CROUZET MOTORS

7.5° 5 Watts 2 phases Part number 82910001

- 48 steps/revolution (7.5°)
- Absorbed power : 5 W
- 2 or 4 phase versions available

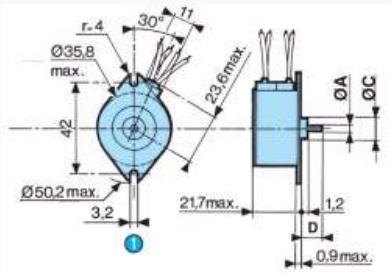
Part numbers

	Type	Type	Electronic controller used	Bearings
82 910 001	2 phases	82 910 0	Bipolar	Sintered bronze

Specifications

Resistance per phase (Ω)	9
Inductance per phase (mH)	12
Current per phase (A)	0,52
Holding torque (mNm)	25
Voltage at motor terminals (V)	4,7
Absorbed power (W)	5
Step angle (^{0})	7,5
Positioning accuracy (%)	5
Rotor inertia (gcm^2)	4,9
Max. detent torque (mNm)	3
Max. coil temperature (^{0}C)	120
Storage temperature (^{0}C)	-40 →+80
Thermal resistance of coil - ambient air (°C/W)	14
Insulation resistance (at 500 Vcc) (MΩ) following NFC 51200 standard	> 10^3
Insulation voltage (50 Hz, 1 minute) (V) following NFC 51200 standard	> 600
Wires length (mm)	250
Weight (g)	90
Protection rating	IP 40

Dimensions (mm)

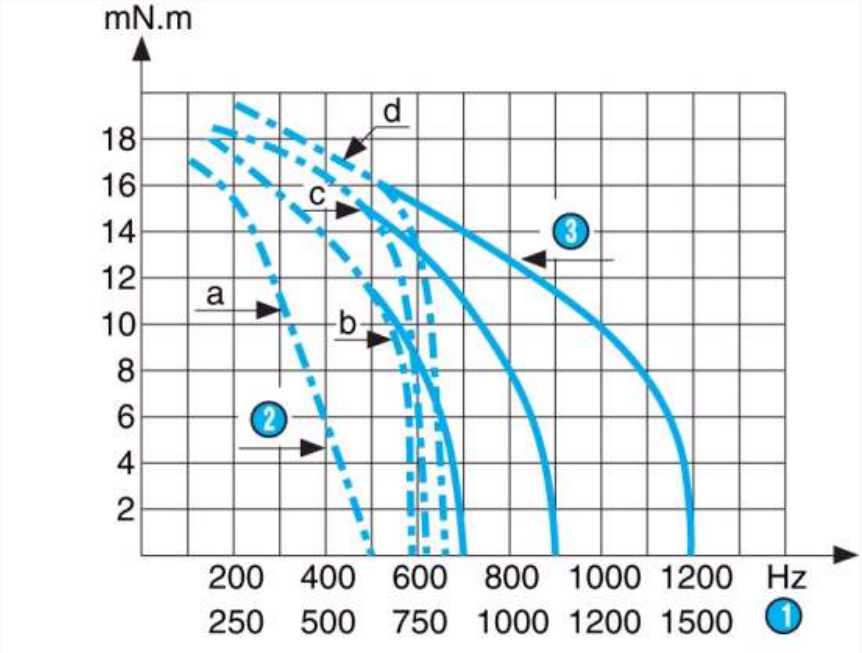


Axe version	Ø A	Ø C	D
Version 1	2 $^{-0,002}_{-0,006}$	9 $^{-0,010}_{-0,060}$	9
Version 2	2 $^{-0,002}_{-0,006}$	10 $^{-0,010}_{-0,060}$	9
Version 3	3,17 $^{0}_{-0,006}$	9,52 $^{-0,010}_{-0,060}$	9

