

SERVO MOTOR 142UDC300BAAEA165240

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



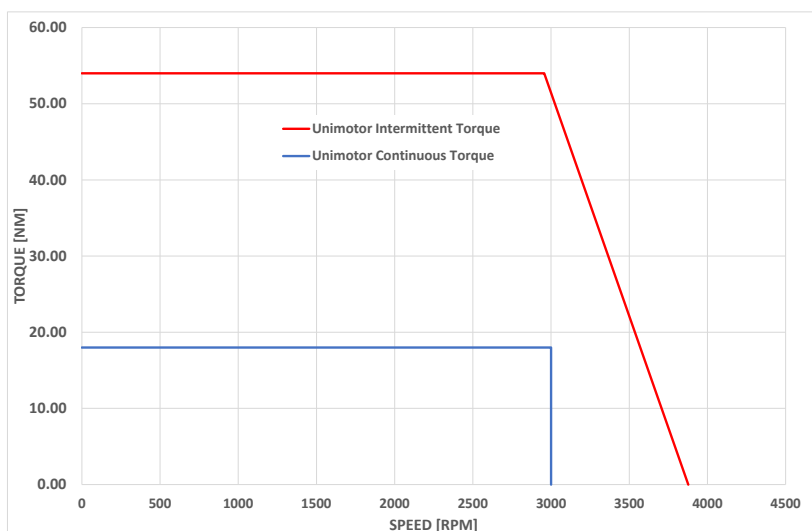
Definition

Type	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	B	Power and Signal size 1 90° rotatable
Output shaft	A	With output key
Feedback device code	AE	Resolver
Inertia & thermistor	A	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

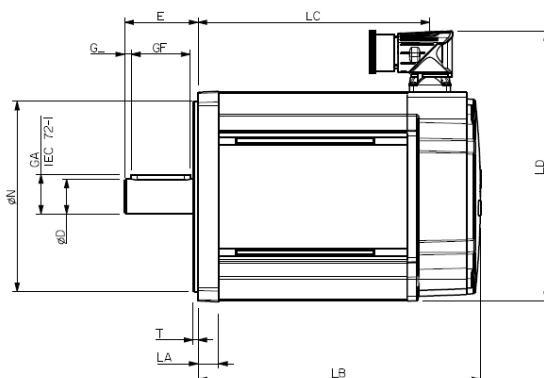
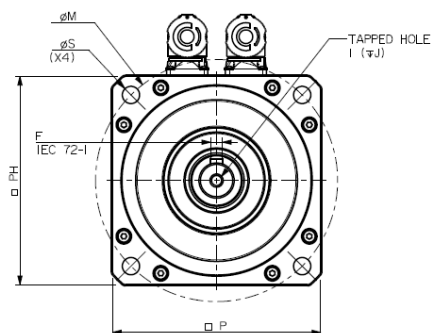
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (Nm)	18.0	Stall Current (A)	11.3
Rated Torque (Nm)	18.0	Nominal Current (A)	11.3
Motor Peak Torque (Nm)	54	Kt (Nm/A)	1.6
Rated Power (kW)	5.7	Ke (V/kmin-1)	98.0
Winding Thermal Time Constant (s)	245	R (ph-ph) (Ohm)	0.3
Number of Poles	10	L (ph-ph) (mH)	5.3
Typical Cogging (Nm)	0.38		
Inertia (kg.cm²)	17.0	Weight (kg)	13.3
Ingress Protection Level (IP)	IP65		

Torque / speed graph



Motors (° & mm)

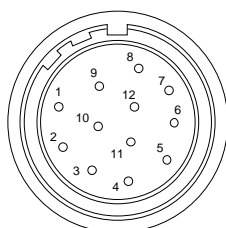
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LB	Total length	217.0
LC	Power connector position	182.5
LA	Flange thickness	14.0
T	Register Length	3.4
N	Register Diameter	130.0
LD	Connector overall height	183.5
P	Flange Square	142.0
S	Fixing Hole Diameter	12.0
M	Fixing hole PCD	165.0
PH	Motor Housing Width	142.0
D	Shaft Diameter	24j6
E	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:

Feedback device code: AE Resolver



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

Connection type: B – Power and Signal size 1 90° rotatable

