

### SERVO MOTOR

**142UDE305JFCAA**



NOTE : SIZE 1 POWER CONNECTOR SHOWN

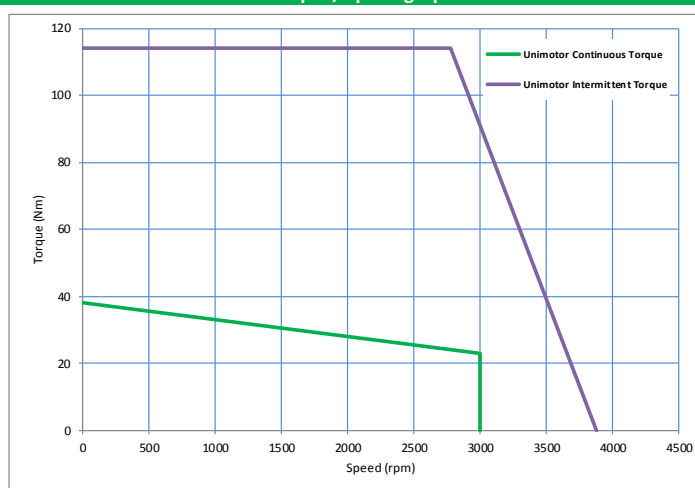
#### Definition

Type	Unimotor HD	
Frame Size (mm)	<b>142</b>	
Voltage	<b>U</b>	400 V
Magnet type	<b>D</b>	High Dynamic
Frame Length	<b>E</b>	
Speed (min <sup>-1</sup> )	<b>30</b>	3000
Brake	<b>5</b>	Braked
Connection type	<b>J</b>	Power (Size 1.5) and Signal (Size 1) 90° rotatable
Output shaft	<b>F</b>	Full key and half key supplied in bag
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>320</b>	32j6 x 58.0
Fan Box	-	
Insulation class	<b>F</b>	
UL Motor / UL Stator	<b>UL Stator</b>	

#### Nominal characteristics

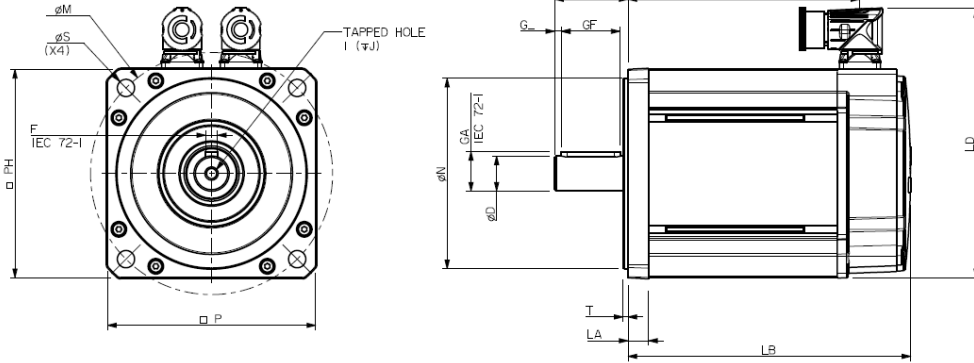
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (N.m)	38.0	Stall Current (A)	23.8
Rated Torque (N.m)	23.0	Nominal Current (A)	14.4
Motor Peak Torque (N.m)	114.0	Kt (Nm/A)	1.6
Rated Power (kW)	7.23	Ke (V/kmin <sup>-1</sup> )	98.0
Winding Thermal Time Constant (s)	256	R (ph-ph) (Ohm)	0.18
Number of Poles	10	L (ph-ph) (mH)	3.10
Maximum Cogging (N.m)	0.57		
Inertia (kg.cm <sup>2</sup> )	29.05	Weight (kg)	21.3
Ingress Protection Level (IP)	IP65		
Brake	Type 5	Static Torque (N.m)	42
Release Time (ms)	95	Backlash (°)	0.77
Brake Supply Voltage (V)	24	Brake Coil Power (W)	25

#### Torque / speed graph



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#### Motors (° & mm)

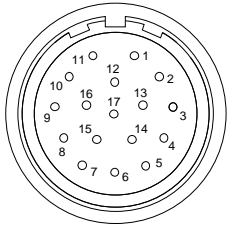


LB	Total length	342.5
LC	Power connector position	308.0
LA	Flange thickness	14.0
T	Register Length	3.4
N	Register Diameter	130.0
LD	Connector overall height	204.5
P	Flange Square	142.0
S	Fixing Hole Diameter	12.0
M	Fixing hole PCD	165.0
PH	Motor Housing Width	142.0
D	Shaft Diameter	32j6
E	Shaft Length	58.0
GA	Key Height	35.0
GF	Key Length	50.0
G	Key to Shaft End	3.0
F	Key Width	10.0
I	Tapped Hole Thread Size	M12 x 1.75
J	Tapped Hole Depth	29.0
	Mounting Bolt	M10

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#### Motor electrical interface Connectors option:

Feedback device code: CA – 4096 ppr Incremental encoder (CF550)



- |                |            |
|----------------|------------|
| 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 - 0 V   |
| 9 - W/         | Screen     |

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

