

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

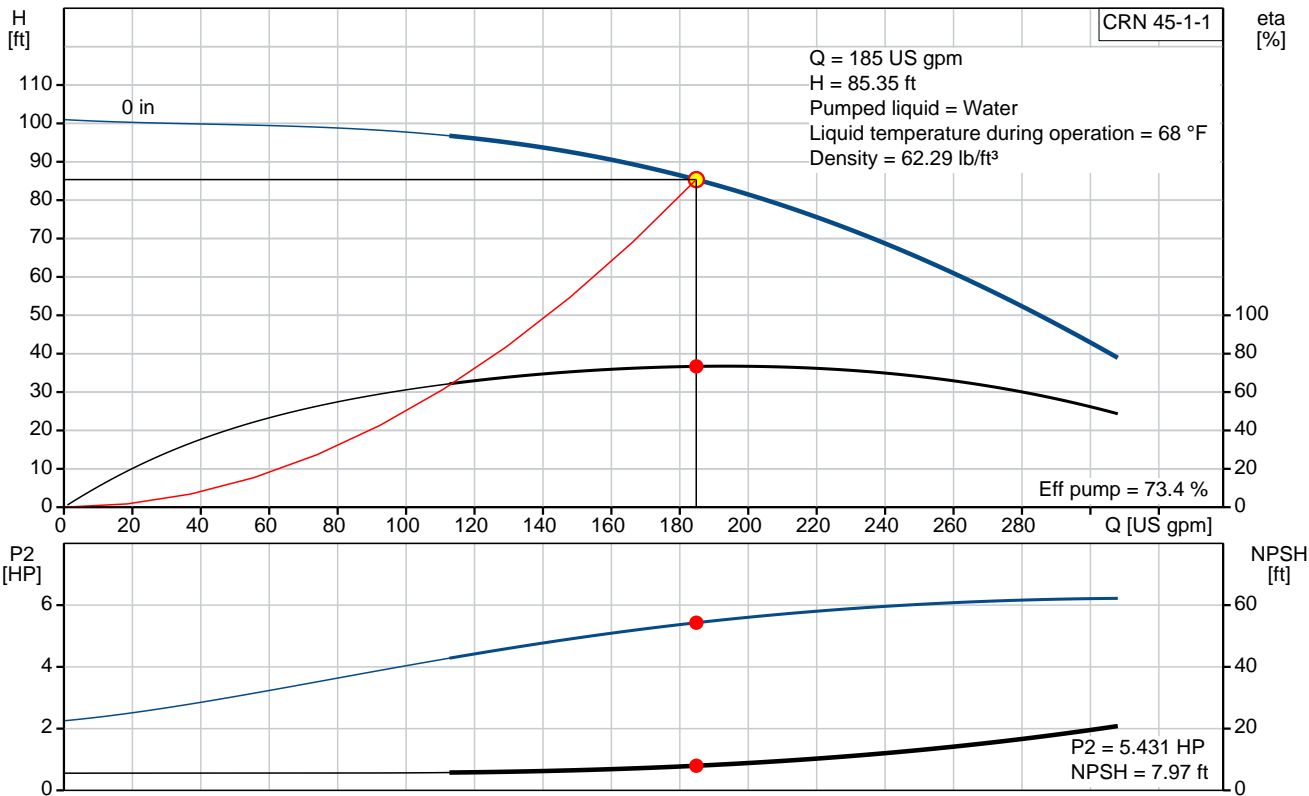


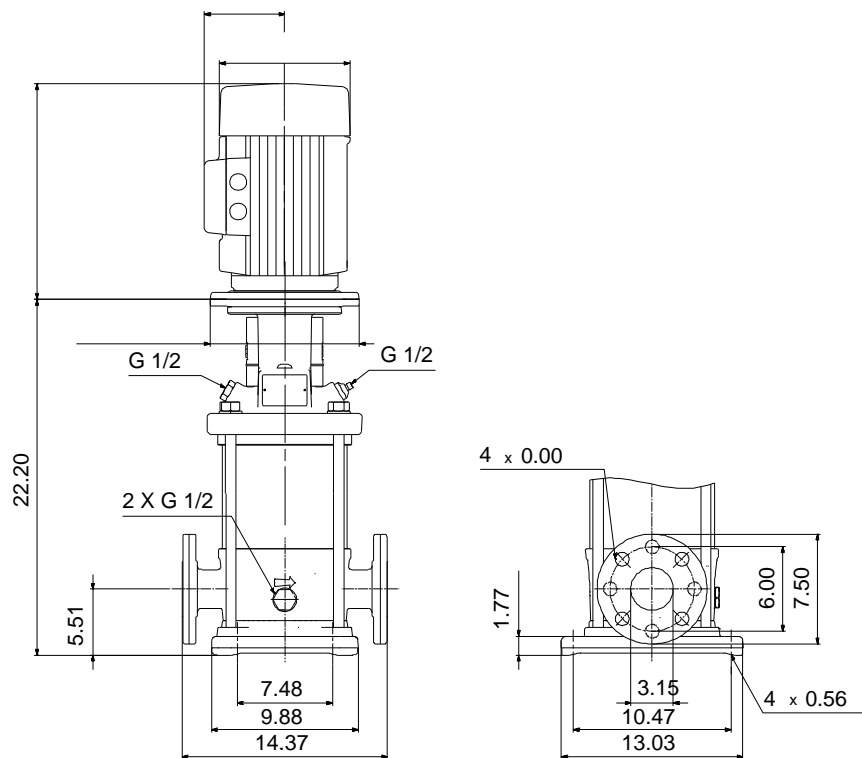
Product photo could vary from the actual product

**CRN 45-1-1**

Vertical, multistage centrifugal pump with suction and discharge ports on same the level. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401) (AISI 316)

Conditions of Service	Pump Data	Motor Data
Flow: 185 US gpm	Max pressure at stated temperature: 232 psi / 194 °F	Main frequency: 60 Hz
Head: 85.35 ft	Shaft seal: HQQV	
Efficiency: _____	Product number: 96415868	
Liquid: Water		
Temperature: 68 °F		
NPSH required: 7.97 ft		
Viscosity: _____		
Specific Gravity: 1.000		





**Materials:**

Base: Stainless steel  
EN 1.4408  
AISI 316

Impeller: Stainless steel  
AISI 316  
EN 1.4401

Material code: G  
Code for rubber: V

## Tender Text



Product photo could vary from the actual product

Product No.: [96415868](#)

### CRN 45-1-1 A-G-G-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, intermediate chambers and outer sleeve are made of
  - Pump head cover and base are made of
  - The shaft seal has assembly length according to DIN 24960.
  - Power transmission is via cast iron split coupling.
- flanges/couplings.

### Controls:

Frequency converter: NONE

### Liquid:

Pumped liquid: Water  
Liquid temperature during operation: 68 °F  
Density: 62.29 lb/ft³

### Technical:

Speed for pump data: 3467 rpm  
Actual calculated flow: 185 US gpm  
Resulting head of the pump: 85.35 ft  
Pump orientation: Vertical  
Shaft seal arrangement: Single  
Code for shaft seal: HQQV  
Curve tolerance: ISO9906:2012 3B

### Materials:

Base: Stainless steel  
EN 1.4408  
AISI 316  
Impeller: Stainless steel  
EN 1.4401  
AISI 316  
Bearing material: SIC  
Support bearing: Graflon



**Company name:**

**Created by:**

**Phone:**

**Date:**

2/21/2018

**Installation:**

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


Type of connection: ANSI  
Size of suction port: 3 inch  
Size of outlet port: 3 inch  
Pressure rating: PN 16  
Flange size for motor: 213TC  
Flange rating inlet: 150 lb

