

Enquiry N°: 2454 Created by: DB / Checked by: FA

Data sheet Date : 24 July 24 (v1)

SERVO MOTOR 142UDC300BAAEA165240

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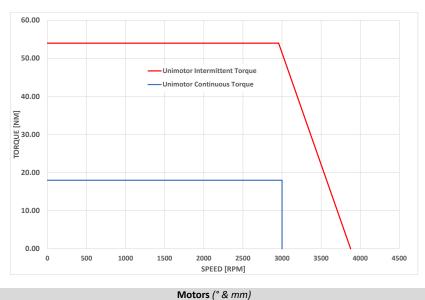
(motor derated - torque output from motor limited by output shaft diameter)



Definition				
Туре	Unimotor HD			
Frame Size (mm)	142			
Voltage	U	400 V		
Magnet type	D	High Dynamic		
Frame Length	C			
Speed (min-1)	30	3000		
Brake	0	Unbraked		
Connection type	В	Power and Signal size 1 90° rotatable		
Output shaft	Α	With output key		
Feedback device code	AE	Resolver		
Inertia & thermistor	Α	Standard inertia + PTC thermistor		
PCD	165	165 (FF 165/130)		
Shaft Diameter	240	24j6 x 50.0 (torque output from motor limited by output shaft dia)		
Fan Box	-			
Insulation class	F			
UL Motor / UL Stator	UL Motor / UL Stator			

Nominal characteristics				
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12	
Motor Stall Torque (Nm)	18.0	Stall Current (A)	11.3	
Rated Torque (Nm)	18.0	Nominal Current (A)	11.3	
Motor Peak Torque (Nm)	54	Kt (Nm/A)	1.6	
Rated Power (kW)	5.7	Ke (V/kmin-1)	98.0	
Winding Thermal Time Constant (s)	245	R (ph-ph) (Ohm)	0.3	
Number of Poles	10	L (ph-ph) (mH)	5.3	
Typical Cogging (Nm)	0.38			
Inertia (kg.cm ²)	17.0	Weight (kg)	13.3	
Ingress Protection Level (IP)	IP65			

Torque / speed graph



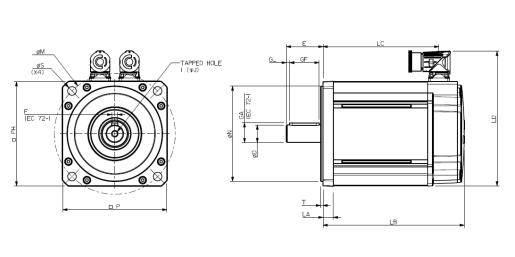
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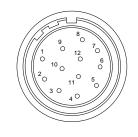
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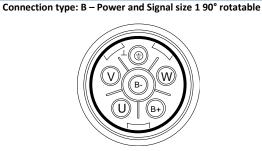
LB	Total length	217.0
LC	Power connector position	182.5
LA	Flange thickness	14.0
Т	Register Length	3.4
Ν	Register Diameter	130.0
LD	Connector overall height	183.5
Р	Flange Square	142.0
S	Fixing Hole Diameter	12.0
М	Fixing hole PCD	165.0
PH	Motor Housing Width	142.0
D	Shaft Diameter	24j6
Е	Shaft Length	50.0
GA	Key Height	27.0
GF	Key Length	40.0
G	Key to Shaft End	5.3
F	Key Width	8.0
I	Tapped Hole Thread Size	M8 x 1.25
J	Tapped Hole Depth	20.0
	Mounting Bolt	M10

Motor electrical interface Connectors option:





1 - Excit 9 --2 - Excit/ 10 - -11 - -3 - COS 4 - COS/ 12 - -5 - SIN Screen 6 - SIN/ 7 – Thermistor + 8 - Thermistor -



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