

# DESIGN ENVELOPE 4382 DUALARM

## SINGLE PHASE | 0408-007.5 | SUBMITTAL

File No: 100.4684  
 Date: OCTOBER 27, 2014  
 Supersedes: NEW  
 Date: NEW

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
 \_\_\_\_\_ Order No: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### PUMP DESIGN DATA

No. of pumps: \_\_\_\_\_ Tag: \_\_\_\_\_  
 Capacity: \_\_\_\_\_ USgpm (L/s) Head: \_\_\_\_\_ ft (m)  
 Liquid: \_\_\_\_\_ Viscosity: \_\_\_\_\_  
 Temperature: \_\_\_\_\_ °F (°C) Specific gravity: \_\_\_\_\_  
 Suction: 4" (100mm) Discharge: 4" (100mm)

### MOTOR DESIGN DATA

HP: 7.5 RPM: 1756 Frame size: \_\_\_\_\_  
 Enclosure: \_\_\_\_\_ Volts: 208 Freq: 60 Hz  
 Phase: 3 Efficiency: NEMA premium

### MAXIMUM PUMP OPERATING CONDITIONS

#### ANSI 125

175 psig at 150°F (12 bars at 65°C)  
 140 psig at 250°F (10 bars at 121°C)

#### ANSI 250

250 psig at 150°F (17 bars at 65°C)  
 250 psig at 250°F (17 bars at 121°C)

- Tolerance of ±0.125" (±3 mm) should be used
- For exact installation, data please write factory for certified dimensions

### MECHANICAL SEAL DATA

Seal type: 2A  
 Stationary seat: Silicone carbide  
 Secondary seal: EPDM  
 Rotating hardware: Stainless steel  
 Spring: Stainless steel

### CONTROLS DATA

**Power supply:** Volts: 200-240VAC  
 Freq: 50/60Hz Phase: 1

**Sensorless control:** Standard

**Minimum system pressure to be maintained:** \_\_\_\_\_ ft (m)\*

**Protocol (standard):**  Modbus RTU  BACnet™ MS/TP  
 Johnson® N2  Siemens® FLN

**Protocol (optional):**  LonWorks®

**Enclosure:**  Indoor - UL TYPE 12  
 Outdoor - UL TYPE 4X with Weather Shield  
 Outdoor - UL TYPE 4X less Weather Shield

**Disconnect switch:**  Non-fused

**Duty/standby pre-wired bridge:**

**EMI/RFI control:** 1-phase IVS102 units do not meet the EN61800-3 directive

**Harmonic suppression:** Dual DC-link reactors (Equivalent: 5% AC line reactor) Supporting IEEE 519-1992 requirements\*\*

