

Customer :  
Branch :

N° :  
Date : 28 juin 2016

**BRUSHLESS MOTOR 142 FM**  
**Unimotor FM 142U3D400JACAA165240**



Prix Net HTVA (€)      Remise (%)      0,00

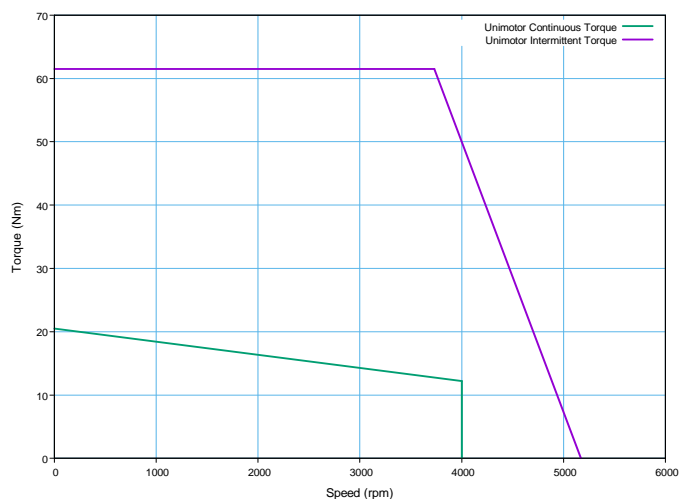
### Definition

Type	Unimotor FM	
Frame Size (mm)	<b>142</b>	
Voltage	<b>U</b>	U - 400V
Magnet type	<b>3</b>	3 - Standard
Frame Length	<b>D</b>	
Speed (min-1)	<b>40</b>	4000
Brake	<b>0</b>	0 - Not fitted
Connection type	<b>J</b>	J - 1.5 Size Power 90° rotatable and Signal 90° rotatable
Output shaft	<b>A</b>	A - Key
Feedback device code	<b>CA</b>	CA - 4096 ppr Incremental encoder
Inertia & thermistor	<b>A</b>	A - Standard
PCD	<b>165</b>	165 (FF 165 / 130)
Shaft Diameter	<b>240</b>	24j6 x 50,0 .
Fan box	<b>-</b>	
Classe d'isolation	<b>F</b>	

### Nominal characteristics

Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (N.m)	20,50	Stall Current (A)	17,10
Rated Torque (N.m)	12,20	Nominal Current (A)	10,2
Motor Peak Torque (N.m)	61,50	I max (A)	51,25
Rated Power (kW)	5,11	Kt (Nm/A)	1,20000
Winding Thermal Time Constant (s)	206	Ke (V/kmin-1)	73,50
Number of Poles	6	R (ph-ph) (Ohm)	0,41
Maximum Cogging (N.m)	0.3	L (ph-ph) (mH)	5,06
Inertia (kg.cm <sup>2</sup> )	30,20	Weight (kg)	17,36
Ingress Protection Level (IP)	IP65		

### Torque / speed graph



Version V1.310

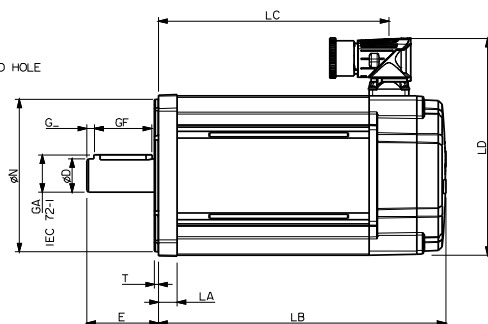
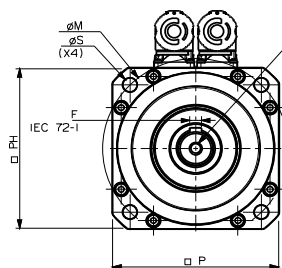
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Moteurs Leroy-Somer SAS. Headquarters: Bd Marcellin Leroy, CS 10015, 16915 Angoulême Cedex 9, France. Share Capital: 65 800 512 €, RCS Angoulême 338 567258.

# Data sheet

## BRUSHLESS MOTOR 142 FM

### Unimotor FM 142U3D400JACAA165240

#### Motor (° & mm)

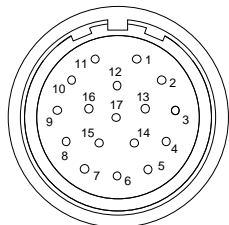


LB	Total length LB	282,80
LB1	Length with hybrid box LB1	232,70
LC	Power connector position LC	248,00
LJ	Hybrid box position LJ	232,70
LA	Flange thickness LA	14,0
T	Register Length T	3,4
N	Register Diameter N	130,0
LD	Power connector overall height LD	204,50
LD1	Signal connector overall height LD1	183,50
P	Flange Square P	142,0
S	Fixing Hole Diameter S	12,0
M	Fixing hole PCD M	165
N	Register Diameter N	130,0
LA	Flange thickness LA	14,0
S	Fixing Hole Diameter S	12,0
PH	Motor Housing Width PH	142
D	Shaft Diameter D	24j6
E	Shaft Length E	50,0
GA	Key Height GA	27,0
GF	Key Length GF	40,0
G	Key to Shaft End G	4,6
F	Key Width F	8
I	Tapped Hole Thread Size I	M8x1,25
J	Tapped Hole Depth J	20,0
	Mounting Bolt	M10

#### Motor electrical interface

Feedback device code : CA - 4096 ppr Incremental encoder

Connection type : J - 1.5 Size Power 90° rotatable and Signal 90° rotatable



1 - CTP	10 - A
2 - CTP	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/	Screen

