

PROJECT:	_____	UNIT TAG:	_____	QUANTITY:	_____
REPRESENTATIVE:	_____	TYPE OF SERVICE:	_____	DATE:	_____
ENGINEER:	_____	SUBMITTED BY:	_____	DATE:	_____
CONTRACTOR:	_____	APPROVED BY:	_____	DATE:	_____
	_____	ORDER NO.:	_____	DATE:	_____

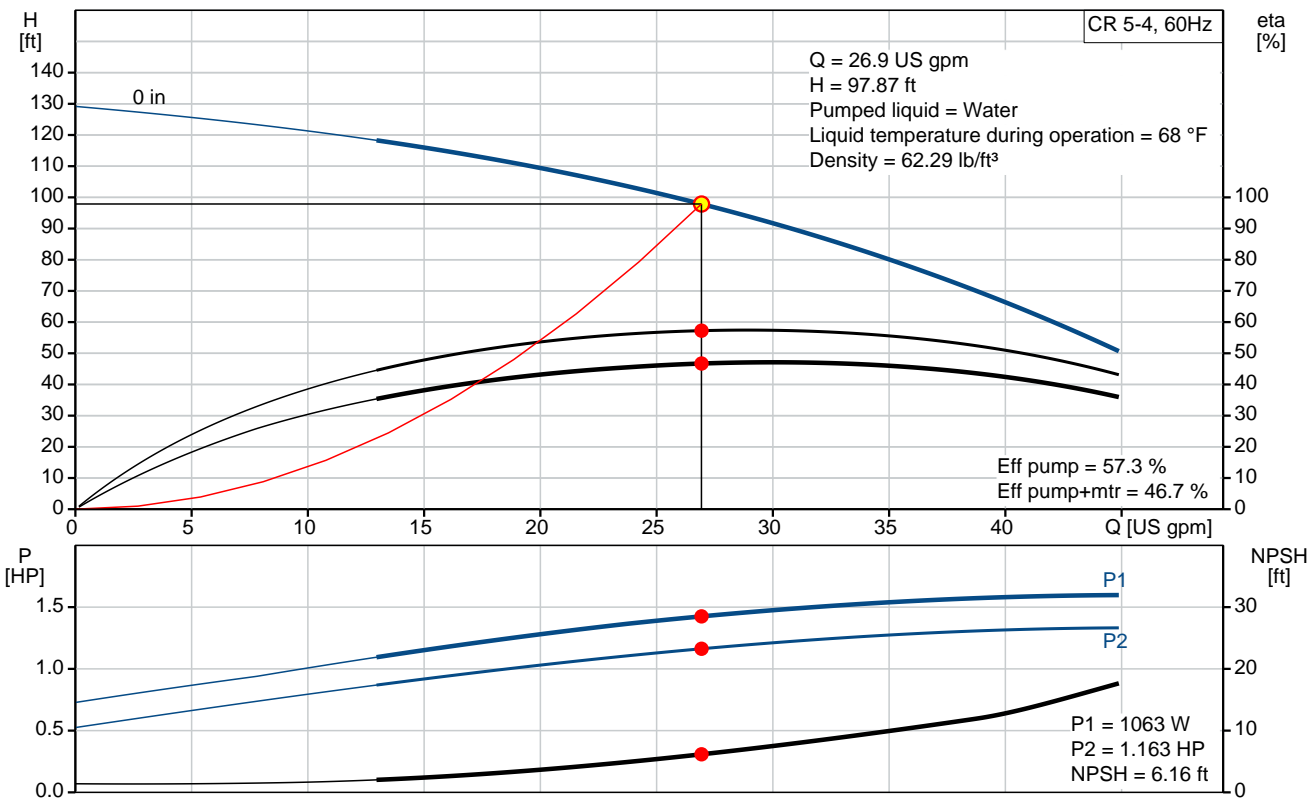


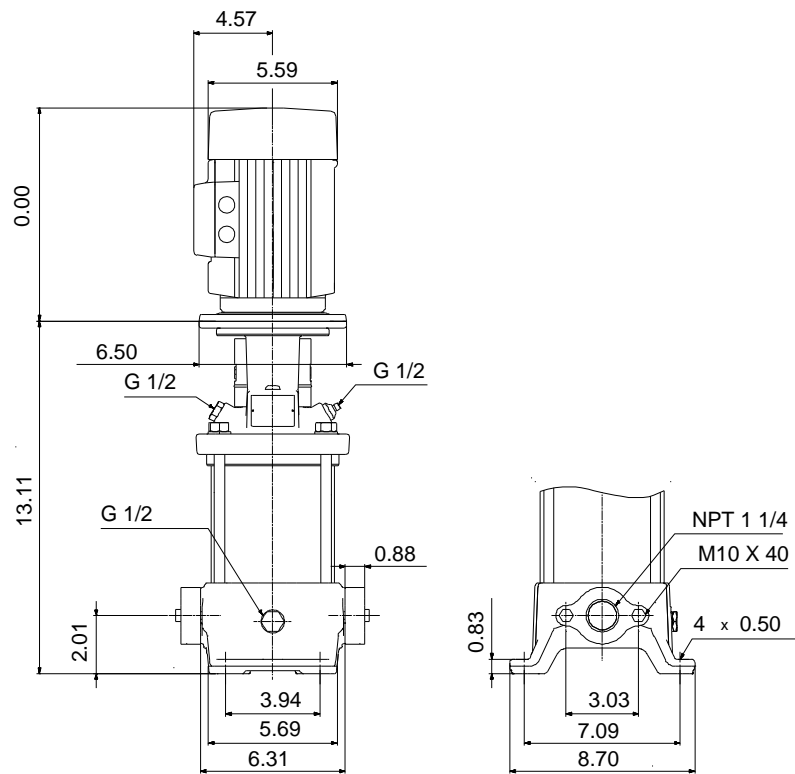
CR 5-4

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301)(AISI 304)

Product photo could vary from the actual product

Conditions of Service	Pump Data	Motor Data
Flow: 26.9 US gpm	Max pressure at stated temperature: 232 psi / 194 °F	Rated power - P2: 1.5 HP
Head: 97.87 ft	Maximum ambient temperature: 140 °F	Rated voltage: 208-230YY/460Y V
Efficiency: 46.7 %	Approvals: CURUS	Main frequency: 60 Hz
Liquid: Water	Shaft seal: HQQV	Enclosure class: 55 Dust/Jetting
Temperature: 68 °F	Product number: 96084176	Insulation class: F
NPSH required: 1.88 m		Motor protection: NONE
Viscosity: _____		Motor type: 80CA
Specific Gravity: 1.000		Motor_efficiency: 84.9 %





Materials:

Base: Cast iron
EN 1561 EN-GJL-200
ASTM A48-25B

Impeller: Stainless steel
AISI 304
EN 1.4301

Material code: A

Code for rubber: V

Tender Text



Product No.: [96084176](#)

CR 5-4 A-B-A-V-HQQV

Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:

- Impellers and intermediate chambers are made of
- The shaft seal has assembly length

according to EN 12756.

- Power transmission is via cast iron split coupling.

The motor is a 3-phase AC motor.