**Electrical data:**

Motor standard: NEMA  
Power (P2) required by pump: 7.5 HP

**Others:**

Net weight: 129 lb  
Gross weight: 147 lb  
Shipping volume: 7.45 ft<sup>3</sup>

Position	Count	Description
	1	<p><b>CRN 45-1-1 A-G-G-V-HQQV</b></p>  <p>Product photo could vary from the actual product</p> <p>Product No.: <a href="#">96415868</a></p> <p>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"> <li>- Impellers, intermediate chambers and outer sleeve are made of</li> <li>- Pump head cover and base are made of</li> <li>- The shaft seal has assembly length according to DIN 24960.</li> <li>- Power transmission is via cast iron split coupling.</li> </ul> <p>flanges/couplings.</p> <p><b>Controls:</b></p> <p>Frequency converter: NONE</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature during operation: 68 °F</p> <p>Density: 62.29 lb/ft<sup>3</sup></p> <p><b>Technical:</b></p> <p>Speed for pump data: 3467 rpm</p> <p>Actual calculated flow: 185 US gpm</p> <p>Resulting head of the pump: 85.35 ft</p> <p>Pump orientation: Vertical</p> <p>Shaft seal arrangement: Single</p> <p>Code for shaft seal: HQQV</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b></p> <p>Base: Stainless steel EN 1.4408 AISI 316</p> <p>Impeller: Stainless steel EN 1.4401 AISI 316</p> <p>Bearing material: SIC</p> <p>Support bearing: Graflon</p> <p><b>Installation:</b></p> <p>Max pressure at stated temperature: 232 psi / 194 °F</p>



Company name:

Created by:

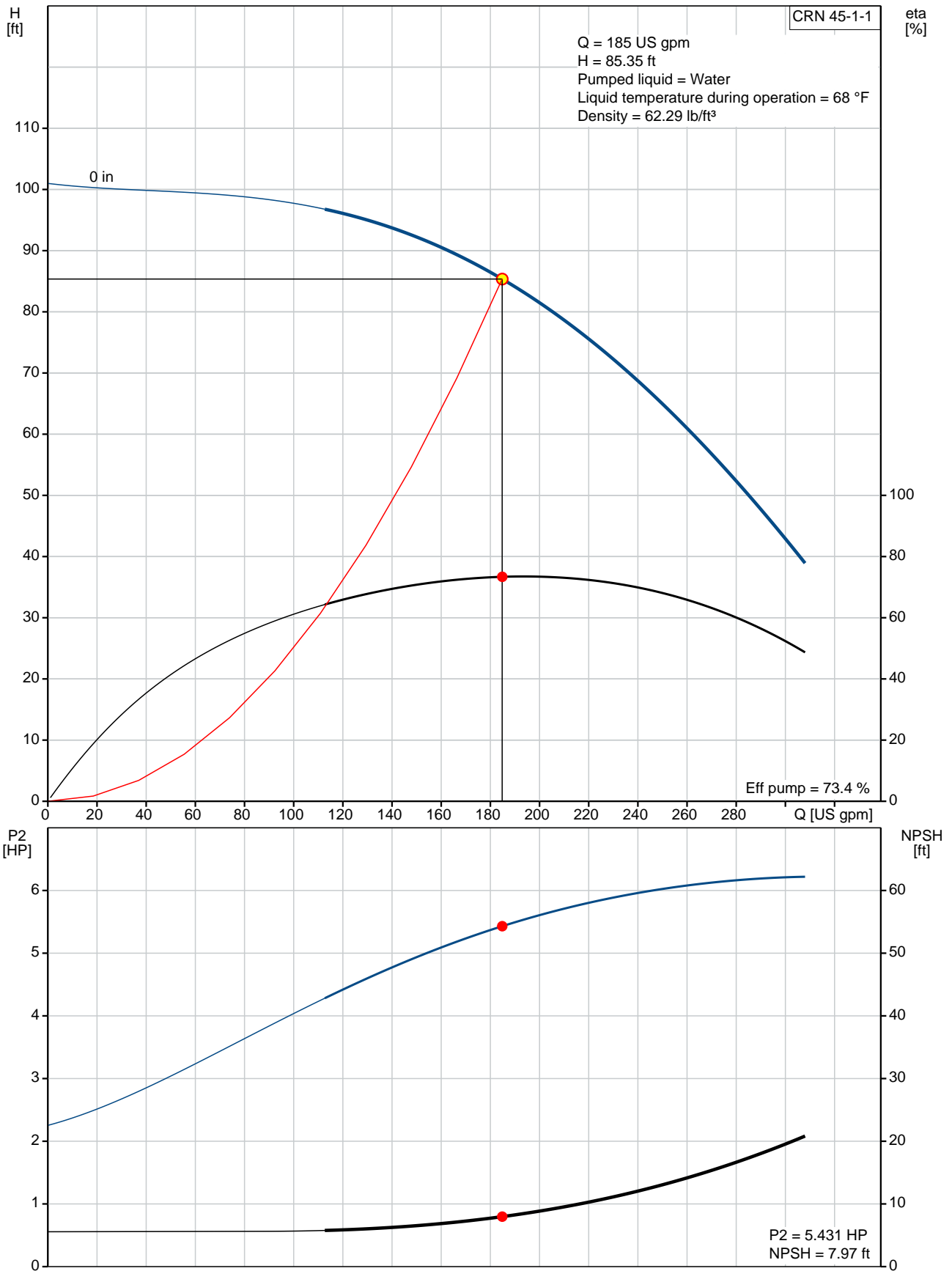
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Date:

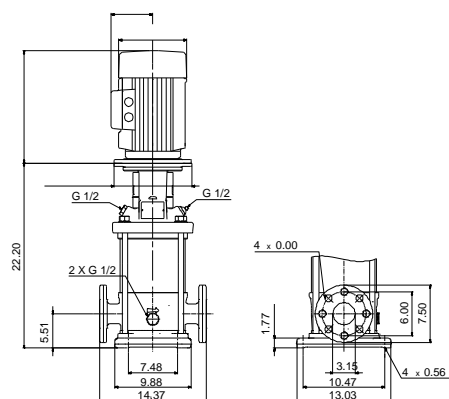
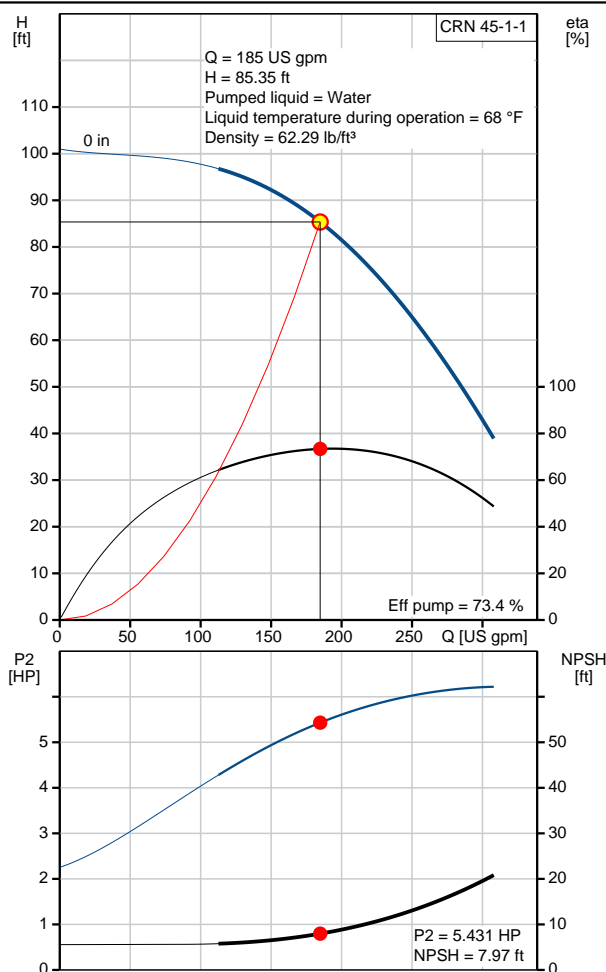
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Position	Count	Description
		232 psi / -4 °F
		Type of connection: ANSI
		Size of suction port: 3 inch
		Size of outlet port: 3 inch
		Pressure rating: PN 16
		Flange size for motor: 213TC
		Flange rating inlet: 150 lb
		<b>Electrical data:</b>
		Motor standard: NEMA
		Power (P2) required by pump: 7.5 HP
		<b>Others:</b>
		Net weight: 129 lb
		Gross weight: 147 lb
		Shipping volume: 7.45 ft <sup>3</sup>

