



精禾科技股份有限公司
台中市西屯區福中二街10巷22號1樓
TEL : 04-23501313 傳真 : 04-23501389
電子信箱 : genho.com@msa.hinet.net
謙虛的態度、專業的服務

CHENG CHANG MACHINERY

SOL-POWER-SYNCHRONOUS-SERVO MOTOR
SOL-POWER-SPINDLE MOTOR(IP54)

SPM





GENERAL SPECIFICATION:

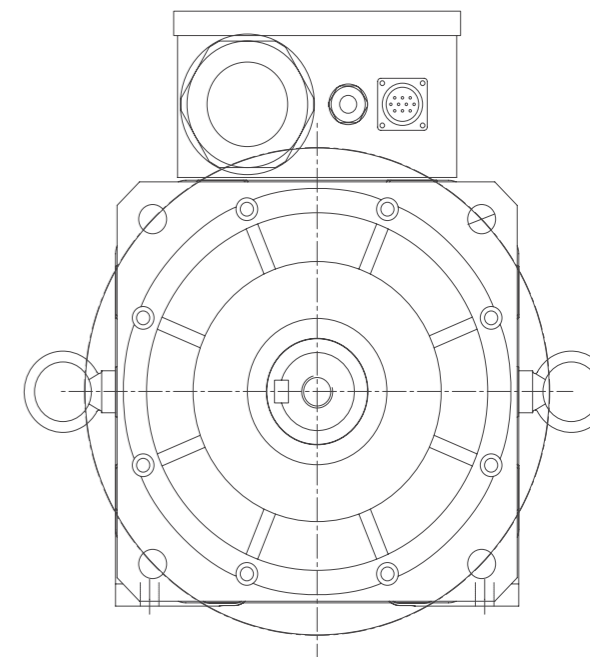
- INSULATION CLASS OF STATOR WINDING : F
- INSULATION VOLTAGE : 1500Vrms/MIN
- INSULATION RESISTANCE : ABOVE 500VDC 10MΩ
- PROTECTION LEVEL : IP55
- OPERATING AMBIENT ENVIRONMENT : 0~40°C , 90%RH
NON-CONDENSING
- STORAGE AMBIENT ENVIRONMENT : -20~60°C , 90%RH
NON-CONDENSING
- VIBRATION CLASS : BLOW 1.8mm / S
- MOUNTING : PM7:B5 , PM10: B35 , PM13: B35
- FEEDBACK SYSTEM : ENCODER +5V , LINE DRIVER ,
/ RESOLVER , 2500PPR WITH U,V,W COMMUTATION
SIGNALS
- TERMINAL BOX & CONNECTOR : POWER : TERMINAL BOX
FEEDBACK DEVICE : CONNECTOR
- OVER TEMPERATURE PROTECTION : THERMO-SWITCH
- COOLING : IC416

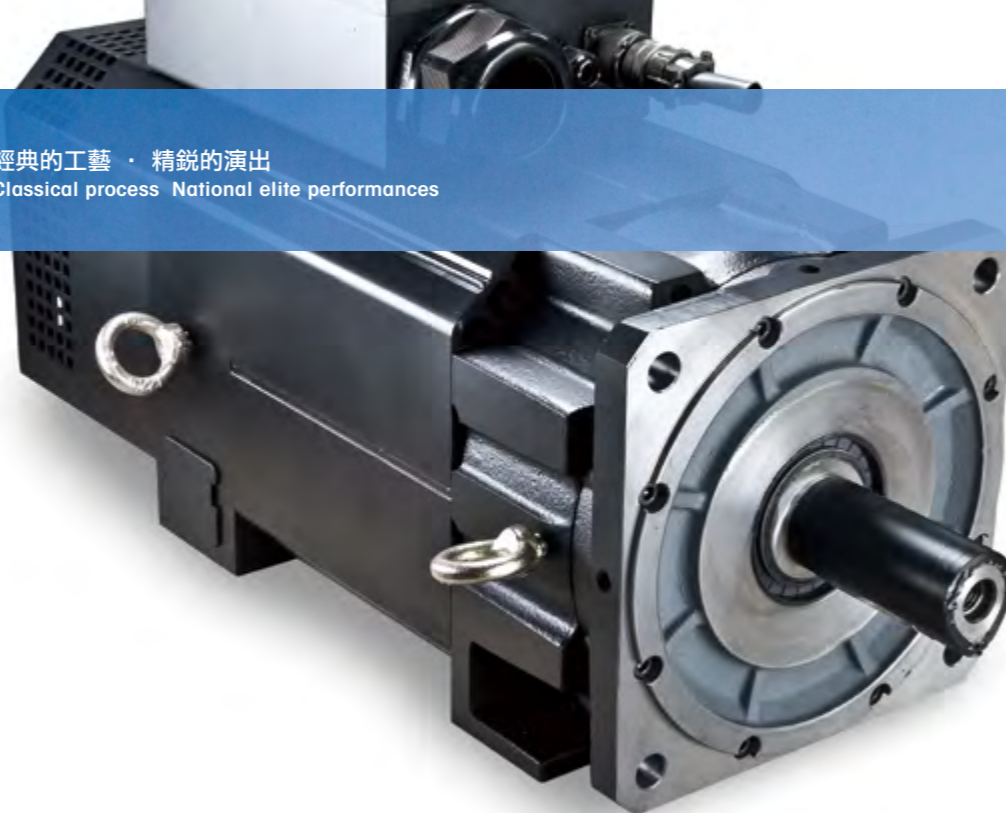
APPLICATIONS:

- INJECTION MOLDING MACHINE
- BLOW MOLDING MACHINE
- PRESS PUNCHING MACHINE
- PRESS FEEDER
- ROTARY CUTTER
- TEXTILE
- PRINTING MACHINE
- MACHINE TOOL
- ROBOTIC
- HANDLING SYSTEM
- CUT TO LENGTH
- PACKAGING MACHINE
- FLY SHEAR

馬達特性 :

- A. 高精度、低慣量設計
- B. 反應靈敏、速度控制





synchronous
SPM07 SERIES
Servo motors with 8 poles
Rated torque output 12~30 nt-m

1~4



synchronous
SPM10 SERIES
Servo motors with 8 poles
Rated torque output 45~142 nt-m

5~8



synchronous
SPM13 SERIES
Servo motors with 8 poles
Rated torque output 118~400 nt-m

9~12





Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A	Max Speed Rpm	Peak Torque Nm
SPM-072-10	1.2	1000	12	66.7	2.1	7000	29
SPM-072-15	1.9	1500	12	100.0	3.3	7000	29
SPM-072-20	2.5	2000	12	133.3	4.3	7000	29
SPM-072-30	3.7	3000	12	200.0	6.4	7000	29
SPM-074-10	1.8	1000	17	66.7	3.2	7000	46
SPM-074-15	2.8	1500	17	100.0	4.9	7000	46
SPM-074-20	3.7	2000	17	133.3	6.5	7000	46
SPM-074-30	5.5	3000	17	200.0	9.6	7000	46
SPM-076-10	2.5	1000	24	66.7	4.3	7000	71
SPM-076-15	3.8	1500	24	100.0	6.6	7000	71
SPM-076-20	5.0	2000	24	133.3	8.7	7000	71
SPM-076-30	7.5	3000	24	200.0	13	7000	71
SPM-078-10	3.2	1000	30	66.7	5.6	7000	90
SPM-078-15	4.8	1500	30	100.0	8.4	7000	90
SPM-078-20	6.3	2000	30	133.3	11	7000	90
SPM-078-30	9.5	3000	30	200.0	16.6	7000	90

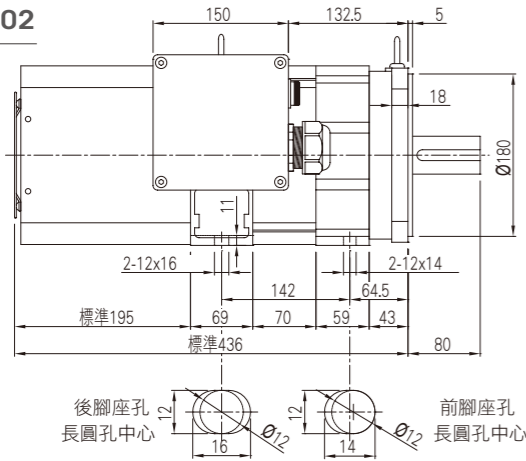
Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm2	Resistance Ohm	Inductance MH	Weight Kg
300	5.4	7	10.0	73.0	21
200	3.6	7	4.4	32.4	
150	2.7	7	2.5	18.3	
100	1.8	7	1.1	8.1	
300	5.4	13	5.7	44.0	24
200	3.6	13	2.5	19.6	
150	2.7	13	1.4	11.0	
100	1.8	13	0.6	4.9	
300	5.4	18	3.6	30.0	27
200	3.6	18	1.6	13.3	
150	2.7	18	0.9	7.5	
100	1.8	18	0.4	3.3	
300	5.4	24	2.3	20	30
200	3.6	24	1	8.9	
150	2.7	24	0.5	5	
100	1.8	24	0.2	2.2	



