CROUZET MOTORS

7.5° 10 Watts 4 phases Part number made to order

- 48 steps/revolution (7.5°)
- Absorbed power : 10 W
- 2 or 4 phase versions available

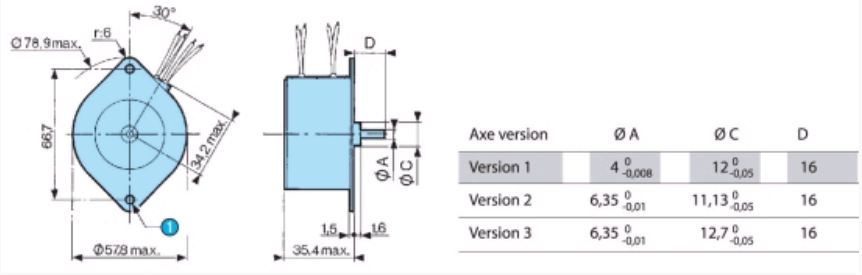
Part numbers

	Type	Type	Number of phases	Electronic controller used	Resistance per phase (ö)	Inductance per phase (mH)	Current per phase (A)	Voltage at motor terminals (V)
82 930 015	4 phases	82 930 0 4		Unipolar	22.3	47	0,39	12,5

Specifications

Absorbed power (W)	10
Holding torque (mNm)	155
Step angle (^{0})	7,5
Positioning accuracy (%)	5
Rotor inertia (gcm^2)	84
Max. detent torque (mNm)	12
Max. coil temperature (^{0}C)	120
Storage temperature (^{0}C)	-40 →+80
Thermal resistance of coil - ambient air (°C/W)	7
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)	340
Protection rating	IP 40

Dimensions (mm)

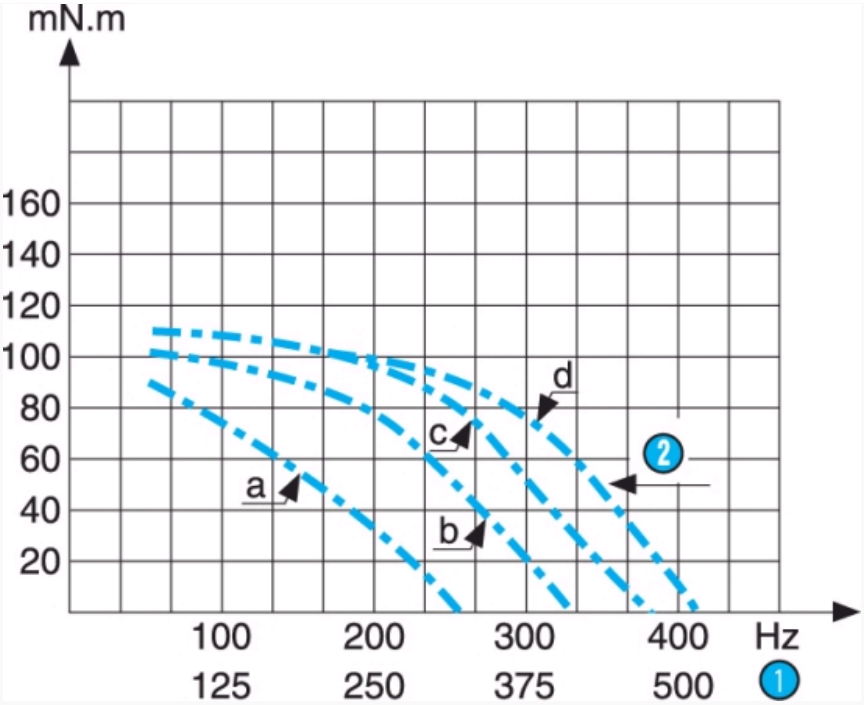


Axe version	Ø A	Ø C	D
Version 1	$4^{\ 0}_{-0,008}$	$12^{\ 0}_{-0,05}$	16
Version 2	$6,35^{\ 0}_{-0,01}$	$11,13^{\ 0}_{-0,05}$	16
Version 3	$6,35^{\ 0}_{-0,01}$	$12,7^{\ 0}_{-0,05}$	16