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water

Liquid temperature during operation: 68 °F

Density: 62.29 lb/ft³

Technical:

Speed for pump data: 3466 rpm

Actual calculated flow: 26.9 US gpm

Resulting head of the pump: 97.87 ft

Pump orientation: Vertical

Shaft seal arrangement: Single

Code for shaft seal: HQQV

Approvals on nameplate: CURUS

Curve tolerance: ISO9906:2012 3B

Materials:

Base: Cast iron
EN 1561 EN-GJL-200
ASTM A48-25B

Impeller: Stainless steel
EN 1.4301

Bearing material: AISI 304
SIC

Installation:

Maximum ambient temperature: 140 °F

Max pressure at stated temperature: 232 psi / 194 °F
232 psi / -4 °F

Type of connection: Oval / NPT(F)

Size of suction port: 1 1/4 inch



Company name:

Created by:

Phone:

Date:

2/20/2018


Size of outlet port: 1 1/4 inch
Pressure rating: PN 16
Flange size for motor: 56C

Electrical data:

Motor standard: NEMA
Motor type: 80CA
IE Efficiency class: NEMA Premium / IE3 60Hz
Rated power - P2: 1.5 HP
Power (P2) required by pump: 1.5 HP
Main frequency: 60 Hz
Rated voltage: 3 x 208-230YY/460Y V
Service factor: 1,15
Rated current: 4,45-4,3/2,16 A
Starting current: 720 %
Cos phi - power factor: 0,84-0,78
Rated speed: 3440-3480 rpm
IE efficiency: IE3 84,1%
Motor efficiency at full load: 84.9 %
Motor efficiency at 3/4 load: 81.0 %
Motor efficiency at 1/2 load: 78.5 %
Number of poles: 2
Enclosure class (IEC 34-5): 55 Dust/Jetting
Insulation class (IEC 85): F

