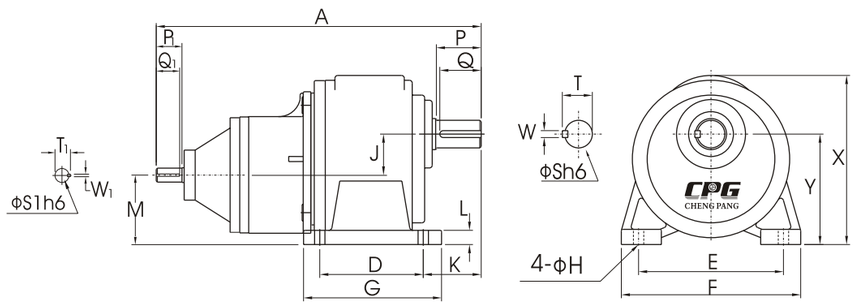
備註：1. * 屬於B型出力法蘭 . * BELONG TO B TYPE OUTPUT FLANGE

2-9 高速比雙軸齒輪減速機
DOUBLE SHAFT HIGH RATIO TYPE REDUCER WITHOR MOTOR

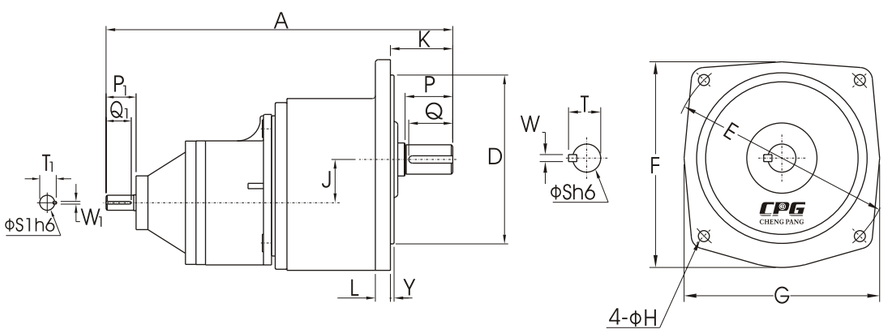
CHD 臥式高速比雙軸
CHD HORIZONTAL HIGH RATIO TYPE

CVD 立式高速比雙軸
CVD VERTICAL HIGH RATIO TYPE

臥式高速比雙軸 HORIZONTAL HIGH RATIO TYPE



立式高速比雙軸 VERTICAL HIGH RATIO TYPE



入力軸尺寸 INPUT SHAFT

入力軸 SHAFT			鍵槽 KEYWAY			鍵 KEY
KW	S1 h6	P1	W1	T1	Q1	SPEC'
0.1	14	25	5	16.2	22	5*5*22
0.2	14	25	5	16.2	22	5*5*22
0.4	16	30	5	18.2	27	5*5*27
0.75	19	40	6	21.7	35	6*6*35

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

臥式高速比雙軸 HORIZONTAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	M	X	Y
100W 1/8HP	250-1800	28	290	90	140	178	120	11	39	68	17	77	178	116
200W 1/4 HP	250-1800	32	340	130	170	210	165	13	47.5	70	23	92.5	212	140
400W 1/2 HP	250-1800	40	455	150	210	265	198	15	59	89	24	103	250	162
750W 1 HP	250-1800	50	515	170	265	321	238	18	74	120	31.5	126	308	200

立式高速比雙軸 VERTICAL HIGH RATIO TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	Y
100W 1/8HP	250-1800	28	290	170	220	205	195	12	39	58	13	3
200W 1/4 HP	250-1800	32	340	185	255	248	225	15	47.5	65	16	3
400W 1/2 HP	250-1800	40	455	230	310	291	272	15	59	85	21	5
750W 1 HP	250-1800	50	515	280	390	372	342	18	74	92	25	5

【生活箴言】

長壽十則

少車多步，少欲多施，少怒多笑，少食多嚼，少鹽多醋。

少言多行，少衣多浴，少煩多眠，少糖多果，少肉多菜。

學習

聰明人從別人錯誤中取得教訓。

普通人從自己錯誤中取得教訓。

愚笨人重複錯誤無法取得教訓。

為善

人為善，福雖未至，禍已遠離。

人為惡，禍雖未至，福已遠離。

說話

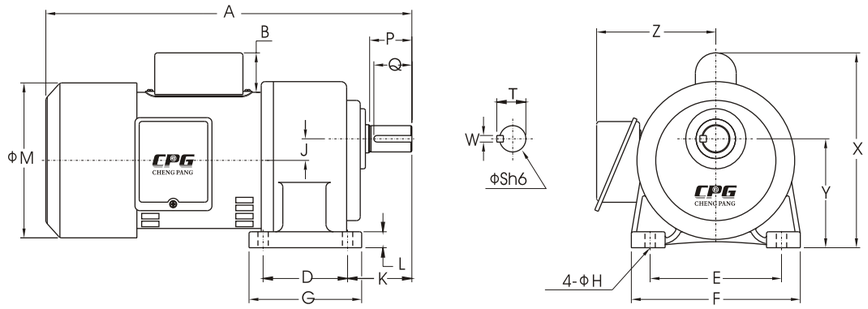
多說話不如少說話，少說話不如說好話。

2-10 附單相半密鐵殼(剎車)馬達減速機
WITH STEEL PLATE 1-PHASE (BRAKE) MOTOR

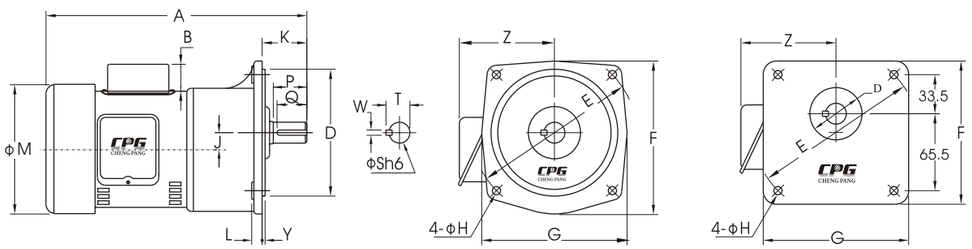
CH..AT 臥式附單相半密
CH..AT HORIZONTAL TYPE

CV..AT 立式附單相半密
CV..AT VERTICAL TYPE

臥式附單相半密 HORIZONTAL TYPE



立式附單相半密 VERTICAL TYPE



B 型 法 蘭 B TYPE FLANGE

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5*5*27
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

適用機型 APPLICABLE MODELS : CH..AT , CH..ATB , CV..AT , CV..ATB

臥式附單相半密 HORIZONTAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	B	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8 HP	3-50	1#	18	250		40	110	135	65	9	16	50	10	127	138	88.5	120
	60-200	2#	22	280		65	130	158	90	11	17.5	60	13	127	152	97.5	120
200W 1/4 HP	3-10	1#	18	280		40	110	135	65	9	16	50	10	127	138	88.5	120
	15-90	2#	22	310		65	130	158	90	11	17.5	60	13	127	152	97.5	120
	100-200	3#	28	340		90	140	178	120	11	23	68	17	127	178	116	120
400W 1/2 HP	3-10	2#	22	360	42	65	130	158	90	11	17.5	60	13	167	200	97.5	135
	15-90	3#	28	390	42	90	140	178	120	11	23	68	17	167	212	116	135
	100-200	4#	32	425	42	130	170	210	165	13	30	70	23	167	228	140	135
750W 1 HP	3-25	3#	28	410	48	90	140	178	120	11	23	68	17	167	222	116	135
	30-120	4#	32	445	48	130	170	210	165	13	30	70	23	167	238	140	135
	125-200	5#	40	500	48	150	210	265	198	15	36	89	24	167	257	162	135
1500W 2 HP	3-30	4#	32	450	48	130	170	210	165	13	30	70	23	177	250	140	146
	40-100	5#	40	500	48	150	210	265	198	15	36	89	24	177	250	162	146
	105-120	6#	50	560	48	170	265	321	238	18	51	120	31.5	177	306	200	146

立式附單相半密 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	B	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8 HP	3-50	1#	*18	245		50	140	120	120	9	16	40	12	127	6	120
	60-200	2#	22	280		148	185	175	165	11	17.5	48	12	127	3	120
200W 1/4 HP	3-10	1#	*18	280		50	140	120	120	9	16	40	12	127	6	120
	15-90	2#	22	310		148	185	175	165	11	17.5	48	12	127	3	120
	100-200	3#	28	340		170	220	205	195	12	23	58	13	127	3	120
400W 1/2 HP	3-10	2#	22	360	42	148	185	175	165	11	17.5	48	12	167	3	135
	15-90	3#	28	390	42	170	220	205	195	12	23	58	13	167	3	135
	100-200	4#	32	425	42	185	255	248	225	15	30	65	16	167	3	135
750W 1 HP	3-25	3#	28	410	48	170	220	205	195	12	23	58	13	167	3	135
	30-120	4#	32	445	48	185	255	248	225	15	30	65	16	167	3	135
	125-200	5#	40	500	48	230	310	291	272	15	36	85	21	167	5	135
1500W 2 HP	3-30	4#	32	450	48	185	255	248	225	15	30	65	16	177	3	146
	40-100	5#	40	500	48	230	310	291	272	15	36	85	21	177	5	146
	105-120	6#	50	560	48	280	390	372	342	18	51	92	25	177	5	146

備註 : 1. 單相剎車馬達尺寸另議.CONTACT FOR BRAKE TYPE DIMENSIONS.

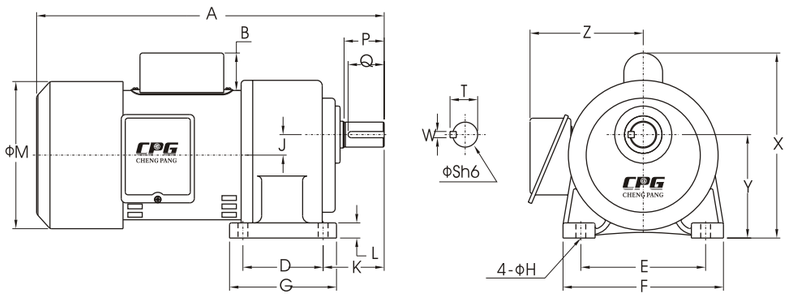
2. * 屬於B型出力法蘭 . * BELONG TO B TYPE OUTPUT FLANGE

2-11 附單相縮框半密鐵殼(剎車)馬達減速機
LIGHT DUTY TYPE WITH SEMI-ENCLOSED STEEL PLATE 1-PHASE (BRAKE) MOTOR

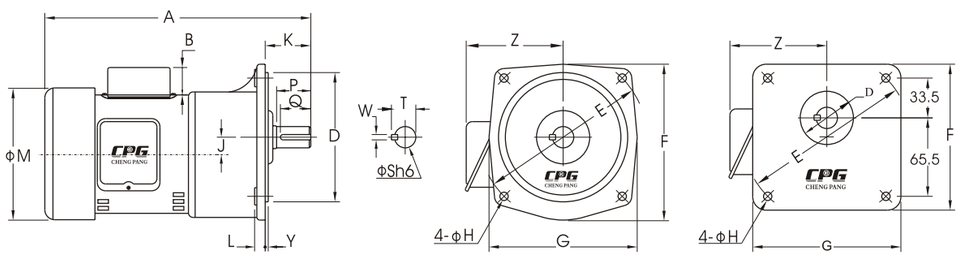
CH..ATZ 臥式附單相縮框半密
CH..ATZ HORIZONTAL LIGHT DUTY TYPE

CV..ATZ 立式附單相縮框半密
CV..ATZ VERTICAL LIGHT DUTY TYPE

臥式附單相縮框半密 HORIZONTAL LIGHT DUTY TYPE



立式附單相縮框半密 VERTICAL LIGHT DUTY TYPE



B 型 法 蘭 B TYPE FLANGE

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5*5*27
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60

適用機型 APPLICABLE MODELS : CH..ATZ , CH..ATZB , CV..ATZ , CV..ATZB

臥式附單相縮框半密 HORIZONTAL LIGHT DUTY TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	B	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8 HP	60-160	1#	18	250		40	110	135	65	9	16	50	10	127	138	88.5	120
200W 1/4 HP	15-90	1#	18	280		40	110	135	65	9	16	50	10	127	138	88.5	120
	100-200	2#	22	310		65	130	158	90	11	17.5	60	13	127	152	97.5	120
400W 1/2 HP	15-90	2#	22	360	42	65	130	158	90	11	17.5	60	13	167	200	97.5	135
	100-175	3#	28	390	42	90	140	178	120	11	23	68	17	167	212	116	135
750W 1 HP	3-25	2#	22	380	48	65	130	158	90	11	17.5	60	13	167	210	97.5	135
	30-120	3#	28	410	48	90	140	178	120	11	23	68	17	167	222	116	135
	125-200	4#	32	445	48	130	170	210	165	13	30	70	23	167	238	140	135
1500W 2 HP	3-30	3#	28	415	48	90	140	178	120	11	23	68	17	177	225	116	146
	40-100	4#	32	450	48	130	170	210	165	13	30	70	23	177	250	140	146
	110-180	5#	40	500	48	150	210	265	198	15	36	89	24	177	255	162	146

