

## IPS Controller 9200

## SUBMITTAL

JOB: _____	REPRESENTATIVE: _____
_____	_____
ENGINEER: _____	ORDER NO: _____ DATE: _____
CONTRACTOR: _____	SUBMITTED BY: _____ DATE: _____
_____	APPROVED BY: _____ DATE: _____

SYSTEM LAYOUT / CONFIGURATION	
Number of pumps being controlled	_____ (Specify 1 to 6)
Number of remote Differential Pressure signals (zones)	_____ (Specify 1 to 18)

IPS CONTROLLER 9200 VARIANT			
	Input Zone Capability	Output Pump Control Capability	Select Standby or Parallel Operation of Pumps (VFDs)
IPS Controller 9201	up to 6 Zones	up to 6 pumps	<input type="checkbox"/> IPS9201 Standby <input type="checkbox"/> IPS9201 Parallel
IPS Controller 9202	up to 12 Zones	up to 6 pumps	<input type="checkbox"/> IPS9202 Standby <input type="checkbox"/> IPS9202 Parallel
IPS Controller 9203	up to 18 Zones	up to 6 pumps	<input type="checkbox"/> IPS9203 Standby <input type="checkbox"/> IPS9203 Parallel



- | STANDARD FUNCTIONALITY and CONSTRUCTION  |
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| <ul style="list-style-type: none"> <li>• A large-sized (10.4") touchscreen operator interface</li> <li>• On-screen menu driven operator interface</li> <li>• Manual or automatic system control (H-O-A selection)</li> <li>• Remote or local start/stop mode of operation</li> <li>• Field and factory password security</li> <li>• Alarm and event logging of 2000 events</li> <li>• Data trending with display screen</li> <li>• PID control loop, adjustable</li> <li>• CE Marked with EMC and LVD compliance</li> <li>• Internal circuit breaker protection</li> <li>• Automatic or manual pump alternation</li> <li>• Remote start/stop of primary pumps by chiller or BMS</li> <li>• Best Efficiency Point (BEP) staging</li> <li>• Wire-to-water efficiency monitoring and staging</li> <li>• 5 standard alarms: (1) drive, motor overload, or pump failure, (2) system fault, (3) zone signal fault, (4) primary pump fatal alarm, (5) secondary pump fatal alarm</li> <li>• Separate operating status display of primary &amp; secondary pump status, pump speed(s) and drive status</li> <li>• Digital inputs for pump differential pressure switches on both primary &amp; secondary pumps</li> <li>• Output for remote alarm/horn signal</li> <li>• Input for silencer of remote alarm/horn</li> <li>• Separate input screen for DP, flow, temperature and kW sensors</li> <li>• Separate input screens for differential pressure sensor setpoint and operating range (psi or feet)</li> <li>• Logic outputs for VFD automatic by-pass control</li> <li>• Logic outputs for constant primary run signals</li> <li>• Constant primary run feedback signals to controller</li> <li>• Separate status screen of remote zone signals, zone faults, zone setpoint and active control zone</li> <li>• Embedded logic to prevent hunting, pump flow surge and motor overloading</li> <li>• Multi-color schematic active display of mechanical room hydronic circuit indicating operating status</li> <li>• Manual control screen for fixed speed, by-pass or selected variable speed settings</li> <li>• IP54 Enclosure with Door Interlocked Isolator</li> <li>• Diagnostic test of CPU, RAM and Flash memory</li> </ul> |

DIMENSIONS and WEIGHTS				
Model	Width	Height	Depth	Weight
IPS Controller 9201	600 mm	800 mm	250 mm	43 KG
IPS Controller 9202				48 KG
IPS Controller 9203				52 KG

POWER SUPPLY			ENCLOSURE DETAILS
Volts	Frequency	Phase	
<input type="checkbox"/> 240 Vac	50 Hz	single	<input type="checkbox"/> IP54 <input type="checkbox"/> IP55 <input type="checkbox"/> IP65

- | OPTIONS and ACCESSORIES   |
|---|
| <input type="checkbox"/> 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) |
| <input type="checkbox"/> Serial communications port to receive full information from the variable speed drives (VFD's) (Modbus)   |
| <input type="checkbox"/> Optional communications gateways for BACnet and Webgate (TCP/IP)   |
| <input type="checkbox"/> Armstrong shall enter the project specific field enter parameters  |
| <input type="checkbox"/> Telephone communications modem and port  |
| <input type="checkbox"/> Flash memory card expandable to 6 MB   |
| End-of-curve on secondary pumps using<br><input type="checkbox"/> DP sensor or <input type="checkbox"/> Flow sensor   |

<b>Armstrong Integrated Limited</b> Wenlock Way Manchester United Kingdom, M12 5JL T: +44 (0) 8444 145 145 F: +44 (0) 8444 145 146	<b>S. A. Armstrong Limited</b> 23 Bertrand Avenue Toronto, Ontario Canada, M1L 2P3 T: 416-755-2291 F: 416-759-9101
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