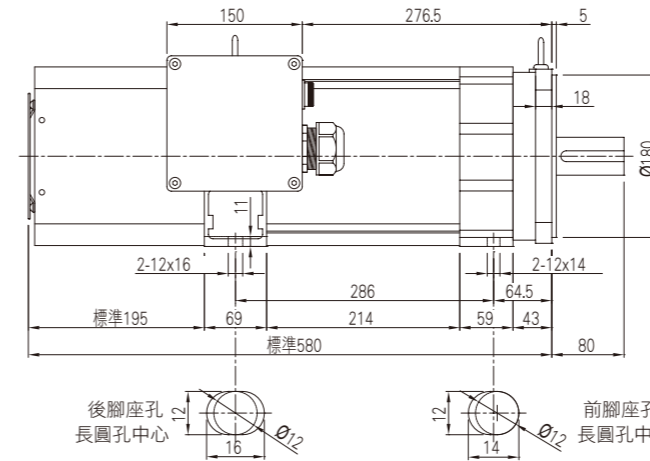
Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A	Max Speed Rpm
SPM-102-10	4.75	1000	45	66.7	9.0	4000
SPM-102-15	7.1	1500	45	100.0	13.5	4000
SPM-102-20	9.5	2000	45	133.3	18.0	4000
SPM-102-30	14.25	3000	45	200.0	27.0	4000
SPM-103-10	5.5	1000	52	66.7	10.5	4000
SPM-103-15	8.3	1500	52	100.0	15.8	4000
SPM-103-20	11	2000	52	133.3	21.0	4000
SPM-103-30	16.5	3000	52	200.0	31.5	4000
SPM-104-10	7.5	1000	71	66.7	14.0	4000
SPM-104-15	11.3	1500	71	100.0	21.0	4000
SPM-104-20	15	2000	71	133.3	28.0	4000
SPM-104-30	22.5	3000	71	200.0	42.0	4000
SPM-105-10	9.25	1000	88	66.7	17.5	4000
SPM-105-15	13.9	1500	88	100.0	26.3	4000
SPM-105-20	18.5	2000	88	133.3	35.0	4000
SPM-105-30	27.75	3000	88	200.0	52.5	4000
SPM-106-10	11	1000	104	66.7	20.8	4000
SPM-106-15	16.5	1500	104	100.0	31.2	4000
SPM-106-20	22	2000	104	133.3	41.6	4000
SPM-106-30	33	3000	104	200.0	62.4	4000
SPM-108-10	13	1000	124	66.7	24.6	4000
SPM-108-15	19.5	1500	124	100.0	36.9	4000
SPM-108-20	26	2000	124	133.3	49.2	4000
SPM-108-30	39	3000	124	200.0	73.8	4000
SPM-109-10	15	1000	142	66.7	28.4	4000
SPM-109-15	22.5	1500	142	100.0	42.6	4000
SPM-109-20	30	2000	142	133.3	56.8	4000
SPM-109-30	45	3000	142	200.0	85.2	4000

Peak Torque Nm	Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm2	Resistance Ohm	Inductance MH	Weight Kg
122	300	5	60	5.5	54.0	36.6
122	200	3.6	60	2.4	24.0	
122	150	2.5	60	1.4	13.5	
122	100	1.7	60	0.6	6.0	
141	300	5	75	4.1	46.5	44
141	200	3.6	75	1.8	20.7	
141	150	2.5	75	1.0	11.6	
141	100	1.7	75	0.5	5.2	
200	300	5	89	2.3	34.2	52
200	200	3.6	89	1.0	15.2	
200	150	2.5	89	0.6	8.6	
200	100	1.7	89	0.3	3.8	
237	300	5	105	1.5	27.7	59.6
237	200	3.6	105	0.6	12.3	
237	150	2.5	105	0.4	6.9	
237	100	1.7	105	0.2	3.1	
280	300	5	120	1.0	23.5	67.3
280	200	3.6	120	0.5	10.4	
280	150	2.5	120	0.3	5.9	
280	100	1.7	120	0.1	2.6	
335	300	5	150	0.6	19	82.7
335	200	3.6	150	0.3	8.3	
335	150	2.5	150	0.2	4.7	
335	100	1.7	150	0.1	2	
398	300	5	165	0.6	17.0	90.4
398	200	3.6	165	0.2	7.6	
398	150	2.5	165	0.1	4.3	
398	100	1.7	165	0.1	1.9	