立式附單相縮框半密 VERTICAL LIGHT DUTY TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	B	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8 HP	60-160	1#	*18	250		50	140	120	120	9	16	40	12	127	6	120
200W 1/4 HP	15-90	1#	*18	285		50	140	120	120	9	16	40	12	127	6	120
	100-200	2#	22	310		148	185	175	165	11	17.5	48	12	127	3	120
400W 1/2 HP	15-90	2#	22	360	42	148	185	175	165	11	17.5	48	12	167	3	135
	100-175	3#	28	390	42	170	220	205	195	12	23	58	13	167	3	135
750W 1 HP	3-25	2#	22	380	48	148	185	175	165	11	17.5	48	12	167	3	135
	30-120	3#	28	410	48	170	220	205	195	12	23	58	13	167	3	135
	125-200	4#	32	445	48	185	255	248	225	15	30	65	16	167	3	135
1500W 2 HP	3-30	3#	28	415	48	170	220	205	195	12	23	58	13	177	3	146
	40-100	4#	32	450	48	185	255	248	225	15	30	65	16	177	3	146
	110-150	5#	40	500	48	230	310	291	272	15	36	85	21	177	5	146

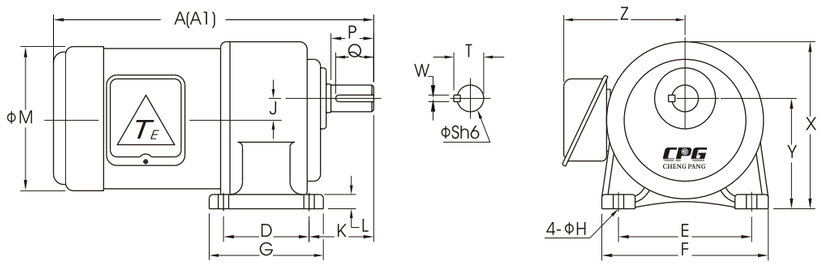
備註：單相剎車馬達尺寸另議, CONTACT FOR BRAKE TYPE DIMENSIONS .
*屬於B型出力法蘭 . * BELONG TO B TYPE OUTPUT FLANGE .

2-12 附東元鐵殼(剎車)馬達減速機
WITH STEEL PLATE TECO (BRAKE) MOTOR

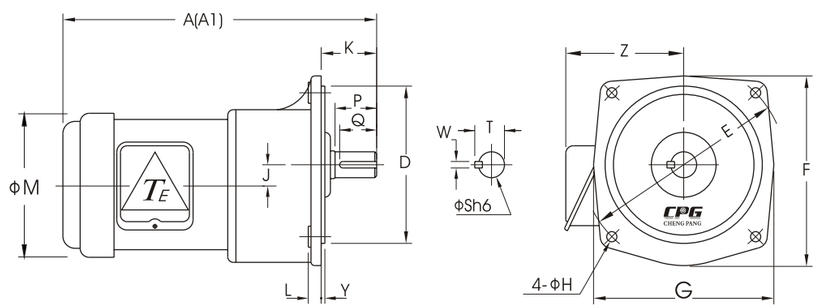
CH..P 臥式附東元
CH..P HORIZONTAL TYPE

CV..P 立式附東元
CV..P VERTICAL TYPE

臥式附東元 HORIZONTAL TYPE



立式附東元 VERTICAL TYPE



出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

適用機型 APPLICABLE MODELS : CH..P , CH..PB , CV..P , CV..PB

臥式附東元 HORIZONTAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	D	E	F	G	H	J	K	L	M	X	Y	Z
200W 1/4 HP	3-90	2#	22	320	320	65	130	158	90	11	17.5	60	13	131	152	97.5	130
	100-200	3#	28	350	350	90	140	178	120	11	23	68	17	131	178	116	130
400W 1/2 HP	3-10	2#	22	330	330	65	130	158	90	11	17.5	60	13	144	152	97.5	135
	15-90	3#	28	360	360	90	140	178	120	11	23	68	17	144	178	116	135
	100-200	4#	32	390	390	130	170	210	165	13	30	70	23	144	212	140	135
750W 1 HP	3-25	3#	28	375	375	90	140	178	120	11	23	68	17	163	178	116	150
	30-120	4#	32	410	410	130	170	210	165	13	30	70	23	163	212	140	150
	125-200	5#	40	460	460	150	210	265	198	15	36	89	24	163	250	162	150
1500W 2 HP	3-30	4#	32	450	450	130	170	210	165	13	30	70	23	184	212	140	162
	40-100	5#	40	500	500	150	210	265	198	15	36	89	24	184	250	162	162
	105-120	6#	50	560	560	170	265	321	238	18	51	120	31.5	184	308	200	162

立式附東元 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	本體 CODE	型番 SIZE(S)	A	A1	D	E	F	G	H	J	K	L	M	Y	Z
200W 1/4 HP	3-90	2#	22	320	320	148	185	175	165	11	17.5	48	12	131	3	130
	100-200	3#	28	350	350	170	220	205	195	12	23	58	13	131	3	130
400W 1/2 HP	3-10	2#	22	330	330	148	185	175	165	11	17.5	48	12	144	3	135
	15-90	3#	28	360	360	170	220	205	195	12	23	58	13	144	3	135
	100-200	4#	32	390	390	185	255	248	225	15	30	65	16	144	3	135
750W 1 HP	3-25	3#	28	375	375	170	220	205	195	12	23	58	13	163	3	150
	30-120	4#	32	410	410	185	255	248	225	15	30	65	16	163	3	150
	125-200	5#	40	460	460	230	310	291	272	15	36	85	21	163	5	150
1500W 2 HP	3-30	4#	32	450	450	185	255	248	225	15	30	65	16	184	3	162
	40-100	5#	40	500	500	230	310	291	272	15	36	85	21	184	5	162
	105-120	6#	50	560	560	280	390	372	342	18	51	92	25	184	5	162

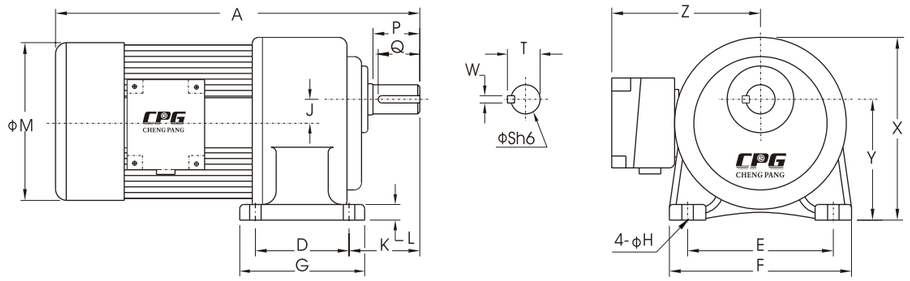
備註 : A ：三相鐵殼東元馬達 . WITH 3-PHASE TECO MOTOR .
A1 : 三相鐵殼東元馬達附剎車器 . WITH 3-PHASE TECO BRAKE MOTOR .

2-13 附三相鋁/鐵殼減速機附DC24V送電剎車器
WITH ALUMINUM/STEEL PLATE 3-PHASE MOTOR W/DC24V POWER FOR BRAKE UNIT

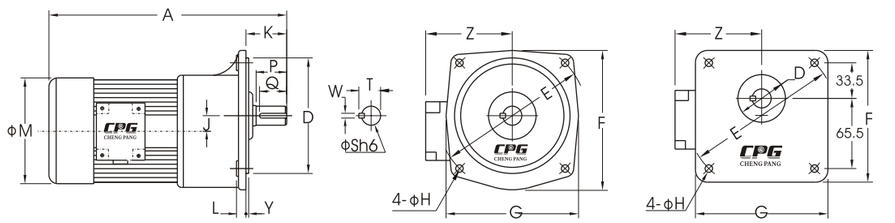
CH..SD 臥式附三相
CH..SD HORIZONTAL TYPE

CV..SD 立式附三相
CV..SD VERTICAL TYPE

臥式附三相 HORIZONTAL TYPE



立式附三相 VERTICAL TYPE



B型法蘭 B TYPE FLANGE

出力軸尺寸 OUTPUT SHAFT

型番 SIZE(S)	出力軸 SHAFT		鍵槽 KEYWAY			鍵 KEY
	S h6	P	W	T	Q	SPEC'
18	ϕ18	30	5	20.2	27	5*5*27
22	ϕ22	40	7	25	35	7*7*35
28	ϕ28	45	7	31.1	40	7*7*40
32	ϕ32	55	10	35.5	50	10*8*50
40	ϕ40	65	10	43.5	60	10*8*60
50	ϕ50	80	14	54	75	14*9*75

適用機型 APPLICABLE MODELS : CH..SD , CH..STD , CV..SD , CV..STD

臥式附三相 HORIZONTAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	剎車器 BRAKE TYPE	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	M	X	Y	Z
100W 1/8HP	3-50	S 50	18	280	40	110	135	65	9	16	50	10	133	138	88.5	120
	60-200		22	310	65	130	158	90	11	17.5	60	13	133	152	97.5	120
200W 1/4HP	3-10	M10	18	315	40	110	135	65	9	16	50	10	133	138	88.5	120
	15-90		22	345	65	130	158	90	11	17.5	60	13	133	152	97.5	120
	100-200		28	375	90	140	178	120	11	23	68	17	133	178	116	120
400W 1/2HP	3-10	M10	22	360	65	130	158	90	11	17.5	60	13	167	152	97.5	135
	15-90		28	390	90	140	178	120	11	23	68	17	167	178	116	135
	100-200		32	425	130	170	210	165	13	30	70	23	167	212	140	135
750W 1HP	3-25	M20	28	420	90	140	178	120	11	23	68	17	167	178	116	135
	30-120		32	455	130	170	210	165	13	30	70	23	167	212	140	135
	125-200		40	510	150	210	265	198	15	36	89	24	167	250	162	135
1500W 2HP	3-30	M20	32	500	130	170	210	165	13	30	70	23	192	212	140	146
	40-100		40	550	150	210	265	198	15	36	89	24	192	250	162	146
	110-180		50	605	170	265	321	238	18	51	120	31.5	192	308	200	146

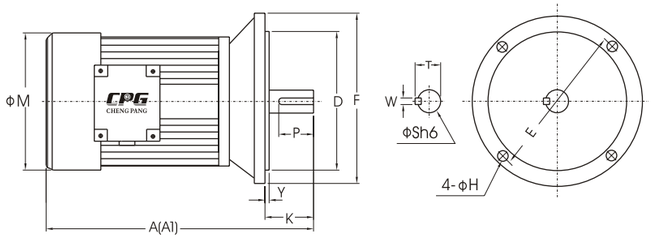
立式附三相 VERTICAL TYPE (Dimension in mm)

馬力 KW	減速比 RATIO	剎車器 BRAKE TYPE	型番 SIZE(S)	A	D	E	F	G	H	J	K	L	M	Y	Z
100W 1/8HP	3-50	S 50	*18	280	50	140	120	120	9	16	40	12	133	6	120
	60-200		22	310	148	185	175	165	11	17.5	48	12	133	3	120
200W 1/4HP	3-10	M10	*18	315	50	140	120	120	9	16	40	12	133	6	120
	15-90		22	345	148	185	175	165	11	17.5	48	12	133	3	120
	100-200		28	375	170	220	205	195	12	23	58	13	133	3	120
400W 1/2HP	3-10	M10	22	360	148	185	175	165	11	17.5	48	12	167	3	135
	15-90		28	390	170	220	205	195	12	23	58	13	167	3	135
	100-200		32	425	185	255	248	225	15	30	65	16	167	3	135
750W 1HP	3-25	M20	28	420	170	220	205	195	12	23	58	13	167	3	135
	30-120		32	455	185	255	248	225	15	30	65	16	167	3	135
	125-200		40	515	230	310	291	272	15	36	85	21	167	5	135
1500W 2HP	3-30	M20	32	500	185	255	248	225	15	30	65	16	192	3	146
	40-100		40	550	230	310	291	272	15	36	85	21	192	5	146
	105-120		50	605	280	390	372	342	18	51	92	25	192	5	146

備註：1. 送電剎車電壓為 DC24V. DC24V POWER FOR BRAKE UNIT

2. *屬於B型出力法蘭. *BELONG TO B TYPE OUTPUT FLANGE.

