# 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

# SULZER

### 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<br>Height top edge flash light<br>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 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<br>2000 m current reduction<br>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



www.sulzer.com

CP 114 en (12.2016), Copyright © Sulzer Ltd 2016

This document does not provide a warranty or guarantee of any kind. Please contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.