

DESIGN ENVELOPE 4200H | END SUCTION BASE MOUNTED SPLIT-COUPLED | 1506-010.0 | **SUBMITTAL**

File No: 100.3214

Date: APRIL 18, 2016

Supersedes: NEW

Date: NEW

Contractor:	Job:		Representative:	
PUMP DESIGN DATA No. of pumps: Tag: Sensorless Control: Standard No. of pumps: USgpm (L/s) Head:ft (m) Liquid: Viscosity: Temperature: °F (°C) Specific gravity: Suction: 3" (75mm) Flanged Discharge: 1.5" (40mm) Flanged Discharge: 1.5" (40mm) Flanged Discharge: 1.5" (40mm) Flanged Discharge: 1.5" (50 mm) Flanged MOTOR DESIGN DATA HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC Volts: Hertz: 60 Hz Phase: 3 Efficiency: NEMA premium 12.12 MAXIMUM PUMP OPERATING CONDITIONS ANSI 125 Pulse inputs: Two programmable Relay outputs: Two programmable CONTROLS DATA Sensorless Control: Standard Minimum system pressure to be maintained: ft (m)* Minimum system pressure to be maintained: ft (m)* Protocol (standard): Modbus RTU Bkoneti™ MS/TP Protocol (standard): Modbus RTU Bkoneti™ MS/TP Protocol (standard): Modbus RTU Bkoneti™ MS/TP Protocol (standard): Hondown MF/TP Protocol (optional): LonWorks® Enclosure: Indoor - UL TYPE 12 Fused disconnect switch: EMI/RFI control: Integrated filter designed to meet EN6180o-3 Harmonic suppression: Dual Dc-link reactors (Equivalent: 5% AC line reactor) Supporting IEEE 591-1992 requirements** AC line reactor) Supporting IEEE 591-1992 requirements** A Cooling: Fan-cooled through back channel Ambient temperature: -10°C to +45°C up to 1000 meters abov sea level (-14°F to +113°F, 3300 ft) Digital I/O: Six programmable inputs (two can be configured as outputs) Pulse inputs: Two programmable Relay outputs: Two programmable		Or	rder No:	Date:
PUMP DESIGN DATA No. of pumps: Tag: Sensorless Control: Standard Minimum system pressure to be maintained: ft (m)* Liquid: Viscosity: Protocol (standard): Modbus RTU BACNet** Ms/TP Temperature: °F (°C) Specific gravity: Protocol (optional): LonWorks* Suction: 3"(75mm) Flanged Discharge: 1.5"(40mm) Flang			bmitted by:	Date:
No. of pumps: Tag: Sensorless Control: Standard Capacity:USgpm (L/s) Head: ft (m) Liquid: Viscosity: Protocol (standard): ft (m)* Emperature: °F (°C) Specific gravity: Protocol (standard): Modbus RTU BACREt™ MS/TP Suction: 3"(75mm) Flanged Protocol (optional): LonWorks® Enclosure: Indoor - UL TYPE 12 Fused disconnect switch: 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** HPI: 10			pproved by:	Date:
Capacity:USgpm (L/s) Head:ft (m)	PUMP DESIGN DATA		CONTROLS DATA	
to be maintained:	No. of pumps:	Tag:	Sensorless Control:	: Standard
Temperature:			to be maintained:	:ft (m)*
Discharge: 1.5" (40 mm) Flanged Enclosure: ☐ Indoor - UL TYPE 12 Fused disconnect switch: ☐ 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** HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC Cooling: Fan-cooled through back channel Volts: ☐ Hertz: 60 Hz Phase: 3 Ambient temperature: -10°C to +45°C up to 1000 meters abov sea level (-14°F to +113°F, 3300 ft) Efficiency: NEMA premium 12.12 Analog I/O: Two current or voltage inputs, one current output Digital I/O: Six programmable inputs (two can be configured as outputs) ANSI 125 Pulse inputs: Two programmable Relay outputs: Two programmable			: Protocol (Standard):	
Fused disconnect switch: UL STD 778 & CSA STD C22.2 NO.108 certified MOTOR DESIGN DATA HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC Volts: Hertz: 60 Hz Phase: 3 Efficiency: NEMA premium 12.12 MAXIMUM PUMP OPERATING CONDITIONS ANSI 125 To poig at 140°F (12 bars at 60°C) 100 psig at 1200°F (77 bars at 140°C) PIMI REMI (Analog I/O: Two programmable inputs) Fused disconnect switch: 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 abov sea level (-14°F to +113°F, 3300 ft) Digital I/O: Six programmable inputs (two can be configured as outputs) Pulse inputs: Two programmable Relay outputs: Two programmable	Suction: 3"(75mm) Flanged		Protocol (optional):	: □ LonWorks®
### Control: Integrated filter designed to meet EN61800-3 ### HARMOTOR DESIGN DATA ### HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC ### Volts: Hertz: 60 Hz Phase: 3 #### HP: 10 RPM premium 12.12 ### Analog I/O: Two current or voltage inputs, one current output ### MAXIMUM PUMP OPERATING CONDITIONS ### ANSI 125 ### Pina RPM: 3600 Frame size: 215TC Enclosure: TEFC ### 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) ### Digital I/O: Six programmable inputs (two can be configured as outputs) ### Pulse inputs: Two programmable ### Pulse inputs: Two programmable ### Relay outputs: Two programmable ### Pulse inputs: Two programmable	Discharge: 1.5"(40mm) Flanged		•	
Harmonic suppression: Dual Dc-link reactors (Equivalent: 5% Ac line reactor) Supporting IEEE 519-1992 requirements** HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC Volts: Hertz: 60 Hz Phase: 3 Efficiency: NEMA premium 12.12 Analog I/O: Two current or voltage inputs, one current output MAXIMUM PUMP OPERATING CONDITIONS ANSI 125 Pulse inputs: Two programmable Relay outputs: Two programmable Relay outputs: Two programmable			Fused disconnect switch:	: 🗆
Ac line reactor) Supporting IEEE 519-1992 requirements** HP: 10 RPM: 3600 Frame size: 215TC Enclosure: TEFC Volts: Hertz: 60 Hz Phase: 3 Efficiency: NEMA premium 12.12 MAXIMUM PUMP OPERATING CONDITIONS ANSI 125 Pulse inputs: Two programmable Relay outputs: Two programmable Ac line reactor) Supporting IEEE 519-1992 requirements** Analog 1/0: Cooling: Fan-cooled through back channel Ambient temperature: -10°C to +45°C up to 1000 meters abov sea level (-14°F to +113°F, 3300 ft) Two current or voltage inputs, one current output Digital 1/0: Six programmable inputs (two can be configured as outputs) Pulse inputs: Two programmable	UL STD 778 & CSA STD C22.2 NO.108 certified		емі/RFI control:	
Volts: Hertz: 60 Hz Phase: 3 Efficiency: NEMA premium 12.12 Analog I/O: Two current or voltage inputs, one current output MAXIMUM PUMP OPERATING CONDITIONS Digital I/O: Six programmable inputs (two can be configured as outputs) ANSI 125 Pulse inputs: Two programmable 175 psig at 140°F (12 bars at 60°C) Relay outputs: Two programmable	MOTOR DESIGN DATA		Harmonic suppression:	Ac line reactor) Supporting IEEE
Efficiency: NEMA premium 12.12 Analog I/O: Two current or voltage inputs, one current output MAXIMUM PUMP OPERATING CONDITIONS Digital I/O: Six programmable inputs (two can be configured as outputs) ANSI 125 Pulse inputs: Two programmable 175 psig at 140°F (12 bars at 60°C) Relay outputs: Two programmable	нр: 10	ze: 215TC Enclosure: TEFC	Cooling:	: Fan-cooled through back channel
Analog I/O: Two current or voltage inputs, one current output MAXIMUM PUMP OPERATING CONDITIONS Digital I/O: Six programmable inputs (two can be configured as outputs) ANSI 125 Pulse inputs: Two programmable 175 psig at 140°F (12 bars at 60°C) Relay outputs: Two programmable		o Hz Phase: 3	Ambient temperature:	: -10°C to +45°C up to 1000 meters abov sea level (-14°F to +113°F, 3300 ft)
be configured as outputs) ANSI 125 Pulse inputs: Two programmable 175 psig at 140°F (12 bars at 60°C) Relay outputs: Two programmable	Efficiency. NEMA premium 12.12		Analog ı/o:	: Two current or voltage inputs, one current output
175 psig at 140°F (12 bars at 60°C) Relay outputs: Two programmable	MAXIMUM PUMP OPERATING CONDITIONS		Digital ı/o:	Six programmable inputs (two can be configured as outputs)
100 nsig at 200°E (7 hars at 140°C)			Pulse inputs:	: Two programmable
100 psig at 300°F (7 pars at 149°C) Communication port: 1-RS485, 1-USB			Relay outputs:	: Two programmable
			Communication port:	: 1-RS485, 1-USB
ANSI 250 *If minimum maintained system pressure is not known: Default to 40% of design head *The manual design head to 50°F (26 bars at 38°C)	ANSI 250 375 psig at 100°F (26 bars at 38°C)		•	