2-14-1 CV..S 立式標準IEC三相鋁殼(剎車)馬達
CV..S IEC VERTICAL 3-PHASE ALUMINUM (BRAKE) MOTOR



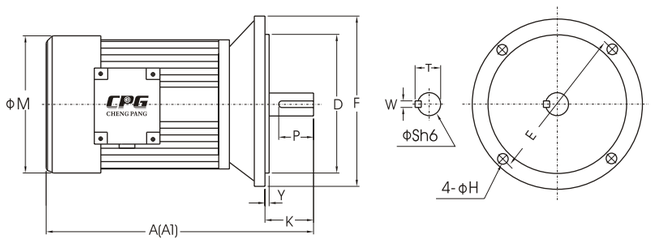
適用機型 APPLICABLE MODELS : CV..S,CV..SB,CV..ST,CV..STB

Dimension in mm

輸出馬力 CAPACITY 4P	框號 FRAME	A	A1	D	E	F	H	K	M	P	Sh6	T	W	Y	重量(KG) WEIGHT
1/8HP	---	210	210	95	115	140	10	23	133	10	11	12.5	4	3.5	4.4
1/4HP	63	240	240	95	115	140	10	23	133	10	11	12.5	4	3.5	5.9
1/2HP	71	290	290	110	130	160	10	30	143	14	14	16	5	3.5	10.6
1HP	80	285	285	130	165	200	12	40	167	25	19	21.5	6	3.5	13.0
2HP	90L	370	370	130	165	200	12	50	192	32	24	27	8	3.5	21.5
3HP	100L	410	410	180	215	250	14.5	60	220	40	28	31	8	4	28.0
5HP	112L	450	450	180	215	250	14.5	60	220	40	28	31	8	4	34.5

A1 : 三相鋁框馬達附剎車器 . WITH 3-PHASE ALUMINUM BRAKE MOTOR .

2-14-2 CV..S 立式三相鋁殼(剎車)馬達——城邦規格
CV..S VERTICAL 3-PHASE ALUMINUM (BRAKE) MOTOR——CHENG PANG



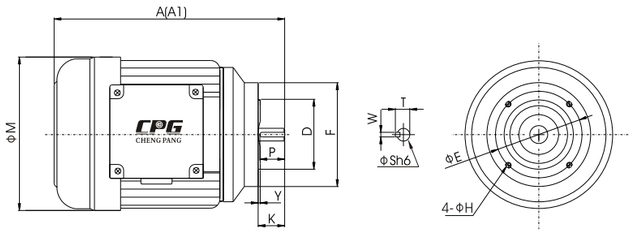
適用機型 APPLICABLE MODELS : CV..S,CV..SB,CV..ST,CV..STB

Dimension in mm

輸出馬力 CAPACITY 4P	框號 FRAME	A	A1	D	E	F	H	K	M	P	Sh6	T	W	Y	重量(KG) WEIGHT
1/8HP	----	210	210	110	130	160	10	23	133	10	11	12.5	4	3.5	6.8
1/4HP	----	240	240	110	130	160	10	23	133	10	11	12.5	4	3.5	8.1

A1 : 三相鋁框馬達附剎車器 . WITH 3-PHASE ALUMINUM BRAKE MOTOR .

2-14-3 CV..S 立式三相鋁殼(剎車)馬達——B14
CV..S VERTICAL 3-PHASE ALUMINUM (BRAKE) MOTOR——B14



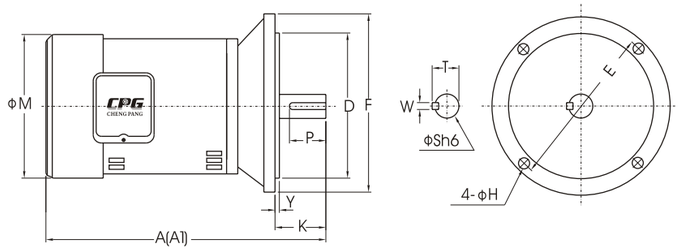
適用機型 APPLICABLE MODELS : CV..S,CV..SB,CV..ST,CV..STB

Dimension in mm

輸出馬力 CAPACITY 4P	框號 FRAME	A	A1	D	E	F	H	K	M	P	Sh6	T	W	Y	重量(KG) WEIGHT
1/8HP	---	210	210	60	75	90	M5	23	133	10	11	12.5	4	1.8	4.2
1/4HP	63	240	240	60	75	90	M5	23	133	10	11	12.5	4	1.8	5.7
1/2HP	71	290	290	70	85	105	M6	30	143	14	14	16	5	2.5	8.2

A1 : 三相鋁框馬達附剎車器 . WITH 3-PHASE ALUMINUM BRAKE MOTOR .

2-15 CV..AT 立式單相鐵殼(剎車)馬達
CV..AT VERTICAL 1-PHASE STEEL PLATE (BRAKE) MOTOR



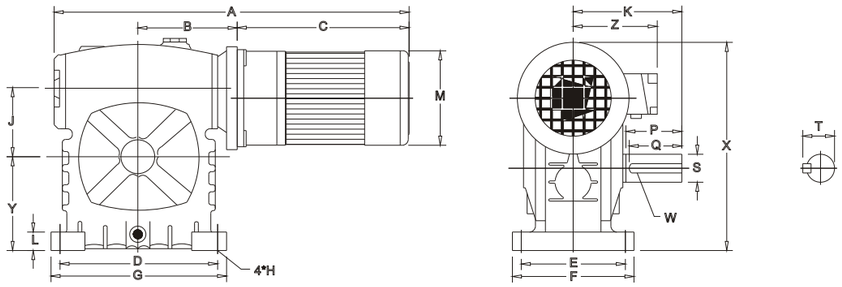
適用機型 APPLICABLE MODELS : CV..AT,CV..ATB,CV..A,CV..AB

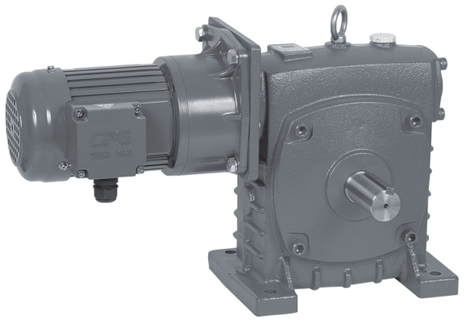
Dimension in mm

輸出馬力 CAPACITY 4P	框號 FRAME	A	A1	D	E	F	H	K	M	P	Sh6	T	W	Y	重量 WEIGHT
1/8HP	--	204	----	110	130	160	10	23	127	10	11	12.5	4	3.5	7.0
1/4HP	63	238	----	110	130	160	10	23	127	10	11	12.5	4	3.5	8.2
1/2HP	80	254	284	130	165	200	12	40	167	25	19	21.5	6	3.5	9.1
1HP	80	281	311	130	165	200	12	40	167	25	19	21.5	6	3.5	11.5

備註：1. A＝單相文電機型 FOR CAPACITOR RUNNING
2. A1＝單相離心開關機型 FOR CENTRIFUGAL RUNNING
3. 剎車馬達尺寸另議 CONTACT FOR BRAKE TYPE DIMENSIONS

2-16 W../CV..S 蝸輪減速機配立式齒輪減速機
W../CV..S WORM GEAR REDUCER WITH VERTICAL GEARMOTOR .





出力軸尺寸 OUTPUT SHAFT						
出力軸 SHAFT			鍵槽 KEYWAY			鍵 KEY
TYPE	Sh6	P	W	T	Q	SPEC'
60#	ϕ22	50	7	25	45	7*7*45
70#	ϕ28	60	7	31.1	55	7*7*55
80#	ϕ32	65	10	35.5	60	10*8*60
100#	ϕ38	75	10	41	70	10*8*70

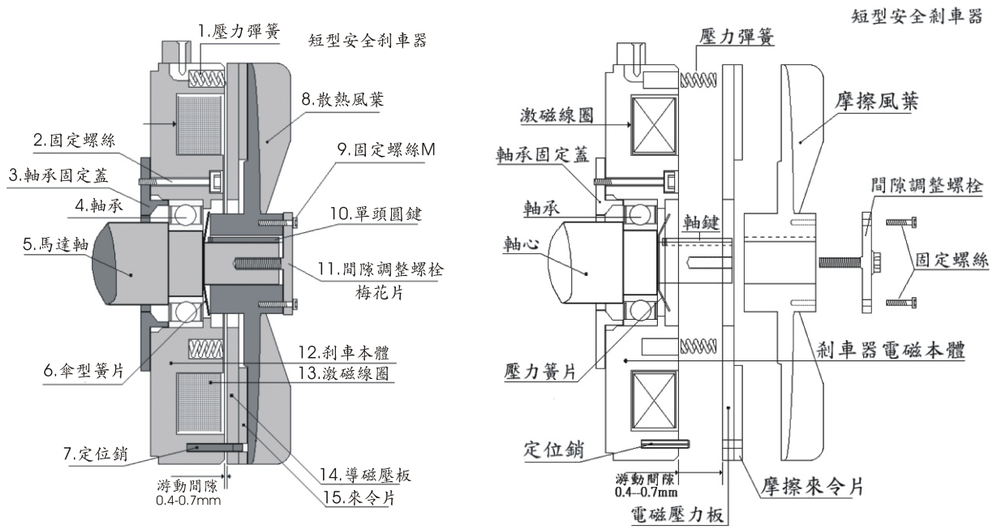
適用機型 APPLICABLE MODELS : W../CV..S,W../CV..A

Dimension in mm

蝸輪機型 WORM REDUCER	蝸輪本體 (GEARMOTOR) 馬力 KW(HP)	型番 SIZE	減速比 RATIO	A	A1	B	V	D	E	F	G	H	J	K	L	M	X	Y
60#-1/30	100W (1/8HP)	1#-ϕ18	1/3-50	383	383	98	208	120	105	131	154	11	60	112	16	133	195	90
70#-1/30	100W (1/8HP)	1#-ϕ18	1/3-50	428	428	125	208	150	115	152	190	15	70	130	20	133	220	105
	200W (1/4HP)	1#-ϕ18	1/3-10	465	465	128	242	150	115	152	190	15	70	130	20	133	220	105
		2#-ϕ22	1/15-30	489	489	128	266	150	115	152	190	15	70	130	20	133	262	105
	400W (1/2HP)		1/3-10	502	502	128	279	150	115	152	190	15	70	130	20	167	262	105
80#-1/30	100W (1/8HP)	1#-ϕ18	1/3-50	455	455	137	208	180	135	172	220	15	80	143	20	133	245	120
	200W (1/4HP)	1#-ϕ18	1/3-10	492	492	140	242	180	135	172	220	15	80	143	20	133	245	120
		2#-ϕ22	1/15-90	516	516	140	266	180	135	172	220	15	80	143	20	133	287	120
	400W (1/2HP)		1/3-10	529	529	140	279	180	135	172	220	15	80	143	20	167	287	120
100#-1/30	200W (1/4HP)	2#-ϕ22	*1/5-10	572	572	170	266	220	155	194	272	15	100	171	25	133	337	150
			1/15-90	572	572	170	266	220	155	194	272	15	100	171	25	133	337	150
	400W (1/2HP)		1/3-10	585	585	170	279	220	155	194	272	15	100	171	25	167	337	150
	400W (1/2HP)	3#-ϕ22	1/15-60	608	608	175	297	220	155	194	272	15	100	171	25	167	353	150
	750W (1HP)		1/3-25	625	625	175	314	220	155	194	272	15	100	171	25	167	353	150

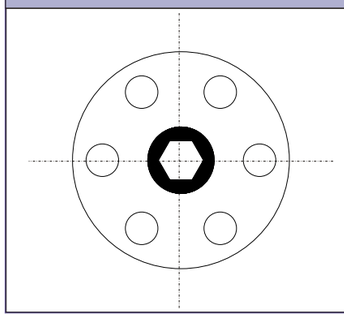
備註：*必需使用加大2#本體.* IT MUST USE ENLARGE 2#GEAR HOUSING.

3-1 剎車零件分解圖
SECTIONAL DIAGRAM FOR BRAKE UNIT



1	壓力彈簧 PRESSURE SPRING	9	固定螺絲 FIXED SCREW
2	固定螺絲 FIXED SCREW	10	固定鍵 KEY
3	軸承固定蓋 FIXED BEARING PLATE	11	調整螺栓 GAP ADJUSTMENT BOLT
4	軸承 BEARING	12	剎車本體 BRAKE HOUSING
5	馬達軸 MOTOR SHAFT	13	激磁線圈 BRAKE COIL
6	傘型簧片 DISC SPRING	14	導磁壓板 FRICTION PLATE
7	定位銷 FIXED PIN	15	來令片 FRICTION BRAKE DISC
8	散熱風葉 FAN		

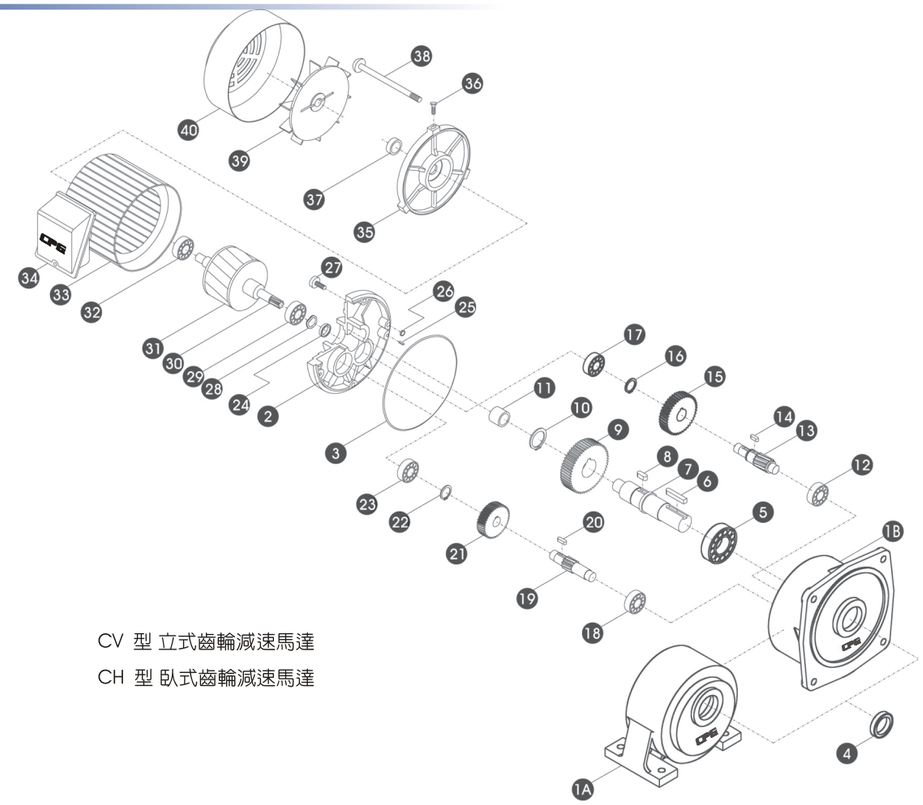
剎車間隙調整ADJUST BRAKE CLEARANCE



1.請先移除固定螺絲 .
PLEASE REMOVE TWO PIECES FIXED SCREWS IN ADVANCE .

