

Dry Cooler manual
C400 – POL468.65/STD

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1 Display

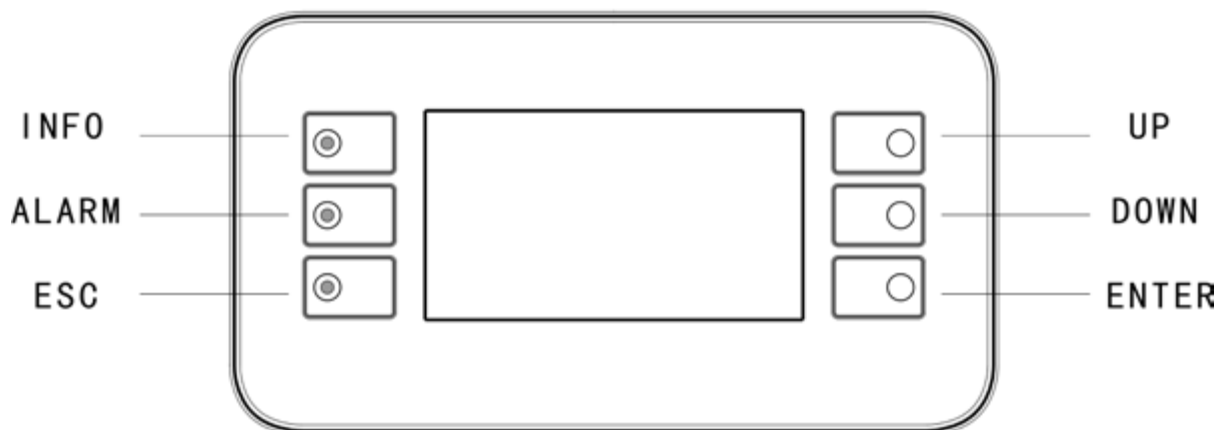
1.1 POL871.72/STD



Pic 1. POL871.72/STD

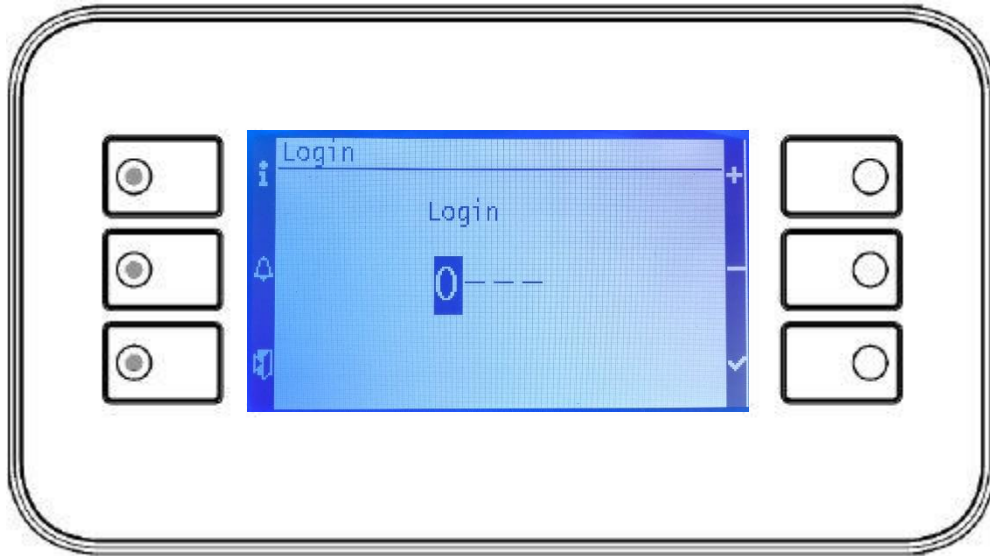
1.1.1 Connecting to user profile

Connect to "User" profile. Hold "Enter" button for 3 seconds.



Pic. 2 Button placement

After 3 seconds screen changes to Pic. 3.



