

### SERVO MOTOR 142UDB300BACAA165240

**142UDB300BACAA165240**



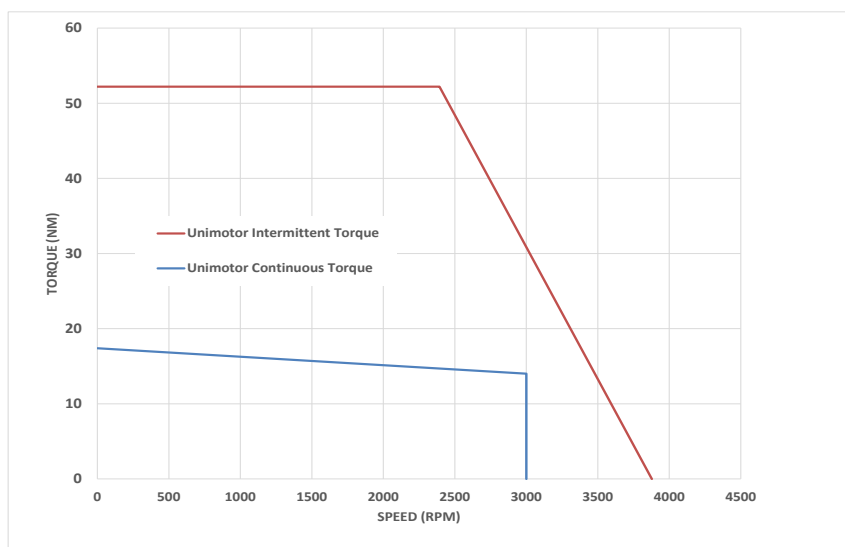
#### Definition

Type	<b>Unimotor HD</b>	
Frame Size (mm)	<b>142</b>	
Voltage	<b>U</b>	400 V
Magnet type	<b>D</b>	High Dynamic
Frame Length	<b>B</b>	
Speed (min-1)	<b>30</b>	3000
Brake	<b>0</b>	Unbraked
Connection type	<b>B</b>	Power and Signal size 1 90° rotatable
Output shaft	<b>A</b>	With output key
Feedback device code	<b>CA</b>	4096 ppr Incremental encoder (CFS50)
Inertia & thermistor	<b>A</b>	Standard inertia + PTC thermistor
PCD	<b>165</b>	165 (FF 165/130)
Shaft Diameter	<b>240</b>	24j6 x 50.0
Fan Box	-	
Insulation class	<b>F</b>	
UL Motor / UL Stator	<b>UL Motor / UL Stator</b>	

#### Nominal characteristics

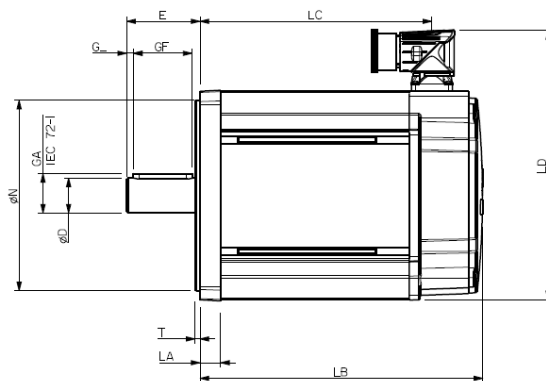
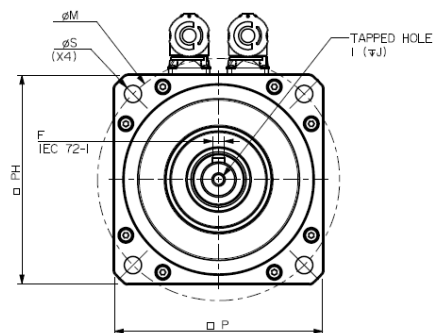
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (Nm)	17.4	Stall Current (A)	11.0
Rated Torque (Nm)	14.0	Nominal Current (A)	8.75
Motor Peak Torque (Nm)	52.2	Kt (Nm/A)	1.6
Rated Power (kW)	4.4	Ke (V/kmin-1)	98.0
Winding Thermal Time Constant (s)	240	R (ph-ph) (Ohm)	0.6
Number of Poles	10	L (ph-ph) (mH)	8.6
Typical Cogging (Nm)	0.26		
Inertia (kg.cm²)	11.9	Weight (kg)	11.0
Ingress Protection Level (IP)	IP65		

#### Torque / speed graph



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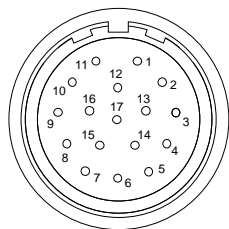
**Motors (° & mm)**



LB	Total length	187.0
LC	Power connector position	152.5
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	4.6
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: CA - 4096 ppr Incremental encoder (CFS50)**



- |                |               |
|----------------|---------------|
| 1 - Thermistor | 10 - A        |
| 2 - Thermistor | 11 - Z        |
| 3 -            | 12 - Z/       |
| 4 - U          | 13 - A/       |
| 5 - U/         | 14 - B        |
| 6 - V          | 15 - B/       |
| 7 - V/         | 16 - Power    |
| 8 - W          | 17 - 0V       |
| 9 - W/         | Body - Screen |

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