2.每向右調整一格,其間距縮小0.07-0.10 MM .
EVERY SINGLE POSITION ADJUSTMENT , BRAKE CLEARANCE WILL REDUCE 0.07-0.10 MM

3-2 零件剖面圖 SECTIONAL DIAGRAM FOR PARTS



CV 型 立式齒輪減速馬達

CH 型 臥式齒輪減速馬達

2段/3段式結構剖示圖
2 STAGES / 3 STAGES SECTIONAL DIAGRAM

項次	零 件 名 稱	項次	零 件 名 稱	項次	零 件 名 稱
1A	臥式本體 HORIZONTAL HOUSING	14	三段小齒軸鍵 KEY-3RD STAGE PINION	28	波浪彈簧 WAVE SPRING
1B	立式本體 VERTICAL HOUSING	15	二段大齒輪 GEAR-2ND STAGE	29	馬達軸培林BEARING-MOTOR SHAFT
2	馬達前蓋HOUSING COVER	16	C-扣環 SNAP RING	30	馬達齒軸 MOTOR SHAFT
3	O型環 O-RING	17	三段齒軸培林 BEARING-3RD STAGE PINION	31	轉子ROTOR
4	出力軸油封 OIL SEAL-OUTPUT SHAFT	18	二段齒軸培林 BEARING-2ND STAGE PINION	32	馬達軸培林BEARING-MOTOR SHAFT
5	出力軸培林 BEARING-OUTPUT SHAFT	19	二段小齒軸 PINION-2ND STAGE	33	線圈總成 COIL ASSEMBLY
6	出力軸鍵 KEY-OUTPUT SHAFT	20	二段小齒軸鍵 KEY-2ND STAGE PINION	34	鋁接線盒WIRE BOX
7	出力軸OUTPUT SHAFT	21	一段大齒輪 GEAR-1ST STAGE	35	馬達後蓋 REAR COVER-MOTOR
8	三段小齒軸鍵 KEY-3RD PINION	22	C-扣環 SNAP RING	36	風罩螺絲 SCREW-FAN COVER
9	三段大齒輪 GEAR-3RD STAGE	23	二段齒軸培林 BEARING-2ND STAGE PINION	37	後蓋油封 OIL SEAL-REARCOVER
10	C-扣環 SNAP RING	24	入力側油封 OIL SEAL-MOTOR SHAFT	38	馬達螺栓 BOLT-MOTOR
11	出力軸自潤軸承 OILLESS BEARING	25	定位銷 PIN	39	風葉 FAN
12	二段齒軸培林 BEARING-2ND STAGE PINION	26	O型環 O-RING	40	風罩 FAN COVER-MOTOR
13	三段小齒軸 PINION-3RD STAGE	27	內六角螺絲 HEX-HEAD SCREW		

3-3 減速機各部零件說明 PARTS DETAILS

A) 本 體 (HOUSING)

＊1號，2號及3號本體.其出力軸直徑介於ϕ18-ϕ28之間時，減速機本體皆採用鋁合金材質ADC-12．
ALUMINUM HOUSING FOR OUTPUT SHAFT DIAMETER BETWEEN ϕ18～ϕ28．
HOUSING MATERIAL：ADC-12 ALUMINUM ALLOY．

＊4號，5號及6號本體.其出力軸直徑介於ϕ32～ϕ50之間時，減速機本體皆採用鑄鐵材質FC-20．
CAST IRON HOUSING FOR OUTPUT SHAFT DIAMETER BETWEEN ϕ32～ϕ50．
HOUSING MATERIAL：FC-20 CAST IRON．

B)1/2/3段齒輪 (1ST , 2ND & 3RD STAGE GEAR)

＊齒輪經精密滾齒加工，齒輪加工精度等級為2-3級．
GEAR MACHINING BY PRECISION HOBBING MACHINE，GEAR PRECISION LEVEL BETWEEN GRADE 2 - 3．

＊齒輪材質為S45C，調質至HRC 21° 再經高週波熱處理至HRC 45°～48°
GEAR WITH S45C MATERIAL．BY NORMALIZE & INDUCTION HARDENED HEAT TREATMENT TO HARDNESS HRC 45°～48°

C)二/三段齒軸 (2ND & 3RD STAGE PINION)

＊齒軸經SKIVING精密滾齒加工，齒輪精度等級為1-2級.
GEAR PINION MACHINING BY SKIVING CUTTING，PINION PRECISION LEVEL BETWEEN GRADE 1 - 2．

＊齒軸材質為SCM21，調質至HRC 21° 再經滲碳熱處理至HRC 58°～61°
PINION WITH SCM21 MATERIAL．BY NORMALIZE & CARBONIZE HARDENED HEAT TREATMENT TO HARDNESS HRC 58°～61°

D)馬達齒軸 (MOTOR SHAFT)

＊馬達齒軸經SKIVING精密滾齒加工，齒軸精度等級為1-2級.
MOTOR SHAFT GEAR PINION MACHINING BY SKIVING CUTTING, PINION PRECISION LEVEL BETWEEN GRADE 1 - 2．

＊材質為SCM4，調質至HRC 21° 再經高週波熱處理至HRC 50°～53°
PINION WITH SCM4 MATERIAL. BY NORMALIZE & INDUCTION HARDENED HEAT TREATMENT TO HARDNESS HRC 50°～53°

E)軸 承 (BEARING)

＊馬達部份皆採用瑞典SKF或同等級精密軸承，以確保長期運轉壽命 ．
ALL MOTOR SHAFT ASSEMBLY WITH SWEDEN MADE "SKF" BEARING OR EQUIVALENT PRECISION BEARING．IN ORDER TO ENSURE LONG LIFE RUNNING..

F)油 封 (OIL SEAL)

＊馬達軸側以耐高溫VITON油封為主．可確保防止潤滑油回漏馬達內部．
MOTOR SHAFT SIDE WITH "VITON" MATERIAL OIL SEAL．IT CAN PREVENT LUBRICANT FLOW INTO MOTOR CASING．

G)接線盒 (TERMINAL BOX)

＊採用鋁合金專用IP-55鋁製接線盒，防水性及防塵性佳．
TERMINAL BOX WITH ALUMINUM ALLOY MATERIAL．SPECIAL DESIGN FOR IP-55 LEVEL AND TOTALLY AVOID WATER AND DUST INTO CASING．

H)三相/單相馬達本體 (THREE / SINGLE PHASE MOTOR HOUSING)

＊三相馬達：採標準全密閉型專用鋁殼馬達配IP-55鋁製接線盒，具較佳防水性及防塵性，易散熱及運轉效率高．
THREE PHASE MOTOR WITH TOTALLY ENCLOSED FAN COOLED TYPE，IP-55 ALUMINUM TERMINAL BOX TOTALLY AVOID WATER AND DUST INTO HOUSING．

＊單相馬達：採標準半密型專用鐵殼馬達配鐵製接線盒，較易散熱，運轉效率高．(本公司亦可提供全密型鐵殼馬達及鋁合金型單相馬達).
SINGLE PHASE MOTOR WITH SEMI-ENCLOSED FAN COOLED STEEL PLATE TYPE．HIGH-EFFICIENCY RUNNING．
(ALSO AVAILABLE FOR TOTALLY ENCLOSED STEEL PLATE HOUSING & ALUMINUM TYPE HOUSING)

I)馬達後蓋 (REAR MOTOR COVER)

＊可採用防水型馬達後蓋，於軸心處加置油封．可防止灰塵及外部水氣流入馬達．
REAR MOTOR COVER ASSEMBLY WITH OIL SEAL．IT CAN PREVENT DUST AND WATER GET INTO MOTOR．

4-1 馬達規範 MOTOR SPECIFICATION

4-1-1 標準馬達規範表 STANDARD MOTOR SPECIFICATION

項目ITEM	三相交流馬達3-PHASE MOTOR		單相交流馬達1-PHASE MOTOR	
保護等級 PROTECTION	全密閉外扇型IP-54 TOTALLY ENCLOSED FAN COOLED TYPE		半密閉外扇型 SEMI-ENCLOSECD FAN COOLED TYPE	
外殼材質 HOUSING MATERIAL	0.1-3.7KW	鋁合金 ALUM ALLOY	0.1-1.5KW	鐵殼 STEEL PLATE
	0.1-3.7KW	鐵殼 STEEL PLATE	0.1-1.5KW (OPTIONAL)	鋁合金 ALUM ALLOY
啓動方式 STARTING	全壓啓動 DIRECT START		0.1-0.2KW	運轉電容啓動 CAPACITOR
			0.4-1.5KW	起動電容啓動+離心開關 Capacitor & centrifugal switch
定格 TIME RATING	連續運轉 CONTINUOUS RUNNING		連續運轉 CONTINUOUS RUNNING	
絕緣等級 INSULATION	F-絕緣 F-CLASS		F-絕緣 F-CLASS	
適用環境 ENVIRONMENT	溫度：-10℃ TO +40℃ (TEMPERATURE BETWEEN-10℃ AND+40℃) 濕度：90%以下 (HUMIDITY LESS THAN 90%)			
適用電壓 VOLTAGE	50HZ	220V,230V,240V,380V, 400V,415V,440V	50HZ	110V,115V,200V, 220V,230V
	60HZ	220V,240V,380V,415V, 440V,460V,480V,600V	60HZ	110V,220V,240V
適用極數 POLE	2P,4P,6P,8P		4P	
輸出轉數(4P) FULL SPEED	50HZ	1360-1430RPM	50HZ	1340-1400RPM
	60HZ	1640-1740RPM	60HZ	1610-1720RPM
依據標準 STANDARD	國際/國家標準 IEC-34,CNS-10919 ACCORDING TO IEC-34,CNS-10919			
海拔 SEA LEVEL	1000公尺以下 UNDER 1000M			
接線盒 TERMINAL BOX	採用IP55級防水型鋁合金接線盒 WITH IP-55 CLASS WATER-PROOF ALUMINUM TERMINAL BOX			

4-1-2 三相電壓全負載電流值 3-PHASE/4-POLES FULL LOAD AMPERE

輸出馬力 CAPACITY	50HZ-4P					60HZ				
	220V	380V	415V	440V	RPM	220V	380V	440V	460V	RPM
100W	0.60	0.40	0.32	0.30	1410	0.6	0.35	0.30	0.29	1720
200W	1.15	0.67	0.61	0.58	1410	1.1	0.63	0.55	0.52	1720
400W	2.14	1.24	1.13	1.07	1420	1.9	1.10	0.95	0.91	1730
750W	3.67	2.13	1.94	1.84	1420	3.4	1.96	1.70	1.63	1730
1500W	6.59	3.82	3.49	3.30	1430	6.1	3.53	3.05	2.92	1740
2200W	8.94	5.18	4.74	4.47	1430	8.7	5.04	4.35	4.16	1725
3700W	13.85	8.03	7.34	6.93	1440	13.5	7.82	6.75	6.46	1745

4-1-3 單相電壓全負載電流值 1-PHASE/4-POLES FULL LOAD AMPERE

輸出馬力 CAPACITY	50HZ-4P			60HZ-4P		
	110V	220V	RPM	110V	220V	RPM
100 W	4.00	2.00	1410	3.80	1.90	1720
200 W	5.00	2.50	1410	4.60	2.30	1720
400 W	8.40	4.20	1420	7.80	3.90	1730
750 W	14.20	7.10	1420	12.90	6.40	1730
1500 W	26.00	13.00	1430	23.40	11.70	1740

4-1-4 單相馬達電容器規格 1-PHASE MOTOR CAPACITOR

輸出馬力 CAPACITY	運轉電容(文電型) RUNNING CAPACITOR (NON-CENTRIFUGAL TYPE)	起動電容(離心開關型) STARTING CAPACITOR (THE CENTRIFUGAL SWITCH TYPE)	運轉電容 + 起動電容 (離心開關型) RUNNING & STATING (THE CENTRIFUGAL SWITCH TYPE)
100 W	10 μf-450v	----	-----
200 W	16 μf-450v	125 μf-250v	-----
400 W	30 μf-450v	----	30 μf-450v+200 μf-250v
750 W	35 μf-450v	----	35 μf-450v+300 μf-250v
1500W	-----	----	50 μf-450v+400 μf-250v