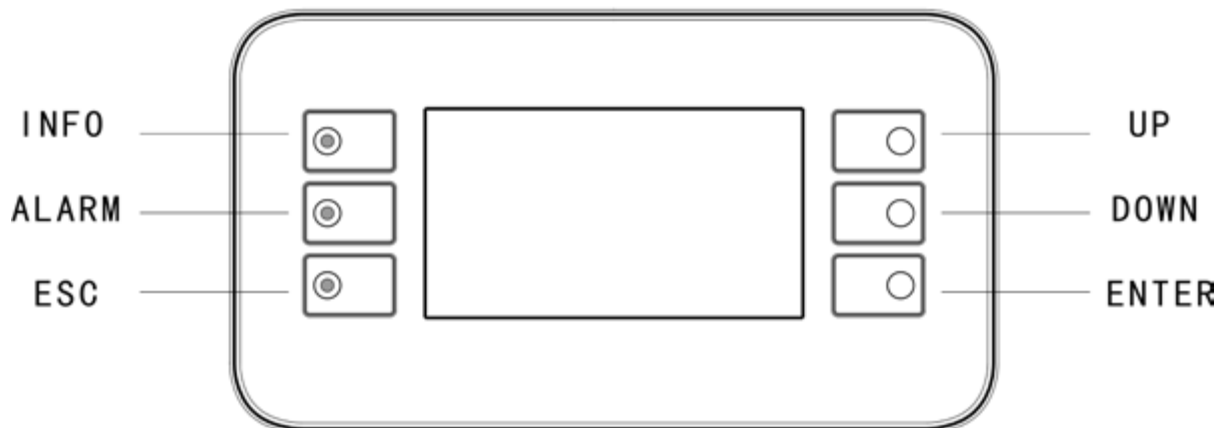
Pic. 3 Login screen

User password is 1000 and it can be entered by “Up” and “Down” buttons and confirm selection press „Enter“. When correct password is entered in the right corner one key icon will be showed.

On User Level user can change “Setpoint” and turn on/off machine from display in line “Display/Comm”:

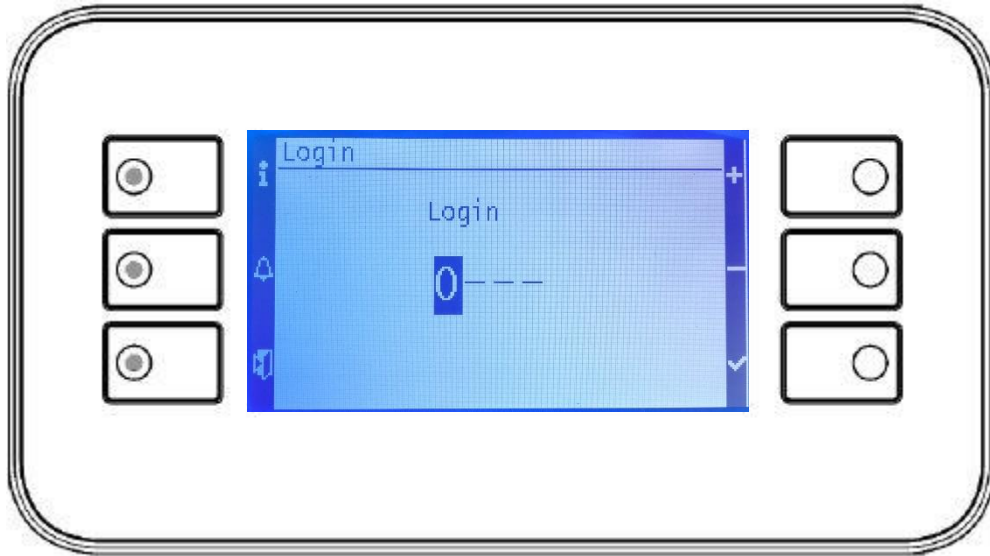
1.1.2 Connecting to service profile

Connect to “Service” profile. Hold “Enter” button for 3 seconds.



Pic. 4 Button placement

After 3 seconds screen changes to Pic. 5.



Pic. 5 Login screen

User password is 2000 and it can be entered by “Up” and “Down” buttons and confirm selection press „Enter“. When correct password is entered in the right corner two key icon will be showed.

