CONTROLS AND CONTROL SYSTEMS

Most heating units are supplied by JEVI together with a control system. To ensure full compatibility and optimum design, production of both the heating unit and the control system together is preferable. The efficiency of any heating system is defined by the ability to control it with precision. This is why we have developed vast expertise when it comes to offering the best solutions for controlling heating systems. A wide range of control systems are available for normal areas, as well as Atex-classified systems in Ex d, Ex de and Ex p forms for protection.

ON-OFF CONTROL

On-off control is ideal for application in which precise temperature control is not necessary. On-off control switches the entire heating unit either on or off. Control systems may include thermostats or, for improved accuracy, electronic regulators with a PT100 sensor or a thermoelement as a sensor.

STEP CONTROL

Step control is advisable for precise regulation of heating systems under heavy load. The power is divided into a number of steps, each of which is enabled by means of a special contactor, depending on the temperature difference between the setpoint and the process temperature. The step controller selects the number of steps to be connected.

THYRISTOR CONTROL

Thyristor units can be used for extreme temperature accuracy. Thyristor control is preferable when extreme accuracy, minimal maintenance, a low noise level (no noise from on-off contactors) and minimisation of power consumption are required. Thyristor control also increases the service life of the heating unit, lower heating element temperatures and prevents high peak temperatures.

COMBINATION OF THYRISTOR UNITS

The heating unit is divided into a series of smaller units for very heavy loads, or when the heating system constitutes a significant proportion of the electrical capacity installed. By way of example, 50% of the power can be controlled by a contactor (on/off) and 50% can be fine-tuned by means of a thyristor.

Please contact our technical sales department for further information.