

1

2

3

4

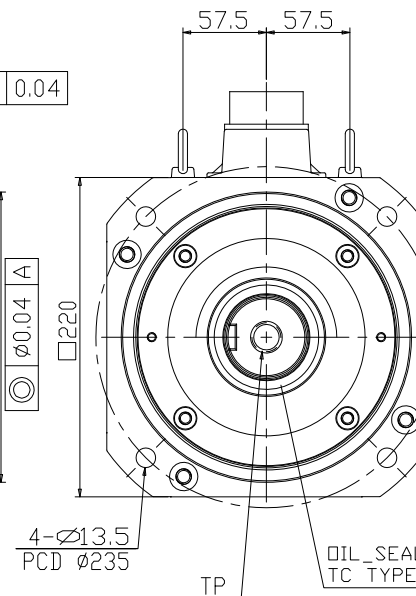
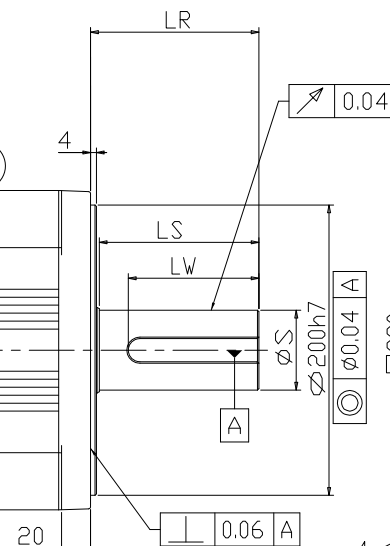
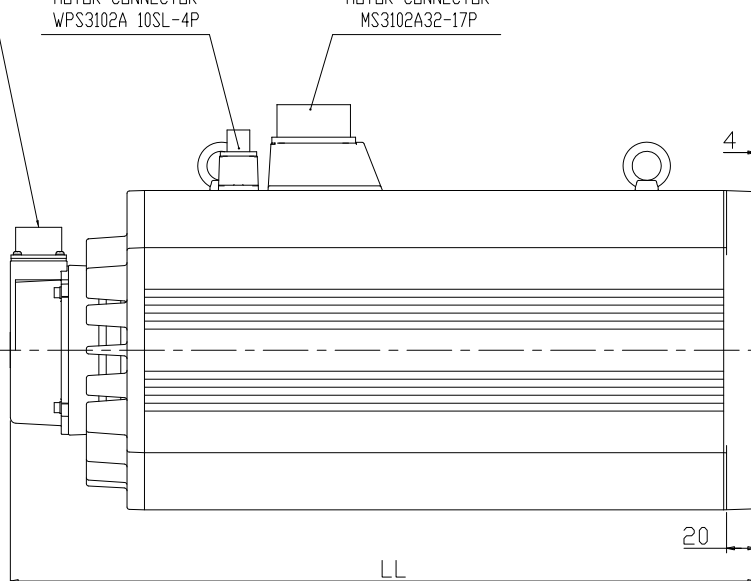
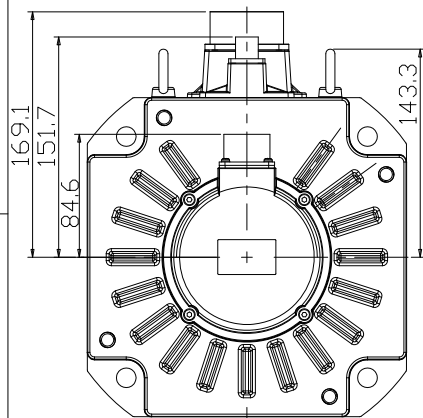
REV. ECN NO.

00

ENCODER CONNECTOR
MS3102A20-29P

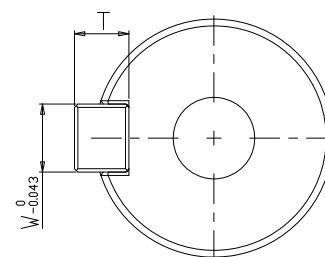
MOTOR CONNECTOR
WPS3102A 10SL-4P

MOTOR CONNECTOR
MS3102A32-17P

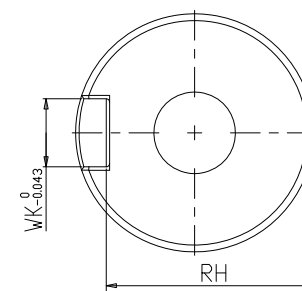


DIMENSION TABLE (MODEL WITH BRAKE)