## 96415868 CRN 45-1-1 60 Hz



Description	Value
<b>General information:</b>	
Product name:	CRN 45-1-1 A-G-G-V-HQQV
Product No.:	96415868
EAN:	5700390650698
<b>Technical:</b>	
Speed for pump data:	3467 rpm
Actual calculated flow:	185 US gpm
Resulting head of the pump:	85.35 ft
Stages:	1
Impellers:	1
Number of reduced-diameter impellers:	1
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
<b>Materials:</b>	
Base:	Stainless steel
	EN 1.4408
	AISI 316
Impeller:	Stainless steel
	EN 1.4401
	AISI 316
Material code:	G
Code for rubber:	V
Bearing material:	SIC
Support bearing:	Graflon
<b>Installation:</b>	
Max pressure at stated temperature:	232 psi / 194 °F
	232 psi / -4 °F
Type of connection:	ANSI
Connect code:	G
Size of suction port:	3 inch
Size of outlet port:	3 inch
Pressure rating:	PN 16
Flange size for motor:	213TC
Flange rating inlet:	150 lb
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft³
<b>Electrical data:</b>	
Motor standard:	NEMA
Power (P2) required by pump:	7.5 HP
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
Net weight:	129 lb





Company name:

Created by:

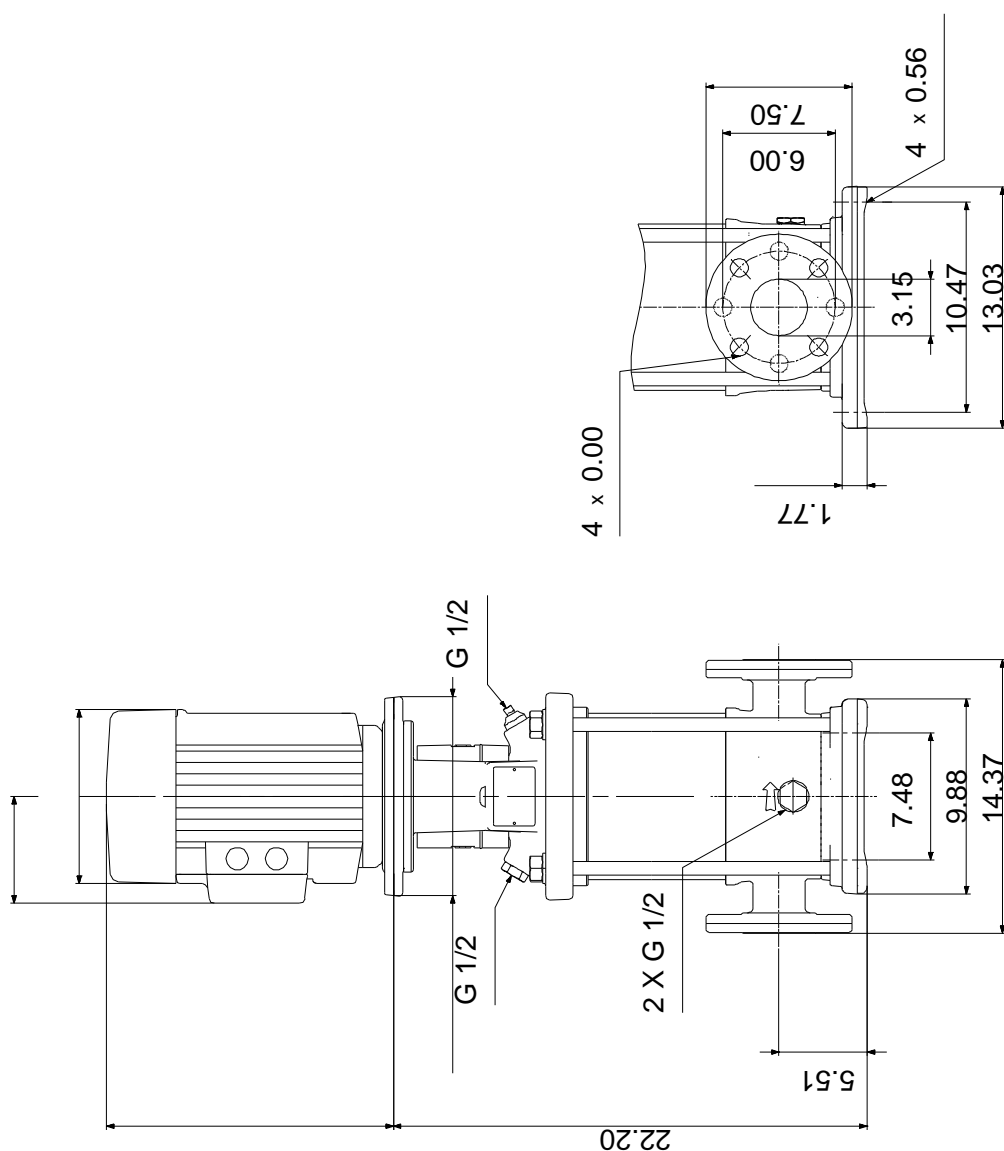
Phone:

Date:

2/21/2018

Description	Value
Gross weight:	147 lb
Shipping volume:	7.45 ft <sup>3</sup>
Sales region:	Namreg

## 96415868 CRN 45-1-1 60 Hz



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



Company name:

Created by:

Phone:

Date:

2/21/2018

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**Order Data:**

Product name: CRN 45-1-1 A-G-G-V-HQQV

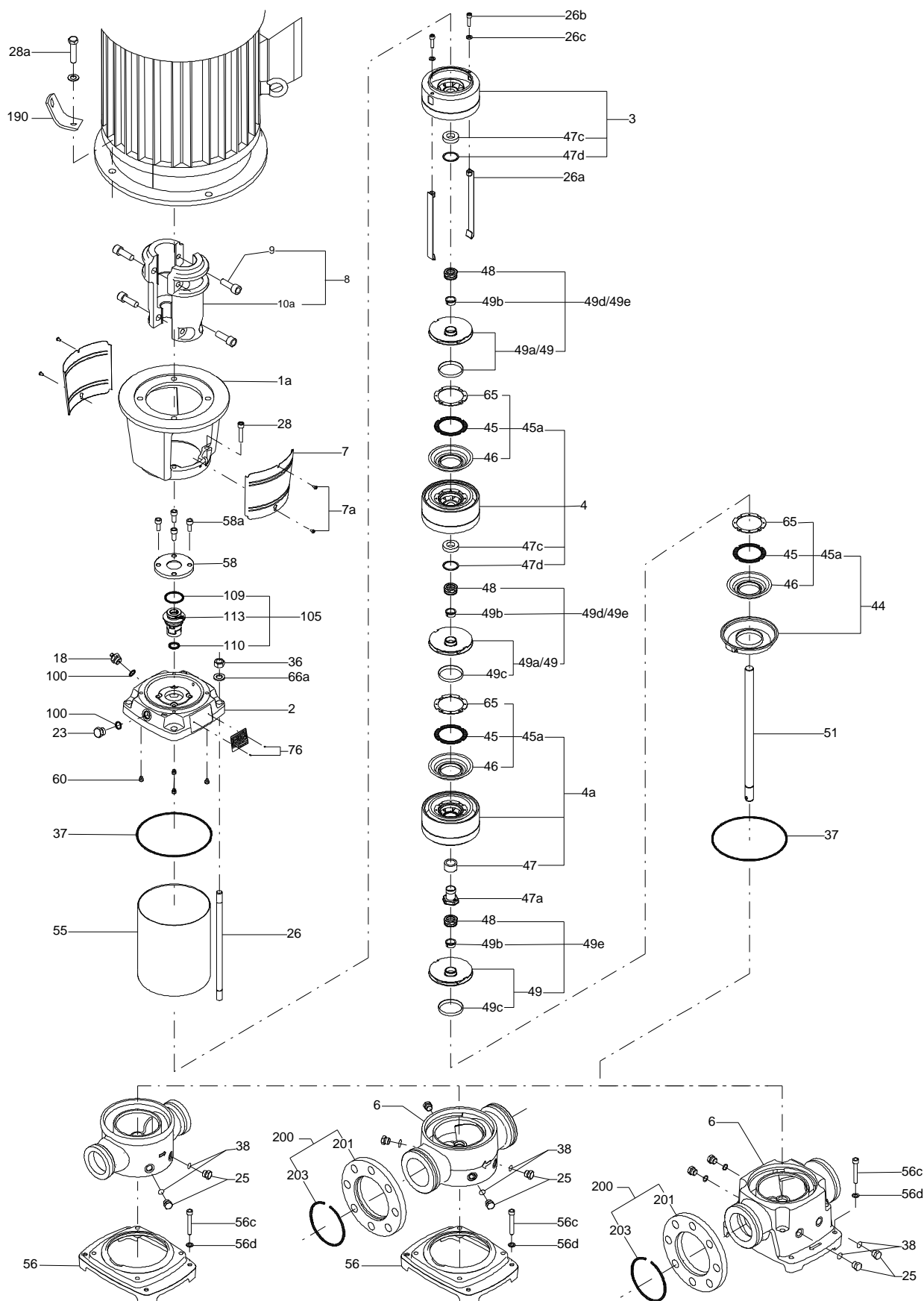
Amount: 1

Product No.: 96415868

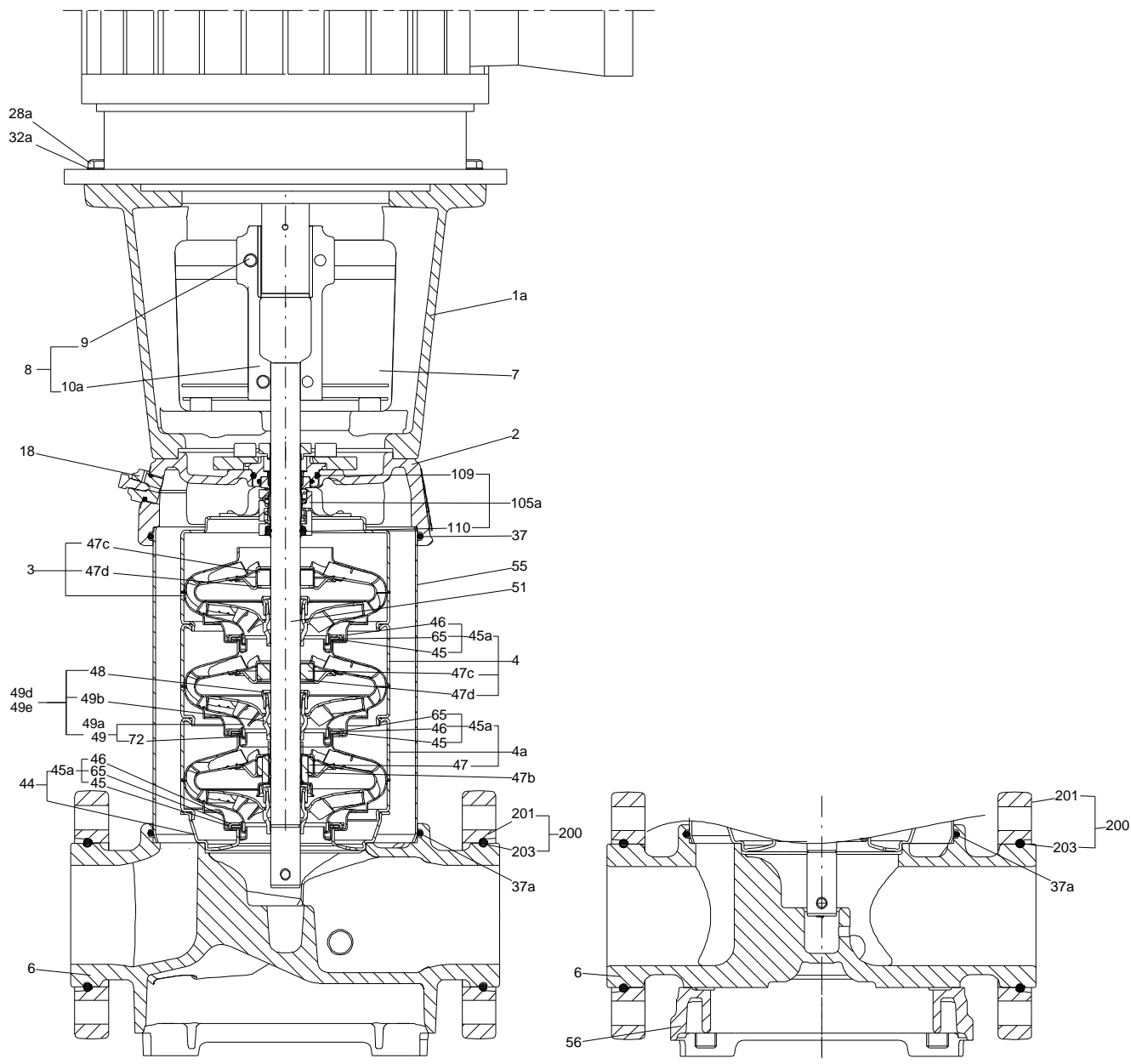
Total: Price on request

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## Exploded view (TM065558 LACR )



## Sectional drawing ( TM065571 LACR)



**Parts list CRN 45-1-1, Prod number 96415868**

**Valid from 3.3.2014 (1410)**

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Hex head screw				1	pcs
	Washer				1	pcs
-	Flange cpl.				2	pcs
201	Flange				1	
203	Lock ring				1	
-	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
7a	Socket button head screw				4	
28	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 50			
			Thread: M10			
	Quick guide				1	pcs
	Shaft end				1	pcs