4-2 輸出扭矩表 OUTPUT TORQUE

標準型（NORMAL DUTY TYPE） KG-M

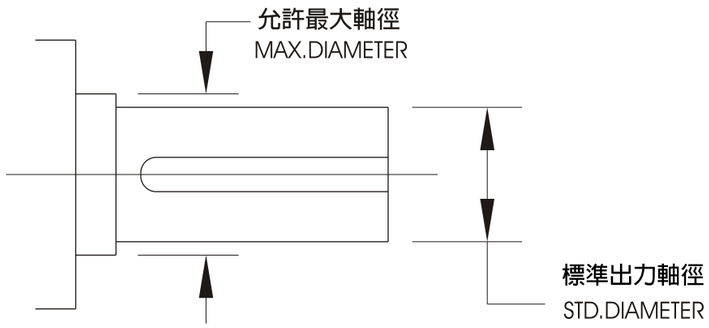
減速比 RATIO	輸出轉速 OUTPUT R.P.M		輸出扭矩 OUTPUT TORQUE													
			0.1KW		0.2KW		0.4KW		0.75KW		1.5KW		2.2KW		3.7KW	
	HZ															
	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60
3	500	600	0.19	0.16	0.37	0.31	0.70	0.60	1.30	1.10	2.60	2.20	3.80	3.20	6.00	5.50
5	300	360	0.31	0.26	0.62	0.52	1.20	1.00	2.20	1.90	4.50	3.80	6.72	5.60	11.0	10.0
10	150	180	0.62	0.52	1.24	1.04	2.40	2.00	4.50	3.80	9.10	7.60	13.7	11.2	22.0	20.0
15	100	120	0.91	0.76	1.80	1.50	3.60	3.00	6.80	5.70	13.5	11.3	20.1	16.8	32.6	29.8
20	75	90	1.20	1.00	2.40	2.00	4.80	4.00	9.00	7.50	18.1	15.1	26.8	22.4	43.6	36.0
25	60	72	1.40	1.20	3.00	2.50	6.00	5.00	11.2	9.40	22.6	18.9	33.6	28.0	53.9	49.53
30	50	60	1.80	1.50	3.60	3.00	7.20	6.00	13.5	11.3	27.1	22.6	40.3	33.6	64.7	58.8
40	37	45	2.20	1.90	4.60	3.90	9.30	7.80	17.5	14.6	34.9	29.1	52.0	43.4	86.3	78.4
45	33	40	2.70	2.20	5.40	4.40	10.9	9.10	20.6	17.0	41.1	34.0	59.8	49.6	98.5	81.7
50	30	36	2.80	2.40	5.70	4.80	11.6	9.70	21.9	18.3	43.6	36.4	65.1	54.3	107	97.0
60	25	30	3.40	2.90	6.90	5.80	13.9	11.6	26.2	21.9	52.4	43.7	78.1	65.1	127	115
70	21	25	4.30	3.60	8.00	6.80	16.2	13.5	31.5	26.3	62.4	52.0	92.5	77.1		
80	19	23	4.80	4.00	9.20	7.70	18.4	15.4	35.5	29.6	70.8	59.0	105	87.5		
90	17	20	5.20	4.40	10.3	8.60	20.7	17.3	39.3	32.8	77.1	64.3	113	94.3		
100	15	18	5.80	4.90	11.5	9.60	23.0	19.2	43.2	36.0	83.7	69.8	126	105		
120	12	15	6.90	5.80	13.8	11.5	27.7	23.1	51.8	43.2	101	83.7				
140	11	13	8.00	6.70	16.0	13.4	32.0	26.7	59.7	49.8	116	96.8				
160	9	11	9.10	7.60	18.3	15.3	36.3	30.3	68.0	56.7	132	110				
180	8	10	10.3	8.60	20.7	17.3	40.8	34.0	76.8	64.0	148	123				
200	7	9	11.6	9.70	22.9	19.1	43.2	36.0	82.8	69.0						

4-3 出力軸懸垂荷重 OVERHUNG LOAD

KG

減速比 RATIO	輸出轉速 OUTPUT R.P.M		0.1KW		0.2KW		0.4KW		0.75KW		1.5KW		2.2KW		3.7KW	
	HZ															
	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60
3	500	600	30	25	30	25	54	45	60	50	145	130	165	150	200	180
5	300	360	36	30	36	30	78	70	85	75	165	150	210	180	270	225
10	150	180	70	60	70	60	150	130	180	150	280	250	430	360	570	550
15	100	120	110	90	110	100	175	160	165	160	355	348	490	450	780	750
20	75	90	150	125	135	125	190	170	175	170	369	365	540	500	850	830
25	60	72	155	140	150	140	210	180	185	180	450	430	650	630	1100	1050
30	50	60	160	150	170	165	235	220	415	400	480	450	690	650	1200	1100
40	38	45	160	160	180	180	270	260	430	420	580	550	710	670	1280	1200
45	33	40	170	170	180	180	335	328	440	430	590	570	820	780	1300	1250
50	30	36	170	170	180	180	350	335	450	440	600	580	850	820	1400	1350
60	25	30	180	180	180	180	350	350	450	450	630	610	900	900	1400	1400
70	21	25	180	180	180	180	350	350	460	460	670	650	1100	1100		
80	18	22	180	180	180	180	350	350	460	460	680	680	1100	1100		
90	16	20	180	180	180	180	350	350	500	500	850	850	1200	1200		
100	15	18	200	200	250	250	380	380	590	590	900	900	1200	1200		
120	12	15	200	200	320	320	390	390	640	640	920	920				
140	11	13	200	200	320	320	400	400	679	679	920	920				
150	10	12	220	220	330	330	420	420	679	679	950	950				
160	9	11	220	220	330	330	420	420	700	700	950	950				
180	8	10	240	240	350	350	430	430	720	720	980	980				
200	7	9	240	240	350	350	430	430	720	720						
1/ 250 ~ 1/1800			300	300	480	480	720	720	1400	1400						

4-4 出力軸允許最大軸徑 AVAILABLE MAX OUTPUT SHAFT DIAMETER



本體框號 HOUSING CODE	標準出力軸徑 STD OUTPUT SHAFT	出力軸培林 OUTPUT SHAFT BEARING	允許最大軸徑 MAX AVAILABLE SHAFT DIAMETER
1#	Φ18.0	6004	Φ20.0
2#	Φ22.0	6205	Φ25.0
3#	Φ28.0	6206	Φ30.0
4#	Φ32.0	6207	Φ35.0
5#	Φ40.0	6209	Φ45.0
5#	Φ45.0	6209	Φ45.0
6#	Φ50.0	6211	Φ55.0

好主管要件：

1.尊重部屬．
2.以身作則．
3.樂在工作．
4.設定目標．
5.樂於教人．
6．善於溝通．
7．貫徹始終．
8．均派工作．
9．公正果斷．
10．樂於助人．
11．支持部屬．
12．廣納意見．
13．誠實負責．
14．知足感恩．
15．待人無私．
16．自我充實．
17．充分授權．
18．真誠互動．
19．不可記仇．
20．肚大乃容．

4-5 出力軸軸徑對照表 OUTPUT SHAFT DIAMETER TABLE

標準型（NORMAL DUTY TUPE)

速比 RATIO \ 馬力 CAPACITY	1/8HP (100W)	1/4HP (200W)	1/2HP (400W)	1HP (750W)	2HP (1500W)	3HP (2200W)	5HP (3700W)
3	18	18	22	28	32	40	40
5	18	18	22	28	32	40	40
10	18	18	22	28	32	40	40
15	18	22	28	28	32	40	50
20	18	22	28	28	32	40	50
25	18	22	28	28	32	40	50
30	18	22	28	32	32	40	50
40	18	22	28	32	40	40	50
45	18	22	28	32	40	50	50
50	18	22	28	32	40	50	50
60	22	22	28	32	40	50	50
70	22	22	28	32	40	50	
80	22	22	28	32	40	50	
90	22	22	28	32	40	50	
100	22	28	32	32	40	50	
120	22	28	32	32	50		
140	22	28	32	40	50		
150	22	28	32	40	*50		
160	22	28	32	40	*50		
180	22	28	32	40	*50		
200	22	28	32	40			
250-1800	28	32	40	50			

輕負載縮框型（LIGHT DUTY TYPE)

速比 RATIO \ 馬力 CAPACITY	1/8HP (100W)	1/4HP (200W)	1/2HP (400W)	1HP (750W)	2HP (1500W)	3HP (2200W)	5HP (3700W)
3				22	28		
5				22	28		
10				22	28		
15		18	22	22	28		40
20		18	22	22	28		40
25		18	22	22	28		40
30		18	22	28	28		40
40		18	22	28	32		40
45		18	22	28	32		40
50		18	22	28	32	40	40
60	18	18	22	28	32	40	40
70	18	18	22	28	32	40	
80	18	18	22	28	32	40	
90	18	18	22	28	32		
100	18	22	28	28	32		
120	18	22	28	28	40		
140	18	22	28	32	40		
150	18	22	28	32	40		
160	18	22	28	32	40		
180	*18	22	28	32	*40		
200	*18	22	*28	*32			
250-1800	22	28	32	40			

備註 REMARK

1. 縮框機型為不正當設計使用，如非必要請勿選用．
   LIGHT DUTY TYPE ARE NOT AVAILABLE FOR STANDARD APPLICATION DESIGN , IT ONLY SUITABLE FOR SPECIAL PROJECT DESIGN .
2. 僅就馬達部 份提供一年保固． PROVIDE ONE YEAR GUARANTEE FOR MOTOR ONLY .
3. ＊為達到此速比時，必須搭配6P馬達使用． ＊ IT NEED TO USE 6 POLE MOTOR TO REACH CERTAIN RATIO .

4-6 公稱及實際速比（NORMAL RATIO & ACTUAL RATIO)

標準型（NORMAL DUTY TYPE)

公稱速比 NORMAL RATIO	低段實際減速比 ACTUAL RATIO						
	0.1KW	0.2KW	0.4KW	0.75KW	1.5KW	2.2KW	3.7KW
3	3.04	3.04	2.99	2.92	3.05	3.25	3.25
5	5.07	5.07	5.14	5.03	5.01	5.19	5.19
10	10.03	10.03	10.01	9.96	10.41	9.48	9.48
15	15.09	15.60	15.61	15.31	14.33	15.71	14.62
20	19.90	19.90	20.69	19.49	19.35	19.38	19.58
25	26.81	25.65	26.35	25.27	25.08	23.71	24.54
30	30.06	32.77	29.81	30.00	29.38	29.25	30.87
40	40.33	40.46	39.11	40.99	43.72	41.83	41.77
50	50.59	49.42	50.21	51.24	50.96	50.51	50.51
60	58.64	63.02	61.36	58.10	61.83	58.48	58.48
70	71.62	71.31	71.15	72.00	72.87	67.65	
80	80.19	81.23	77.13	79.99	80.30	81.18	
90	91.34	92.69	94.27	90.00	90.54	93.99	
100	102.27	104.62	103.70	99.99	103.05	98.17	
110		109.02		108.00	***109.20		
115	115.71				117.00		
120	117.73	123.33	116.66	120.00	122.20		
130	131.81	133.25	129.62	133.79	***126.30		
140	134.34	141.32	140.00				
150	150.41	150.74		150.41	***151.56		
160	162.73	162.86	155.55	160.70	***158.30		
170	168.40	172.73			***175.50		
180	182.19	182.32	175.00	180.01	***183.30		
200	192.83	193.37	194.44	216.22			
備註 REMARK	***為達到此速比時，必須搭配6P馬達使用 ***IT NEED USE 6 POLE MOTOR TO REACH CERTAIN RATIO						

公稱速比 NORMAL RATIO	高段實際減速比 ACTUAL RATIO						
	0.1KW	0.2KW	0.4KW	0.75KW	1.5KW	2.2KW	3.7KW
250	258.02	267.07	250.05	244.62			
300	306.03	304.74	282.89	299.84			
350	354.98	367.70	357.57	359.81			
400	389.75	377.61	401.21	381.87			
450	468.00	435.77	468.71	458.24			
500	528.35	496.40	510.97	518.42			
600	600.78	566.42	605.37	602.14			
700	700.07	704.66	701.91	703.57			
800	825.28	805.32	810.36	814.66			
900	922.95	894.80	893.94	921.64			
1000	1008.09	1036.04	1014.40	985.00			
1100	1097.35	1118.51	1102.53	1114.35			
1200	1224.82	1172.26	1214.91	1199.37			
1300	1329.80	1291.19	1298.22				
1400	1374.44	1393.98					
1500	1517.32	1540.55	1484.89	1492.43			
1600	1582.76	1613.99	1574.88	1612.36			
1650							
1700	1711.73	1685.55	1728.08				
1800	1775.20	1838.52	1821.00	1832.99			

