

- **Burst fired dimmer**

Voltage range from 200Vac to 440Vac
also available in 24Vac, 48Vac, 115Vac, ...

- **Output power : 7KW at 230V - 12KW at 400V**

Current range from 0.1A to 30A
integrated high speed fuse

- **Internal proportional setpoint**

Control by potentiometer

- **Application : Plastics processing**

ovens, dryers,
Climatic chambers,
Test bench,
Heating tape
(not suitable for inductive load)



Autonomous and compact AC energy regulator for proportional linear control of resistive load using burst fire mode. Can be used with most of resistance heaters.

Description:

Dimmer with proportional control command for resistive load
High robustness due to absence of mobile mechanical parts and contact subject to wear, ensuring greater longevity and maintenance costs reduction (insensitive to shocks and vibrations)

- Burst fired (zero-crossing) for high inertia system (cycle time : 1 second)
- Don't generate electromagnetic disturbance.
- Operating frequency : 40-500Hz self adaptive
- Setpoint adjustment with single turn potentiometer (0...100% graduated)
- Panel mounting, natural convection cooling. Designed for supply nominal current with room temperature up to 60°C.
- Connection of output and power supply on screw terminal blocks (2.5 mm²)
- Self powered, build in protection with RC circuit

Designed for resistive load, it is therefore necessary to ensure of inrush current compatibility at power up.

The short circuit protection is done by an internal fast fuse (fast fuse 30A 600V HS (type SCR) 10x38mm)

The static relay protection against the load short circuit should be done by a fast fuse with $i^2t = 1/2 i^2t$ of relay

Note: Semiconductor relays do not provide galvanic isolation between network and load, so it is necessary to switch off main supply before any intervention on the load.

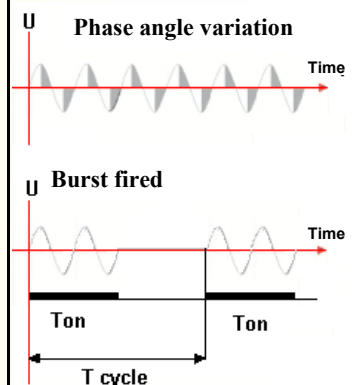
Modulation type:

Phase angle variation

Advantage: Allows precise load control. Suitable for low inertia loads.
Disadvantage: generates more disturbance.

Burst fired

Advantage: "clean" switching, no disturbance generated.
Disadvantage: not appropriate for low inertia loads, accuracy limitation of load control due to cycle time. (1% for a 1second cycle at 50Hz)

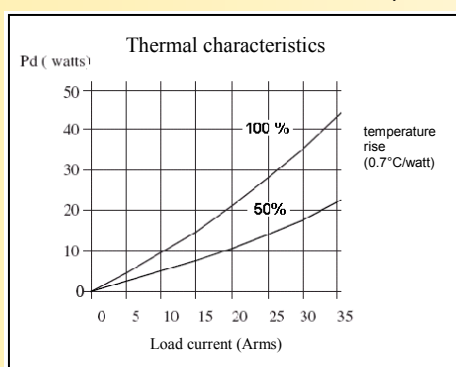


SETPOINT

3/4 turn potentiometer 0 ... 100%

OUTPUT

Full wave burst fire
 Burst fire period : 1.2 second
 Output current: 30 A
 Permissive overload 40A 2 seconds
 Non repetitive overload current: 250A peak
 I^2t (<10ms) (for fuse determination) 1500 A²s
 Current, minimal load: 10mA
 Off state leakage current: < 1mA
 Output power 7KW at 230Vac
 12KW at 400Vac
 Voltage dropout: 1.4V
 Power dissipation: 1.4 x Is (watts)
 Temperature rising: 0.7°C/Watt at 100%
 0.98°C/Ampere at 100%



ENVIRONMENT

Operating temperature -10 °C to 60 °C
 Storage temperature -20 °C to 85 °C
 Humidity 85 % (not condensed)
 Dielectric strength 2500 Vrms continuous
 Weight 750 g
 Protection rating IP50
 Offstate dv/dt 500V/us
 For optimum performance and dissipation, the unit must be mounted vertically