**Cooling:** Fan-cooled through back channel

**Ambient temperature:** -10°C to +45°C up to 1000 meters above sea level (-14°F to +113°F, 3300 ft)

**Analog I/O:** Two current or voltage inputs, one current output

**Digital I/O:** Six programmable inputs (two can be configured as outputs)

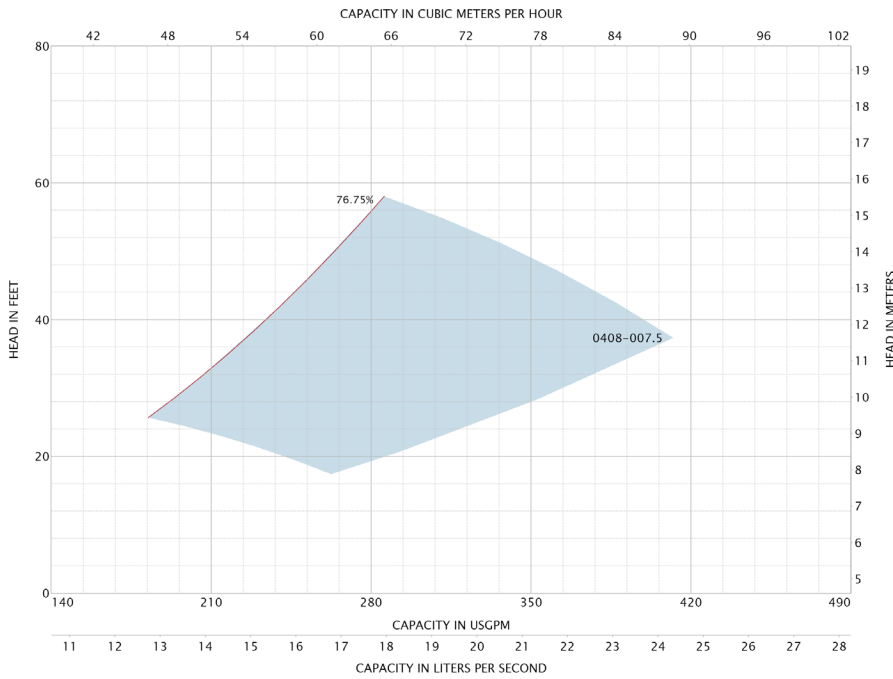
**Pulse inputs:** Two programmable

**Relay outputs:** Two programmable

**Communication port:** 1-RS485, 1-USB

\*If minimum maintained system pressure is not known: Default to 40% of design head  
 \*\*The IVS 102 drive is a low harmonic drive via built-in DC line reactors. This does not guaranty performance to any system wide harmonic specification or the costs to meet a system wide specification. If supplied with the system electrical details, Armstrong will run a computer simulation of the system wide harmonics. If system harmonic levels are exceeded Armstrong can also recommend additional harmonic mitigation and the costs for such mitigation.

FLUID TYPE	ALL GLYCOLS > 30% WT CONC		ALL OTHER NON-POTABLE FLUIDS		POTABLE (DRINKING) WATER	
	up to 200°F / 93°C	over 200°F / 93°C	up to 200°F / 93°C	over 200°F / 93°C	up to 200°F / 93°C	over 200°F / 93°C
Temperature						
Rotating face	Silicone carbide		Resin bonded carbon	Antimony loaded carbon	Resin bonded carbon	
Seat elastomer	EPDM (L-cup)	EPDM (O-ring)	EPDM (L-cup)	EPDM (O-ring)	EPDM (L-cup)	EPDM (O-ring)
Material code	SCSC L EPSS 2A	SCSC O EPSS 2A	C-SC L EPSS 2A	ACSC O EPSS 2A	C-SC L EPSS 2A	C-SC O EPSS 2A

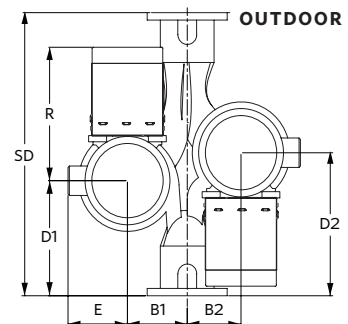
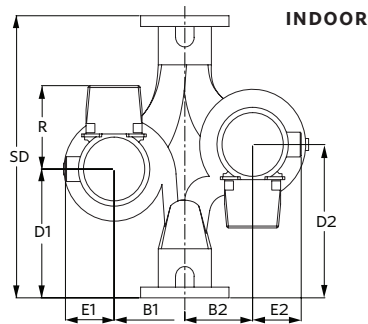


**DIMENSION DATA**

	INDOOR (UL TYPE 12/ODP)	OUTDOOR (UL TYPE 4X/TEFC)
<b>Frame size:</b>	213	213
<b>Size:</b>	4×4×8	4×4×8
<b>HP:</b>	7.5	7.5
<b>RPM:</b>	1756	1756
<b>AB:</b>	27.18(690)	33.22(844)
<b>B1:</b>	8.75(222)	8.75(222)
<b>B2:</b>	8.75(222)	8.75(222)
<b>C1:</b>	15.09(383)	15.09(383)
<b>C2:</b>	15.63(397)	15.63(397)
<b>D1:</b>	14.84(377)	14.84(377)
<b>D2:</b>	14.84(377)	14.84(377)
<b>E:</b>	8.25(210)	8.25(210)
<b>F:</b>	16.77(426)	20.25(514)
<b>P:</b>	12.13(308)	11.25(286)
<b>SD:</b>	27.63(702)	27.63(702)
<b>T:</b>	6.28(160)	6.28(160)
<b>XY:</b>	25.49(647)	26.61(676)
<b>Weight:</b>	722(327.5)	822(372.9)

Performance curves are for reference only.  
Confirm current performance data with Armstrong ACE Online selection software.

Dimensions - inch (mm)  
Weight - lbs (kg)



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