M2500-L (M2500-230L) Soft starter for self-adjusting heating cables 2.5KW 230V with programmable power limiter.



Single-phase relay suitable to control resistive loads such as self-regulating heating cables with strong initial draw. You can set the limit values of the delivered power using the dip-switches with maximum deliverable power from 1KW to 2.5KW. Using this relay, it is possible to limit the initial startup current that can also be four times the work current. This allows, where required, to introduce multiple resistances, without having the problem of line overload with the consequent application limitations.

Two possibilities of low voltage control 12-24v dc (M2500L) and 230v ac (M2500-230L).

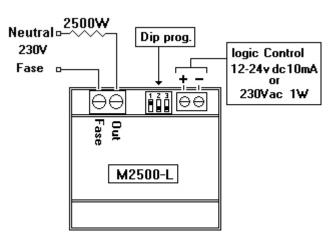


CE

OPERATION:

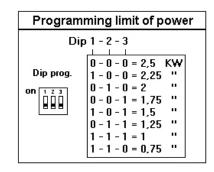
The device, powered with a control signal 12-24v dc 10mA or 230v ac 1w, performs a ramp with soft-start phase angle method, controls the average power delivered and positions on the preset power value. Over time, the self regulating cable warms up and reduces the current draw, the real-time control increases the phase angle to maintain the required power. When the cable reaches the set temperature, it will draw the rated current and the relay will continue to deliver 100%.

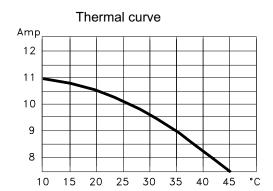
Electrical connection:

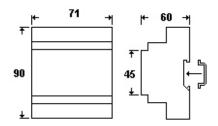


Technical specifications:

- Phase angle relay 230V ac: Maximum deliverable power 2.5 kW at 25 °C ambient temperature.
- Thermal dissipation max. 10W
- i2t semiconductor 450Amp. 10mS.
- Internal transducer for the measurement of the 20Amp current.
- Programmable power limiter (DP1-2-3).
- Logic Control 12-24v dc 10mA (M2500-L)
- Voltage control 230v ac 1W (M2500-230L)
- Soft-start time 0-100% 1,5 Ses.
- Turn off time with control signal "OFF" 10ms.
- Operating temperature range -10 ° C + 45 ° C







APPLICATION NOTES:

- 1) The static relay must be used setting the limit of the rated power of the load to start plus 500W. This is to ensure the completion of the start-up work, i.e. that the phase angle control reaches 100% of delivery and that it does not remain in limit phase.
- 2) The static relay must be protected by a thermal magnetic circuit breaker suitable to the rated load value.