	Bar				1	pcs
	Spring lock washer				1	pcs
- 1	Basic unit				1	pcs
- 2a	Pump head cpl.				1	
2	Pump head					
9	Hex socket head cap screw		Designation: DIN 912			
			Length: 25			
			Thread: M10			
- 18	Air vent screw					
	Plug					
	Spindle					
23	Plug					
37	O-ring		Diameter: 216			
			Material type: FKM			
			Thickness: 4			
58	Cover					
60	Spring					
100	O-ring		Diameter: 16,3			
			Material type: FKM			
			Thickness: 2,4			
- 6b	Base cpl.		Rubber type: FKM		1	
6	Base					
25	Plug					
32	Washer		Designation: DIN 125A			
			Inner diameter: 6,4			
			Outer diameter: 12,0			
			Thickness: 1,6			
37	O-ring		Diameter: 216			
			Material type: FKM			
			Thickness: 4			
38	O-ring		Diameter: 16,3			
			Material type: FKM			
			Thickness: 2,4			
56	Base plate					
26	Staybolt		Length: 310		4	
			Thread: M16			
36	Nut		Thread: M16		4	
55	Outer sleeve		Outer diameter: 216		1	
			Length: 103,5			

Position	Description	Annotation	Classification data	Part No.	Count	Unit
66a	Washer		Designation: DIN 125 A2		4	
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
