Control Panel Type ABS CP 116 & CP 216

Compact control panel for one or two pumps confirming to ATEX. Direct connect pumps up to $5.5~\mathrm{kW}$ (10 A).

Optional GSM/GPRS modem, allows communication with AquaWeb or SCADA system using Comli or Modbus RTU/TCP protocol.

Specification

- □ Graphic colour display
- □ Intuitive menu navigation with arrow buttons
- □ Multiple choice of level control
 - Float switches
 - Analogue (4-20 mA) sensor
 - Built in pressure sensor for closed or open air systems
- Advanced pump capacity and flow calculation (analogue level sensor required)
- □ 8 channel analogue data logger (2 weeks capacity)
- □ Time-date stamp on up to 4000 pump and alarm events
- One week history on counters and accumulators (run time, start count, flow)
- □ Fused terminal for operation of optional air compressor CA 641
- □ Built in charger for optional backup battery
- □ Built in alarm buzzer
- □ Switching potential free alarm-relay contact
- Closing potential free alarm-relay contacts for individual pump fail indication
- □ One free run contact on each contactor
- □ Hard wired pump interlock input (Ex)
- □ Dry run protection on low power factor
- □ Complete with 1.5 m power cable and CEE16 plug with phase shift possibility
- □ Two pump versions complete with 3 phase pump fuses
- □ 9 pin RS 232 port for PC interface (AguaProg tool)
- □ Pulse input for rain, energy or flow sensor
- □ Support for register and IO cross reference table

Analogue values

- □ Level
- $\quad \square \ \, \mathsf{Inflow}$
- □ Outflow
- $\ \square$ Overflow
- □ Pump capacity
- □ Motor current on all 3 phases
- □ Cos fi (power factor)
- □ Back pressure (optional sensor for pressurized systems)

Pump counters

- □ No of starts per pump
- □ Running hours per pump

Settings

- □ Start/stop level per pump
- □ Start/stop delay per pump
- □ Max no of pumps running
- □ Various alternation options
- □ Cyclic pump motion timer (exercise run)
- □ Emergency pump run on high float with run on time
- □ Amp rating (nominal motor current) for motor protection
- Number of pump runs and extra run on time for venting the air tube
- □ High back pressure
- □ Display language
- □ Pit shape and area at shape forming levels (flow setup)



Features for pump protection

- □ Thermal failure (Klixon or PTC)
- □ Overload failure
- □ Phase order
- □ Phase missing
- □ Leakage (DI)
- □ Dry run protection (low power factor)

Approved standards

- □ EMC emission standard EN 61000-6-3:2001
- □ EMC immunity standard EN 61000-6-2:2003
- □ LVD electrical safety EN 61010-1
- Safety of Machinery- Electrical Equipment of Machines EN 60204-1

Technical specifications:	
Ambient operating temperature:	-20 to +50°C
Ambient storage temperature:	-30 to +80°C
Cabinet and mounting:	DIN rail, IP65
	Mounting holes: see figure
Dimensions:	HxWxD: 370x250x123 mm
Weight:	<5kg, with battery
Humidity:	0-95% RH non-condensing
Power supply:	230/400 VAC
	maximum 16A fused
Power consumption:	< 16VA
Contactor, max load:	ABB B7-30-10, 5.5 kW, 12A,
	coil 24 VAC
Fuses (only CP 216):	3x10A 3-pole
	type D circuit breakers
Fuse for external air pump:	500mA slow blow
Max load on alarm relays:	250VAC, 4A
	100VA resistive load
Max current from 12 VDC out:	50mA
Input voltage at Digital In and	5-24 VDC
Block Pump:	
Resistance at Digital In and	5 kohm
Block Pump:	
Analogue sensor:	4-20 mA
Analogue input resistance:	110 ohm
Temperature sensor:	PTC, limit: 3 kohm
Leakage sensor:	Limit: 50 kohm
Maximum length of I/O cables:	30 meters
Charge for lead-acid battery:	Max 80mA, 13.7 VDC