**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.

\bullet Pump equipped with casing drain plug and $\mbox{$\frac{1}{4}$"}$ NPT suction and discharge gauge ports

OPTIONAL EQUIPMENT

275 psig at 300°F (19 bars at 149°C)

certified dimensions

• Tolerance of ±0.125" (±3 mm) should be used

• For exact installation, data please write factory for

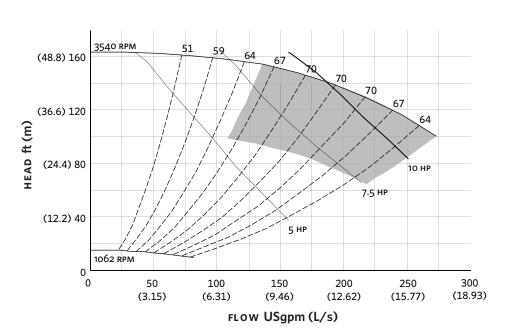
MECHANICAL SEAL DATA

Seal type: AB2Stationary seat: Sintered silicon carbideSecondary seal: VitonRotating hardware: Stainless steel

Spring: Stainless steel

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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: 215TC

Size: 3×1.5×6

HP: 10

RPM: 3600

на: 14.00 (355)

11A 11.00 (333)

нв: 33.00 (838)

HC: 33.77 (858)

HD: 8.25 (210)

HE: 6.37 (162)

HF: 14.50 (368)

2HF: 29.00 (737)

HG: 3.00 (76)

ни: 29.53 (750)

HL: 4.50 (114)

HV: 14.42 (366)

NaN1: 2.00 (51)

NaN2: 7.95 (202)

x: 6.50 (165)

Y: 4.00 (102) **Weight:** 384 (174.1)

Dimensions - inch (mm)

Weight - Ibs (kg)

INDOOR



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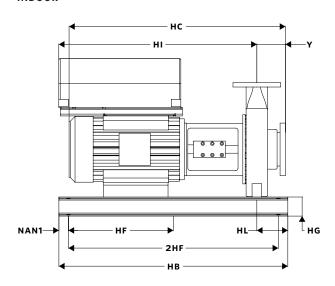
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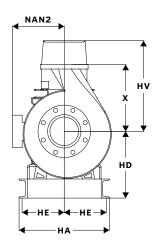
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