Others:

Net weight: 49.8 lb
Gross weight: 60.8 lb
Shipping volume: 4.94 ft³

Position	Count	Description
	1	<p>CR 5-4 A-B-A-V-HQQV</p>  <p>Product No.: 96084176 Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.</p> <p>The pump has the following characteristics:</p> <ul style="list-style-type: none"> - Impellers and intermediate chambers are made of - The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling. <p>The motor is a 3-phase AC motor.</p> <p>Controls: Frequency converter: NONE</p> <p>Liquid: Pumped liquid: Water Liquid temperature during operation: 68 °F Density: 62.29 lb/ft³</p> <p>Technical: Speed for pump data: 3466 rpm Actual calculated flow: 26.9 US gpm Resulting head of the pump: 97.87 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CURUS Curve tolerance: ISO9906:2012 3B</p> <p>Materials: Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Impeller: Stainless steel EN 1.4301 AISI 304 Bearing material: SIC</p> <p>Installation: Maximum ambient temperature: 140 °F Max pressure at stated temperature: 232 psi / 194 °F 232 psi / -4 °F Type of connection: Oval / NPT(F) Size of suction port: 1 1/4 inch Size of outlet port: 1 1/4 inch</p>



Company name:

Created by:

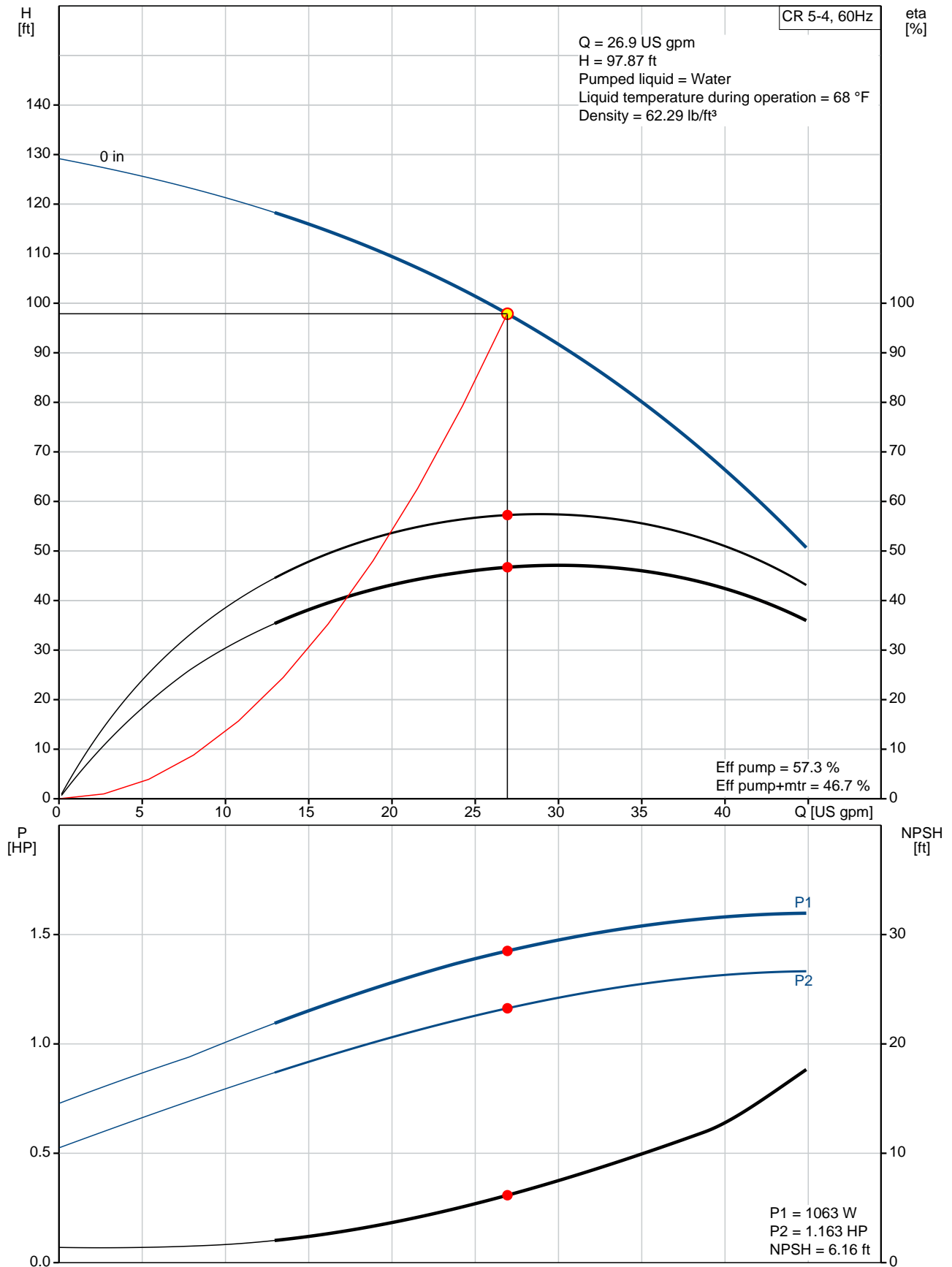
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Date:

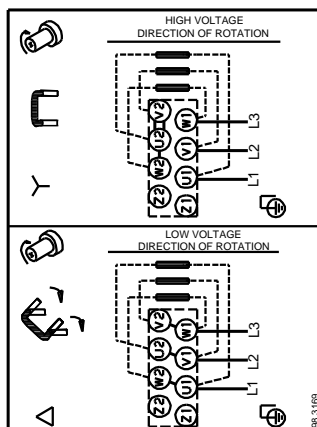
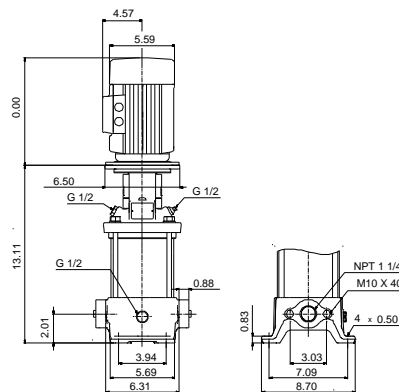
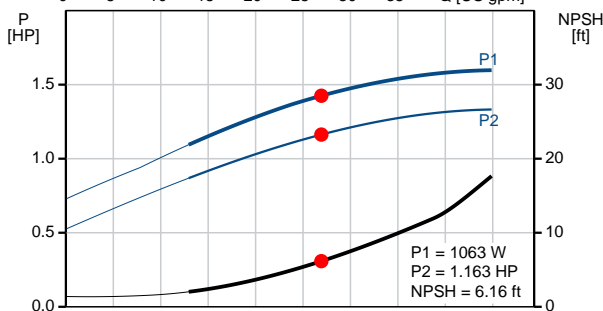
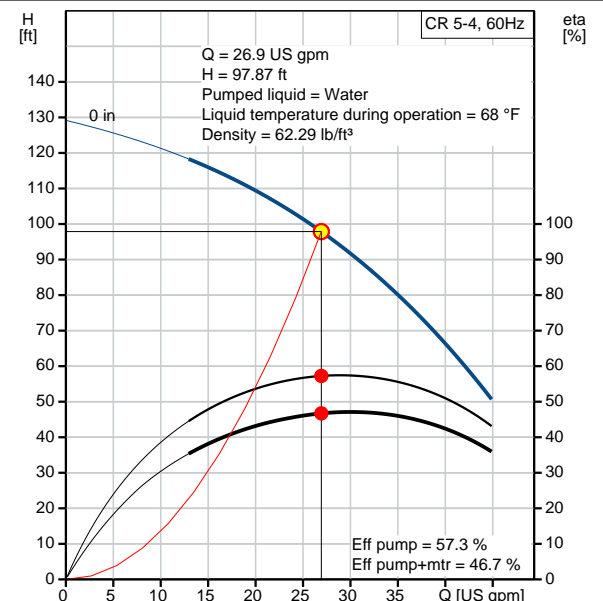
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Position	Count	Description
		Pressure rating: PN 16 Flange size for motor: 56C Electrical data: Motor standard: NEMA Motor type: 80CA IE Efficiency class: NEMA Premium / IE3 60Hz Rated power - P2: 1.5 HP Power (P2) required by pump: 1.5 HP Main frequency: 60 Hz Rated voltage: 3 x 208-230YY/460Y V Service factor: 1,15 Rated current: 4,45-4,3/2,16 A Starting current: 720 % Cos phi - power factor: 0,84-0,78 Rated speed: 3440-3480 rpm IE efficiency: IE3 84,1% Motor efficiency at full load: 84.9 % Motor efficiency at 3/4 load: 81.0 % Motor efficiency at 1/2 load: 78.5 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Others: Net weight: 49.8 lb Gross weight: 60.8 lb Shipping volume: 4.94 ft³

