

## DESIGN ENVELOPE 4382 DUALARM | 0406-001.5 | SUBMITTAL

File No: 100.4612  
 Date: OCTOBER 30, 2015  
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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)

**OSHPD Seismic Certification OSP-0422-10**

**UL STD 778 & CSA STD C22.2 NO.108 certified**

### MOTOR DESIGN DATA

HP: \_\_\_\_\_ RPM: \_\_\_\_\_ Frame size: \_\_\_\_\_ Enclosure: \_\_\_\_\_

Volts: \_\_\_\_\_ Hertz: 60 Hz Phase: 3

Efficiency: NEMA premium 12.12

### 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: Silicon carbide

Secondary Seal: EPDM Rotating Hardware: Stainless steel

Spring: Stainless steel

### CONTROLS DATA

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

Fused disconnect switch:

Duty/standby pre-wired bridge:

EMI/RFI control: Integrated filter designed to meet EN61800-3

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

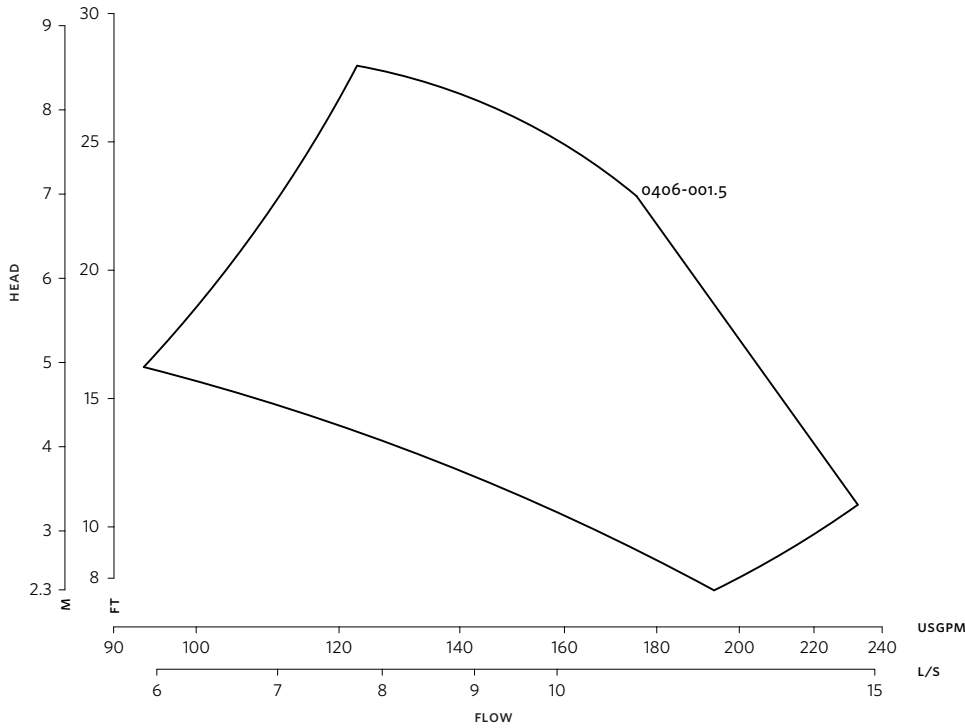
Relay outputs: Two programmable

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	
Temperature	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
Rotating Face	Silicon 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**

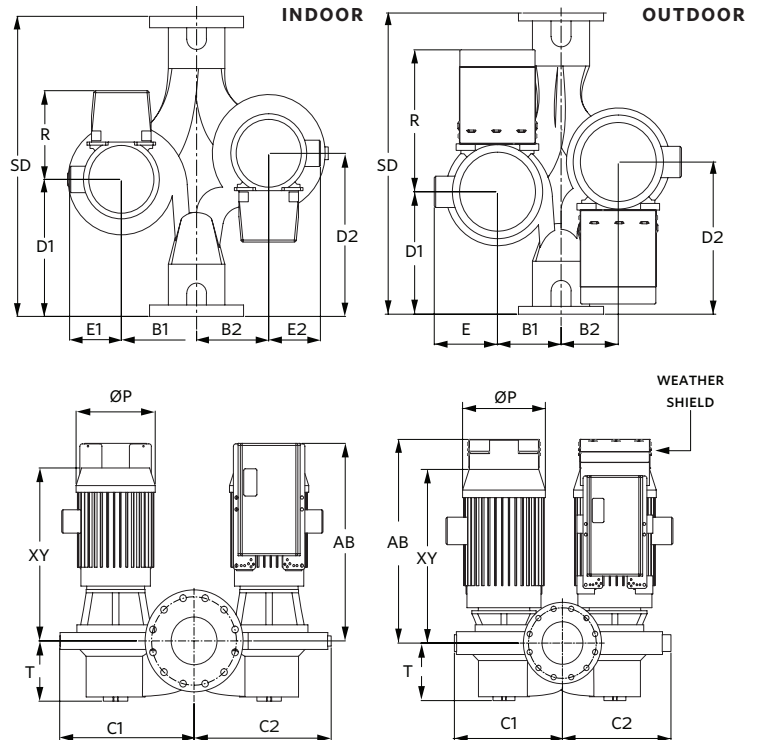
	INDOOR (UL TYPE 12/ODP)	OUTDOOR (UL TYPE 4X/TEFC)
<b>Frame size:</b>	145	145
<b>Size:</b>	4×4×6	4×4×6
<b>HP:</b>	1.5	1.5
<b>RPM:</b>	1800	1800
<b>AB:</b>	12.65(321)	18.50(470)
<b>B1:</b>	6.81(173)	6.81(173)
<b>B2:</b>	6.81(173)	6.81(173)
<b>C1:</b>	12.14(308)	12.14(308)
<b>C2:</b>	12.63(321)	12.63(321)
<b>D1:</b>	13.84(352)	13.84(352)
<b>D2:</b>	13.84(352)	13.84(352)
<b>E:</b>	6.13(156)	6.13(156)
<b>P:</b>	8.63(219)	7.83(199)
<b>F:</b>	24.19(614)	30.15(766)
<b>SD:</b>	26.63(676)	26.63(676)
<b>T:</b>	5.80(147)	5.80(147)
<b>XY:</b>	17.25(438)	17.00(432)
<b>Weight:</b>	432(196.0)	440(199.6)

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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