

## Panels for SUBMERSIBLE Pumps

### SINGLE PHASE PUMPS

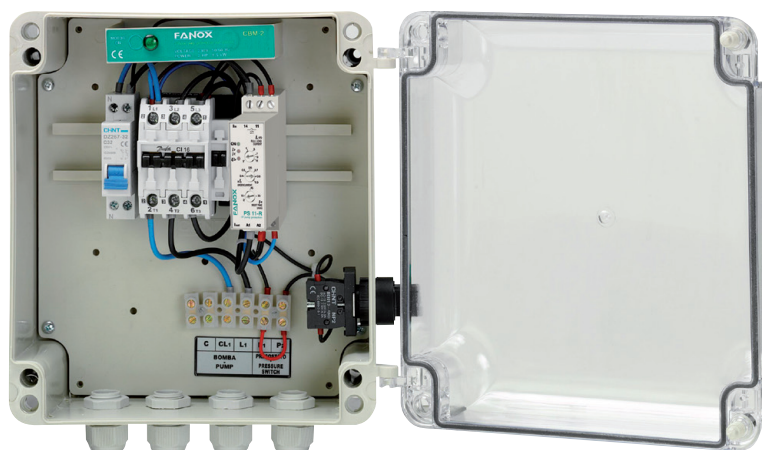
- Thermal memory of motors heating and cooling cycles.
- Automatic reset, adjustable from 2 to 240 minutes for well filling,
- Indication of trip cause.
- Control point for pressure switch, buoy, programmer...
- Includes: circuit breaker 1P+N, PS-R electronic relay, contactor, LEDs and on/off switch.

One of the most critical situations in pump operation is dry running. The solution offered by FANOX single-phase protection panels is based on measuring the undercurrent. In dry running situations a current decrease is detected. This reduction of consumed current is measured by the PS-R electronic relay fitted to the protection panel: when the preset undercurrent value is reached, it switches the pump off.

- IP 55

## WITHOUT LEVEL SENSORS

CBM



### PROTECTION FUNCTIONS

- I> Overload
- I< Undercurrent
- U> Overvoltage
- I>> Short-circuit



Pump protection without level sensor video demo:

Models	Code	Approx. motor current (Amps)	Power of single-phase 230 V motor		Adjustable well filling time (minutes)	Dimensions (mm)
			HP	kW		
CBM-2	12312	3 - 11	0.5 - 2	0.37 - 1.5	2 - 70	230 x 250 x 150
CBM-3	12314	11 - 16	2 - 3	1.5 - 2.2	2 - 240	230 x 250 x 150
CBM-4	12313	16 - 28	3 - 5	2.2 - 3.75	2 - 240	230 x 250 x 150

- Equipment with halogen-free wiring

Fanox Control Panels protect pumps against dry running without using level sensors.

- Maximum protection without level electrodes or level relays.
- Electronic relay incorporated.
- Quick and easy installation, maintenance-free.
- Installation costs are significantly reduced.
- Can be adapted to installations already in service, without removing the pump.

