1500 International Dr •Traverse City, MI 49686
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OTC, OTM and OTI Series Options Index for PLC Control Systems:

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Audible Alarm w/silence (AA1 or AA2)

The audible alarm feature links a number of alarm conditions in series to trigger the audible alarm. An alarm condition would engage the audible alert, signaling the operator that attention is required.

Anti Drain-back Valve (AD1 or AD2)

The anti drain-back valve package allows for the unit to operate with overhead piping systems without overflowing the fluid reservoir. Once power is removed from the chiller, a solenoid valve and check valve are used to stop the back-flow of fluid from an overhead piping system and protecting the reservoir.

Alarm Beacon (AV1)

The alarm beacon feature allows you to link a number of alarm conditions in series to the alarm output. Any alarm condition would then signal the alarm beacon to light, thus signaling the operator.

Auto Water Make-up (AWM)

The auto water make-up package includes an external fluid supply, hose, reservoir float, and solenoid valve. The additional reservoir float triggers the solenoid valve to close when the internal reservoir is at full capacity. The low water float signals to open the solenoid valve, allowing additional water to flow into the closed loop system. This is a benefit to customers whom have limited access to their unit and the unit experiences fluid losses between process runs.

Uncontrolled DI Loop (D01)

The uncontrolled DI loop option provides a flow regulator, strainer, conductivity sensor w/ light indicator and mixed bed filter. This system passively polishes the process water by continually passing a side flow of water through the DI polishing loop.

Controlled DI Loop (D02)

The controlled DI loop option provides a pump or solenoid valve, conductivity sensor, conductivity board, strainer and mixed bed filter. The active control system manages the conductivity level of the water by regulating the amount of water passed through the mixed bed cartridge. The controlled DI loop system is utilized when control over the specific level of water conductivity is crucial.

Process Controller (CF1)

The enhanced PLC panel mounted controller. Face mounted LED display, 2 control loops, and 5 analog input monitoring points. Equipped with Modbus RTU via RS485.

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Process Controller (CR1)

The enhanced PLC DIN rail mounted controller. LED display inherent on face of DIN rail mounted body, 2 control loops, and 5 analog input monitoring points. Equipped with Modbus RTU via RS485.

Process Controller (CR2)

The enhanced PLC DIN rail mounted controller. Programmable LCD display inherent on face of DIN rail mounted body, 2 control loops, and 5 analog input monitoring points. Equipped with Modbus RTU via RS485 and Modbus TCP via Ethernet. Expandable functionality and customization on a case by case basis.

Flow Meter (FS2)

A flowmeter option will provide a flow measuring device mounted in the return process fluid loop. The flowmeter will measure the flow of fluid through the process and display the process value on the PLC controller. There is a programmable, low flow signal sent to the common fault dry contact. In addition, a discreet flow signal will be sent on Modbus RTU via RS485.

Heater Package (HT1)

Heaters are incorporated within the process fluid loop to increase the temperature of the system fluid. The addition of the HT1 option allows the system to heat and cool a process. The feature is very useful when the process fluid set point is above ambient air temperature or the system is in a cold environment.

Low Flow Indicator (LF2)

The low flow indicator includes a flow switch mounted in the process fluid loop's return piping measuring the flow of fluid through the process. It is designed to send a signal if the flow rate is below a preset condition. The low flow alarm can be used to enable or disable a customer's process if a low flow condition occurs. The low flow alarm will send its signal to the warning signal dry contact and also provide a discreet signal on Modbus RTU via RS485.

Low Water Indicator (LW2)

The low water indicator option provides an additional reservoir float and control indicator to warn the operator of a low water condition in the fluid reservoir. The low water alarm will send its signal to the warning signal dry contact and also provide a discreet signal on Modbus RTU via RS485.

CE or UL Certification (NR1, NR2, NR3, NR4)

Due to local regulations, some end users require CE or UL certifications. Our unit certification options allow the end user to meet their requirements and receive a compliant unit right from the factory.