Nº	Legend
1	2 Fixing holes Ø 4.4

Curves

4 phases

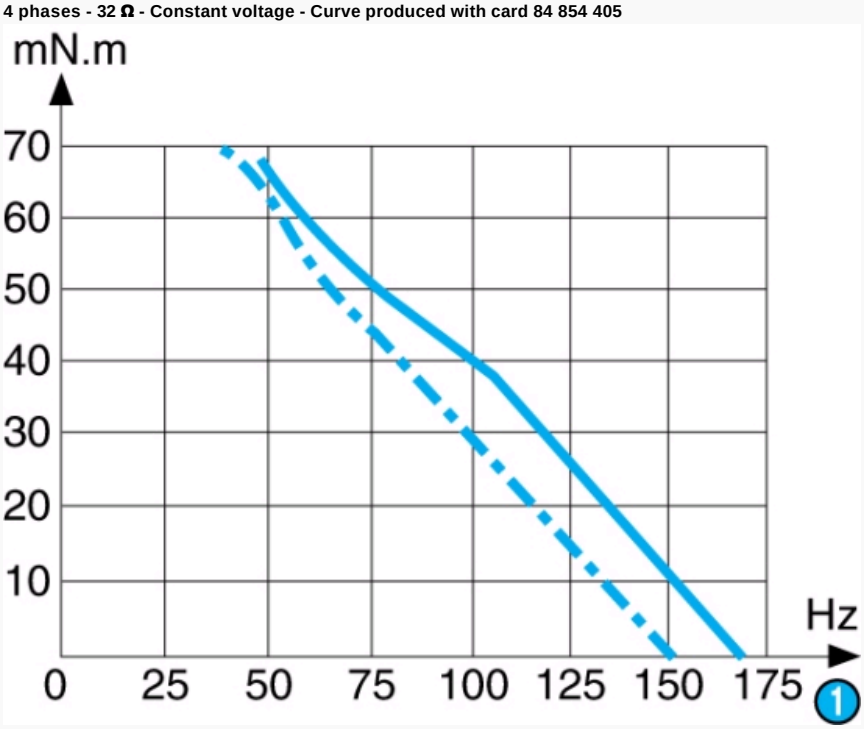


Inertia of measuring chain : 3.4 g.cm2 a = constant voltage controller with Rs (resistance in series) = 0 b = constant voltage controller with Rs (resistance in series) = R motor c = constant voltage controller with Rs (resistance in series) = 2R motor d = constant voltage controller with Rs (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

Nº	Legend
1	RPM
2	Max. stopping-starting curves

Curves

4 phases - 32 Ω - Constant voltage - Curve produced with card 84 854 405

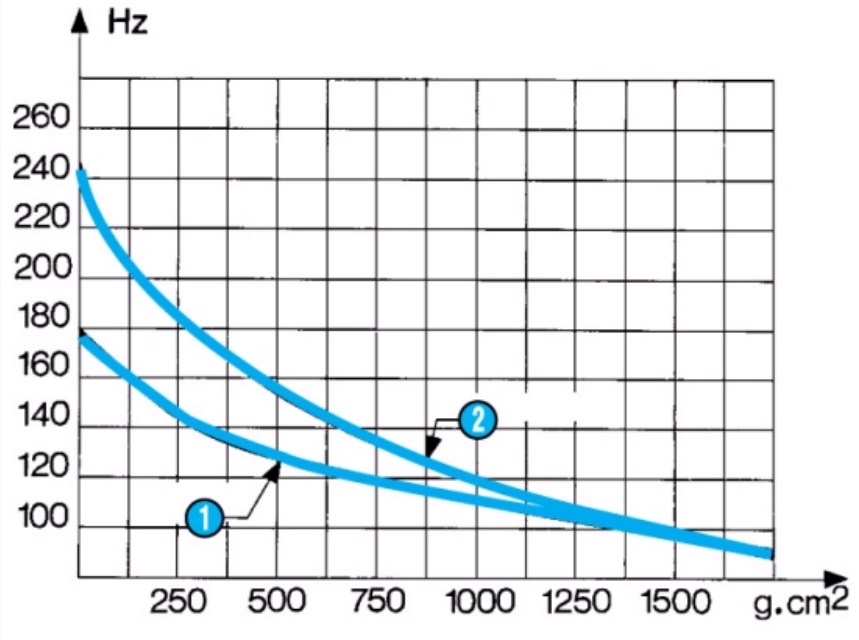


Max. stopping-starting and operating curves at I constant (PBL 3717) for 2 (motor) phases 9 ohms. Holding torque 150 mN.m Current per phase 0.53 A

Nº	Legend
1	RPM

Curves

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



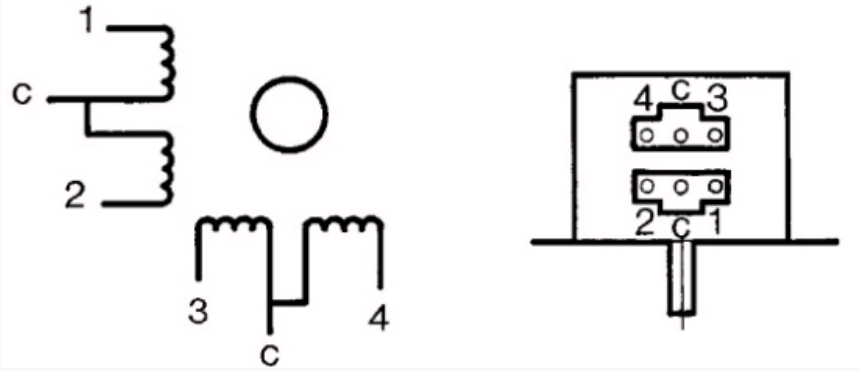
N.B. Measurement conditions : Tam = 25 °C, motor cold

Nº	Legend
1	2 phases
2	4 phases

Connections

4 phases

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



Energisation sequence for clockwise rotation : 2 phases energised (viewed shaft end, front forward) Commons connected to positive.

Nº	Legend
1	Step

Product adaptations

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