

SERVO MOTOR – 142UDC400JAECA165240-JSHJ

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HIGH INERTIA

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



NOTE : SIZE 1 POWER CONNECTOR SHOWN

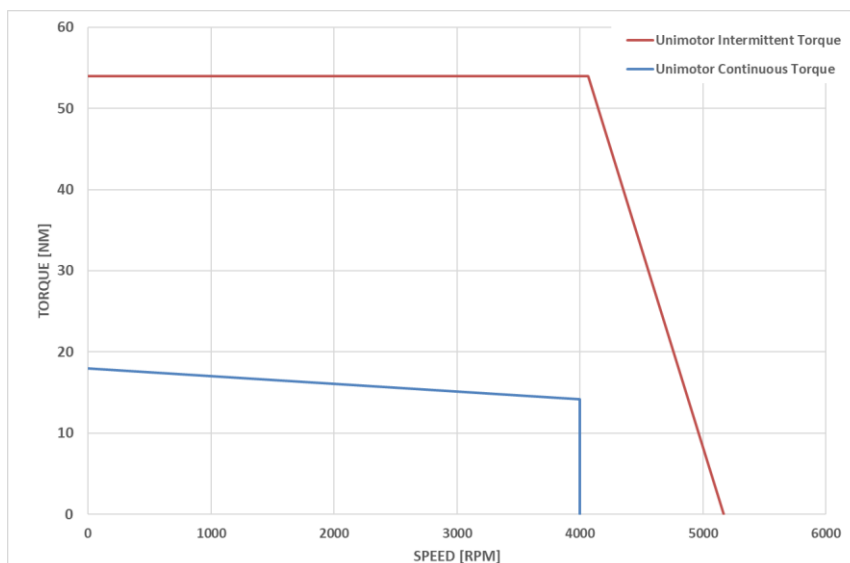
Definition

Type	Unimotor HD	
Motor frame size (mm)	142	
Voltage (Vdc)	U	400V
Magnet type	D	High Dynamic
Frame Length	C	
Speed (min ⁻¹)	40	4000
Brake	0	Unbraked
Connection type	J	Power (Size 1.5) and Signal (Size 1) 90° rotatable
Output shaft	A	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

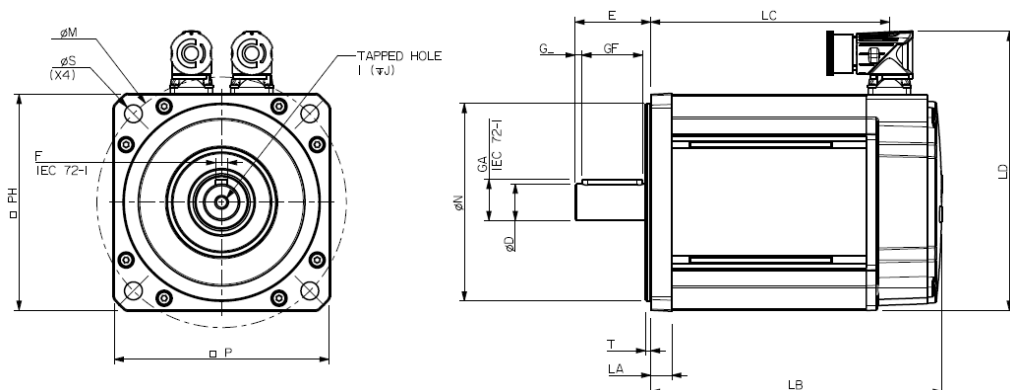
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Continuous Stall Torque (Nm)	18.0	Stall Current (A)	15.0
Rated Torque (Nm)	14.2	Nominal Current (A)	11.8
Motor Peak Torque (Nm)	54.0	Kt (Nm/A) @cold	1.2
Rated Power (kW)	5.95	Ke (V/kmin-1) @cold	73.5
Winding Thermal Time Constant (s)	245	R (ph-ph)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

Torque / Speed Graph



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Motor Dimensions (mm)

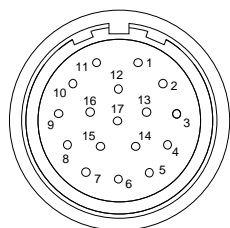


NOTE : SIZE 1 POWER CONNECTOR SHOWN

LB	Total length	247.0
LC	Power connector position	212.5
LA	Flange thickness	14
T	Register Length	3.4
N	Register Diameter	130
LD	Overall height	204.5
P	Flange Square	142
S	Fixing Hole Diameter	12
M	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

Connectors

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



- | | |
|------------------|-------------|
| 1 - Thermistor - | 10 - COS |
| 2 - Thermistor + | 11 - DATA |
| 3 - Screen | 12 - DATA / |
| 4 - | 13 - COS / |
| 5 - | 14 - SIN |
| 6 - | 15 - SIN / |
| 7 - | 16 - Power |
| 8 - CLK | 17 - 0V |
| 9 - CLK / | Screen |

Connection type: J - Power (Size 1.5) and Signal (Size 1) 90° rotatable

