# DESIGN ENVELOPE 4312 TWIN | 8015-00.75 |
## SUBMITTAL

**File No:** 100.4714IN
**Date:** AUGUST 14, 2015
**Supersedes:** 100.4714IN
**Date:** MAY 27, 2015

Job: _____ Representative: _____

_____ Order No: _____ Date: _____

Engineer: _____ Submitted by: _____ Date: _____

Contractor: _____ Approved by: _____ Date: _____

### PUMP DESIGN DATA

No. of pumps: _____ Tag: _____

Capacity: _____ $m^3/h$(USgpm) Head: _____m (ft)

Liquid: _____ Viscosity: _____

Temperature: _____°C (°F) Specific gravity: _____

Suction: 80mm (3") Discharge: 80mm (3")

### MOTOR DESIGN DATA

kW:_____ RPM: _____ Enclosure: _____

Volts: _____ Hertz: 50 Hz Phase: 3

Efficiency: ☐ IE2 Frame size: _____

### MAXIMUM PUMP OPERATING CONDITIONS

**PN 16**

16 bars at 149°C (232 psig at 300°F)

7 bars at 150°C (100 psig at 300°F)

**PN 25**

25 bars at 149°C (375 psig at 300°F)

21 bars at 150°C (260 psig at 300°F)

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

### MECHANICAL SEAL DESIGN DATA

See file no. 43.50 for standard mechanical seal details as indicated below

Armstrong seal reference number

☐ C1 (a) ☐ Others: _____

### CONTROLS DATA

**Sensorless control:** Standard

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

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

**Protocol (optional):** ☐ LonWorks®

**Enclosure:** ☐ Indoor – IP55 ☐ Outdoor – IP66

**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

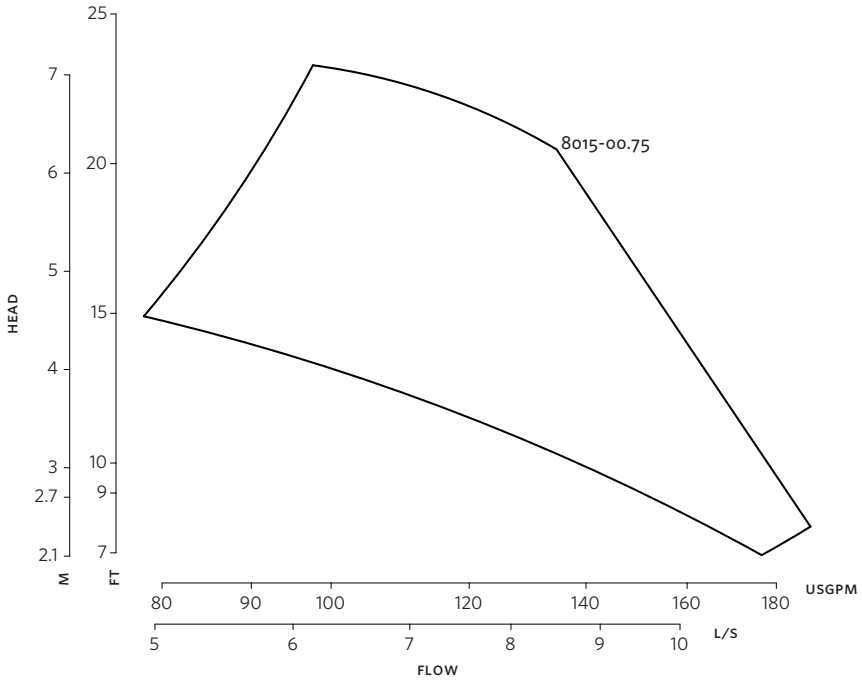
**Relay outputs:** Two programmable

**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.

**2**



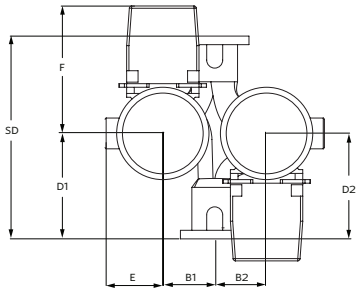

Performance curves are for reference only.
Confirm current performance data with Armstrong ACE Online selection software.

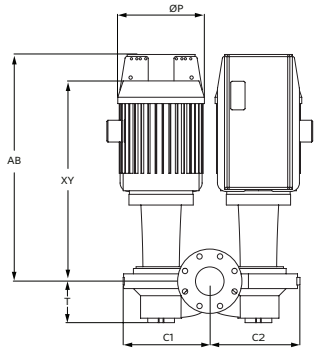
## DIMENSION DATA

| | INDOOR IP55 |
|---|---|
| **Frame size:** | 80 |
| **Size:** | 8015–00.75 |
| **kW:** | 0.75 |
| **RPM:** | 1500 |
| **AB:** | 526(20.70) |
| **B1:** | 225(08.94) |
| **B2:** | 225(08.94) |
| **C1:** | 362(14.25) |
| **C2:** | 362(14.25) |
| **D1:** | 180(07.17) |
| **D2:** | 220(08.75) |
| **E:** | 123(04.84) |
| **F:** | 148(05.82) |
| **P:** | 170(06.78) |
| **SD:** | 380(15.05) |
| **T:** | 150(05.90) |
| **XY:** | 541(21.38) |
| **Weight:** | 137.44(303) |

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

**INDOOR**

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