96084176 CR 5-4 60 Hz



Description	Value
General information:	
Product name:	CR 5-4 A-B-A-V-HQQV
Product No.:	96084176
EAN:	5700395190144
Technical:	
Speed for pump data:	3466 rpm
Actual calculated flow:	26.9 US gpm
Resulting head of the pump:	97.87 ft
Stages:	4
Impellers:	4
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC
Materials:	
Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B
Impeller:	Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	V
Bearing material:	SIC
Installation:	
Maximum ambient temperature:	140 °F
Max pressure at stated temperature:	232 psi / 194 °F 232 psi / -4 °F
Type of connection:	Oval / NPT(F)
Connect code:	B
Size of suction port:	1 1/4 inch
Size of outlet port:	1 1/4 inch
Pressure rating:	PN 16
Flange size for motor:	56C
Liquid:	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	NEMA
Motor type:	80CA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	1.5 HP
Power (P2) required by pump:	1.5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1,15
Rated current:	4,45-4,3/2,16 A
Starting current:	720 %





Company name:

Created by:

Phone:

Date: 2/20/2018

Description	Value
Load current:	5,1-4,95/2,48 A
Cos phi - power factor:	0,84-0,78
Rated speed:	3440-3480 rpm
IE efficiency:	IE3 84,1%
Motor efficiency at full load:	84.9 %
Motor efficiency at 3/4 load:	81.0 %
Motor efficiency at 1/2 load:	78.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	98976607

Controls:

Frequency converter: NONE

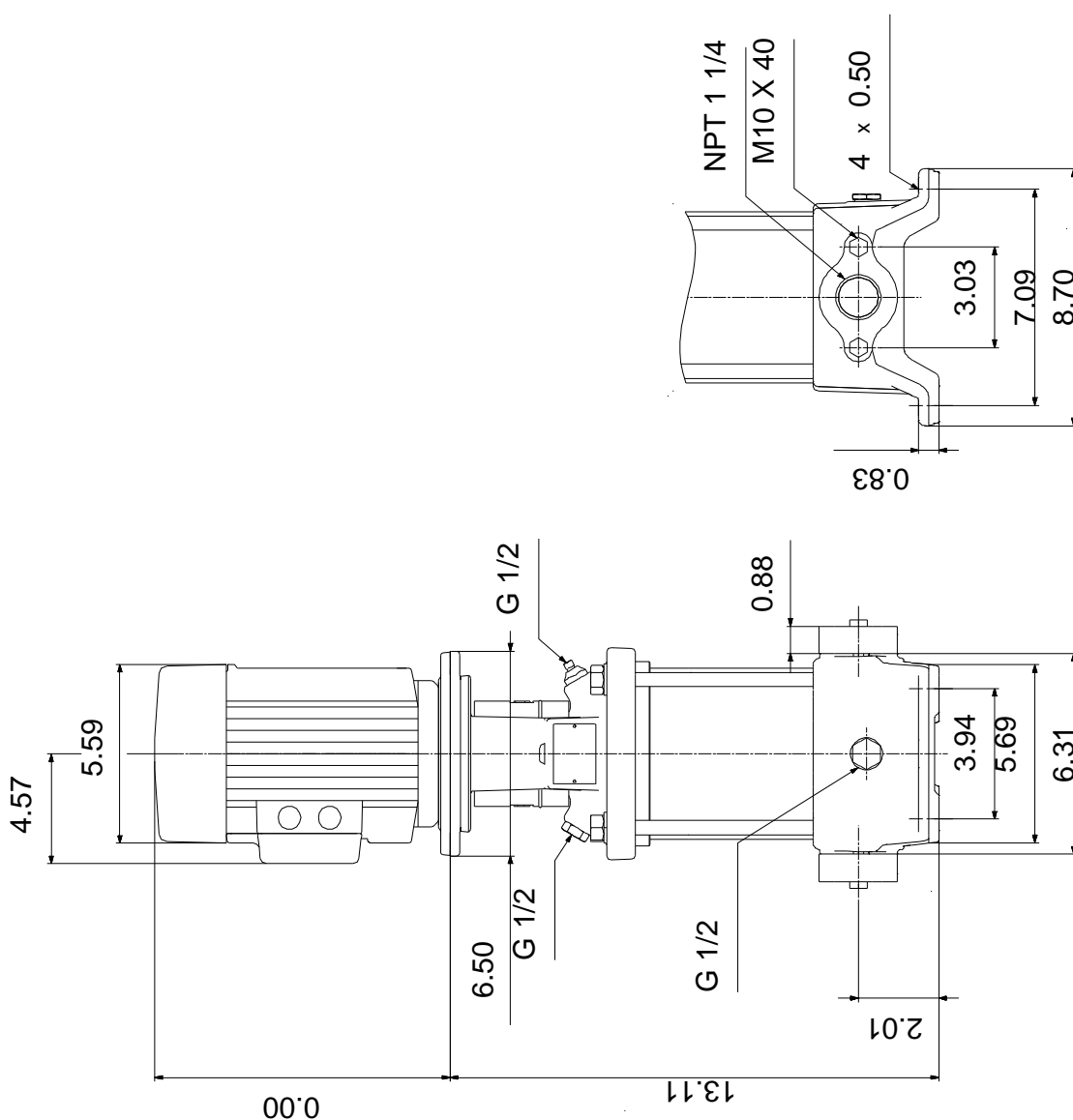
Others:

Net weight: 49.8 lb

Gross weight: 60.8 lb

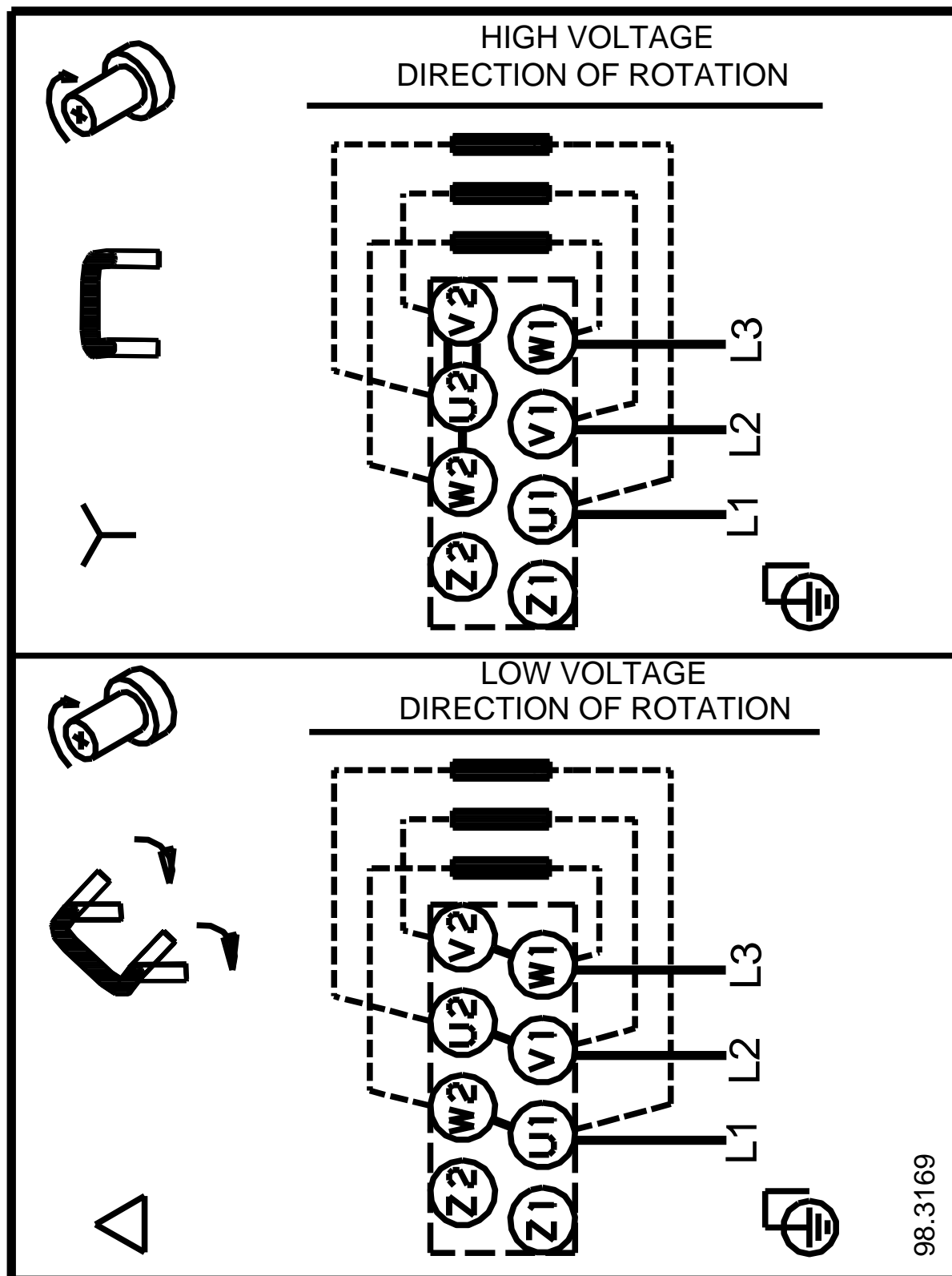
Shipping volume: 4.94 ft³

96084176 CR 5-4 60 Hz



Note! All units are in [mm] unless otherwise stated.
Disclaimer: This simplified dimensional drawing does not show all details.

96084176 CR 5-4 60 Hz



98.3169



Company name:

Created by:

Phone:

Date:

2/20/2018

Order Data:

Product name: CR 5-4 A-B-A-V-HQQV

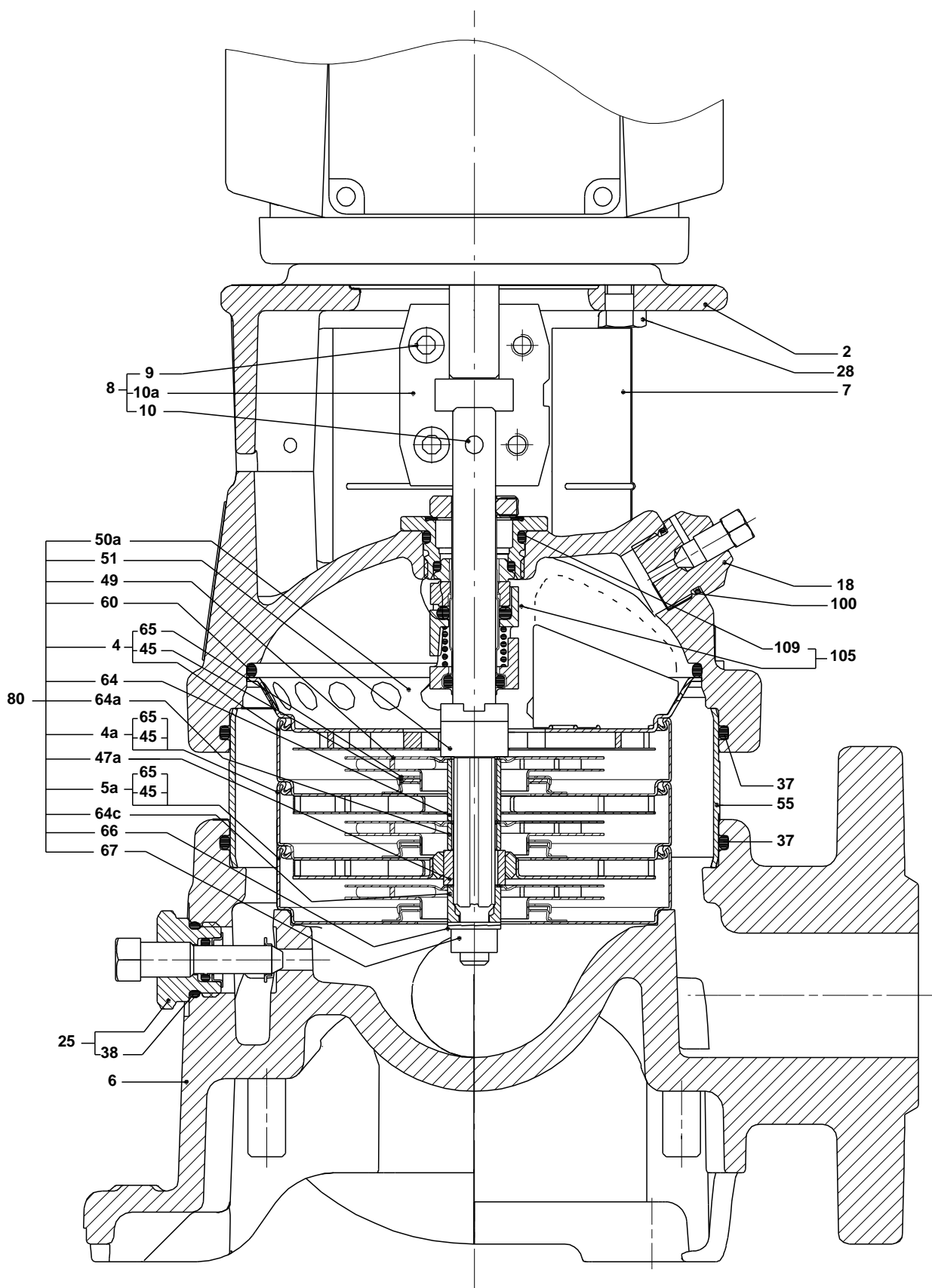
Amount: 1

Product No.: 96084176

Total: Price on request

TM020210

Sectional drawing (tm020211 4100)



TM020211

Parts list CR 5-4, Prod number 96084176
Valid from 16.9.2016 (1638)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Motor				1	pcs
-	Base cpl.				1	pcs
6	Base				1	
12	Flange				2	
35	Hex head screw		Length: 40 Thread: M10		4	
39	Gasket				2	
-	Sealing parts				1	pcs
- 25	Drain plug w/bypass valve				1	
38	O-ring		Diameter: 16,3 Material type: FKM Thickness: 2,4			
37	O-ring		Diameter: 137,5 Material type: FKM Thickness: 3,3		2	
100	O-ring		Diameter: 16,3 Material type: FKM Thickness: 2,4		2	
- 2	Pump head cpl.				1	pcs
2	Pump head				1	
7	Coupling guard				2	
7a	Thread cutting screw				4	
- 18	Air vent screw				1	
	Plug					
	Spindle					
- 25	Drain plug				1	
23	Pipe plug					
25	Drain plug					
28	Hex head cap screw		Length: 25 Thread: UNC 3/8"		4	
60	Formed wire spring				1	
- 8	Coupling cpl.				1	pcs
9	Hex socket head cap screw		Designation: DIN 912 Length: 20 Thread: M6		4	
10	Shaft pin		Diameter: 5 Length: 26		1	
10a	Coupling half				2	
26	Staybolt		Length: 133 Thread: M12		4	pcs
36a	Washer		Designation: DIN 125 A Inner diameter: 13 Outer diameter: 24 Thickness: 2,5		4	pcs
55	Outer sleeve				1	pcs