SPM-102



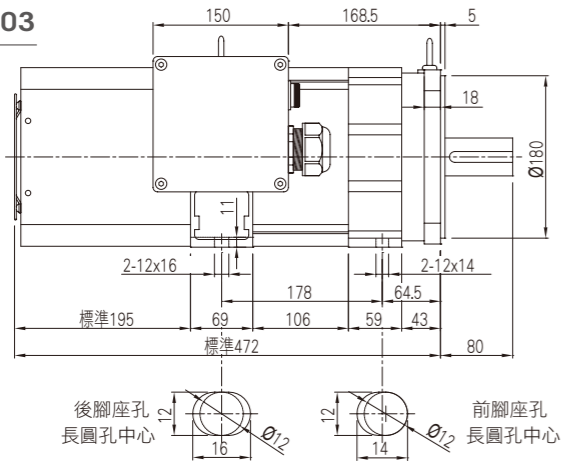
軸心公差: ± 0.005
引導公差: -0.04



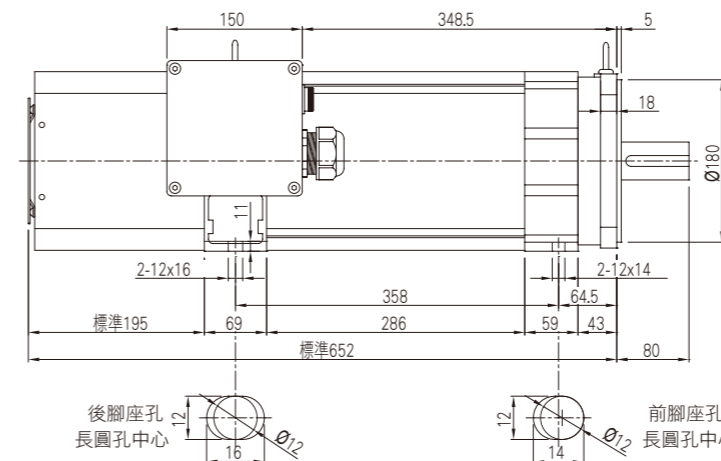
軸心公差: ± 0.005
引導公差: -0.04

SPM-106

SPM-103



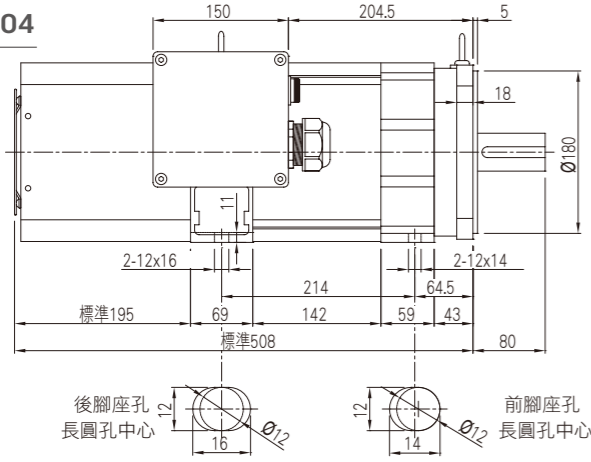
軸心公差: ± 0.005
引導公差: -0.04



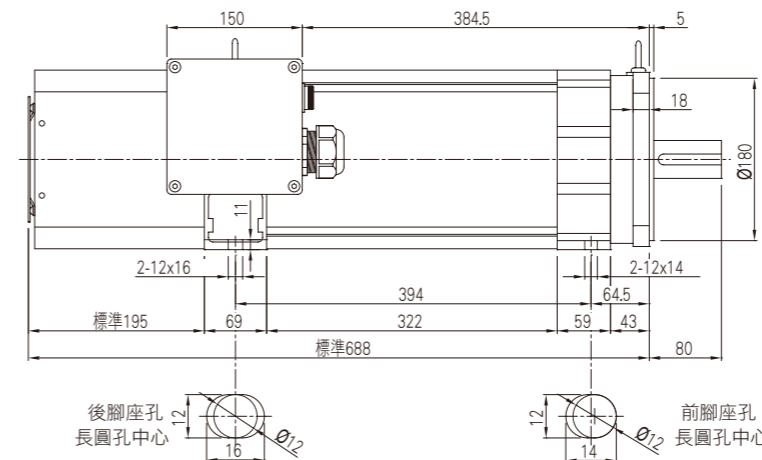
軸心公差: ± 0.005
引導公差: -0.04

SPM-108

SPM-104



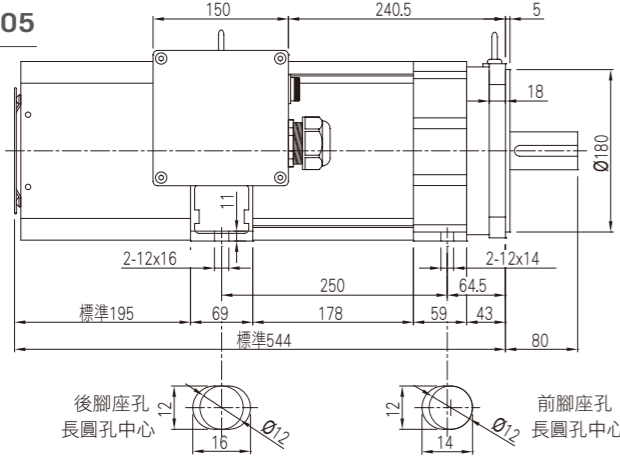
軸心公差: ± 0.005
引導公差: -0.04



軸心公差: ± 0.005
引導公差: -0.04

SPM-109

SPM-105



軸心公差: ± 0.005
引導公差: -0.04

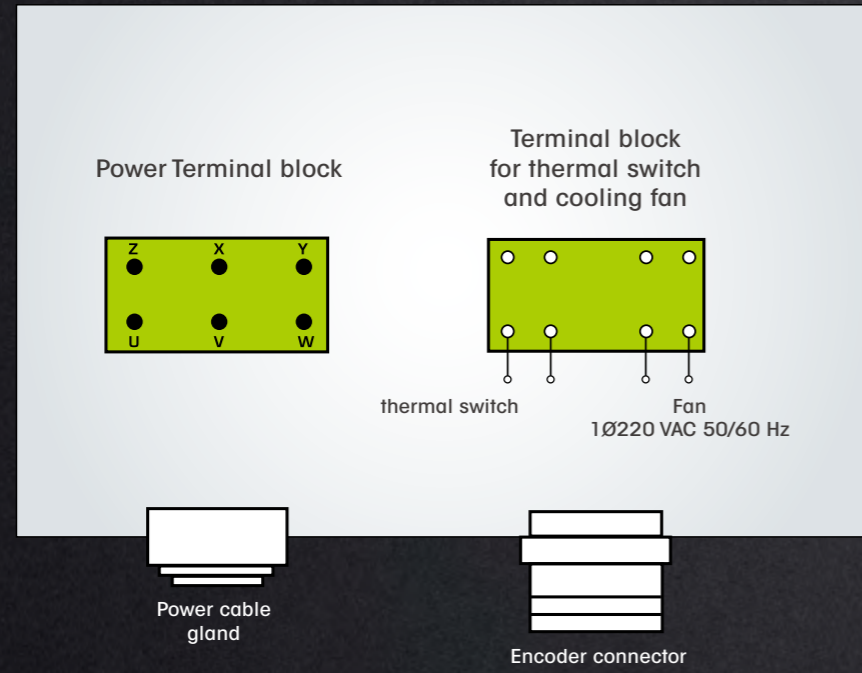


Motor Type	Rated Power Kw	Rated Speed Rpm	Rated Torque Nm	Rated Frequency Hz	Rated Current A	Max Speed Rpm
SPM-132-10	12.5	1000	118	66.7	23.6	4000
SPM-132-15	18.8	1500	118	100.0	35.5	4000
SPM-132-20	25	2000	118	133.3	47.3	4000
SPM-132-30	37.5	3000	118	200.0	70.9	4000
SPM-133-10	18.75	1000	179	66.7	35.8	4000
SPM-133-15	28.1	1500	179	100.0	53.7	4000
SPM-133-20	37.5	2000	179	133.3	71.6	4000
SPM-133-30	56.24	3000	179	200.0	107.4	4000
SPM-134-10	22.5	1000	215	66.7	43.0	4000
