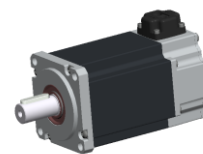


SERVO MOTOR – 060LDB306FFCTC

060LDB306FFCTC



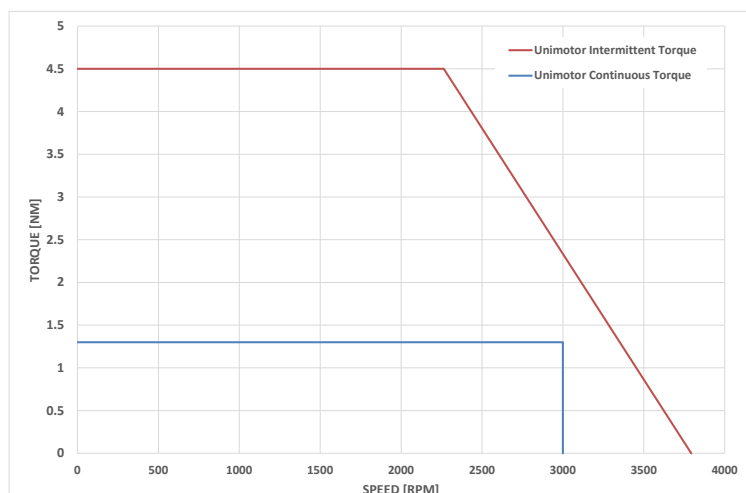
Definition

Type	Unimotor HD	
Frame Size (mm)	060	
Voltage	L	48 V
Magnet type	D	High Dynamic
Frame Length	B	
Speed (min ⁻¹)	30	3000
Brake	6	Braked
Connection type	F	Flying leads 0.5m Power cut ends, Signal 16-way Molex connector
Output shaft	F	Half key and full key supplied in bag
Feedback device code	CT	4096 ppr Incremental encoder (TDK)
Inertia & thermistor	C	Standard inertia + KTY84 thermistor
PCD	070	70 (FF 70/50)
Shaft Diameter	140	14j6 x 30.0
Fan Box	-	
Insulation class	F	
UL Motor / UL Stator	UL Stator / UL Motor	

Nominal characteristics

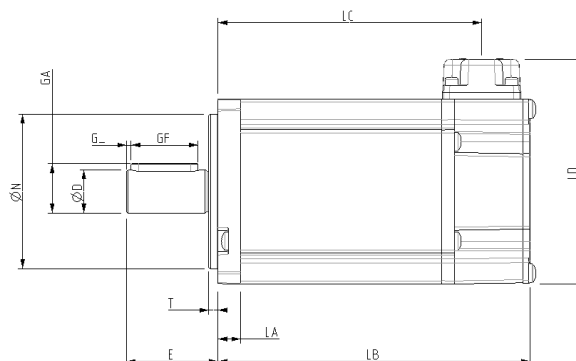
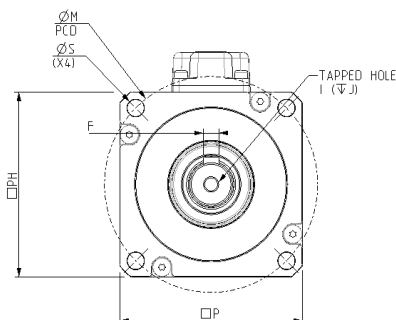
Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (Nm)	1.3	Stall Current (A)	9.29
Rated Torque (Nm)	1.3	Nominal Current (A)	9.29
Motor Peak Torque (Nm)	4.5	Kt (Nm/A)	0.14
Rated Power (kW)	0.4	Ke (V/kmin-1)	8.5
Winding Thermal Time Constant (s)	55	R (ph-ph) (Ohm)	0.23
Number of Poles	10	L (ph-ph) (mH)	0.7
Typical Cogging (Nm)	0.02		
Inertia (kg.cm ²)	0.35	Weight (kg)	~2.2
Ingress Protection Level (IP)	IP54		
Brake	Spring-applied	Static Torque (Nm)	2.0
Release Time (ms)	60	Backlash (°)	3
Brake Supply Voltage (V)	24.0	Brake Coil Power (W)	7.2

Torque / speed graph



SERVO MOTOR – 060LDB306FFCTC

Motors (° & mm)



LB	Total length	139.5
LC	Gland position	123.5
LA	Flange thickness	7.5
T	Register Length	3.0
N	Register Diameter	50.0
LD	Overall height	72.8
P	Flange Square	60.0
S	Fixing Hole Diameter	5.5
M	Fixing hole PCD	70.0
PH	Motor Housing Width	60.0
D	Shaft Diameter	14j6
E	Flange to Shaft End	30.0
GA	Key Height	16.0
GF	Key Length	22.0
G	Key to Shaft End	1.5
F	Key Width	5.0
I	Tapped Hole Thread Size	M5 x 0.8
J	Tapped Hole Depth	10.0
	Mounting Bolt	M5

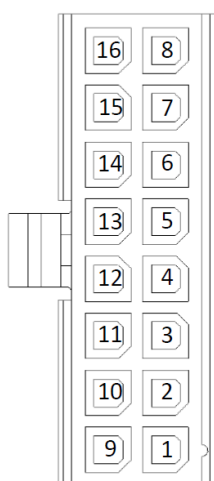
Motor electrical interface Connectors option:

Feedback device code: CT - 4096 ppr Incremental encoder (TDK),
43025-1600 Molex 16-way male signal connector (0.5m lead)

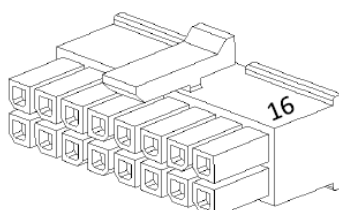
Connection type: Flying leads 0.5m Power cut ends, Signal
16-way Molex connector

SIGNAL FUNCTION	PIN END B
Thermistor -	1
Thermistor +	2
CH S1	3
CH S2	4
CH S3	5
CH A	6
CH B	7
CH Z	8
GND	9
VCC	10
CH S1-	11
CH S2-	12
CH S3-	13
CH A-	14
CH B-	15
CH Z-	16

PIN DETAIL



16 – WAY CONNECTOR



Cable 4 + 2 core orange PUR screened
500mm from gland to cable cut end
4 x 1.0mm² wires 300/500V
2 x 0.5mm² wires (brake)
Cable O/D 9.8mm

Orange	U
Red	V
Yellow	W
Green/Yellow	Earth
Black	Brake
White	Brake

Enquiry N°:

Created by: SB / Approved by: DB

SERVO MOTOR – 060LDB306FFCTC

CT encoder

Manufacturer:	CTD / Motion TDK
Model:	Magnetic
Signal periods:	4096
Output interface:	Differential
Supply voltage:	5V +/- 10%
Accuracy	±0.2 Deg