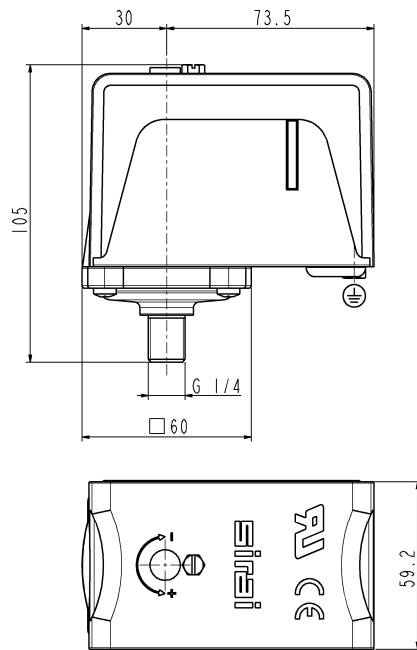




THREE POLE PRESSURE SWITCH

P302



► **GENERAL FEATURES**

This switch is designed so to open a three-pole electric circuit when the pressure in the system rises and to close it when the pressure decreases. Designed for electric boilers of coffee machines as main application.
In conformity with EU Directive 2011/65/EC (RoHS 2 Directive)

► **TECHNICAL FEATURES**

Al-Zn alloy plated steel housing fitted with grounding and two wire bushings in synthetic rubber suitable for cables Ø 12mm, cover fiberglass reinforced PBT (Polybutylene-terephthalate). Both supporting plate and main lever are in zinc plated steel. A diaphragm in PTFE (polytetrafluoroethylene) backed by a diaphragm in FPM (fluoro-carbon elastomer) is the sensing element wetted by the medium: it can withstand overpressures equivalent to max. pressure plus about 50%. Snap action switch is vibration resistant type. Silver contacts with double break for each phase. Diaphragm housing in forged brass with pressure intake for bi-conical connection.

► **PROTECTION DEGREE** IP00

► **AMBIENT TEMPERATURE** 80°C max

► **CALIBRATION**

The pressure switch can be adjusted at any closing pressure P1 within the pressure range: the opening pressure is consequently P1 + Δp. The P1 setting is made by the screw "V" as shown in the section overleaf: each turn of the screw is about 10% of the pressure range. The Δp value is pre-fixed and understood as the differential of the pressure switch.

PORT SIZE ISO 228	ADJUSTABLE PRESSURE RANGE (bar)	PRE-FIXED DIFFERENTIAL PRESSURE Δp (bar)	MAX FLUID TEMP. (°C)	SERIES AND TYPE	MAX BREAKING CAPACITY (contacts)	NOTES	WEIGHT (kg)
Male thread G 1/4 for pipe Ø 4 x 6 mm	0,5 ÷ 1,4	0,15 +0,06 -0	140	P302-6	220V c.a. 7 KW (30A) 400V c.a. 12 KW (30A)	1 - 2 - 3	0,770
	0,3 ÷ 1,2			P302-9		-	

NOTE

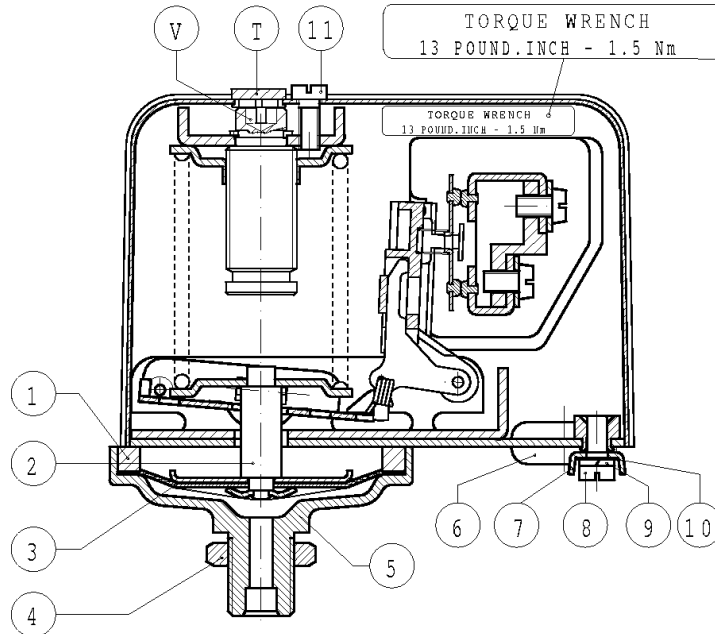
- The temperature at the contacts of terminal board can raise up to 160°C in heavy operating conditions: provide any suitable electric connection
- 1 – UL approved as per file E118977
- 2 – For applications in conformity with UL standard: 240V c.a. - 30A
- 3 – CB certificate N°. IT-7503
- 4 – ENEC 03 certificate N°. CA02.03588

THE VALIDITY OF REPORTED DATA IS REFERRED TO THE DATE OF ISSUE. POSSIBLE UPDATES ARE AVAILABLE ON REQUEST 1003/1303



SPARE PARTS

Series P302



Kit description

Kit P.N.

Consisting of:

Diaphragm kit

G2649502

Ring pos. 1
Diaphragm group pos. 2
PTFE diaphragm pos. 3

Accessories kit

G2649401

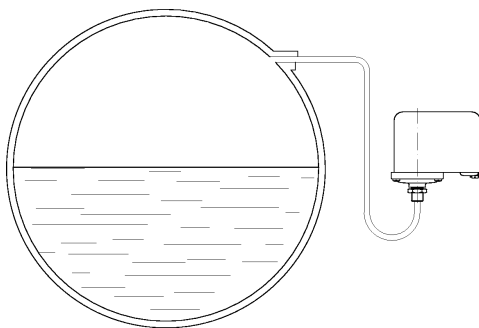
Nut pos. 4
Wire bushing (n° 2) pos. 6
Clamp pos. 7
Brass screw pos. 8
Washer pos. 9
Washer pos. 10
Nickel plated screw pos. 11

Housing with pressure intake

2620601R

Housing with pressure intake pos. 5

SCHEME FOR THE CONNECTION TO THE BOILER



The pressure switch can be mounted in any position, but the mounting with vertical axis and pressure intake as per scheme is suggested. This to avoid that the boiler deposits obstruct the pressure pipe.

The regular cleaning of components with a suitable lubrication of mechanical parts can guarantee optimum performances and functioning in the lifetime.

► DEFINITION AS PER IEC 60730-1 STANDARD

The P302 is a control device in class 1, of action and additional features Type 1A, in which the protection against the electric discharges is guaranteed by both the main insulation and the connection of the conductive parts to a protection conductor (grounding) that is part of the built-in wiring. In this way in case of failure any accessible conductive part cannot become active. Control pollution situation: normal

► MAIN INSULATION AS PER IEC 60730-1 STANDARD

The main insulation is the insulation of the alive parts needed to guarantee the main protection against electric discharges. In this device the insulation is made by the terminal box contained in the PBT housing.