

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 |
|---|
| <ul style="list-style-type: none"> • A large-sized (10.4") touchscreen 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 • UL Listed and CSA Approved • Internal circuit breaker protection • Automatic or manual pump alternation • Remote start/stop of primary pumps by chiller or BAS • Best Efficiency Point (BEP) staging • Wire-to-water efficiency monitoring and staging • 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 • Separate operating status display of primary & secondary pump status, pump speed(s) and drive status • Digital inputs for pump differential pressure switches on both primary & secondary pumps • Output for remote alarm/horn signal • Input for silencer of remote alarm/horn • 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 by-pass control • Logic outputs for constant primary run signals • Constant primary run feedback signals to controller • 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, by-pass or selected variable speed settings • Secure front cabinet door with lock and key • Diagnostic test of CPU, RAM and Flash memory |

DIMENSIONS and WEIGHTS				
Model	Width	Height	Depth	Weight
IPS Controller 9201	24 (610)	24 (610)	8 (203)	95 (43)
IPS Controller 9202				105 (48)
IPS Controller 9203	24 (610)	36 (914)	8 (203)	115 (52)

Note: Dimensions are in inches (mm) and weights are in lbs. (kg).

POWER SUPPLY		
Volts	Frequency	Phase
<input type="checkbox"/> 115 Vac	60 Hz	single
<input type="checkbox"/> 230 Vac		
<input type="checkbox"/> 240 Vac	50 Hz	

ENCLOSURE DETAILS
<input type="checkbox"/> NEMA 1
<input type="checkbox"/> NEMA 2
<input type="checkbox"/> NEMA 3R
<input type="checkbox"/> NEMA 4
<input type="checkbox"/> NEMA 12
<input type="checkbox"/> EEMAC 2

- | OPTIONS and ACCESSORIES |
|---|
| <input type="checkbox"/> A serial communications port for communication with a Building Automation 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 <input type="checkbox"/> DP sensor or <input type="checkbox"/> Flow sensor |

Armstrong Pumps Inc.
 93 East Avenue
 North Tonawanda, New York
 U.S.A. 14120-6594
 Tel: (716) 693-8813
 Fax: (716) 693-8970
 www.armstrongpumps.com

Armstrong Holden Brooke Pullen
 Wenlock Way
 Manchester
 United Kingdom, M12 5JL
 Tel: +44 (0) 1612 232223
 Fax: +44 (0) 1612 209660



S.A. Armstrong Limited
 23 Bertrand Avenue
 Toronto, Ontario
 Canada, M1L 2P3
 Tel: (416) 755-2291
 Fax: (416) 759-9101

Armstrong Darling
 9001 De L'Innovation, Suite 200
 Montreal (Anjou), Quebec
 Canada, H1J 2X9
 Tel: (514) 352-2424
 Fax: (514) 352-2425