輕負載縮框型 LIGHT DUTY

公稱速比 NORMAL RATIO	低段實際減速比 ACTUAL RATIO						
	0.1KW	0.2KW	0.4KW	0.75KW	1.5KW	2.2KW	3.7KW
3				2.99	2.93		
5				5.14	5.03		
10				10.01	9.96		
15		15.09	15.06	15.06	15.03		15.71
20		19.90	20.14	20.14	19.49		19.37
25		26.81	26.18	26.18	25.27		23.72
30		30.06	29.31	28.93	28.93		29.25
40		40.33	44.20	43.07	41.64		41.82
50		50.59	56.38	52.64	52.05	51.97	51.96
60	60.49	60.49	56.37	57.06	57.33	59.15	59.13
70			72.67	69.75	71.66	70.23	
80			82.92	82.22	77.40	79.93	
90	89.62	89.62	92.81	88.83	86.00		
100		103.78	98.24	100.49	107.50		
120	122.49	116.20	120.07	115.15	121.67		
140	140.41	133.05	135.83	135.00	136.26		
160	161.33	162.73	155.64	150.00	163.70		
180	***183.74	182.17	174.24	***180.00	***182.50		
200	***210.62	215.87		***202.50	***204.39		
備註 REMARK	***為達到此速比時，必需搭配6P馬達使用 ***IT NEED USE 6 POLE MOTOR TO REACH CERTAIN RATIO						

公稱速比 NORMAL RATIO	高段實際減速比ACTUAL RATIO						
	0.1KW	0.2KW	0.4KW	0.75KW	1.5KW	2.2KW	3.7KW
250	255.98	258.02	255.16	264.54			
300	300.50	291.90	300.12	299.28			
350	340.02	354.98	344.47	356.29			
400	396.18	389.75	389.76	401.72			
450		467.84	443.98	457.24			
500	510.63	528.35	493.38	519.30			
600	610.64	600.78	594.88	599.53			
700	687.84		717.74	705.75			
800	802.78	825.28	800.32	815.69			
900	908.34		884.57	922.80			
1000	1007.13	1052.10	1000.40	1016.86			
1200	1321.92	1224.82	1200.48	1210.37			
1500	1485.90	1523.73	1500.61	1484.56			
1800	1810.42	1771.61	1775.94	1775.2			

4-7 潤滑油 LUBRICANT

本公司於出廠前已添加潤滑油脂(BT-860-0)，在正常條件下運轉20,000小時可不必更換潤滑油脂，但在特殊環境條件下運轉時，如: 高溫, 長時間運轉, 衝擊負荷等，則換油頻率為10,000-15,000小時。

ALL REDUCERS FILLED WITH LUBRICANT(BT-860-0)BEFORE DELIVERY , NORMALLY, IT NO NEED TO REPLACE LUBRICANT FOR FIRST 20,000 HRS RUNNING, BUT IF WORKING IN SPECIAL APPLICATION, SUCH AS: HIGH TEMPERATURE, 24 HRS RUNNING , HEAVY DUTY IMPACT....etc. THEN LUBRICANT NEED TO BE CHANGED IN EVERY 10,000-15,000 WORKING HOURS.

可替換潤滑油脂 (EXCHANGEABLE LUBRICANT)

廠牌（BRAND)	SHELL	COSMD	MOBIL	昭和石油	台製
規格（SPEC')	OMALA OIL 320	EP-320	MOBIL GEAR 632	ISO VG EP 320	國光牌 HD-320

油量表/重量表 (LUBRICANT / WEIGHT TABLE)

馬力 CAPACITY	出力軸 OUTPUT SHAFT	本體框號 HOUSING CODE	機型TYPE							
			油量表（公升） LUBRICANT(L)		重量表（公斤） WEIGHT(KG)					
			CH CHM CHD	CV CVM CVD	CH	CHM	CHD	CV	CVM	CVD
100W 1/8HP	Φ18	1#	0.19	0.18	5.60	5.22	2.90	5.80	5.12	2.80
	Φ22	2#	0.38	0.39	7.30	6.40	4.00	7.30	6.52	4.10
	Φ28	1#+3#	0.8	0.85	14.6	12.4	11.3	14.6	12.52	11.4
200W 1/4HP	Φ18	1#	0.17	0.18	7.00	5.22	2.90	7.00	5.12	2.80
	Φ22	2#	0.38	0.39	8.60	6.42	4.00	8.80	6.52	4.10
	Φ28	3#	0.63	0.68	11.0	9.12	8.30	10.8	8.92	8.10
	Φ32	2#+4#	1.30	1.40	27.6	24.0	23.0	28.0	24.4	22.8
400W 1/2HP	Φ22	2#	0.38	0.39	11.1	6.42	4.80	11.2	6.52	4.90
	Φ28	3#	0.63	0.68	14.2	9.12	8.30	14.0	8.92	8.10
	Φ32	4#	0.95	1.05	27.0	22.2	21.5	26.9	23.2	22.5
	Φ40	3#+5#	1.80	1.90	46.0	39.8	39.1	47.0	40.8	40.1
750W 1HP	Φ28	3#	0.63	0.68	15.5	12.1	8.30	15.0	11.9	8.10
	Φ32	4#	0.95	1.05	27.6	25.1	21.5	28.0	26.1	22.5
	Φ40	5#	1.26	1.38	42.3	37.3	32.0	41.9	36.3	31.0
	Φ50	3#+6#	3.00	3.13	91.5	83.5	79.2	91.5	82.5	77.2
1500W 2HP	Φ32	4#	0.95	1.05	33.6	25.0	22.0	34.6	26.0	23.0
	Φ40	5# T	1.470	1.590	49.6	37.3	33.0	49.0	36.3	32.0
		5# TT	1.260	1.470						
	Φ50	6#	2.520	2.600	94.0	74.3	70.0	94.0	71.3	67.0
	Φ50	4#+6#	3.470	3.650	105.0	--	--	106.0	--	--
2200W 3HP	Φ40	5# D	1.680	1.800	49.8	40.8	36.5	51.0	39.8	35.5
		5# T	1.490	1.590						
	Φ50	6#	2.520	2.600	92.5	77.8	73.5	88.5	74.8	70.5
3700W 5HP	Φ40	5#	1.680	1.800	54.8	43.8	39.5	55.3	42.8	38.5
	Φ50	6#	2.520	2.600	98.5	78.8	74.5	94.5	75.8	71.5

備註：1. 此表僅供參考，具體以實物為準
1. THIS TABLE IS FOR REFERENCE ONLY,SUBJECT TO THE SPECIFIC KIND

4-8 速比/段數適用表 RATIO / GEAR STAGE TABLE)

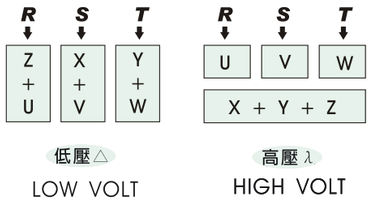
馬力 CAPACITY	速比 RATIO	雙段 (D) 2ND STAGE	三段 (T) 3ND STAGE	雙本體 1#+3# TWIN HOUSING	雙本體 2#+4# TWIN HOUSING	雙本體 3#+5# TWIN HOUSING	雙本體 3#+6# TWIN HOUSING
1/8HP	1/3-1/50	D					
	1/60-1/200		T				
	1/150,180,200		T				
	1/250-1/1800			DD			
1/4HP	1/3-1/35	D					
	1/40-1/200		T				
	1/160,180,200		T				
	1/250-1/1800				DD		
1/2HP	1/3-1/35	D					
	1/40-1/200		T				
	1/250-1/1800					DD	
1HP	1/3-1/30	D					
	1/40-1/120		T				
	1/125-1/200		(TT)				
	1/250-1/1800						DD
2HP	1/3-1/22	D					
	1/25-1/50		T				
	1/55-1/100						
	1/105,115,120		T				
	1/110-1/180		T				
3HP	1/3-1/15	D					
	1/20-1/100		T				
5HP	1/3-1/25	D					
	1/30-1/60		T				

**馬達到以下速比時，必需搭配6P馬達使用 TO REACH CERTAIN RATIO THAT NEED TO USE 6 POLE MOTOR	
2HP	1/130,1/150,1/160,1/170,1/180

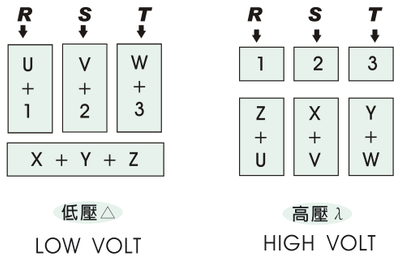
4-9 接線方式 WIRING DIAGRAM

(1) 三相馬達/剎車器接線方式 (THREE PHASE MOTOR W/BRAKE UNIT DIAGRAM)

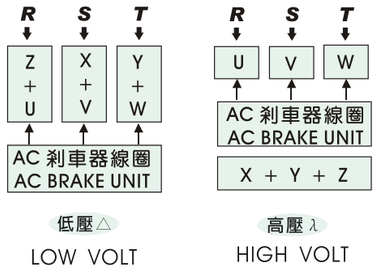
(a) 三相六條馬達電源線 (FOR SIX WIRES)



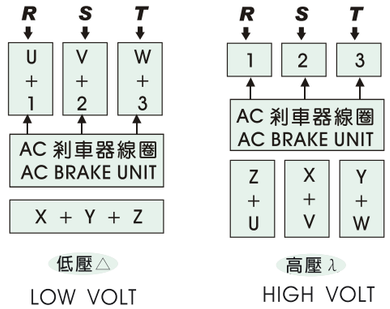
(b) 三相九條馬達電源線 (FOR NINE WIRES)



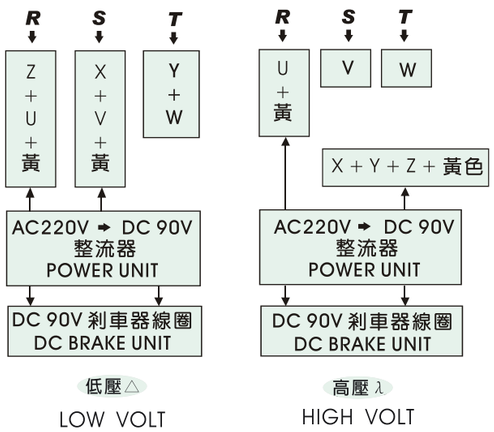
(c) 三相六條馬達電源線附交流剎車器
(SIX WIRES W / AC BRAKE UNIT)



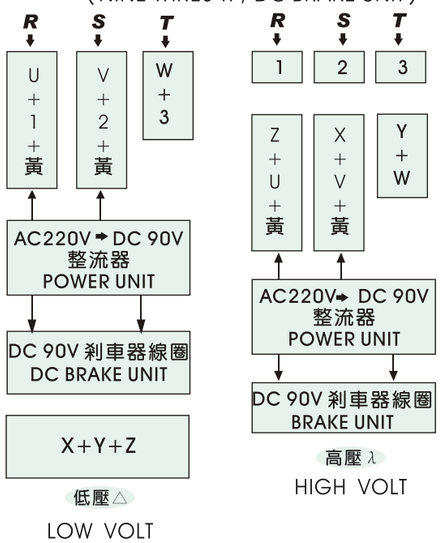
(d) 三相九條馬達電源線附交流剎車器
(NINE WIRES W / AC BRAKE UNIT)



(e) 六條馬達電源線附直流剎車器
(SIX WIRES W / DC BRAKE UNIT)

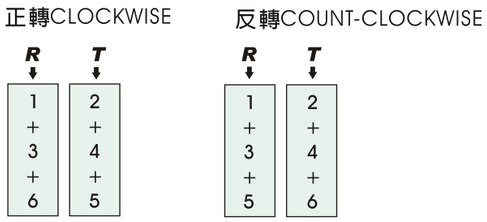


(f) 九條馬達電源線附直流剎車器
(NINE WIRES W / DC BRAKE UNIT)

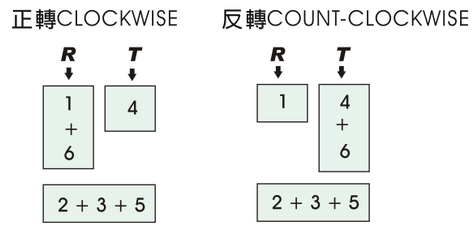


(2) 單相馬達/剎車器接線方式 (SINGLE PHASE MOTOR W / BRAKE UNIT DIAGRAM)