66a	Nut		Thread: M12		4	pcs
- 80	Chamber stack				1	pcs
	Spacing pipe		Length: 2.00		1	
-	Guide vane cpl.				1	
	Guide vane					
	Plate					
50b	Top plate					
- 4	Chamber cpl.				2	

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Chamber					
	Retainer for seal ring					
	Guide vane					
	Plate					
	Vane					
45	Neck ring					
65	Retainer					
- 4a	Chamber w. bearing cpl.				1	
	Chamber					
	Retainer for seal ring					
	Guide vane					
	Retainer for bearing					
	Bearing bush					
	Vane					
45	Neck ring					
65	Retainer					
- 5a	Chamber cpl.				1	
	Chamber					
45	Neck ring					
65	Retainer					
36	Lock nut		Thread: M8		1	
47a	Bearing ring, rotating				1	
49	Impeller cpl.				4	
51	Shaft, spline, cpl.				1	
64a	Spacing pipe		Inner diameter: 12,85		1	
			Outer diameter: 15,85			
			Length: 4,50			
64a	Spacing pipe		Length: 13.00		1	
64c	Clamp, splined		Inner diameter: 8,5		1	
			Outer diameter: 15			
66	Wedge lock washer				1	
69	Spacing pipe		Length: 26.0		2	
- 105	Shaft seal		Material type: HQQV		1	pcs
	O-ring				1	
	O-ring				1	
	O-ring				1	
	Seal driver, upper				1	
	Seal driver, lower				1	
	Spacer ring				1	
	Pipe				1	
	Plug				1	
	Plug				1	
	Compression spring				1	
	Socket set screw				3	
103	Seal ring, stationary				1	
105	Seal ring, rotating				1	
109	O-ring				1	
113	Driver				1	