SPM-134-15	33.8	1500	215	100.0	64.5	4000
SPM-134-20	45	2000	215	133.3	86.0	4000
SPM-134-30	67.5	3000	215	200.0	129.0	4000
SPM-135-10	27.5	1000	263	66.7	52.6	4000
SPM-135-15	41.3	1500	263	100.0	78.9	4000
SPM-135-20	55	2000	263	133.3	105.2	4000
SPM-135-30	82.5	3000	263	200.0	157.8	4000
SPM-136-10	32	1000	303	66.7	60.4	4000
SPM-136-15	48.0	1500	303	100.0	90.6	4000
SPM-136-20	64	2000	303	133.3	120.8	4000
SPM-136-30	96	3000	303	200.0	181.2	4000
SPM-137-10	37.5	1000	355	66.7	71.0	4000
SPM-137-15	56.3	1500	355	100.0	106.5	4000
SPM-137-20	75	2000	355	133.3	142.0	4000
SPM-137-30	112.5	3000	355	200.0	213.0	4000
SPM-138-10	41	1000	388	66.7	77.5	4000
SPM-138-15	61.5	1500	388	100.0	116.3	4000
SPM-138-20	82	2000	388	133.3	155.0	4000
SPM-138-30	123	3000	388	200.0	232.5	4000

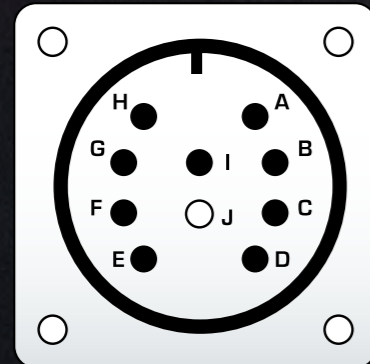
Peak Torque Nm	Ke (E.M.F.) vRMS /1000rpm	Kt Nm /Arms	Inertia Kg-cm2	Resistance Ohm	Inductance MH	Weight Kg
326	300	5	220	1.1	21.5	110
326	200	3.6	220	0.5	9.6	