In service level parameters for regulation and alarms can be changed.

1.1.3 Alarm list

AL01	Fan overload
AL02	DryCoolerIn Temp. sensor fault
AL03	DryCoolerOut Temp. sensor fault
AL04	Fault Supply pump (Single pump)/ Fault Supply pump 1 (Twin pump)
AL05	Fault Flow Detector (Single pump)
AL06	Fault Supply pump 2 (Twin pump)
AL07	Fault Flow Detector (Twin pump)
AL08	Outside temp. sensor fault
AL09	Fault Adiabatic pump
AL10	Fault flow switch adiabatic pump

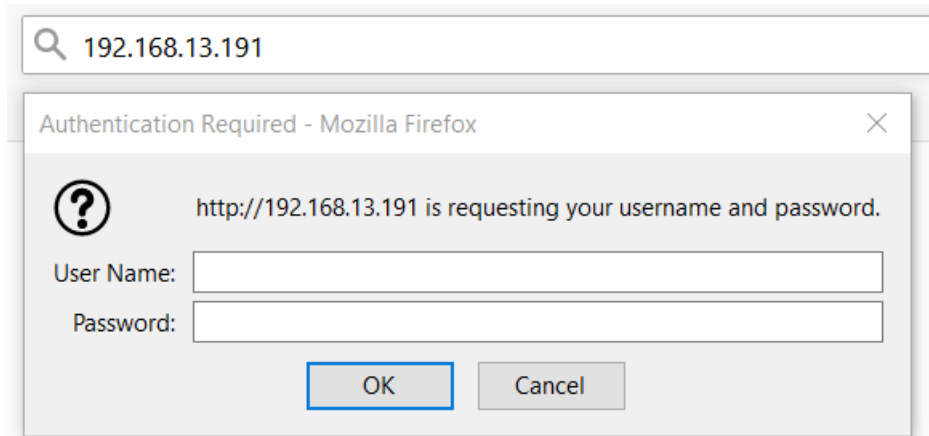
Most recent alarm will be showed on HMI LED. Alarm history can be reached by Hold “SET” key for 5s then screen will change and show “PL” press “UP” key and it changes to ALH and alarm history is showed.

1.2 Web service access

For reaching internet access find IP:

POL871.72/STD Main menu->System->Communications

Enter found IP address to browser and should see Authentication required window:



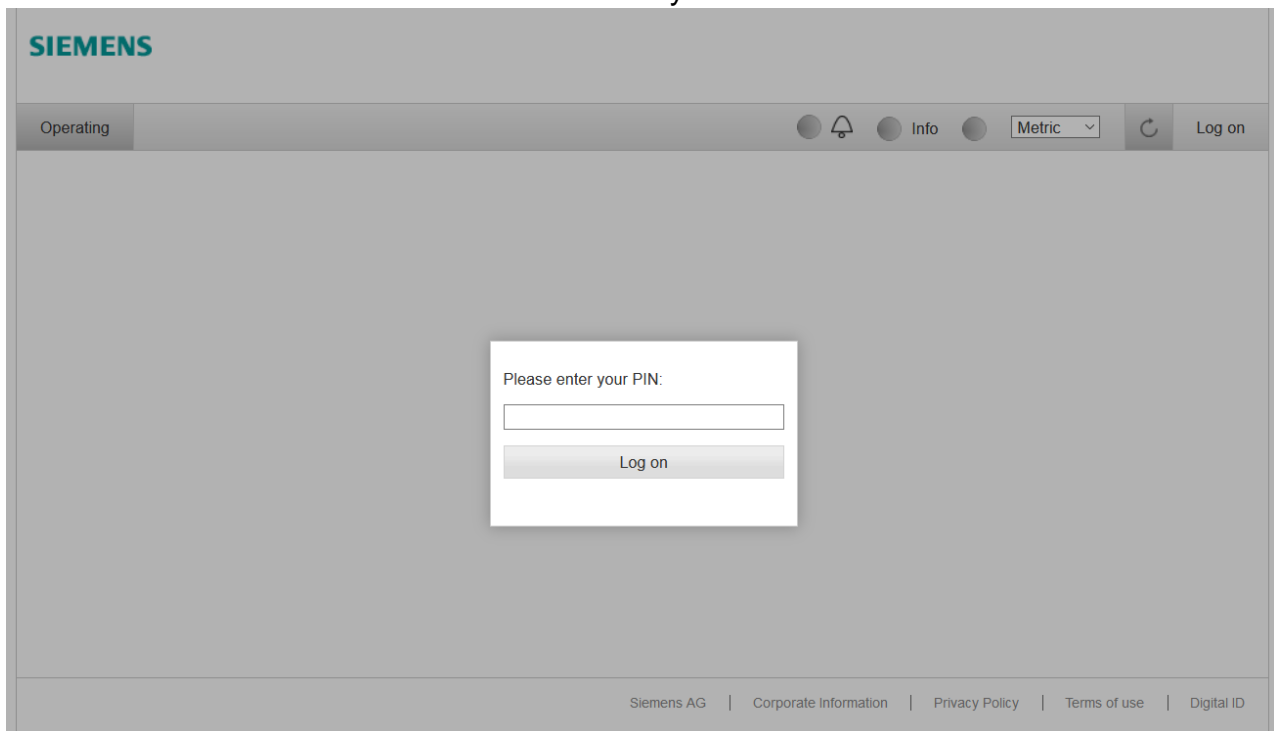
Pic. 7 Authentication required

Enter user name and password:

User name: WEB

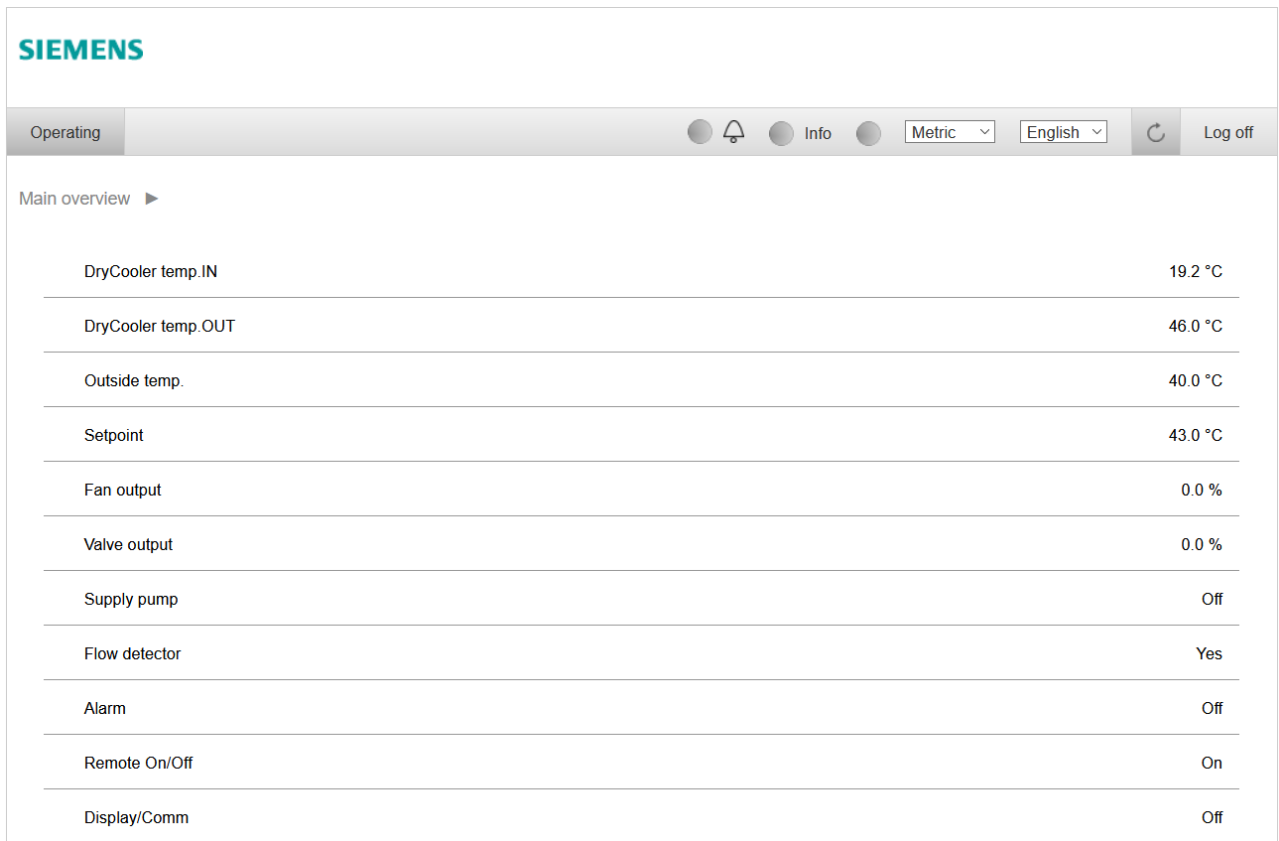
Password: SBTAdmin!