Nº	Legend
1	2 fixing holes Ø 3.2

Curves

2 phases

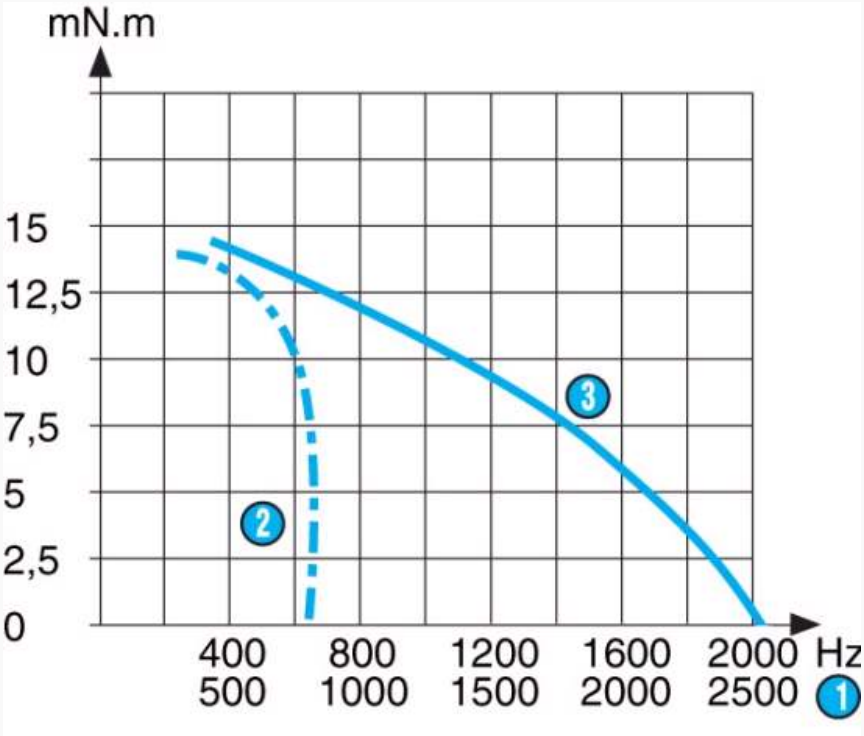


Inertia of measuring chain : 1,5 g.cm2 a = constant voltage controller with Rs (resistance in series) = 0 b = constant voltage controller with Rs (resistance in series) = R motor c = constant voltage controller with Rs (resistance in series) = 2R motor d = constant voltage controller with Rs (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

Nº	Legend
1	RPM
2	Max. stopping-starting curves
3	Max. operating curves

Curves

Max. stopping-starting and operating curves at I constant (PBL 3717) for 2 (motor) phases 12.9 Ω



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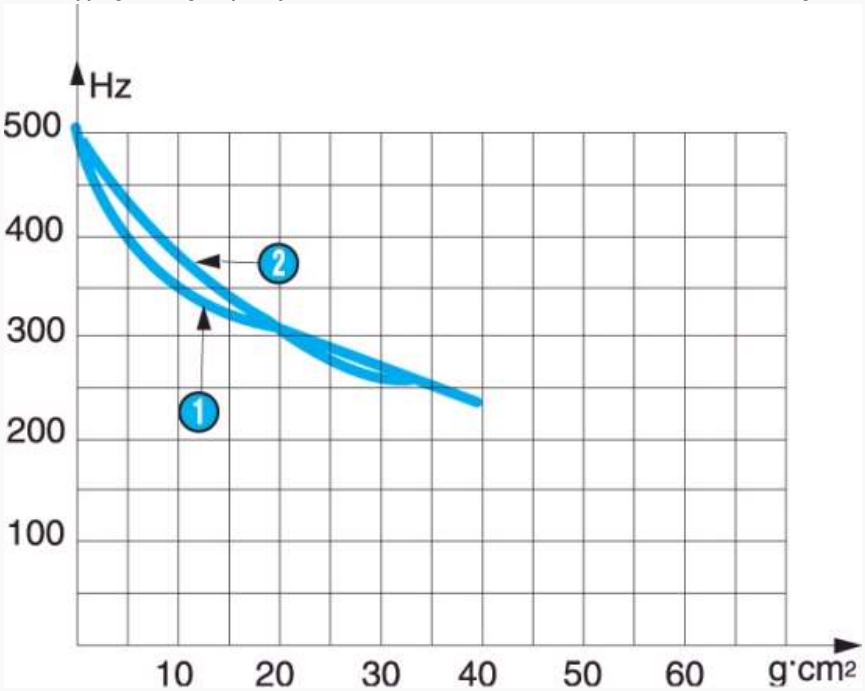
Nº	Legend
1	RPM

2	Max. stopping-starting curves
3	Max. operating curves

Curves

Max. stopping-starting frequency curves as a function of the external inertia load at zero antagonistic torque. Tests at constant U



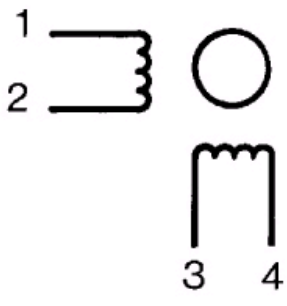
N.B. Measurement conditions : Tam = 25 °C, motor cold

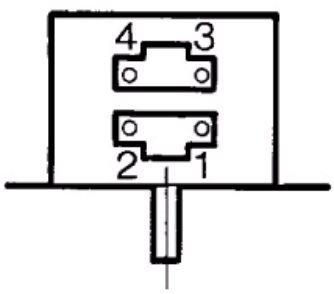
Nº	Legend
1	2 phases
2	4 phases

Connections

2 phases

		1	2	3	4
1	1	-	+	-	+
	2	-	+	+	-
	3	+	-	+	-
	4	+	-	-	+
	5	-	+	-	+





Energisation sequence for clockwise rotation (viewed shaft end)

Nº	Legend
1	Step

Product adaptations

- Special output shafts
- Special supply voltages
- Special cable lengths
- Special connectors