Submittal Data

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



Product photo could vary from the actual product

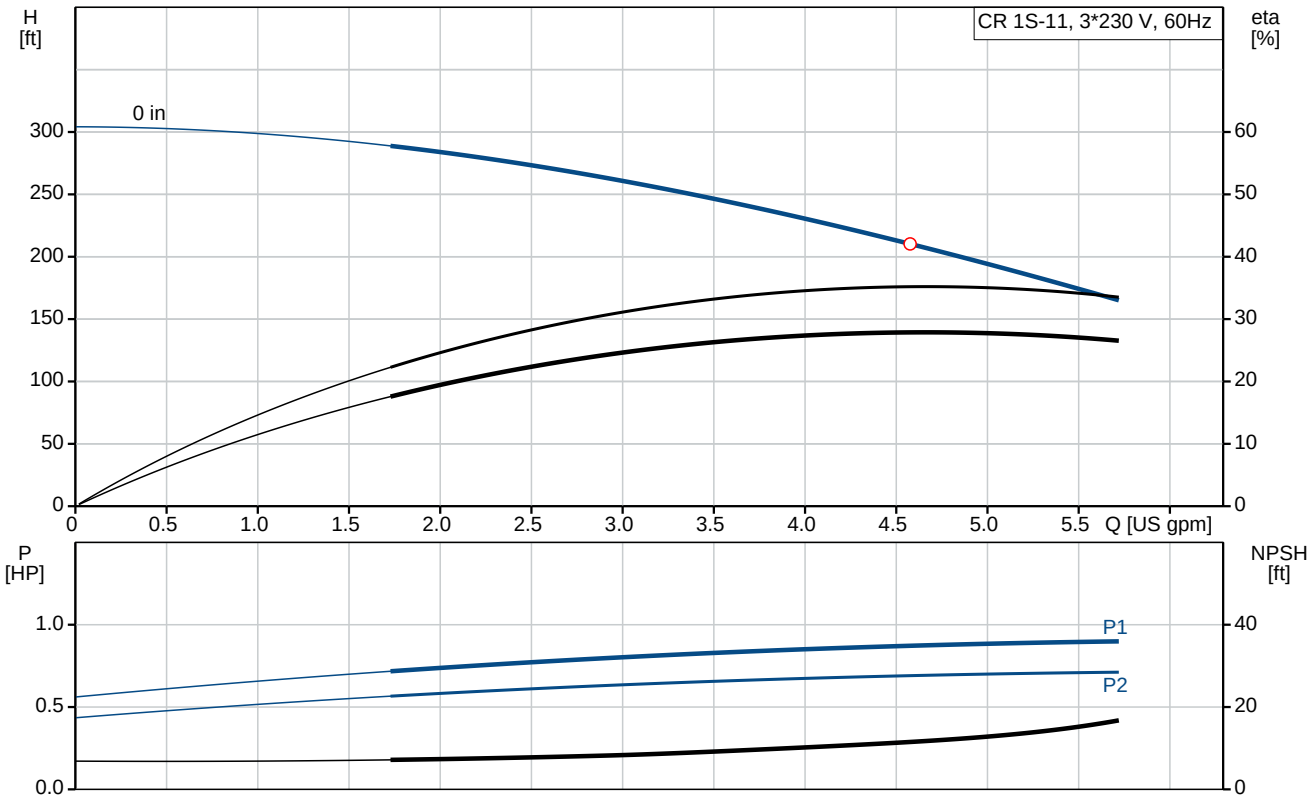
CR 1S-11

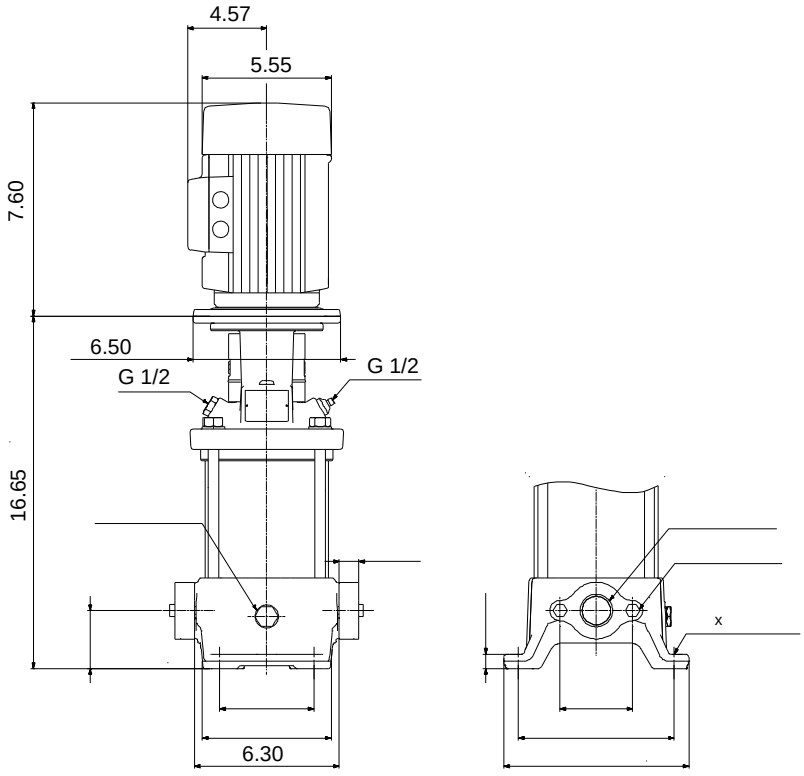
Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301)(AISI 304)

Conditions of Service	
Flow:	
Head:	
Efficiency:	
Liquid:	Water
Temperature:	68 °F
NPSH required:	ft
Viscosity:	
Specific Gravity:	1.000

Pump Data	
Max pressure at stated temperature:	232 psi / 194 °F
Maximum ambient temperature:	104 °F
Approvals:	CURUS
Shaft seal:	HQQV
Product number:	96080964

Motor Data	
Rated power - P2:	0.75 HP
Rated voltage:	208-230YY/460Y V
Main frequency:	60 Hz
Enclosure class:	55 Dust/Jetting
Insulation class:	F
Motor protection:	NONE
Motor type:	71BA
Motor_efficiency:	79.0-80.0 %





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

Company name:
Created by:
Phone:

Date: 2/20/2018

Tender Text



Product No.: 96080964
CR 1S-11 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:	3439 rpm
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 AISI 304
Bearing material:	SIC

Installation:

Maximum ambient temperature:	104 °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 inch
Size of outlet port:	1 inch
Pressure rating:	PN 16

Flange size for motor:	56C

Electrical data:

Motor standard:	NEMA
Motor type:	71BA
IE Efficiency class:	NA
Rated power - P2:	0.75 HP
Power (P2) required by pump:	0.75 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1,25
Rated current:	2,40-2,30/1,20 A
Starting current:	590-650 %
Cos phi - power factor:	0,84-0,78
Rated speed:	3430-3460 rpm
Motor efficiency at full load:	79.0-80.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F

Others:

Net weight:	53.7 lb
Gross weight:	64.7 lb
Shipping volume:	4.94 ft^3

GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

Position	Count	Description
	1	**CR 1S-11 A-B-A-V-HQQV**



Product No.: 96080964
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:	3439 rpm
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 AISI 304
Bearing material:	SIC

Installation:

Maximum ambient temperature:	104 °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 inch
Size of outlet port:	1 inch
Pressure rating:	PN 16
Flange size for motor:	56C

GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

Position	Count	Description

Electrical data:

Motor standard:	NEMA
Motor type:	71BA
IE Efficiency class:	NA
Rated power - P2:	0.75 HP
Power (P2) required by pump:	0.75 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1,25
Rated current:	2,40-2,30/1,20 A
Starting current:	590-650 %
Cos phi - power factor:	0,84-0,78
Rated speed:	3430-3460 rpm
Motor efficiency at full load:	79.0-80.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F

