

IPC 9511 | SUBMITTAL

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Date: FEBRUARY 17, 2014
Supersedes: NEW
Date: NEW

Job: _____ Representative: _____
 _____ Ordered by: _____ Date: _____
 Engineer: _____ Submitted by: _____ Date: _____
 Contractor: _____ Approved by: _____ Date: _____

SYSTEM LAYOUT			CONFIGURATION		OPERATION
Number of CHW pumps	—	(Specify 1 to 5)	<input type="checkbox"/> Single <input type="checkbox"/> DualArm <input type="checkbox"/> Twin	<input type="checkbox"/> Headered <input type="checkbox"/> Dedicated Dedicated	<input type="checkbox"/> Standby <input type="checkbox"/> Parallel Parallel
Number of air cooled chillers*	—	(Specify 1 to 5)	Primary pump speed control		
Capacity per chiller	—	Tons	<input type="checkbox"/> Sensorless <input type="checkbox"/> Zone differential pressure sensors <input type="checkbox"/> Zone temperature sensor		
Number of zones	—	(Specify 1 to 5)			

*Same quantity as CHW pumps for decicated configuration

CHILLER COMMUNICATION		DIMENSIONS AND WEIGHTS				
		WIDTH	HEIGHT	DEPTH	WEIGHT	ENCLOSURE
Serial	<input type="checkbox"/> Modbus RTU	850 (33.50)	800 (31.50)	300 (11.80)	35 (75)	IP54
	<input type="checkbox"/> BACnet™ MS/TP <input type="checkbox"/> BACnet™ IP <input type="checkbox"/> LonWorks®	950 (37.40)	950 (37.40)	325 (12.80)	40 (85)	IP55
Hardwired (output 0-10V)	<input type="checkbox"/>	850 (33.50)	950 (37.40)	300 (11.80)	40 (85)	IP54
Hardwired (output 4-20mA)	<input type="checkbox"/>	950 (37.40)	1100 (43.30)	325 (12.80)	45 (95)	IP55

Dimensions in mm (inches) Weights in kg (lbs)
Weights are approximate

OPTIONS

- ECO*PULSE embedded intelligence (diagnostic service available on a subscription basis)
- Armstrong to enter the project specific data
- Export crating
- IPC with VFDs Assembly

SERIAL BAS COMMUNICATION

- Not required
- Modbus RTU
- Modbus TCP
- BACnet™ MS/TP
- BACnet™ IP
- LonWorks®

STANDARD FUNCTIONALITY AND CONSTRUCTION

- A large-sized (10.4") touch-screen operator interface (not to be directly exposed to sunlight)
- On-screen menu driven operator interface
- Manual or automatic system control (H-O-A selection)
- Remote or local start/stop mode of operation
- Diagnostic test of CPU, RAM and Flash memory
- Secure front cabinet door with lock and key
- Internal circuit breaker protection
- Three standard alarms:
 - 1 I-O system communication alarm
 - 2 System fault
 - 3 Sensor signal fault.
- Output for remote alarm/horn signal
- Standard serial communication between IPC controller and VFD's (Modbus)
- Logic outputs for chiller 2-way automatic ON/OFF isolation valves
- Logic output for chiller 2-way automatic modulating bypass valve
- Digital inputs for pump differential pressure switches on all variable speed primary pumps
- Automatic or manual pump alternation
- Automatic sequencing of chillers
- Pump speed, cooling valves and bypass valve PID control loop, adjustable
- Sensorless pumps control mode
- Cooling valves control mode (ASHRAE 90.1)
- ECO*PULSE ready
- Separate operating status display of primary pump status, pump speed(s) and drive status
- Separate operating status display of chiller status, demand limit, power, temperatures
- Separate operating status display of isolation and bypass valves
- Separate configuration screen for DP, flow, temperature and Chiller kW sensors
- Separate configuration screens for differential pressure sensor setpoint and operating range (psi or feet)
- Separate configuration screen for chiller configuration (capacity, RLA, staging).
- Separate status screen of remote zone signals, zone faults, zone setpoint and active control zone
- Embedded logic to prevent hunting, pump flow surge and motor overloading
- Field and factory password security
- Alarm logging of 2000 events
- Data trending with display screen
- Multi-color schematic active display of mechanical room hydronic circuit indicating operating status
- Manual control screen for fixed speed, by-pass, or selected variable speed settings
- Power supply : 100v-240v AC / 1 phase / 50-60 Hz

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