

Panels for SUBMERSIBLE Pumps

THREE PHASE PUMPS WITH SOFT STARTER

- 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...
- Plastic case.
- Includes: circuit breaker 3P+N, PF-R electronic relay, ES soft starter, contactor, LEDs and on/off switch.
- IP 54

FANOX protection panels with progressive startup and shut -down are fitted with ES soft starters to prevent problems caused by water hammering or sudden start-ups and shut-downs.

Protection against dry running is provided by the PF-R relay that monitors the value of $\cos \varphi$ and shuts down the pump when it falls below the selected value.

CBS



PROTECTION FUNCTIONS

- $\cos \varphi$ Underload
- $I >$ Overload
- Δ Phase imbalance or phase loss
- (φ) Phase sequence
- $I >>$ Short-circuit
- \sim Soft start
- \sim Soft stop

WITHOUT LEVEL SENSORS

Ref.	Code		Adjustable well filling time (min)	I _b (A)	Motor		Protections - Functions						Dimensions
	230V	400V			HP	kW	I >	cos φ	(φ)	Soft start/stop	Short circuit	Δ	
CBS-2/P	12321P-230		2 - 75	2 - 6,8	0,5 - 2	0,37 - 1,5	✓	✓	✓	✓	✓	✓	300x250x140
CBS-3/P	12322P-230		2 - 75	9,6	3	2,2	✓	✓	✓	✓	✓	✓	300x250x140
CBS-5/P	12323P-230		2 - 75	12,4 - 15,6	4 - 5,5	3-4	✓	✓	✓	✓	✓	✓	300x250x140
CBS-7/P	12324P-230		2 - 75	22	7,5	5,5	✓	✓	✓	✓	✓	✓	300x250x140
CBS-10/P	12326P-230		2 - 75	28	10	7,5	✓	✓	✓	✓	✓	✓	300x400x200
CBS-12/P	12327P-230		2 - 75	37	12,5	9,2	✓	✓	✓	✓	✓	✓	300x400x200
CBS-15/P	12328P-230		2 - 75	42	15	11	✓	✓	✓	✓	✓	✓	300x400x200
CBS-2/P		12321P-400	2 - 75	3,8	2	1,5	✓	✓	✓	✓	✓	✓	300x400x200
CBS-3/P		12322P-400	2 - 75	5,5	3	2,2	✓	✓	✓	✓	✓	✓	300x400x200
CBS-5/P		12323P-400	2 - 75	7-9,5	3,5 - 5,5	2,6 - 4	✓	✓	✓	✓	✓	✓	300x400x200
CBS-7/P		12324P-400	2 - 75	13	7,5	5,5	✓	✓	✓	✓	✓	✓	300x400x200
CBS-10/P		12326P-400	2 - 75	16,5	10	7,5	✓	✓	✓	✓	✓	✓	300x400x200
CBS-12/P		12327P-400	2 - 75	21	12,5	9,2	✓	✓	✓	✓	✓	✓	300x400x200
CBS-15/P		12328P-400	2 - 75	24	15	11	✓	✓	✓	✓	✓	✓	300x400x200
CBS-20/P		12329P-400	2 - 75	32	20	15	✓	✓	✓	✓	✓	✓	300x400x200
CBS-25/P		12330P-400	2 - 75	40	25	18,5	✓	✓	✓	✓	✓	✓	300x400x200
CBS-30/P		12331P-400	2 - 75	47	30	22	✓	✓	✓	✓	✓	✓	300x400x200

- Equipment with halogen-free wiring
- Other voltages under request