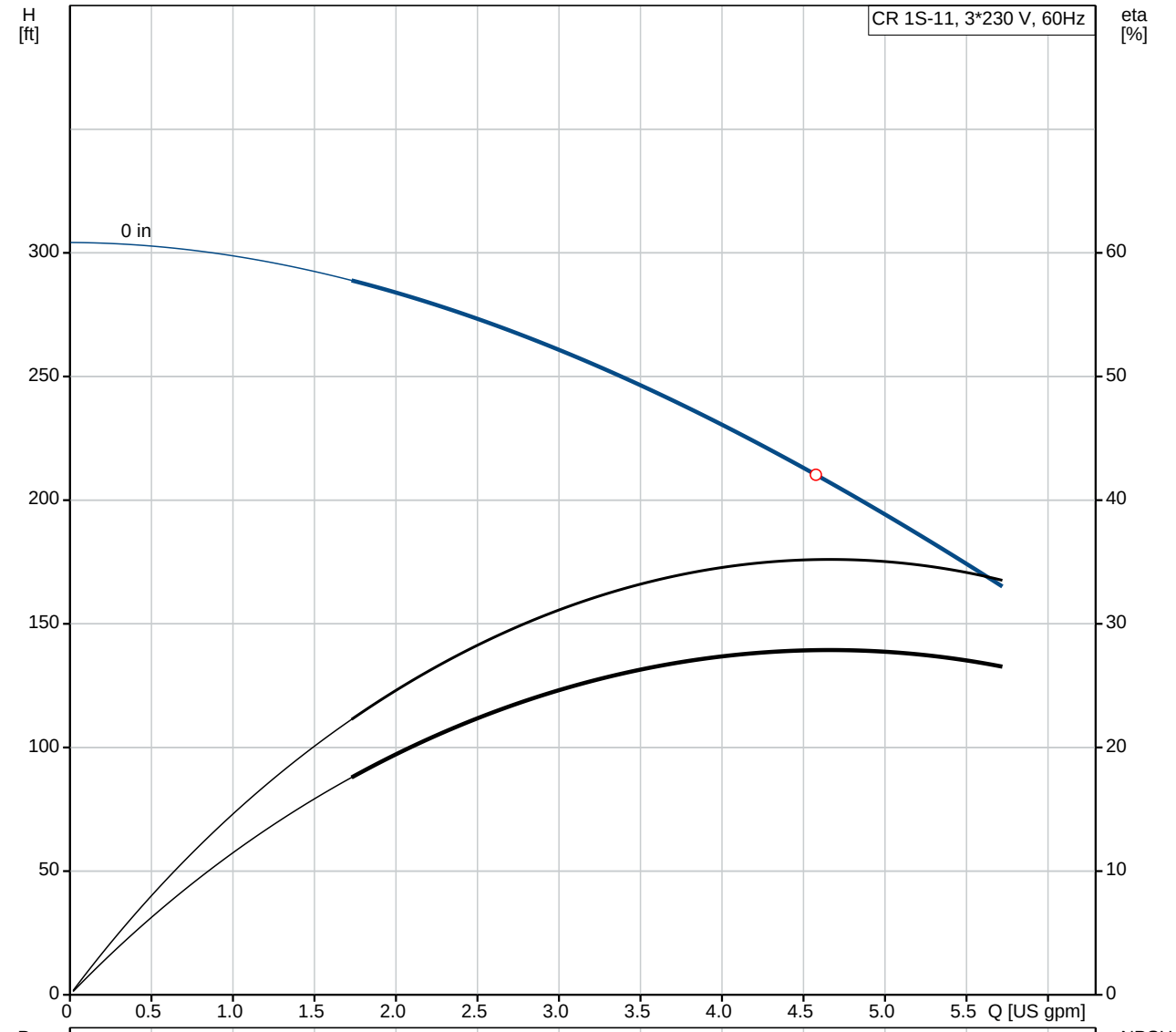
Others:

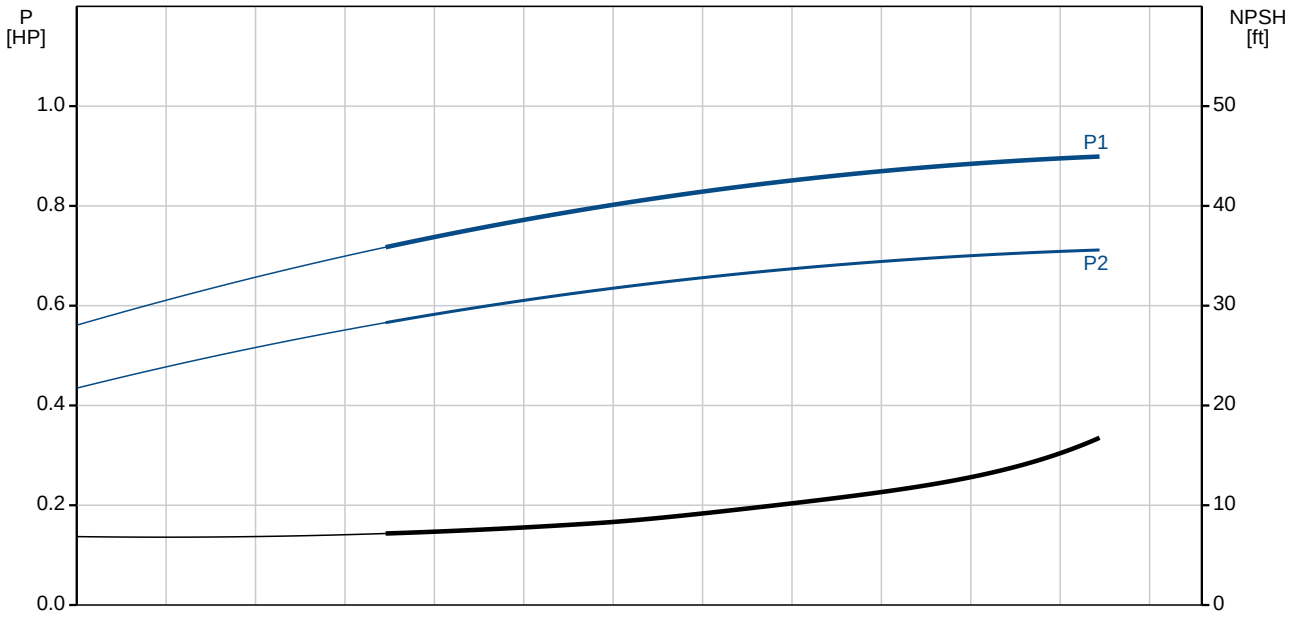
Net weight:	53.7 lb
Gross weight:	64.7 lb
Shipping volume:	4.94 ft^3

Company name:
Created by:
Phone:

Date: 2/20/2018

96080964 CR 1S-11 60 Hz

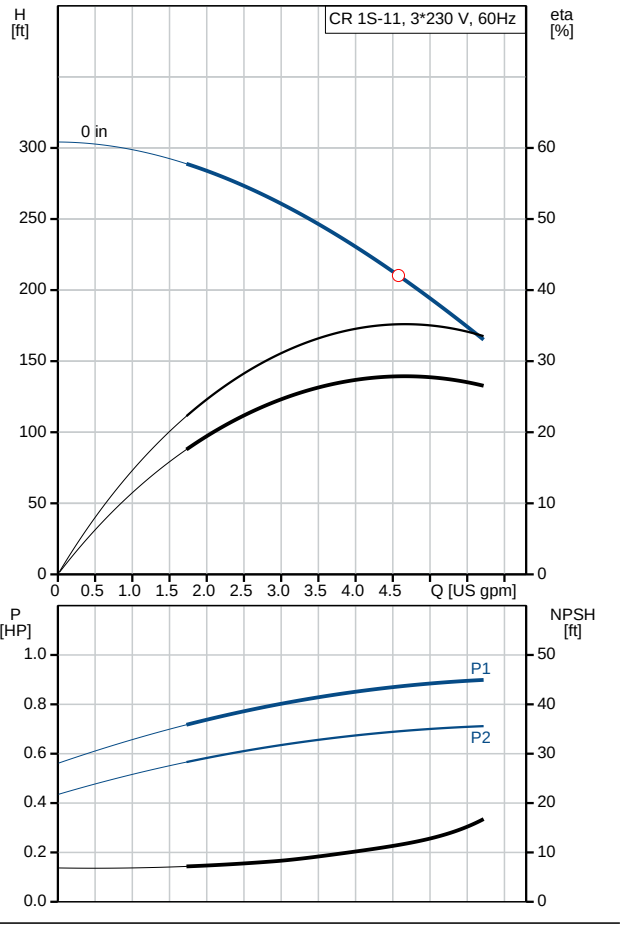


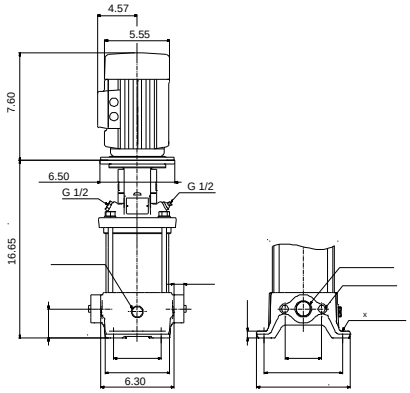


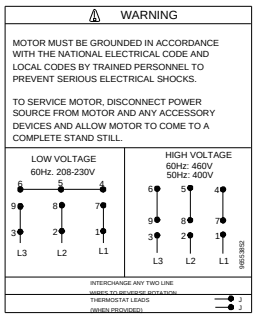
Company name:
Created by:
Phone:

Date: 2/20/2018

Description	Value
General information:	
Product name:	CR 1S-11 A-B-A-V-HQQV
Product No.:	96080964
EAN:	5700395154221
Technical:	
Speed for pump data:	3439 rpm
Stages:	11
Impellers:	11
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:	104 °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 inch
Size of outlet port:	1 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:	71BA
IE Efficiency class:	NA
Rated power - P2:	0.75 HP
Power (P2) required by pump:	0.75 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1,25
Rated current:	2,40-2,30/1,20 A
Starting current:	590-650 %
Load current:	2,9-2,75/1,4 A
Cos phi - power factor:	0,84-0,78







GRUNDFOS

Company name:
Created by:
Phone:

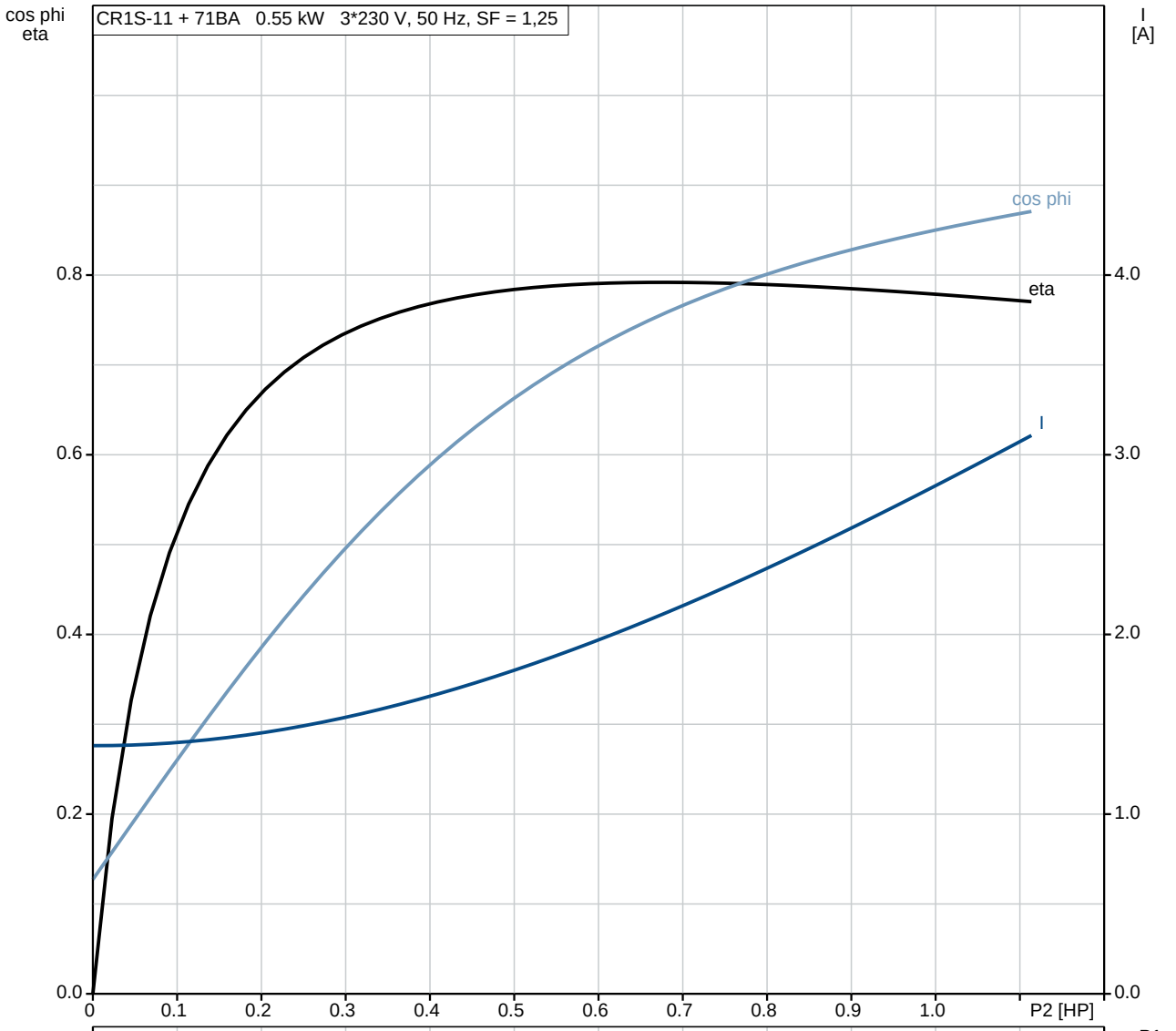
Date: 2/20/2018

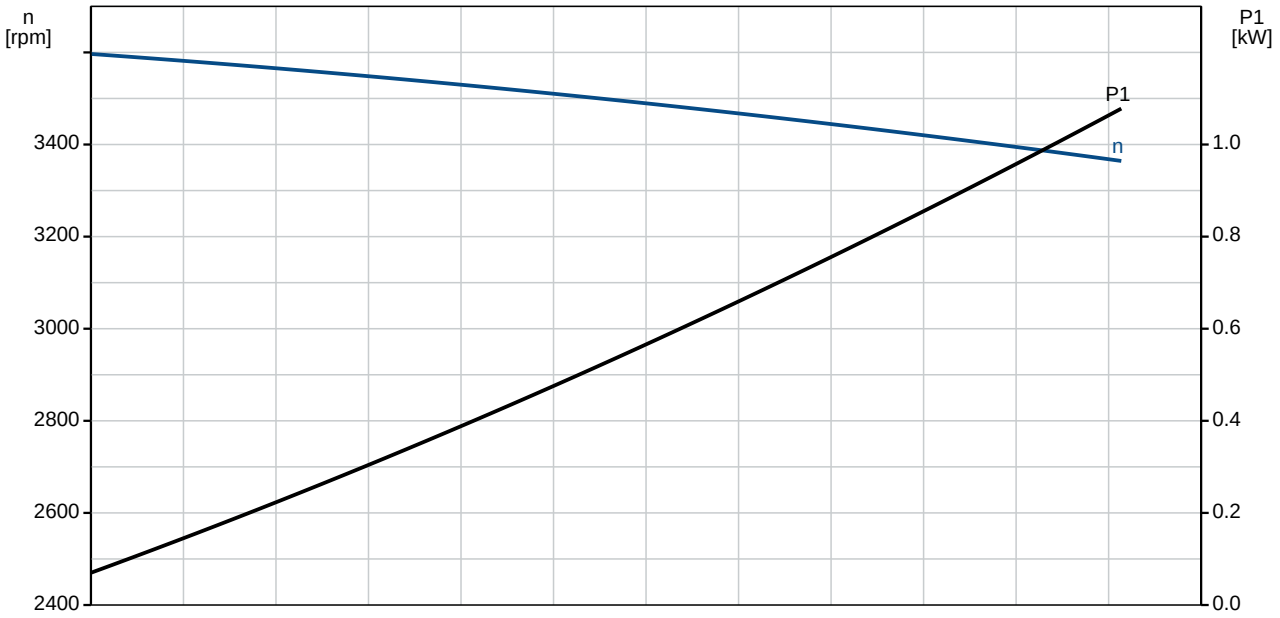
Description	Value
Rated speed:	3430-3460 rpm
Motor efficiency at full load:	79.0-80.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	85900702
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	53.7 lb
Gross weight:	64.7 lb
Shipping volume:	4.94 ft^3

