

# DESIGN ENVELOPE 4312 TWIN | 0308-020.0 | submittal

Discharge: 3" (75mm)

File No: 100.4770 Date: JANUARY 14, 2016 Supersedes: 100.4770 Date: AUGUST 14, 2015

Job:		Representative:		
	C	Order No:	Date:	
Engineer:	S	ubmitted by:	Date:	
Contractor:		Approved by:	Date:	
PUMP DESIGN DATA		CONTROLS DATA		
No. of pumps:	Tag:	Sensorless Control:	itandard	
Capacity:USgpm (L/s) Liquid:		to be maintained:	ft (m)*	
Temperature:°F (°C)		Durate and Zeta and And De E	] Modbus RTU □ BACnet™ MS/TP	

OSHPD Seismic Certification OSP-0422-10

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

### MOTOR DESIGN DATA

Suction: 3" (75mm)

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)

• Tolerance of ±0.125" (±3 mm) 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: \_

Ainimum system pressure to be maintained:		ft (m)*
Protocol (standard):		□ bacnet™ ms/tp □ Siemens® fln
Protocol (optional):	$\Box$ LonWorks <sup>®</sup>	
Enclosure:	□ Indoor - UL TYPE 12 □ Outdoor - UL TYPE 4X with Weather Shield □ Outdoor - UL TYPE 4X less Weather Shield	

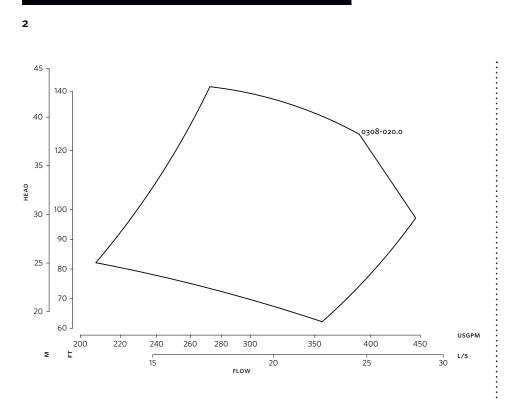
## Fused disconnect switch: $\Box$

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 ı/o:	Two current or voltage inputs, one current output	
Digital ı/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.

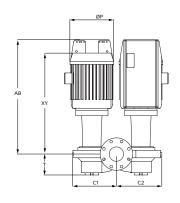
SUBMITTAL 0308-020.0



Performance curves are for reference only.

Confirm current performance data with Armstrong ACE Online selection software.

INDOOR U D1 B2 B1

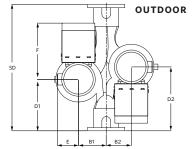


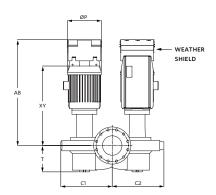
## **DIMENSION DATA**

	INDOOR	OUTDOOR
	(UL TYPE 12/ODP)	(UL TYPE 4X/TEFC)
Frame size:	254TC	256TC
Size:	3×3×8	3×3×8
HP:	20	20
RPM:	3000	3000
AB:	35.99(914)	41.78(1061)
B1:	9.84(250)	9.84(250)
B2:	9.84(250)	9.84(250)
C1:	16.22(412)	16.22(412)
C2:	16.24(412)	16.24(412)
D1:	7.87(200)	7.87(200)
D2:	9.05(230)	9.05(230)
E:	9.94(252)	8.90(226)
F:	17.84(453)	21.44(545)
P:	13.38(340)	13.38(340)
SD:	15.75(400)	15.75(400)
т:	6.22(158)	6.22(158)
XY:	34.03(864)	34.10(866)
Weight:	872(395.5)	1068(484.4)

Dimensions - inch (mm)

Weight – Ibs (kg) ÷





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