ARMSTRONG

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DATE:	New

IPS Controller 9500

SUBMITTAL

JOB: _____ REPRESENTATIVE: _____

_____ _____

_____ ORDER NO: _____ DATE: _____

ENGINEER: _____ SUBMITTED BY: _____ DATE: _____

CONTRACTOR: _____ APPROVED BY: _____ DATE: _____

SYSTEM LAYOUT / CONFIGURATION

Number of variable pumps being controlled	_____ (Specify 1 to 6)
Number of remote zone Differential Pressure signals	_____ (Specify 1 to 18)

IPS CONTROLLER 9500 VARIANT

Model	Input Zone Capability	Output Pump Control Capability	Select whether Chillers/Boilers are to be sequenced by IPS Controller 9500 Models: 9501-9503 NO sequencing Models: 9511-9513 WITH sequencing	
IPS Controller 9501 / 9511	up to 6 Zones	up to 6 pumps & 5 chillers/boilers	☐ IPS9501 ☐ IPS9511	☐ Sequence chillers/ boilers?
IPS Controller 9502 / 9512	up to 12 Zones	up to 6 pumps & 5 chillers/boilers	☐ IPS9502 ☐ IPS9512	☐ Sequence chillers/ boilers?
IPS Controller 9503 / 9513	up to 18 Zones	up to 6 pumps & 5 chillers/boilers	☐ IPS9503 ☐ IPS9513	☐ Sequence chillers/ boilers?

STANDARD FUNCTIONALITY and CONSTRUCTION

- A large-sized (10.4") touch-screen operator interface
- On-screen menu driven operator interface
- Manual or automatic system control (H-O-A selection)
- Remote or local start/stop mode of operation
- Field and factory password security
- Alarm and event logging of 2000 events
- Data trending with display screen
- PID control loop, adjustable
- CE Marked with EMC and LVD compliance
- Internal circuit breaker protection
- Automatic or manual pump alternation
- Remote start/stop of variable speed primary pumps by chiller, boiler or BMS
- Best Efficiency Point (BEP) staging
- Wire-to-water efficiency monitoring and staging
- 4 standard alarms: (1) drive, motor overload or pump failure (2) system fault (3) zone signal fault (4) primary pump fatal alarm
- Separate operating status display of primary pump status, pump speed(s) and drive status
- Digital inputs for pump differential pressure switches on all variable speed primary pumps
- Output for remote alarm/horn signal
- Input for silencer of remote alarm/horn
- Standard serial communication between IPS Controller and VFD's
- Separate input screen for DP, flow, temperature and kW sensors
- Separate input screens for differential pressure sensor setpoint and operating range (psi or feet)
- Logic outputs for VFD automatic bypass control
- Logic outputs for chiller/boiler 2-way automatic ON/OFF isolation valves
- Logic output for chiller/boiler 2-way automatic modulating bypass valve
- 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
- Multi-color schematic active display of mechanical room hydronic circuit indicating operating status
- Manual control screen for fixed speed, bypass or selected variable speed settings
- IP54 Enclosure with Door Interlocked Isolator
- Diagnostic test of CPU, RAM and Flash memory

DIMENSIONS and WEIGHTS

Model	Width	Height	Depth	Weight
IPS Controller 9501 / 9502 / 9511	600mm	800mm	250mm	43 KG
IPS Controller 9503 / 9512 / 9513				52 KG

POWER SUPPLY

Volts	Frequency	Phase
☐ 240 Vac	50 Hz	single

ENCLOSURE DETAILS

☐ IP54
☐ IP55
☐ IP65

OPTIONS and ACCESSORIES

- ☐ A serial communications port for communication with a Building Management System (standard communication options included with basic system are Modbus, LonWorks, Trend, Johnson Controls Metasys N2 and pLAN)
- ☐ Serial communications port to receive full information from the variable speed drives (VFD's)
- ☐ Optional communications gateways for BACnet and Webgate (TCP/IP)
- ☐ Armstrong shall enter the project specific field enter parameters
- ☐ Telephone communications modem and port
- ☐ Flash memory card expandable to 6 MB
- End-of-curve on primary pumps using ☐ DP sensor or ☐ Flow sensor

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