

# **DESIGN ENVELOPE** 4200H | END SUCTION BASE MOUNTED SPLIT-COUPLED | 1506-007.5 | **SUBMITTAL**

File No: 100.3212 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: 3"(75mm) Flanged       |                   |         |  |  |
| Discharge: 1.5" (40 mm) Flanged |                   |         |  |  |

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

# MOTOR DESIGN DATA

| HP: 7.5 | rpm: 3600 | Frame size: 213TC | Enclosure: TEFC |
|---------|-----------|-------------------|-----------------|
| Volts:  |           | Hertz: 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

| Sensorless Control:                          | Standard   |  |
|--|--|--|
| Minimum system pressure<br>to be maintained: | ft (m)*  |  |
| Protocol (standard):                         | □ Modbus rtu □ bacnet™ ms/tp<br>□ Johnson® n2 □ Siemens® fln   |  |
| Protocol (optional):                         | $\Box$ LonWorks <sup>®</sup>   |  |
| Enclosure:                                   | : 🗆 Indoor – UL TYPE 12  |  |
| Fused disconnect switch:                     |  |  |
| ЕМІ/RFI control:                             | Integrated filter designed to meet<br>EN61800-3  |  |
| Harmonic suppression:                        | Dual DC-link reactors (Equivalent: 5%<br>AC line reactor) Supporting IEEE<br>519-1992 requirements** |  |
| Cooling:                                     | Fan-cooled through back channel  |  |
| Ambient temperature:                         | -10°C to +45°C up to 1000 meters above<br>sea level (-14°F to +113°F, 3300 ft)                       |  |
| Analog ı/o:                                  | Two current or voltage inputs,<br>one current output   |  |
| Digital ı/o:                                 | Six programmable inputs (two can<br>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.

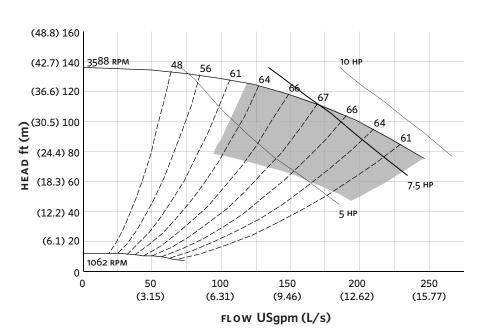
#### MECHANICAL SEAL DATA

| Seal type: AB2          | S |
|-------------------------|---|
| Secondary seal: Viton   | R |
| Spring: Stainless steel |   |

Stationary seat: Sintered silicon carbide Rotating hardware: Stainless steel

#### 2

### **EXTENDED SPEED**



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

NAN2

HE

HA

HE

|   | INDOOR           |
|---|------------------|
|   | (UL TYPE 12/ODP) |
| Frame size:                                 | 213TC            |
| Size:                                       | 3×1.5×6          |
| HP:   | 7.5              |
| RPM:  | 3600             |
| HA:   | 14.00 (355)      |
| HB:   | 33.00 (838)      |
| нс:   | 32.27 (820)      |
| HD:   | 8.25 (210)       |
| HE:   | 6.37 (162)       |
| HF:   | 14.50 (368)      |
| 2HF:  | 29.00 (737)      |
| HG:   | 3.00 (76)        |
| HI:   | 32.11 (816)      |
| HL:   | 4.50 (114)       |
| HV:   | 16.98 (431)      |
| NaN1:                                       | 2.00 (51)        |
| Nan2:                                       | 7.95 (202)       |
| x:  | 6.50 (165)       |
| Υ:  | 4.00 (102)       |
| Weight:                                     | 349 (158.2)      |
| Dimensions – inch (mm)<br>Weight – Ibs (kg) |                  |

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NAN1-

ARMSTRONG FLUID TECHNOLOGY ESTABLISHED 1934

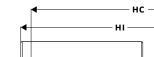
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