- 80	Chamber stack				1	
- 3	Upper chamber cpl.					
	Chamber					
	Guide vane					
	Cone					
	Guide cup					
	Guide cup					
3	Upper chamber cpl.					
47	Bearing					
26a	Strap cpl.					
26b	Hex socket head cap screw					
26c	Washer		Designation: DIN 125A			
			Inner diameter: 8,4			
			Outer diameter: 16			
			Thickness: 1,6			
- 44	Suction interconnector coupling					
44a	Suction interconnector					
45	Seal ring					
65	Neck ring					
65	Top f/neck ring					
- 47a	Bearing cpl.					
	Disc spring					
	Bearing ring, rotating					
	Holder					
	Driver					
	Hairpin clip					
- 49	Impeller cpl.					
-	Impeller, reduced diameter					
	Impeller hub					
49c	Wear ring					
48	Nut					
49b	Split cone					
51	Shaft					
- 8	Coupling cpl.		Dimension: 22/34,9		1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 25			
			Thread: M10			
10a	Coupling half				2	
36	Hex nut				2	pcs
- 105	Shaft seal		Material type: HQQV		1	pcs
	Adjusting fork				1	
109	O-ring		Diameter: 44,45		1	
			Material type: FKM			
			Thickness: 3,53			
110	O-ring		Diameter: 21,5		1	
			Thickness: 4,25			