

Panels for SUBMERSIBLE Pumps

THREE PHASE PUMPS

- Thermal memory of motors heating and cooling cycles.
- Automatic reset for well filling. Adjustable from 2 to 75 minutes.
- Trip cause indication.
- Control point for pressure switch, buoy, programmer...
- Includes: circuit breaker 3P or 3P+N, PF-R electronic relay, contactor, LEDs and on/off switch.
- Models with metal enclosure also include voltmeter, ammeter and φ meter.

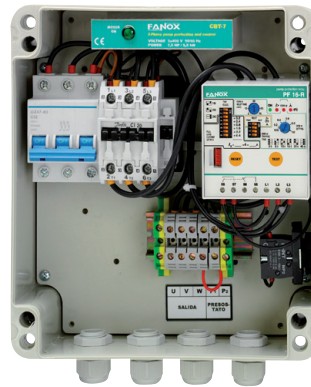
The cosine of phi ($\cos \varphi$) is the value of the cosine of the phase angle between the voltage and the intensity of the electrical current. This oscillates from a value slightly below 1 for a full load operating motor to almost 0 when it is dry running.

Therefore, in dry running situations, $\cos \varphi$ falls significantly. This reduction is monitored by the PF-R relay installed in FANOX three-phase protection panels, meaning that when it falls beneath the adjusted value, the panel shuts down the pump and protects it from damage.

- IP 55

WITHOUT LEVEL SENSORS

CBT



CBT-M



PROTECTION FUNCTIONS

- $\cos \varphi$ Underload
- $I >$ Overload
- Δ Phase imbalance or phase loss
- (R) Phase sequence
- $I >>$ Short-circuit

| | Models | Code | Approx. motor current (Amps) | Power of three-phase 400 V motor | | Adjustable well filling time (minutes) | Dimensions (mm) |
|---------|--------|-------|------------------------------|----------------------------------|-------------|--|-----------------|
| | | | | HP | kW | | |
| PLASTIC | CBT-1 | 12301 | 1.1 - 2.0 | 0.5 - 1 | 0.37 - 0.75 | 2 - 75 | 230x250x150 |
| | CBT-2 | 12302 | 2.8 - 3.8 | 1.5 - 2 | 1.1 - 1.5 | 2 - 75 | 230x250x150 |
| | CBT-5 | 12305 | 5.5 - 9.5 | 3 - 5.5 | 2.2 - 4 | 2 - 75 | 230x250x150 |
| | CBT-7 | 12307 | 13 | 7.5 | 5.5 | 2 - 75 | 230x250x150 |
| | CBT-10 | 12310 | 16.5 | 10 | 7.5 | 2 - 75 | 230x250x150 |
| | CBT-15 | 12315 | 24 | 15 | 11 | 2 - 75 | 230x250x150 |

- Equipment with halogen-free wiring
- Models adapted to 3x230 V networks available.