

## 7.5° 12.5 Watts 4 phases Part number made to order



- 48 steps/revolution (7.5°)
- Absorbed power : 12.5 W
  2 or 4 phase versions available

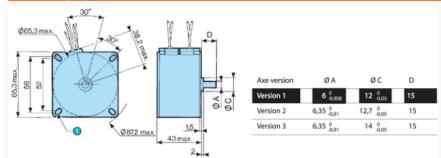
### Part numbers

|                  | Туре        |          | Number of phases | Electronic controller<br>used | Resistance per phase<br>(ö) | Inductance per phase<br>(mH) | Current per phase<br>(A) | Voltage at motor terminals<br>(V) |
|------------------|-------------|----------|------------------|-------------------------------|-----------------------------|------------------------------|--------------------------|-----------------------------------|
| MADE TO<br>ORDER | 4<br>phases | 82 940 0 | 4                | Unipolar                      | 26.7                        | 40                           | 0,48                     | 12,7                              |

#### Specifications

| Absorbed power (W)  | 12,5              |
|---|-------------------|
| Holding torque (mNm)  | 240               |
| Step angle ( <sup>o</sup> )   | 7,5               |
| Positioning accuracy (%)  | 5                 |
| Rotor inertia (gcm <sup>2</sup> )   | 180               |
| Max. detent torque (mNm)  | 16                |
| Max. coil temperature ( <sup>o</sup> C)                                       | 120               |
| Storage temperature ( <sup>0</sup> C)   | -40 →+80          |
| Thermal resistance of coil - ambient air (°C/W)                               | 5,6               |
| Insulation resistance (at 500 Vcc) (M $\Omega$ ) following NFC 51200 standard | > 10 <sup>3</sup> |
| Insulation voltage (50 Hz, 1 minute) (V) following NFC 51200 standard         | > 600             |
| Wires length (mm)   | 250               |
| Weight (g)  | 540               |
| Protection rating   | IP 40             |

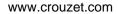
## Dimensions (mm)

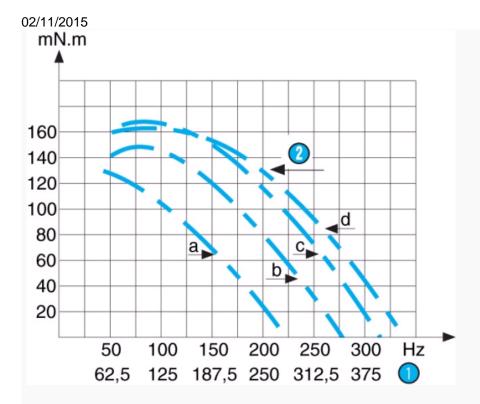


| N° | Legend                         |  |
|----|--------------------------------|--|
| 0  | 4 oblong fixing holes 4.2 wide |  |

# Curves

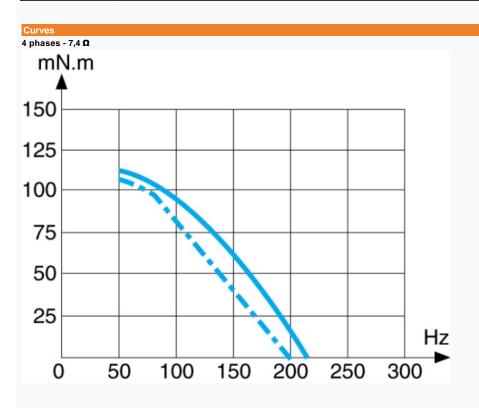
4 phases





Inertia of measuring chain : 20.5 g.cm2 a = constant voltage controller with Rs (resistance in series) = 0 b = constant voltage controller with Rs (resistance in series) = 2R motor c = constant voltage controller with Rs (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

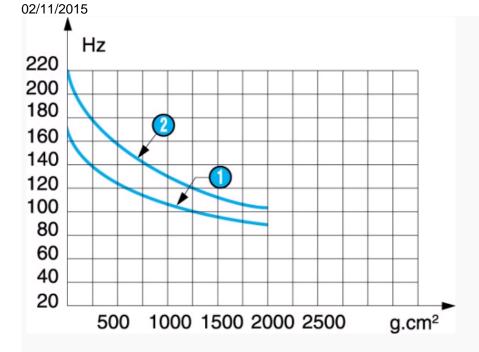
| N | o | Legend                        |  |
|---|---|-------------------------------|--|
| 1 |   | RPM                           |  |
| 0 |   | Max. stopping-starting curves |  |



Max. stopping-starting and operating curves at I constant (PBL 3717) for 2 (motor) phases 5.2 ohms. Holding torque 240 mN.m Current per phase 0.55 A

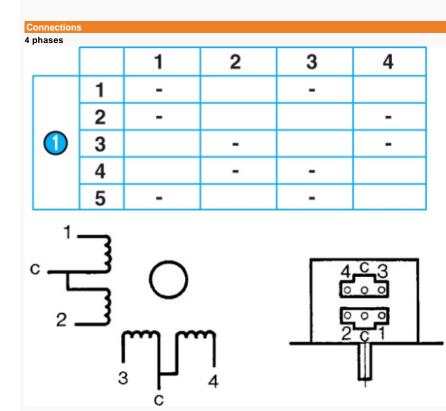
#### Curves

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

| N° | Legend   |
|----|----------|
| 0  | 2 phases |
| 0  | 4 phases |



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

| N° | Legend |
|----|--------|
| •  | Step   |



Special output shafts
Special supply voltages
Special cable lengths
Special connectors