## ES 519 Electrical heating element power modul and regulator Connection diagram: Period time Temp . . . Pulser NTC On/Off Alternatively with 5V In 0V External 0-10V control signal 230/400V AC dep. on order 0V Max 16A Fuse 0-10V Start/stop Fire thermostat opens. Start contact closes. If the fire thermostat or start/stop are not used, they should be shortened. Potentiometer or 0-5V have identical jumper settings. At 0-10V control signal the jumper is moved to pos. 0-10V 22K

Technical data:

Supply: 230 or 400 V AC, 50 Hz

Mains fuse: max. 16A

Load: 0.3-16 A (3,6KVA /6,4KVA) heat Enclosure: IP 00/54 w/o/enclosure-w/enclosure Dimensions (HxWxD): 220 x 167 x 110 mm w/o/couplings

Period time: 10 sec. - 20 minutes

Xp in heat. reg. part: approx. 2°C Set point: 0-40°C

Potentiometer value: 10K, 47K, 100K 0 -10V input imped.: Typically 20K ohm

## **Description:**

Heat output with integrated pulse/wave train, controlled by potentiometer, 0-5V or 0-10V control signal. Input for external start/stop switch and fire thermostat. As the printed circuit board is equipped with input for a 22K NTC sensor, it can also be used as an independent heat regulator. In this case the control signal or the potentiometer is the set point.

## Adjustment:

The period time is to be adjusted depending on the load to ensure that current regulations are observed. Factory settings are approx. 10 seconds. Control signal (0-5V/potentiometer or 0-10V) is selected by means of jumpers. The functions (normal pulser or temperature regulator with 22K NTC sensor) are chosen by means of jumpers.

If sensor is used, the tolerance can be fine adjusted on the trimmer, if required.

## Mounting:

The box should be wall mounted with the clamp rail facing downward, and it should be connected in accordance with the connection diagram and current regulations.

It is important to ensure a clearance around the box: 20 cm below and above the box and 10 cm clearance on the sides. After installation a 5 mm drain hole is to be drilled in the bottom.

Date: 1/5 - 2002 Drawn by: PN-JEH Rev.: 3

Manufactured by: LS Control A/S

LSCONTROL

www.lscontrol.dk

lsc@lscontrol.dk tel. +45 5550 5550 fax +45 5550 2265