326	150	2.5	220	0.3	5.4	
326	100	1.7	220	0.1	2.4	
513	300	5	290	1.1	14.3	130
513	200	3.6	290	0.5	6.4	
513	150	2.5	290	0.3	3.6	
513	100	1.7	290	0.1	1.6	
616	300	5	360	0.3	12.0	150
616	200	3.6	360	0.1	5.3	
616	150	2.5	360	0.1	3.0	
616	100	1.7	360	0.0	1.3	
774	300	5	430	0.2	9.8	169
774	200	3.6	430	0.1	4.3	
774	150	2.5	430	0.1	2.4	
774	100	1.7	430	0.0	1.1	
877	300	5	500	0.2	8.4	189
877	200	3.6	500	0.1	3.7	
877	150	2.5	500	0.0	2.1	
877	100	1.7	500	0.0	0.9	
1062	300	5	570	0.1	7.2	207
1062	200	3.6	570	0.1	3.2	
1062	150	2.5	570	0.0	1.8	
1062	100	1.7	570	0.0	0.8	
1169	300	5	630	0.1	6.6	228
1169	200	3.6	630	0.0	2.9	
1169	150	2.5	630	0.0	1.7	
1169	100	1.7	630	0.0	0.7	

Terminal box

Power Terminal block



Resolver



SECONDARY			
A	S1	RED	
B	S2	YEL	
C	S3	BLK	
D	S4	BLU	
PRIMARY			
H	R1	RED / WHT	AC
I	R2	YEL / WHT	7V

Encoder Connection



1 → A	6 → \bar{Z}
2 → \bar{A}	7 → U
3 → B	8 → \bar{U}
4 → \bar{B}	9 → V
5 → Z	10 → \bar{V}
	11 → W
	12 → \bar{W}
	13 → +VCC
	14 → 0V
	15 → Shield

