

N° :

Date : 14 janv. 2020

SERVO MOTOR 142U3B30X...with hand release brake

Definition

Type	Unimotor FM	
Frame Size (mm)	142	
Voltage	U	U - 400V
Magnet type	3	3 - Standard
Frame Length	B	
Speed (min-1)	30	3000
Brake	X	Special Brake
Connection type	B	B - Power and Signal 90° rotatable
Output shaft	B	No key
Feedback device code	EB	EB - Optical EnDat SinCos MultiTurn (EQN 1325)
Inertia & thermistor	C	C - Standard inertia + KTY84-130 thermistor
PCD	165	165 (FF 165 / 130)
Shaft Diameter	240	24j6 x 50.0 .
Fan box	-	
Insulation class	F	
UL Motor / UL Stator	UL Motor / UL Stator	

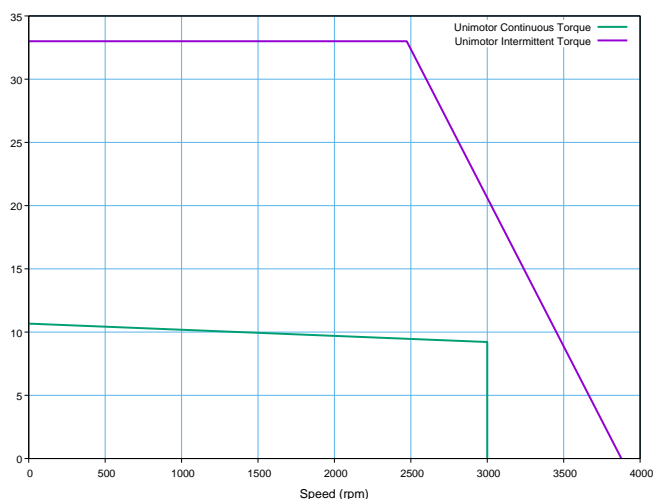
Nominal characteristics

Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Stall Torque (N.m)	11.00	Stall Current (A)	6.90
Rated Torque (N.m)	9.50	Rated Current (A)	5.9
Motor Peak Torque (N.m)	33.00		
Rated Power (kW)	2.98	Kt (Nm/A)	1.60
Winding Thermal Time Constant (s)	148	Ke (V/kmin-1)	98.00
Number of Poles	6	R (ph-ph) (Ohm)	2.12
Maximum Cogging (N.m)	0.16	L (ph-ph) (mH)	19.11
Inertia (kg.cm²)	17.44	Product mass	13.87
Ingress Protection Level (IP)	IP65		

Brake

Braked (X)

Torque / speed graph



Configured characteristics

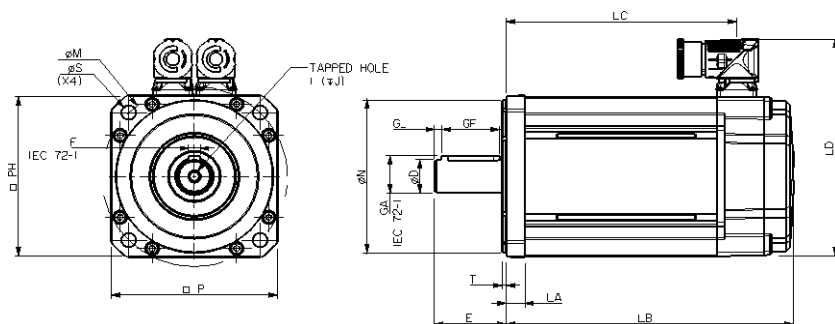
Motor Ambient Temperature (°C)	40
Drive Fsw (kHz)	8
Derating Factor	0.97
Stall Torque with Derating Factor (N.m)	10.67
Nominal Torque after Derating (N.m)	9.21
Peak Torque with Derating Factor (N.m)	33.00

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Motor (° & mm)



LB	Total length	282.80
LB1	Power connector position	248.00
LC	Register Length	14.0
LJ	Register Diameter	3.4
LA	Power connector overall height	130.0
T	Flange Square	183.50
N	Fixing Hole Diameter	142.0
LD	Fixing hole PCD	12.0
LD1	Motor Housing Width	165
P	Shaft Diameter	24j6
S	Shaft Length	50.0
M	Key Height	0.0
PH	Key Length	0.0
D	Key to Shaft End	0.0
E	Key Width	-
GA	Tapped Hole Thread Size	M8x1,25
GF	Tapped Hole Depth	20.0
G	Mounting Bolt	M10
F		
I		
J		

Motor electrical interface

Feedback device code : EB - Optical EnDat SinCos MultiTurn (EQN 1325)

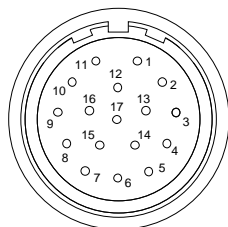
= '03' Cable : SI

Connection type :

