ARMSTRONG

# DESIGN ENVELOPE 4200H | END SUCTION BASE MOUNTED | SINGLE PHASE | 0308-007.5 | SUBMITTAL

**File No:** 100.3443
**Date:** APRIL 18, 2016
**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) Flanged

Discharge: 3"(75mm) Flanged

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

## MOTOR DESIGN DATA

| | | |
|---|---|---|
| HP: 7.5 | RPM: 1800 | Frame size: 213TC |
| Enclosure: TEFC | Volts: 208 | Freq: 60 Hz |
| Phase: 3 | Efficiency: NEMA premium 12.12 | |

## MAXIMUM PUMP OPERATING CONDITIONS

**ANSI 125**

175 psig at 140°F (12 bars at 60°C)

100 psig at 300°F (7 bars at 149°C)

**ANSI 250**

375 psig at 100°F (26 bars at 38°C)

275 psig at 300°F (19 bars at 149°C)

- Tolerance of ±0.125" (±3 mm) should be used
- For exact installation, data please write factory for certified dimensions
- Pump equipped with casing drain plug and ¼" NPT suction and discharge gauge ports

## OPTIONAL EQUIPMENT

## 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

**Disconnect switch:** ☐ Non-fused

**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.

## MECHANICAL SEAL DATA

**Seal type:** AB2

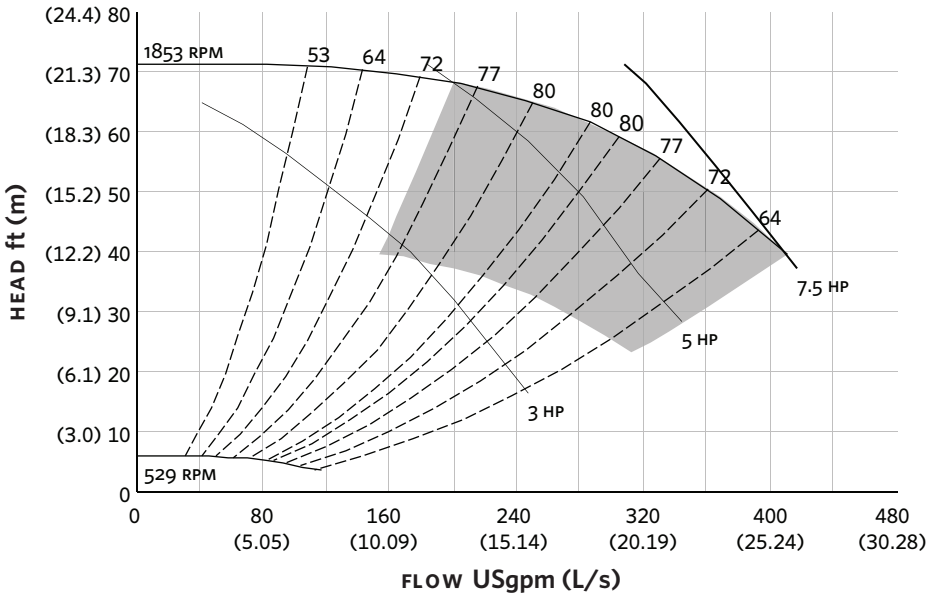
**Secondary seal:** Viton

**Spring:** Stainless steel

**Stationary seat:** Sintered silicon carbide

**Rotating hardware:** Stainless steel

## EXTENDED SPEED



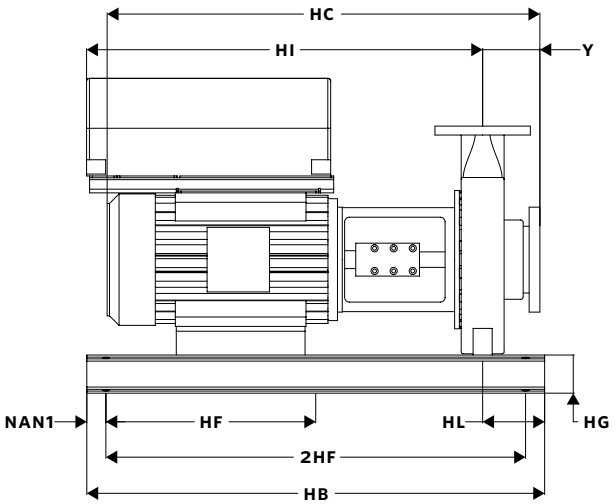

Performance curves are for reference only.
Confirm current performance data with Armstrong ACE Online selection software.

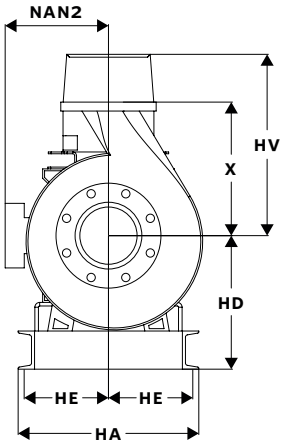
## DIMENSION DATA

| | INDOOR (UL TYPE 12/ODP) |
|---|---|
| **Frame size:** | 213TC |
| **Size:** | 4×3×8 |
| **HP:** | 7.5 |
| **RPM:** | 1800 |
| **HA:** | 14.00 (355) |
| **HB:** | 33.00 (838) |
| **HC:** | 32.28 (820) |
| **HD:** | 10.25 (260) |
| **HE:** | 6.37 (162) |
| **HF:** | 14.50 (368) |
| **2HF:** | 29.00 (737) |
| **HG:** | 3.00 (76) |
| **HI:** | 32.12 (816) |
| **HL:** | 4.50 (114) |
| **HV:** | 16.98 (431) |
| **NAN1:** | 2.00 (51) |
| **NAN2:** | 7.95 (202) |
| **X:** | 11.00 (279) |
| **Y:** | 4.00 (102) |
| **Weight:** | 447 (202.6) |

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

**INDOOR**

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