MODEL	LL	LR	LS	LW	S	WK	W	T	RH	TP
ECMA-L221FSS	513.4	116	110	90	55 ^{+0.03} _{+0.011}	16	16	10	49	M20,DEPTH 40



KEY DETAILS



SHAFT END DETAILS

 <div>台達電子工業股份有限公司 DELTA ELECTRONICS, INC.</div>		DRAWN:		DESIGN:	
<div>THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA ELECTRONICS, INC. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SELL OF APPARATUS OR DEVICES WITHOUT PERMISSION.</div>		DATE: 04/07/2016		ECN NO:	
		DIMENSIONAL TOLERANCES			
		() () ()		ANGLES	
		DECIMALS 0~4 :±0.05 <50 :±0.1 <50 :±0.5 <30° :±0.1°			
		X :±0.3 4~16 :±0.08 >50~100 :±0.15 >50~100 :±1.0 >30°~60° :±0.3°			
		X.X :±0.2 16~63 :±0.12 >100~200 :±0.2 >100~200 :±1.5 >60°~90° :±0.5°			
		X.XX :±0.1 63~200 :±0.2 >200~ :±0.2% >200~ :±0.3%			
DRAWING NAME:		A3		PART NO:	
ECMA-LX221FSS				REV.	
USED ON		SIZE		00	
		mm		SCALE 0.280 SHEET 1 OF 1	

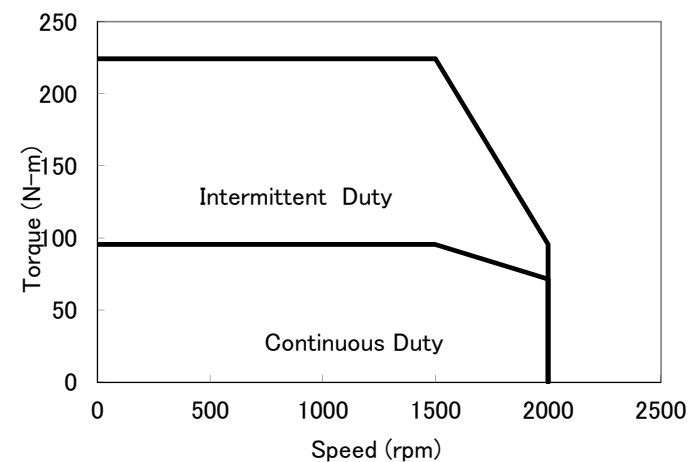
1

2

3

4

Rated Spec.	Motor Model	Symbol	Unit	ECMA-L1221F
	Rated Power	R _R	kW	15
	Rated Voltage	V _R	V	400
	Rated Torque	T _R	N.m	95.4
	Rated Speed	N _R	r/min	1500
	Rated Current	I _R	A	41.6
	Rated Power Rate	Q _R	k W/s	201.8
	---Model with Brake	Q _R	k W/s	197.1
Motor Spec.	Continuous Stall Torque	T _S	N.m	95.4
	Inataneous Maximum Torque	T _P	N.m	224
	Maximum Rotating Speed	N _{max}	r/min	2000
	Inataneous Maximum Current	I _P	A	100
	Induced Phase Voltage Constant	K _E	mv/(r/min)	83.90
	Torque Constant	K _T	N.m/A	2.29
	Rotor Moment of Inertia	J _M	×10 ⁻⁴ kg.m ²	451
	---Model with Brake	J _M	×10 ⁻⁴ kg.m ²	461.8
	Phase Armature Resistance	R _φ	Ω	0.0545
	Phase Armature Inductance	L _φ	m H	1.43
	Mechanical Time Constant	t _m	ms	1.34
	---Model with Brake	t _m	ms	1.37
	Electrical Time Constant	t _e	ms	26.26
	Insulation Resistance	-	-	>100MΩ DC500V
	Dielectric Strength	-	-	2300V AC,1 second
	Maximum Radial Shaft Load	-	N	3300
	Maximum Axial Shaft Load	-	N	1100
	Vibration Grade	-	-	V15
	Mass	W	kg	75
	---Model with Brake	W	kg	87
T-N Curve	-	-	Figure 1	
Enviroment Spec.	Maximum Winding Temperature	-	℃	130
	Operating Temperature	Top	℃	0~40
	Storage Temperature	Tst	℃	-10~80
	Operating Humidity	-	%RH	20~90
	Storage Humidity	-	%RH	20~90
	Enclosure Type	-	-	IP65
	Vibration Resistance	-	-	2.5G



 台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA ELECTRONICS, INC. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION.

DIMENSIONAL TOLERANCES

()	()	()	()	ANGLES
DECIMALS	<50 ±0.1	<50 ±0.15	<50 ±0.2	<30° ±0.1°
X	±0.3	>50~100 ±0.15	>50~100 ±0.2	>50~100 ±0.25
XX	±0.2	>100~200 ±0.2	>100~200 ±0.25	>100~200 ±0.3
XXX	±0.1	>200~ ±0.2%	>200~ ±0.25%	>200~ ±0.3%
				>30°~60° ±0.3°
				>60°~90° ±0.5°

DRAWN: ADONI. CHAO

DESIGN: ADONI. CHAO

APPROVE:

DATE: 2016/5/16

DESCRIPTION

CONFIDENTIAL

ECMA-L1221F

PART NO.

REV.

DATE:

2016/5/16

X00