Conductors size :

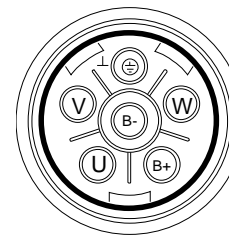
B - Power and Signal 90° rotatable

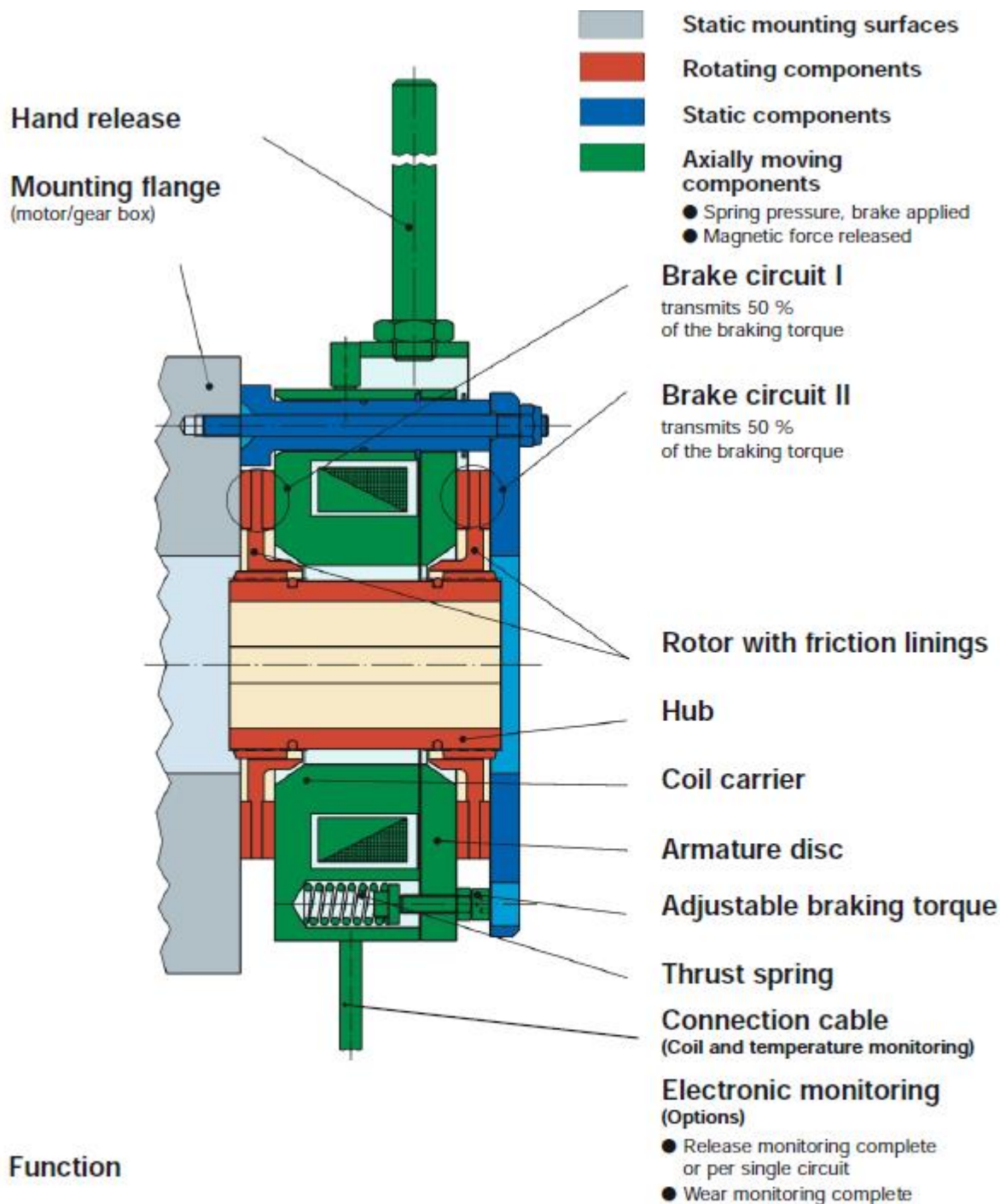
4G1 + 2x 0.5 (A)



- 1 - CTP
- 2 - CTP
- 3 - Screen
- 4 -
- 5 -
- 6 -
- 7 -
- 8 - CLK

Screen





Function

Brake released:

Magnetic coil is energised.
Coil carrier and armature disc
are attracted to each other.
Both rotors with their friction
linings are free.

Brake applied:

Magnetic coil is de-energised.
Coil carrier and armature disc are
forced apart via the thrust springs.
Both rotors with their friction
linings are braked.

Switch according to
on request