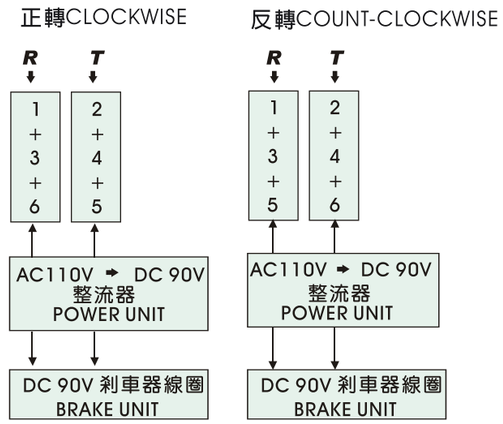
(a) 單相低壓 LOW VOLTAGE-110V



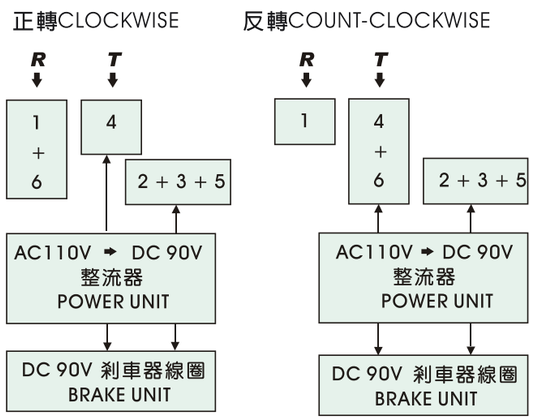
(b) 單相高壓 HIGH VOLTAGE-220V



(c) 單相低壓110V附直流剎車器
LOW VOLTAGE 110V WITH DC BRAKE UNIT

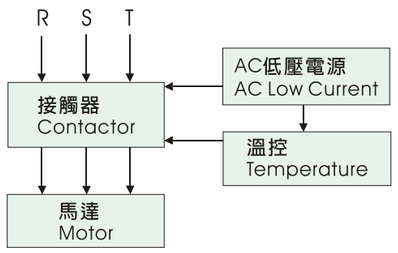


(d) 單相高壓220V附直流剎車器
HIGH VOLTAGE 220V WITH DC BRAKE UNIT



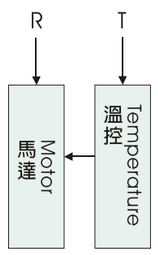
(3) 加溫控接線方式 (TEMPERATURE CONTROL WIRING)

(a) 三相馬達加溫控接線圖
3-PHASE THERMOSTAT WIRING DIAGRAM

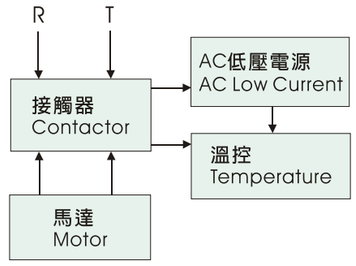


(b) 單相馬達加溫控接線圖
1-PHASE THERMOSTAT WIRING DIAGRAM

單相額定電流小於或等於5A接法
1-PHASE RATED CURRENT IS LESS THAN OR EQUAL TO 5A CONNECTION



單相額定電流大於5A接法
1-PHASE RATED CURRENT IS GREATER THAN 5A CONNECTION



4-10 剎車器性能說明（FUNCTION FOR BRAKE UNIT）

4-10-1 交流剎車器規格（AC BRAKE UNIT SPECIFICATION）

輸出馬力 CAPACITY (HP)	允許最高轉速 PERMIT MAX RPM	剎車制動力 TORQUE (KG-M)	剎車間隙 CLEARANCE (MM)	來令片 BRAKE DISC 外徑 O/D	來令片 BRAKE DISC 內徑 I/D	重量 WEIGHT (KG)
1/4HP4P	4000	0.15-0.30	0.4-1.2	83	48	1.6
1/2HP4P-1/4HP6P	4000	0.15-0.40	0.4-1.2	112	65	4.0
1HP4P-1/2HP6P	4000	0.25-0.70	0.5-1.3	130	68	4.3
2HP4P-1HP6P	3600	0.42-1.50	0.5-1.4	140	78	5.8
3HP4P-2HP6P	3600	0.92-2.00	0.5-1.4	150	78	7.0
5HP4P-3HP6P	3600	1.80-3.50	0.5-1.5	170	86	9.0
7.5HP4P-5HP6P	3600	2.80-5.50	0.5-1.7	170	86	12.5
10HP4P-7.5HP6P	3400	4.00-7.00	0.6-1.7	190	105	15.0
15HP4P-10HP6P	3400	6.00-11.00	0.6-1.7	200	110	23.6
20HP4P-15HP6P	3200	8.00-13.00	0.6-1.8	240	125	31.5
25HP4P-2OHP6P	2600	15.00-23.00	0.8-2.0	300	145	54.5
30HP4P-25HP6P	2600	15.00-23.00	0.8-2.0	300	145	54.5
40HP4P-30HP6P	2600	15.00-23.00	0.8-2.0	300	145	54.5

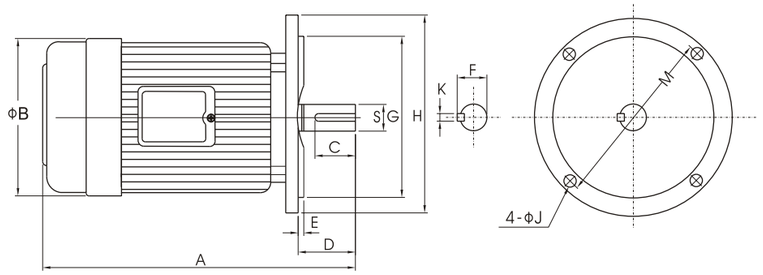
備註 REMARK	
	1.AC剎車器安裝尺寸較長於原有標準馬達. AC BRAKE UNIT LENGTH LONGER THAN ORIGINAL STANDARD MOTOR.
	2.適用電壓AVAILABLE VOLTAGE 220V,380V,400V,415V,440V,460V.
	3.可接受特殊訂製AC剎車器及專用剎車機型 AVAILABLE FOR SPECIAL BRAKE DESIGN
	4.BA07-BA40為複板式剎車器 DOUBLE BRAKE DISC SYSTEM FOR 7.5HP4P-40HP4P

4-10-2 直流安全式剎車器規格（DC BRAKE UNIT SPECIFICATION）

輸出馬力 CAPACITY (HP)	剎車制動力 TORQUE (KG-M)	剎車間隙 CLEAR-ANCE (MM)	剎車時間 BRAKE (SEC)	釋放時間 RELEASE (SEC)	剎車線圈BRAKE COIL 電壓 VOLTAGE (DC-V)	剎車線圈BRAKE COIL 電流 AMP (A)	剎車線圈BRAKE COIL 阻抗OHM (Ω)	重量 WEIGHT (KG)
1/4HP4P	0.20	0.2-0.60	0.22	0.12	95±10%	0.17	565	3.5
1/2HP4P	0.40	0.2-0.60	0.24	0.13	95±10%	0.28	336	4.0
1HP4P	0.80	0.3-0.65	0.22	0.12	95±10%	0.41	233	5.0
2HP4P	1.50	0.3-0.65	0.28	0.15	95±10%	0.57	167	6.0
3HP4P	2.20	0.4-0.70	0.28	0.18	95±10%	0.73	130	8.0
5HP4P	4.50	0.4-0.70	0.28	0.18	95±10%	0.73	130	10.0
7.5HP4P	5.60	0.5-0.90	0.38	0.21	95±10%	1.02	93	12.5

備註 REMARK	
	1.直流剎車器安裝尺寸相同於原有標準馬達. DC BRAKE UNIT LENGTH SAME AS ORIGINAL STANDARD MOTOR.
	2.採用非石棉剎車來令片材質 ADOPT MATERIAL WITH NON-ASBESTOS BRAKE DISC.
	3.適用電壓AVAILABLE VOLTAGE 220V,380V,400V,415V,440V,460V.
	4.剎車電壓為 DC90V.BRAKE COIL VOLTAGE:DC90V.
	5.選用配件OPTIONAL DESIGN a.可附加手動釋放剎車裝置 AVAILABLE FOR MANUAL RELEASE BRAKE SYSTEM. b.可接受特殊訂製DC剎車器及專用剎車機型 AVAILABLE FOR SPECIAL BRAKE DESIGN

4-11 標準東元/大同鑄鐵馬達 IEC CAST IRON MOTOR



IEC標準三相立式馬達尺寸表（IEC 3-PHASE MOTOR）

輸出馬力 CAPACITY 2P	4P	6P	框號 FRAME	A	B	C	D	E	F	G	H	J	K	M	S	重量 WEIGHT
1/4	1/4	--	63	248	144	10	23	3.5	12.5	110	160	10	4	130	11	8 KG
1/2	1/2	1/4	71	278	162	14	30	3.5	16	110	160	10	5	130	14	12 KG
1	1	1/2	80	282	177	25	40	3.5	21.5	130	200	12	6	165	19	16 KG
2,3	2	1	90L	272	200	32	50	3.5	27	130	200	12	8	165	24	25 KG
--	3	2	100L	375	219	40	60	4.0	31	180	250	14.5	8	215	28	32 KG
5	5	3	112M	431	235	40	60	4.0	31	180	250	14.5	8	215	28	43 KG
7.5	7.5	5	132S	454	273	56	80	4.0	41	230	300	14.5	10	265	38	67 KG
--	10	7.5	132M	492	273	56	80	4.0	41	230	300	14.5	10	265	38	74 KG

【生活箴言】

生活大師

你不能決定生命的長度，但你可以決定生命的寬度。

你不能左右天氣，但你可以改變心情。

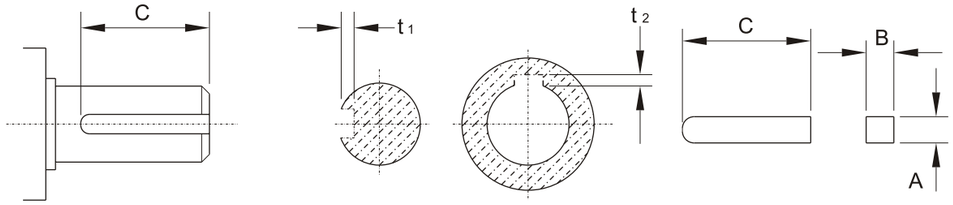
你不能改變容貌，但你可以展現笑容。

你不能控制他人，但你可以掌握自己。

你不能預知明天，但你可以利用今天。

你不能樣樣順利，但你可以事事盡力。

4-12 鍵/鍵槽加工尺寸 (KEY / KEYWAY DIMENSION)



軸徑 SHAFT DIA	鍵 KEY		鍵槽 KEYWAY			
	新JIS規範 NEW JIS SPEC'	舊JIS規範 OLD JIS SPEC'	新JIS規範 NEW JIS SPEC' (SHAFT / HOLE)		舊JIS規範 OLD JIS SPEC' (SHAFT / HOLE)	
S	A x B x C	A x B x C	t 1	t 2	t 1	t 2
φ11.0	4 x 4 x C	4 x 4 x C	$2.5^{+0}_{+0.1}$	$1.8^{+0}_{+0.1}$	$2.5^{+0}_{+0.1}$	$2.0^{+0}_{+0.1}$
φ14.0	5 x 5 x C	5 x 5 x C	$3.0^{+0}_{+0.1}$	$2.3^{+0}_{+0.1}$	$3.0^{+0}_{+0.1}$	$2.5^{+0}_{+0.1}$
φ18.0	6 x 6 x C	6 x 6 x C	$3.5^{+0}_{+0.1}$	$2.8^{+0}_{+0.1}$	$3.5^{+0}_{+0.1}$	$3.0^{+0}_{+0.1}$
φ19.0	6 x 6 x C	6 x 6 x C	$3.5^{+0}_{+0.1}$	$2.8^{+0}_{+0.1}$	$3.5^{+0}_{+0.1}$	$3.0^{+0}_{+0.1}$
φ22.0	8 x 7 x C	7 x 7 x C	$4.0^{+0}_{+0.1}$	$3.3^{+0}_{+0.1}$	$4.0^{+0}_{+0.1}$	$3.5^{+0}_{+0.1}$
φ24.0	8 x 7 x C	8 x 7 x C	$4.0^{+0}_{+0.2}$	$3.3^{+0}_{+0.2}$	$4.0^{+0}_{+0.2}$	$3.5^{+0}_{+0.2}$
φ28.0	8 x 7 x C	8 x 7 x C	$4.0^{+0}_{+0.2}$	$3.3^{+0}_{+0.2}$	$4.0^{+0}_{+0.2}$	$3.5^{+0}_{+0.2}$
φ32.0	10 x 8 x C	10 x 8 x C	$5.0^{+0}_{+0.2}$	$3.3^{+0}_{+0.2}$	$4.5^{+0}_{+0.2}$	$4.0^{+0}_{+0.2}$
φ40.0	12 x 8 x C	12 x 8 x C	$5.0^{+0}_{+0.2}$	$3.3^{+0}_{+0.2}$	$4.5^{+0}_{+0.2}$	$4.0^{+0}_{+0.2}$
φ45.0	14 x 9 x C	12 x 8 x C	$5.5^{+0}_{+0.2}$	$3.8^{+0}_{+0.2}$	$4.5^{+0}_{+0.2}$	$4.0^{+0}_{+0.2}$
φ50.0	14 x 9 x C	15 x 10 x C	$5.5^{+0}_{+0.2}$	$3.8^{+0}_{+0.2}$	$5.0^{+0}_{+0.2}$	$5.5^{+0}_{+0.2}$
φ55.0	16 x 10 x C	15 x 10 x C	$6.0^{+0}_{+0.2}$	$4.3^{+0}_{+0.2}$	$5.0^{+0}_{+0.2}$	$5.5^{+0}_{+0.2}$
φ65.0	18 x 11 x C	18 x 12 x C	$7.0^{+0}_{+0.2}$	$4.4^{+0}_{+0.2}$	$6.0^{+0}_{+0.2}$	$6.5^{+0}_{+0.2}$
φ75.0	20 x 12 x C	20 x 13 x C	$7.5^{+0}_{+0.2}$	$4.9^{+0}_{+0.2}$	$7.0^{+0}_{+0.2}$	$6.5^{+0}_{+0.2}$
φ90.0	25 x 14 x C	24 x 16 x C	$9.0^{+0}_{+0.2}$	$5.4^{+0}_{+0.2}$	$8.0^{+0}_{+0.2}$	$8.5^{+0}_{+0.2}$
φ100.0	28 x 16 x C	28 x 18 x C	$10.0^{+0}_{+0.2}$	$6.4^{+0}_{+0.2}$	$9.0^{+0}_{+0.2}$	$10.0^{+0}_{+0.2}$
φ115.0	28 x 16 x C	28 x 18 x C	$10.0^{+0}_{+0.2}$	$6.4^{+0}_{+0.2}$	$9.0^{+0}_{+0.2}$	$10.0^{+0}_{+0.2}$

