Control Panel Type ABS CP 114



CP 114 is a compact control panel for single pump applications using a 3-phase pump on a 1-phase main.

1 pump version with variable frequency drive (VFD) up to max. 7.5 A or 10 A without Ex-approval.

Application areas

Tanks, small pits or commercial standard applications with single phase power supply 1/230/N/PE.

Specification

- Control panel with two line LCD display. LED power, run- and alarm indication, manual-0-automatic switch and clear text display of all messages
- Function for reversing the pump via VFD
- VFD with build-in EMC filter C1 category, using standard 3-phase pump (3x230V)
- · Jog dial and ESC button
- Possible connections for level sensor with digital input (e. g. float switches), analogue input 4-20 mA (e. g. submersible pressure sensors)
- Battery charger, built-in, for optional back-up battery
- Built-in alarm buzzer and top-mounted LED flashlight (can be switched off)
- 1 potential free contact as changer
- Standard configuration is complete wired in an Sulzer steel cabinet including
 - lockable door
 - wall-mounting holder
 - cable glands
 - protective shroud inside
- Main switch

Indicated values

- Level (if the mA input)
- No of starts per pump
- Running hours per pump
- · All settings and alarms
- Current per pump (showing on display of VFD)

Settings

- · Start/stop level
- Start/stop delay
- Emergency pump run timer on high float
- Exercise run
- Language



Features for pump protection

- Thermal failure (Klixon or PTC)
- Overload failure via VFD
- Leakage (DI)

Approved standards

- EMC emission standard EN 61000-6-3:2001
- EMC immunity standard EN 61000-6-2:1999
- LVD electrical safety EN 61010-1
- Safety of Machinery- Electrical Equipment of Machines EN 60204-1
- Adjustable speed electrical power drive systems EN 61800-3

Technical specifications

Description		
Ambient operating temperature	-10 to +50 °C	
Ambient storage temperature	-25 to +70 °C	
Humidity	5 - 95 % non-condensing	
Dimensions	HxWxD: 420 x 300 x 230 mm Height top edge flash light Depth top edge lock	
Degree of protection	IP54	
Power supply	210–240 V, 50–60 Hz 1~	
Analogue sensor	4-20 mA	
Temperature sensor	Klixon, PTC limit $> 3~\text{k}\Omega$	
Leakage sensor	Limit < 50 kΩ	
Analogue input resolution	12 bits	
Max. length of I/O cables	30 m	
Charge current for battery	Max. 80 mA, 13.7 V	
Weight	Approx. 10 kg	

Special VFD values	
Max. altitude of site	1000 m 2000 m current reduction 1 % per added 100 m
Range of output frequency	0.5 – 400 Hz
Max. transient current for	
60 sec.	150 % of VFD nominal current
2 sec.	165 % of VFD nominal current
C1 EMC category	Max. 5 m shielded cable, switching frequency 4, 8 or 12 kHz

Part-No. and accessories

Description	Part number
CP 114 up to 1.5 kW – 7.5 A	62160870
CP 114 up to 2.2 kW – 10.0 A	62160871
Backup battery add-on kit 12 VDC 1.2 Ah with needed connections and holder	62160961
Heater with thermostat and connections, for outdoor installation	62160088
External alarm box 12 VDC with combined acoustical and optical alarm	62160978

Mounting template

