BOILER ROOM COMPONENTS

0459EN February 2018

Manual reset safety pressure switch K374Y001







Description

Manual reset safety pressure switch to cut off the heat from the heat generator when reaching the system preset limit of maximum pressure (locking pressure). Device complying with directive "PED" 2014/68/UE.

Versions and product codes

Product code	Connection	Control range
K374Y001	1/4″F	2÷4,5 bar

Technical data

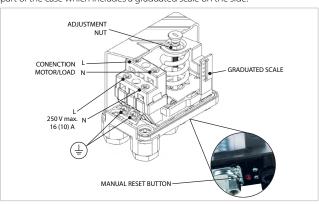
- Fluid temperature range: 20 \div 110 °C
- Fluid class: 2
- Compatible fluids: water and glycol-based solutions (max. 50 %)
- Room temperature range: 0 \div 50 $^{\circ}$ C (RH 85 % max)
- Max. working pressure: 5 bar
- Control range: 2÷4,5 bar
- Factory setting: 3 bar
- Reset min. differential: 0,5 bar
- Construction tolerance: ± 0,15 bar
- Nominal current: 16 A (resistive load) / 10 A (inductive load)
- Max. voltage: 250 V, 50/60 Hz
- \bullet Section of electric wires used: 0,75 \div 4 mm²
- Protection class: IP44

Operation

Setting

The default locking pressure value is 3 bar.

The value can be reset using a tool by turning the adjustment nut in the upper part of the case which includes a graduated scale on the side.



Device intervention

The device is activated when the preset locking pressure is reached; the heat generator stops when the electric contacts open.

Rese

The system can be restarted only by pushing the special reset button on the lower side of the case when the pressure drops by 0,5 bar below the setting value.

Use

Always avoid the following:

- Exceeding the expected room temperature (50 °C)
- Exceeding the expected fluid temperature (110 °C)
- · Using "unclean" water
- · Use in rooms with highly corrosive air

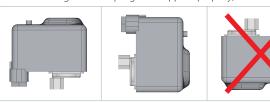
Installation



Warning.

The safaty pressure switch must be installed by qualified operators.

- The pressure switch is a device able to cut off the heat generator electric system. However, it cannot limit any pressure increase caused by heat inertia that may occur after the pressure switch is engaged. For such reason, devices preventing the pressure value from dropping below the maximum value admitted of 5 bar (es. safety valve) and the fluid temperature from dropping below 110 °C (thermostat) must also be installed, in compliance with the safety standards.
- •The pressure switch can be installed both horizontally and vertically screwing it on a 1/4"M (R, EN 10226) threaded pipe or fitting after properly preparing the latter with oakum + putty, or PTFE, or anaerobic sealant (such materials guarantee sealing of the coupling when applied properly).

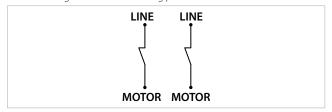


- The pipe connecting the pressure switch and the system must have a min. internal diameter of 8 mm if the pipe is shorter than a meter; 15 mm if the pipe is longer than a meter; 20 mm if it also serves other devices, whatever its length.
- The pressure switch must be installed with a n° 17 wrench (recommended torque: 35 Nm).
- When the theoric short circuit current is greater than the max. nominal flow of the electric contacts, an electric current protection with intervention value lower or equal to 8 A must be installed before the pressure switch.

Electric connections

The K374Y001 pressure switch includes two electric contacts normally closed and insulated one from the other.

Both contacts remain closed when the system is pressurized and both open when reaching the maximum locking pressure.



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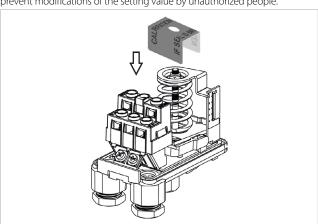
Manual reset safety pressure switch





Start up

Once installed, apply the anti-tampering seal on the adjustment screw to prevent modifications of the setting value by unauthorized people.



Before starting the pressure switch make sure:

- Proper current protections have been installed where required
- Electric connection has been executed in compliance with the applicable regulations
- -There are no water leaks from the hydraulic connection (pressure switch-system)

Maintenance and inspections

- Every year: visual inspection to identify fluid leaks and/or corrosion.
- Every three years: verify proper contact opening.
- After every pressure switch intervention, verify there are no leaks both inside and outside the pressure switch, also removing the case.
- \bullet Also perform periodical mandatory inspections in compliance with the rules in force in the Country of installation.

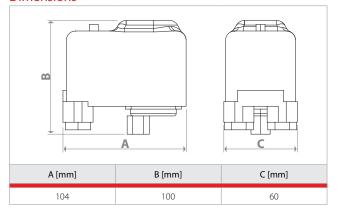


Warning.

Every modification and/or repair performed on K374Y001 must be authorized in writing by Giacomini S.p.A.

Failure to comply with any of the instructions above shall hold Giacomini S.p.A harmless from any civil and criminal responsibility.

Dimensions



Certifications

- Complying with directive "PED" 2014/68/UE
- CE mark

Product specifications

K374Y001

Manual reset safety pressure switch. 1/4"F connection. Locking pressure factory setting 3 bar. Control range: 2÷4,5 bar. Manual reset button (differential 0,5 bar; tolerance \pm 0,15 bar). Two contacts normally closed (wire section 0,75÷4 mm²). Graduated scale visible from the outside. Nominal current 16 A (resistive load); 10 A (inductive load). Nominal voltage 250 V. Protection class IP44. Dimensions 104x100x60 mm (LxHxD). Room temperature range: 0÷50 °C. Fluid temperature range: 20÷110 °C. Max. working pressure: 5 bar. Complying with directive "PED" 2014/68/UE.