4-13 相關計算 CALCULATE DATA

(A)連結係數表(CONNECTION FACTOR)

鏈輪SPROCKET	1.00
齒輪GEAR	1.25
三角皮帶 BELT	1.50
平皮帶FLAT BELT	2.50

(B)荷重係數表(SERVICE FACTOR)

減速機負載等級 LOAD GRADE	每日運轉時間 (HRS) DAILY OPERATING HOURS			
	1-2	3-8	9-15	16-24
均一負載 UNIFORM LOAD	0.80	0.90	1.20	1.30
中級衝擊負載 MEDIUM IMPACT LOAD	1.00	1.20	1.30	1.50
重級衝擊負載 HEAVY IMPACT LOAD	1.20	1.50	1.75	2.00

(C)符號說明(CODE DETAILS)

V=速度 SPEED (M/MIN)	E=效率 EFFICIENCY(%)	1 INCH = 2.54 CM
I=減速比RATIO	N_2=出力軸轉速(RPM) OUTPUT SHAFT SPEED	1 FOOT = 12 INCH
T=輸出扭力 (KG-M) OUTPUT TORQUE	D=滾輪直徑 (MM) ROLLER DIAMETER	1 KW = 1000W 1 KW = 1.34 HP
K=連結係數 CONNECTING FACTOR	R=滾輪半徑(MM) ROLLER RADIUS	1 KG-M = 7.233 FT-LB 1 KG-M = 86.8 IN-LB
F=荷 重 係 數 SERVICE FACTOR	KW1(HP1)=入力馬力 INPUT CAPACITY	1 KG = 2.2 LB 1 LB = 0.4536 KG
W=荷重(KG) LOAD	KW2(HP2)=輸出馬力 OUTPUT CAPACITY	N1 = 入力迴轉速 (r/min) INPUT SHAFT ROTATION SPEED

(D)基本傳動公式(BASIC FORMULAR)

減速比 RATIO	$I = N_2 / N_1$
迴轉速度 ROTATION SPEED (r / min)	$N_1 = V / \pi D$
輸出扭矩 OUTPUT TORQUE (KG-M)	T = W x R x K
輸入馬力 INPUT HORSEPOWER (公制 METRIC)	KW1 = N x T x 974
輸入馬力 INPUT HORSEPOWER (英制 INCH)	HP1 = N x T / 716
輸出馬力 OUTPUT HORSEPOWER (公制 METRIC)	KW2 = KW1 x F / E
輸出馬力 OUTPUT HORSEPOWER (英制 INCH)	HP2 = HP1 x F / E

(E) 減速機水平輸送場合符號說明及傳動公式 (DESCRIPTION AND TRANSMISSION)

輸送速度(r/min) TRANSMISSION SPEED	V	輸送帶摩擦係數 BELT FRICTION COEFFICIENT	μ
滾輪直徑(MM) ROLLER DIAMETER	D	鏈輪傳動效率(%) Chain drive efficiency	η1
載重量(KG) LOAD	W	減速機傳動效率(%) REDUCER TRANSMISSION EFFICIENCY	η2=0.9
出力軸主動鏈輪齒數 OUTPUT SHAFT TEETH	t1	輸送機被動鏈輪齒數 CONVEYOR PASSIVE SPROCKET TEETH	t2
輸送帶所需扭力(KG-M) BELT TORQUE	T1	減速機減速比 REDUCER RATIO	I
減速機扭力(KG-M) REDUCER TORQUE	T2	減速機出力軸迴轉速(r/min) REDUCER OUTPUT SHAFT ROTATION SPEED	N2
荷重係數 SERVICE FACTOR	F (查4-13 表(B)) F (FIND 4-13 TABLE(B))		

輸送機迴轉速(r/min) TRANSMISSION SPEED	$N1 = V / \pi D$
減速機出力軸迴轉速(r/min) REDUCER OUTPUT SHAFT ROTATION SPEED	N2 = N1 x (t2 / t1)
減速機減速比(I) REDUCER RATIO	50hz I=1500/N2 60hz I=1800/N2
輸送帶所需扭力(KG-M) BELT TORQUE	$T1 = W \times D / 2 \times \mu / \eta 1$
減速機所需扭力(KG-M) REDUCER TORQUE	$T2 = T1 \times (t1 / t2) / \eta 2$
考慮荷重係數減速馬達扭力 GEAR MOTOR TORQUE (SERVICE FACTOR BE CONSIDER)	T3 = T2 x F
馬力(HP) CAPACITY	HP = T3 x N2 / 716.2

Troubleshooting 故障排除

直流剎車器故障排除 TROUBLESHOOTING FOR DC BRAKE UNIT

不良原因 DEFECTIVE REASON	原因分析 POSSIBLE ANALYSIS	解決方式 SOLUTION
剎車器不動作 NO ACTION	未供電源 NO POWER INSIDE BRAKE	供應電源SUPPLY POWER
	來令片磨損 BRAKE DISC WORN OUT	換新來令片 USE NEW BRAKE DISC
	間隙過大LARGE CLEARANCE	調整間隙ADJUST CLEARANCE
	電源電壓不足LOW VOLTAGE	提供正確電壓 USE CORRECT VOLTAGE
	電源供應器損壞 POWER SUPPLY DAMAGE	電源供應器換新 USE NEW POWER SUPPLY
	異物入侵DIRTY INSIDE	清潔零件CLEAN PARTS
	使用電壓錯誤 WRONG VOLTAGE	使用正確電壓 CORRECT VOLTAGE
	接線脫落 CONNECT WIRE LOST	重新接線 RE-CONNECT WIRE
	來令片卡死 BRAKE DISC LOCKED	清潔零件CLEAN PARTS
	剎車線圈燒毀 BRAKE COIL BURNED-OUT	剎車線圈換新 USE NEW BRAKE COIL
剎車移動 OVER STOP	來令片磨損 BRAKE DISC WORN OUT	換新來令片 USE NEW BRAKE DISC
	間隙過大LARGE CLEARANCE	調整間隙ADJUST CLEARANCE
	來令片沾染油漬 SURFACE W/OIL	清潔來令片 CLEAN BRAKE DISC
	負載過大OVER LOADING	重新設計 RE-DESIGN BRAKE UNIT
	剎車表面歪斜 DISC SURFACE TWIST	更換零件USE NEW PARTS
	下降衝量過大 HUGE MOMENTUM	機構重新設計 SYSTEM RE-DESIGN
	選用機型錯誤 SELECT WRONG TYPE	選用正確機型RE-SELECT UNIT
	環境溫度過高 HIGH TEMPERATURE	檢討環境溫度 ADJUST TEMPERATURE

減速機故障排除 TROUBLESHOOTING FOR GEARMOTOR

不良原因 DEFECTIVE REASON		原因分析 POSSIBLE ANALYSIS	解決方式 SOLUTION
噪音 NOISE	齒輪敲擊聲 KNOCKING	齒輪表面受傷 HURT GEAR SURFACE	更換受傷齒輪組 REPLACE GEAR SET
	連續性雜音 CONTINUALLY	培林損壞 BAD BEARING	更換損壞培林 REPLACE BEARING
	週期性雜音 PERIODICALLY	異物附著齒面 PARTICLE INSIDE	檢查齒輪齒面 CHECK GEAR
	厮厮聲 NEIGH	油量不足 LACK OF LUBRICANT	添加潤滑油 FILL WITH LUB-OIL
	斷續性雜音 INTERMITTENTLY	潤滑油不潔 DIRTY LUBRICANT	更換新潤滑油 REPLACE LUBRICANT
振動 VIBRATING	固定底座振動 MOUNTING BASE MOVEMENT	安裝平面歪斜 BAD SURFACE MOUNTING	重新調整固定底座 RE-ADJUST MOUNTING BASE
	出力軸振動 OUTPUT SHAFT MOVING	培林損壞 BEARING BROKEN	更換損壞培林 REPLACE WOUNDED BEARING
	內部齒輪零件振動 INSIDE GEAR PARTS MOVEMENT	齒輪受傷 GEAR WOUNDED	更換受傷齒輪 REPLACE WOUNDED GEAR
	本體振動 HOUSING VIBRATING	齒輪組安裝不良 BAD GEAR ASSEMBLY	重新調整齒輪組 RE-ADJUST GEAR SET
漏油 LEAKAGE	油封漏油 OIL SEAL LEAKAGE	油封硬化 OIL SEAL TOO HARDEN	更換損壞油封 REPLACE WOUNDED OIL SEAL
	本體漏油 HOUSING LEAKAGE	本體有砂孔 HOUSING HAD SAND HOLE	更換砂孔本體 REPLACE SAND HOLE HOUSING
	結合面漏油 CONNECT SURFAXE LEAKAGE	O-型環損壞 O-RING BROKEN	更換損壞O-型環 REPLACE WOUNDED O-RING
過熱 OVER-HEATING	油封 BAD OIL SEAL	油封太緊 OIL SEAL TOO TIGHT	更換太緊油封 REPLACE TIGHTEN OIL SEAL
	本體過熱 HOUSING TOO HEAT	過負載 OVER LOAD RUNNING	重新計算負載馬力 RE-CALAULATE LOADING
	缺潤滑油 LESS LUBRICANT	油量不足 LACK OF LUBRICANT	加入潤滑油 FILL WITH LUBRICANT
	馬達過熱 MOTOR TOO HEAT	馬達不良 DEFECTIVE MOTOR	更換新馬達 REPLACE NEW MOTOR

Countries voltage

各國電壓表

國名 COUNTRY	頻率 (HZ)	單相 1-PHASE	三相 3-PHASE	國名 COUNTRY	頻率 (HZ)	單相 1-PHASE	三相 3-PHASE
阿根廷 Argentina	50	220	220/380	日本 Japan	50/60	100/200	200
澳洲 Australia	50	240	240/415	科威特 Kuwait	50	100/200	200
奧地利 Austria	50	220	220/380	黎巴嫩 Lebanon	50	110/220	220/380
孟加拉 Bangladesh	50	230	230/400	馬來西亞 Malaysia	50	115/240	240/415 400/440
比利時 Belgium	50	127/220	220/380	荷蘭 Netherlands	50	110/220	220/230
巴西 Brazil	50 60	110/220 127	220/380	紐西蘭 New Zealand	50	230	230/400
緬甸 Burma	50	230	230/440	巴勒斯坦 Pakistan	50	230	220/380 230/400
高棉 Cambodia	50	120	220/380	沙烏地阿拉伯 Saudi-arabia	50 60	127/220	220/380 230/400
智利 Chile	50	220	220/380	敘利亞 Syris	50	115/200	220/380
中國 China	50	220	220/380	新加坡 Singapore	50	115/230	230/400
捷克 Czechoslovakia	50	120/220	220/380	南非 South-africa	50	220/230	220/380 230/400
丹麥 Denmark	50	220	220/380	西班牙 Spain	50	127/220	220/380
埃及 Egypt	50	220	220/380	瑞士 Switzerland	50	220	220/380
芬蘭 Finland	50	220	220/380	泰國 Thailand	50	110/220	220/380
法國 France	50	115/127/ 220	220/380	土耳其 Turkey	50	127/220/230	220/380
德國 Germany	50	110/220	220/380	英國 U. K.	50	240	240/415
希臘 Greece	50	220	220/380	越南 Viet-Num	50	127/220	220/380
香港 Hong kong	50	110/200/ 230	220/380	加拿大 Canada	60	110/120	220/240/480
匈牙利 Hungary	50	220	220/380	哥倫比亞 Colombia	60	110/220	220/380
冰島 Iceland	50	220	220/380	古巴 Cuba	60	115/120	240
印度 India	50	230	220/380 230/400	厄瓜多爾 Ecuador	60	120/127	208/220
印尼 Indonesia	50	127/200	220/380	韓國 Korea	60	100/200	200
伊拉克 Iraq	50	220	220/380	秘魯 Peru	60	110/220	220
以色列 Israel	50	230	230/400	菲律賓 Philippines	60	110/220	220/440
意大利 Italy	50	127/220	220/380	美國 U.S.A.	60	120/240	240/480

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