

Created by: SB / Checked by: FA

# Data sheet

Date : 14 Mar 25 (v1)

SERVO MOTOR – 142UDC400JAECA165240-JSHJ

### 142UDC400JAECA165240-JSHJ

### **HIGH INERTIA**

(motor derated - torque output from motor limited by output shaft diameter)

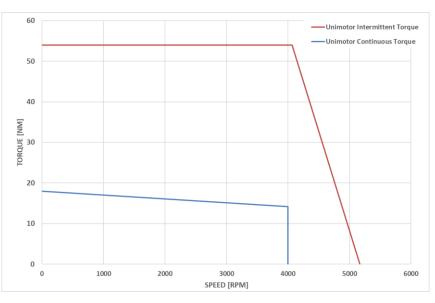


NOTE : SIZE 1 POWER CONNECTOR SHOWN

Definition				
Туре	Unimotor HD			
Motor frame size (mm)	142			
Voltage (Vdc)	U	400V		
Magnet type	D	High Dynamic		
Frame Length	С			
Speed (min <sup>-1</sup> )	40	4000		
Brake	0	Unbraked		
Connection type	J	Power (Size 1.5) and Signal (Size 1) 90° rotatable		
Output shaft	Α	With output key		
Feedback device code	EC	Inductive EnDat SinCos Multi-Turn (EQI 1331)		
Inertia & thermistor	A - JSHJ	PTC thermistor + High inertia		
PCD	165	165 (FF 165/130)		
Shaft Diameter	240	24j6 x 50 (torque output from motor limited by output shaft dia.)		
Fan Box	-			
Insulation class	F			
UL Motor / UL Stator	UL Motor / UL Stator			

Motor Characteristics				
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12	
Continuous Stall Torque (Nm)	18.0	Stall Current (A)	15.0	
Rated Torque (Nm)	14.2	Nominal Current (A)	11.8	
Motor Peak Torque (Nm)	54.0	Kt (Nm/A) @cold	1.2	
Rated Power (kW)	5.95	Ke (V/kmin-1) @cold	73.5	
Winding Thermal Time Constant (s)	245	R (ph-ph) (Ohm) @ambient	0.20	
Number of Poles	10	L (ph-ph) (mH)	3.04	
Typical Cogging (Nm)	0.38			
Inertia (kg.cm <sup>2</sup> )	40.10	Weight (kg)	16.6	
Ingress Protection Level (IP)	IP65			

#### Torque / Speed Graph



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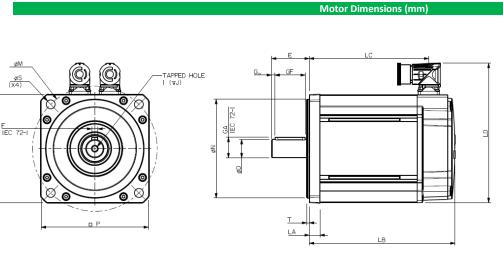


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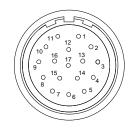
LB	Total length	247.0
LC	Power connector position	212.5
LA	Flange thickness	14
Т	Register Length	3.4
N	Register Diameter	130
LD	Overall height	204.5
Р	Flange Square	142
S	Fixing Hole Diameter	12
М	Fixing hole PCD	165
PH	Motor Housing Width	142
D	Shaft Diameter	24j6
E	Flange to Shaft End	50
GA	Key Height	27
GF	Key Length	40
G	Key to Shaft End	3
F	Key Width	8
I	Tapped Hole Thread Size	M8 x 1.25
J	Tapped Hole Depth	20
	Mounting Bolt	M10

NOTE : SIZE 1 POWER CONNECTOR SHOWN

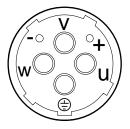
E PH

#### Connectors

### Feedback device code : EC - Inductive EnDat SinCos Multi-Turn (EQI 1331)



1 - Thermistor -2 - Thermistor + 3 - Screen 4 -5 -6 -7 -8 - CLK 9 - CLK / 10 - COS 11 - DATA 12 - DATA / 13 - COS / 14 - SIN 15 - SIN / 16 - Power 17 - OV Screen Connection type: J - Power (Size 1.5) and Signal (Size 1) 90° rotatable



Version V1.0

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