POWER SUPPLY

200Vac.....440Vac 40 - 500Hz
 Other on request

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments
 EN 61000-6-2

Emission standard for industrial environments
 EN 61000-6-4

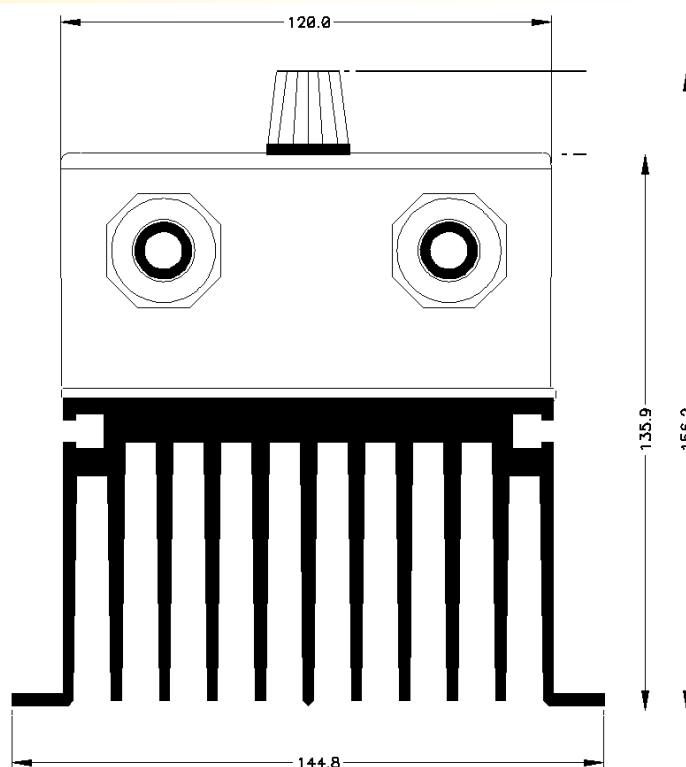
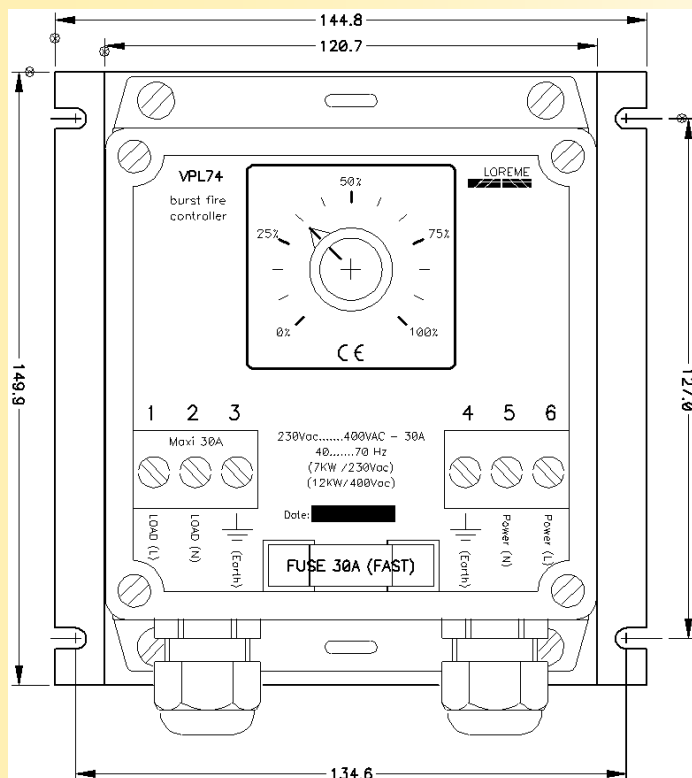
EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011
 group 1
 class A



WIRING AND OUTLINE DIMENSIONS:

Attention : The wiring should be made by qualified personnel. Dangerous voltage may be present on the opening cover. Always disconnect the power source before any operation.



In order to secure their technical features, we recommend at least a 25 mm spacing between each devices.