

## Function

### 3 inputs, 1 output

Microprocessor control unit for solar systems with backlit display, 3 inputs for temperature sensors, 1 modulating TRIAC output for pump control. The price includes 1 solar panel sensor and 1 boiler sensor with 2 mt. silicon cable.

### Product features

- Power supply: 210 ... 250V~ 50-60 Hz
- Power input: max. 3 VA
- Fuse: 3.15 A fast-acting (device + output)
- Supply cable: 3x 1mm<sup>2</sup> H05VV-F conforming to EN 60730-1
- Case: plastic: ABS, flame resistance: Class V0 to UL94 Norm
- Protection rating: 2 - safety insulated
- Protection class: IP40
- Dimensions (W/H/D): 152x101x48 mm
- Weight: 210 g
- Allowed ambient temperature: 0 to 45° C
- Inputs: 3 inputs; optional for temperature sensor (KTY (2 kΩ), PT1000), Vortex sensor
- VFS2-40, radiation sensor; as digital input or as input for volume flow encoder (ONLY input 3)
- Control output: 0 - 10V / 20mA switchable to PWM (10V / 500 Hz), supply for electronic volume flow encoder: +5 V DC / 5 mA or connection of the auxiliary relay
- HIREL31-STAG
- Output: 1 output
- ESR31-R ... relay output
- ESR31-D ... Triac output (minimum load of 20W required)
- Rated current load: max. 1.5 A ohmic inductive cos phi 0.6 for ESR31-D
- max. 2.5 A ohmic inductive cos phi 0.6 for ESR31-R
- Tank sensor BF: diameter 6 mm incl. 2 m cable
- BF PT1000 – to 90°C continuous load
- BF KTY – to 90°C continuous load
- Collector sensor KF: diameter 6 mm incl. 2 m cable with connection box and overvoltage protection KF KTY to 180°C continuous load KF PT1000 to 180°C continuous load (momentary to 240°C)
- The sensor cables at the inputs having a cross section of 0.75 mm<sup>2</sup> can be extended by up to 30 m.
- Consumers (e.g.: pumps, valves...) having a cross section of 0.75 mm<sup>2</sup> can be connected at a distance of up to 30 m.
- Temperature differential: adjustable from 0 to 99°C
- Minimum threshold/Maximum threshold: adjustable from -30 to +150°C
- Temperature display: -40 to 200°C
- Resolution: from -40 to 99.9°C in 0.1°C increments; from 100 to 200°C in 1°C increments
- Accuracy: type. +-1%

