

- **AC motor power from 0.5 to 5 A / 230 VAC**
- **0 to 100% speed control**
- **Automatic triac retriggering**
- **Soft-start available**
- **Load-current sensing available**

FUNCTION

The BRPM701 rail-mountable RPM controller, is designed to control the speed of single-phase AC motors up to 5A/230VAC. The unit operates on the principle of 'phase angle control from 25 to 180 deg., adjusted by a front-panel thumbwheel and applied to an internal power triac. BRPM701 can switch up to 500 VA AC motors of fans or other industrial appliances, connected to the device output. A 'soft-start' option allows the motor to reach gradually the pre-adjusted speed, and a 'load-current sensing' option can be used for keeping the motor speed relatively constant and independent on the load. Thanks to their reliability and simplicity, the BRPM701 controllers can be widely applicable in applications requiring low-cost AC-motor speed control.

**TECHNICAL SPECIFICATIONS**

Construction : DIN-rail mounting
Casing : Plastic

MOTOR OUTPUT

Control output : Phase-controlled triac
Maximum power : 0,5 to 5 A/230VAC
Phase angle : Min 25 max 180 deg.
Non rep surge current at t=20mS : 50A
Maximum holding current : 50mA
Maximum leakage current : 2mA
Critical rate of current rise di/dt : 50A/uS
Critical off-state voltage rise dV/dt : 1000V/uS
I²t value for using at t=10mS : 1000V/uS

CONTROL FEED-BACKS

Main voltage compensation : Approx 1% of SPA per 10V
Soft-start (option) : 0 to SPA for approx 3s
Load-current sensing (option): Approx 10% of SPA per 1A

INDICATION AND CONTROLS

LED : LED for power ON
Speed (RPM) set-point: 0-100%
Adjustment : By front-panel potentiometer
Fusing : By external fuses

INSTALLATION

Supply voltage : 230 VAC +/-10%
Consumption : Max 2,5 VA
Operating temp : -10 to 40 C
Storage temp : -30 to 80 C
Wiring : Screw terminals
Dimension : B35 x H86 x D53mm
Weight : 80g
Protection : IP40

PERFORMANCE

Setting accuracy error: ±1%
Dial type : Arc 270 °
EMC : EN 50081-1, EN 50082-2, 89/336/EEC

**ORDERING INFORMATION**

BRPM701
SOFT-START **LOAD-CURRENT SENSING**
X None X None
SF Mounted LS Mounted