

Enquiry N°: Created by: SB / Approved by: JD

Data sheet Date : 24 Oct 24 (v1)

SERVO MOTOR - 060LDB300FFCTC

060LDB300FFCTC



Definition			
Туре	Unimotor HD		
Frame Size (mm)	060		
Voltage	L	48 V	
Magnet type	D	High Dynamic	
Frame Length	В		
Speed (min ⁻¹)	30	3000	
Brake	0	Unbraked	
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	СТ	4096 ppr Incremental encoder (TDK)	
Inertia & thermistor	С	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)	0.33	Weight (kg)	~1.9
Ingress Protection Level (IP)	IP54		





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Total length	102.5
Gland position	86.5
Flange thickness	7.5
Register Length 3.0	
Register Diameter 50.0	
Overall height 72.8	
Flange Square	60.0
Fixing Hole Diameter	5.5
Fixing hole PCD	70.0
Motor Housing Width 60.0	
Shaft Diameter 14j6	
Flange to Shaft End 30.0	
Key Height 16.0	
Key Length	22.0
Key to Shaft End	1.5
Key Width	5.0
Tapped Hole Thread Size	M5 x 0.8
Tapped Hole Depth	10.0
Mounting Bolt	M5
	Total lengthGland positionFlange thicknessRegister LengthRegister DiameterOverall heightFlange SquareFixing Hole DiameterFixing hole PCDMotor Housing WidthShaft DiameterFlange to Shaft EndKey HeightKey LengthKey WidthTapped Hole Thread SizeTapped Hole DepthMounting Bolt

Motor electrical interface Connectors option:

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

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





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

Cable 4 + 2 core orange PUR screened 500mm from gland to cable cut end 4 x 1.0mm^2 wires 300/500V 2 x 0.5mm^2 wires (brake) Cable O/D 9.8mm		
Orange	U	
Red	V	
Yellow	W	
Green/Yellow	Earth	
Black	Brake (if applicable)	
White	Brake (if applicable)	

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CT encoder

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