When entered correctly user should see:



Pic. 8 Web server pin

Enter user or service Pin for required access level.



The screenshot displays the Siemens Climatix web server interface. At the top left is the Siemens logo. Below it, a navigation bar shows the status 'Operating' and several icons: a bell, 'Info', a 'Metric' dropdown menu, an 'English' dropdown menu, a refresh icon, and a 'Log off' button. The main content area is titled 'Main overview' with a right-pointing arrow. Below this is a table listing system parameters and their current values.

DryCooler temp.IN	19.2 °C
DryCooler temp.OUT	46.0 °C
Outside temp.	40.0 °C
Setpoint	43.0 °C
Fan output	0.0 %
Valve output	0.0 %
Supply pump	Off
Flow detector	Yes
Alarm	Off
Remote On/Off	On
Display/Comm	Off

Pic. 9 Web server

2 Control logic

2.1 Turning on system

System starts to work then Main switch On/Off and Display/Comm On/Off both is in ON state.

2.2 Dry cooler control (Dry Cooler control)

Fan speed is regulated by output temperature of glycol. If temperature is closer to setpoint fan power is increased.

Example. Setpoint = 20 °C, Dif = 5 °C. glycol temp. 15 °C fan power 0%, glycol temp. 17.5 °C fan power 50%, glycol temp. 20 °C fan power 100%.

3 Communications

Possible communications:

Modbus RTU by default: Baud rate 19200 , Parity EVEN, Stop bits 1, Word length 8 bit.

Modbus TCP/IP port: 502.

Modbus list parameters:

Parameters	Address	Read/Write	Gain
Mode			
Main switch Off/On	H2	Read	
Display/Comm. Off/On	H4	Read	
Setpoint	H8	Read/Write	
Dif	H10	Read/Write	
Fan			
DryCooler temp.IN value	H100	Read	0.1
DryCooler temp.OUT value	H102	Read	0.1
DryCooler temp.OUT alarm	H104	Read	
Fan overload	H106	Read	
Fan output 0-100%	H108	Read	
Fan work hours	H118	Read	
Pump			
Supply pump (Single) Status	H200	Read	
Supply pump 1 (Twin) Status	H202	Read	
Supply pump 2 (Twin) Status	H204	Read	
Supply pump (Single) / Supply pump 1 (Twin) overload	H206	Read	
Supply pump 2 (Twin) overload	H208	Read	
Flow det. status (single pump)	H210	Read	
Flow det. alarm (single pump)	H212	Read	
Supply pump (Single) Work hours	H214	Read	
Supply pump 1 (Twin) Work hours	H216	Read	
Supply pump 2 (Twin) Work hours	H218	Read	
Adiabatic pump Status	H220	Read	
Adiabatic pump work hours	H222	Read	
Adiabatic pump overload	H224	Read	
Flow det. status adiabatic pump	H226	Read	
Flow det. alarm adiabatic pump	H228	Read	
Valve			
Valve output 0-100	H300	Read	
Valve drain status	H302	Read	
Valve supply status	H304	Read	
Common			
Alarm output	H400	Read	
Outside temp.	H402	Read	0.1