

### SERVO MOTOR 142U3E300BACAA165240



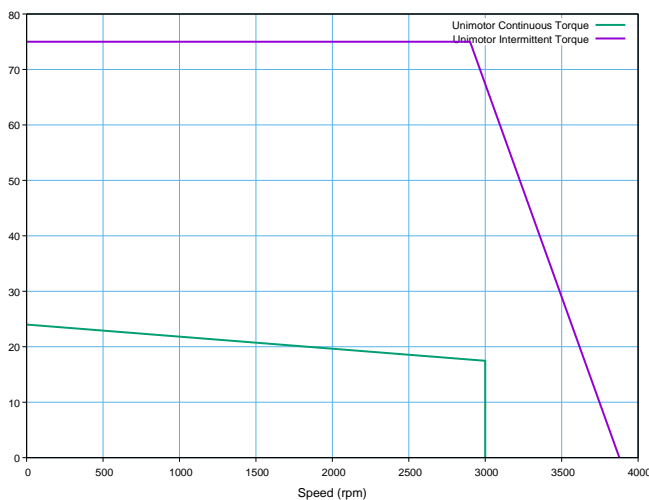
#### Definition

Type	<b>Unimotor FM</b>	
Frame Size (mm)	<b>142</b>	
Voltage	<b>U</b>	U - 400V
Magnet type	<b>3</b>	3 - Standard
Frame Length	<b>E</b>	
Speed (min-1)	<b>30</b>	3000
Brake	<b>0</b>	Unbraked (0)
Connection type	<b>B</b>	B - Power and Signal 90° rotatable
Output shaft	<b>A</b>	with key
Feedback device code	<b>CA</b>	CA - 4096 ppr Incremental encoder (CFS50)
Inertia & thermistor	<b>A</b>	A - Standard + PTC thermistor
PCD	<b>165</b>	165 (FF 165 / 130)
Shaft Diameter	<b>240</b>	24j6 x 50.0 .
Fan box	<b>-</b>	
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 (N.m)	25.00	Stall Current (A)	15.60
Rated Torque (N.m)	18.20	Rated Current (A)	11.4
Motor Peak Torque (N.m)	75.00		
Rated Power (kW)	5.72	Kt (Nm/A)	1.60
Winding Thermal Time Constant (s)	249	Ke (V/kmin-1)	98.00
Number of Poles	6	R (ph-ph) (Ohm)	0.50
Maximum Cogging (N.m)	0.35	L (ph-ph) (mH)	6.70
Inertia (kg.cm <sup>2</sup> )	36.90	Product mass	20.21
Ingress Protection Level (IP)	IP65		

#### Torque / speed graph

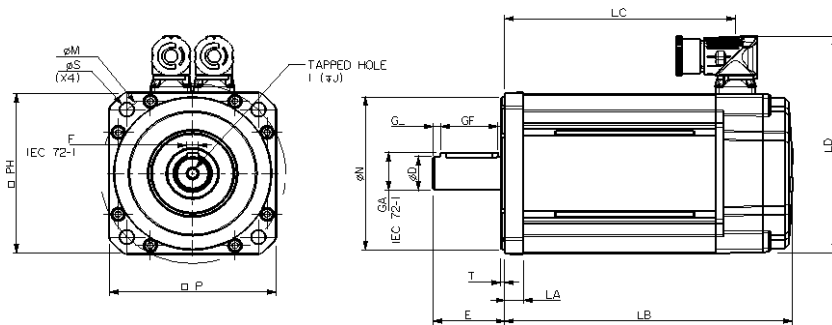


#### Configured characteristics

Motor Ambient Temperature (°C)	40
Drive Fsw (kHz)	8
Derating Factor	0.96
Stall Torque with Derating Factor (N.m)	24.00
Nominal Torque after Derating (N.m)	17.47
Peak Torque with Derating Factor (N.m)	75.00

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#### Motor (° & mm)



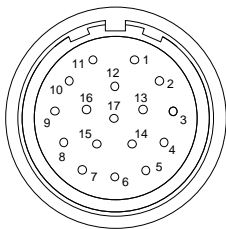
LB	Total length	312.80
LB1	length with hybrid box	262.70
LC	Power connector position	278.00
LJ	Hybrid box position	262.70
LA	Flange thickness	14.0
T	Register Length	3.4
N	Register Diameter	130.0
LD	Power connector overall height	183.50
LD1	Signal connector overall height	183.50
P	Flange Square	142.0
S	Fixing Hole Diameter	12.0
M	Fixing hole PCD	165
PH	Motor Housing Width	142
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
I	Tapped Hole Thread Size	M8x1,25
J	Tapped Hole Depth	20.0
	Mounting Bolt	M10

#### Motor electrical interface

Feedback device code : CA - 4096 ppr Incremental encoder (CFS50)

Connection type :  
Conductors size :

B - Power and Signal 90° rotatable  
4G2.5 (B)



- |           |            |
|-----------|------------|
| 1 - CTP   | 10 - A     |
| 2 - CTP   | 11 - Z     |
| 3 - -     | 12 - Z_inv |
| 4 - U     | 13 - A_inv |
| 5 - U_inv | 14 - B     |
| 6 - V     | 15 - B_inv |
| 7 - V_inv | 16 - Power |
| 8 - W     | 17 - 0V    |
| 9 - W_inv | Screen     |