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Outdoor Package (OD1)

The outdoor package adds components allowing the system to be located outdoors in conditions between 17 F and 95°F ambient temperature range (proper fluid must be used for freeze protection in conditions below freezing) . This feature includes compressor heaters, NEMA 4 (water proof) electrical enclosure, all metal fittings, fluid circuit insulation, ODP or TEFC pump and an electrical box heater. These provisions allow for an OPTI TEMP unit to safely operate in an outdoor environment. Extended ambient temperature ranges (warmer than 95 F and colder than 17 F) can be accommodated but must be evaluated in a case by case application.

Particle Filters (M05, M1L, M1T, M12, M20, LC04, LC08, NC08, MS1)

Particle filters are used to maintain a clean process fluid loop. They can be sized 5 to 50 micron particle size (30 micron typical) for your specific process. This filter provides dual protection for the braze plate inside your unit for your process micro channels. Particle filters capture scale materials caused by galvanic corrosion, hard water and micro bacteria.

Pressure Gage (PG1 or PG2)

The pressure gage feature allows the end user to monitor the process fluid pressure on an analog gauge. The gauge may be panel mounted or located on the pump discharge. The gauge material is consistent with the customer specified wetted materials.

pH Control Loop (PH1)

The pH control loop option includes a pH controller, pH sensor, solenoid valves and anion/cation filters. The user can adjust the pH level set point and the controller will utilize cation and anion filters to maintain this system‘s desired fluid pH level.

Pressure Transducer (PT2)

The pressure transducer is used to measure the process fluid pressure in the process supply or return (customer specified). The pressure value can be accessed and viewed on the controller’s display or by a discreet signal on Modbus RTU via RS485.

Wired Remote Control Tether with Mirrored Resident Screen (RC2)

The wired remote control tether package is useful to end users that require control and monitoring from a remote location and is used with either the CF1 or CR1 controllers. This option provides a remote box with a mirrored resident screen of the CF1 or CR1 controllers. Option allows remote alarm monitoring, remote On/Off command, remote set point adjustment and monitoring.

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Wired Remote Control Tether with Color Touchscreen (RC3)

The wired remote control tether package is useful to end users that require control and monitoring from a remote location and is used with the CF1, CR1 or CR2 controllers. This option provides a remote box with a color touchscreen of the CF1, CR1 or CR2 controllers. Option allows remote alarm monitoring, remote On/Off command, remote set point adjustment and monitoring of multiple control loops. RC3 option allows for the potential of screen display enhancements and customization.

Color Touchscreen Interface Mounted on Equipment for Local Interface (HM1)

This option provides a system with a color touchscreen of the CF1, CR1 or CR2 controllers. The option allows monitoring and adjustment of the processes with a multi-page touchscreen. HM1 option allows for the potential of screen display enhancements and customization.

Remote Air Cooled Condenser Option (RCX)

The remote condenser option is used when rejecting the cooling system's condenser heat at the chiller is objectionable and that heat would be better discharged outdoors. The remote condenser feature removes the air cooled condenser from the unit and allows the user to place it at some remote location.

Remote Start/Stop (RS2)

The remote start/stop option is important to end users that require the ability to turn on or off the unit with a contact closure or a discreet signal on Modbus RTU via RS485. It is a key feature if your application does not allow you to access the unit's control panel during normal operation.

Remote Temp Sensing/ Cascade Control (RT1)

The standard system design uses a process control measuring point which is within the unit's fluid reservoir. The remote temperature sensing feature/cascade control option allows the system to have a secondary point of temperature monitoring with an option of using the secondary measuring point as the process control point. The option includes a secondary temperature sensor but will require the customer to field wire the sensor if it is located external of the system enclosure.

Sound Reduction Package (SR1)

The sound reduction package includes solid cabinet side panels and noise reduction insulation to lower the system's overall noise level. This option is only applicable to water cooled chillers or water to water heat exchangers.

Temperature Deviation Indication (TA1)

The temperature out of tolerance alarm is a temperature monitoring option that sends a warning signal to the system's common warning contacts if the process temperature drifts outside the customer's

selected temperature tolerance. The temperature deviation can also be monitored through a discreet signal on Modbus RTU via RS485.