Company name:
Created by:
Phone:

Date: 2/20/2018

96080964 CR 1S-11 60 Hz

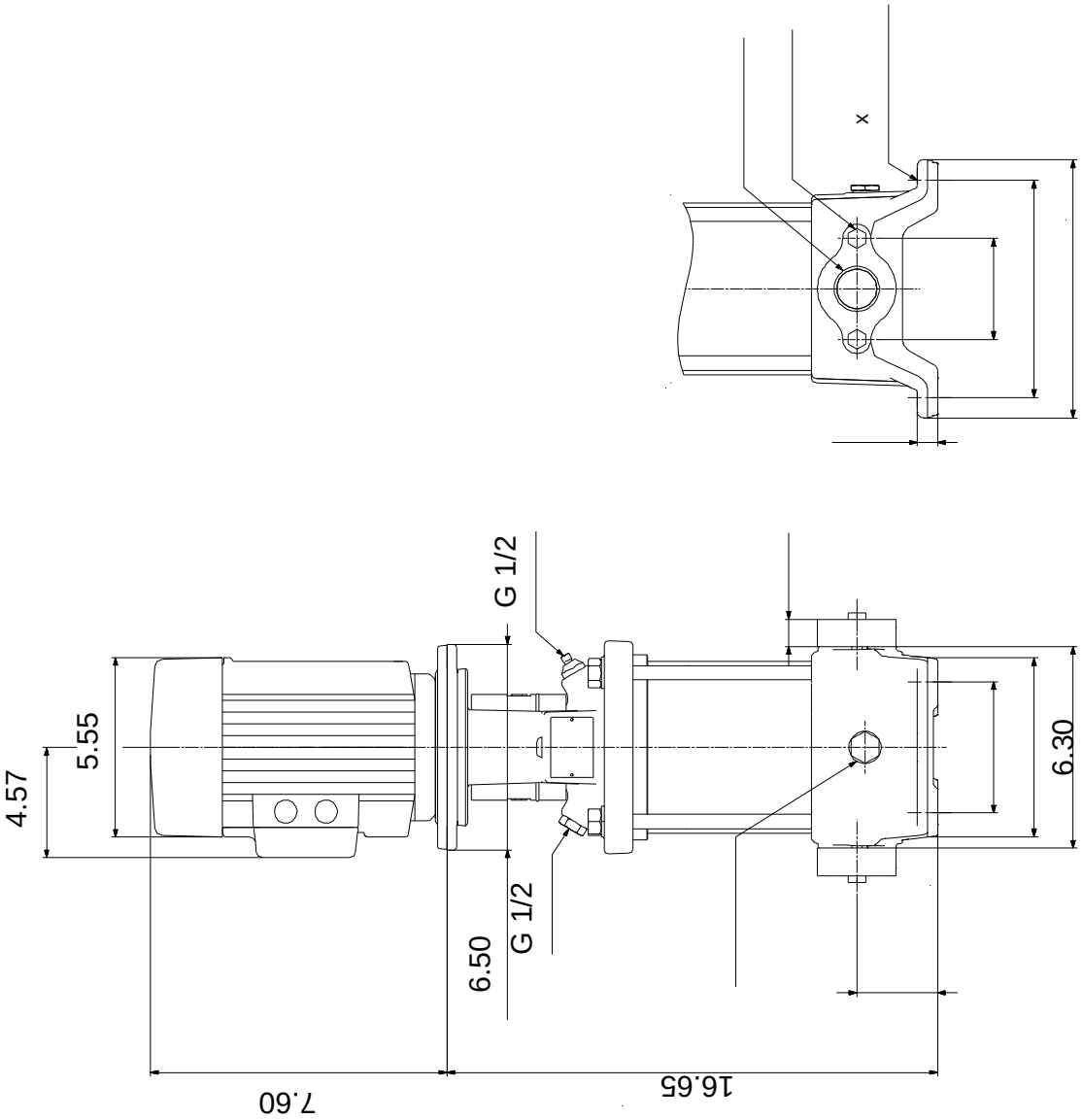




Company name:
Created by:
Phone:

Date: 2/20/2018

96080964 CR 1S-11 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: 2/20/2018

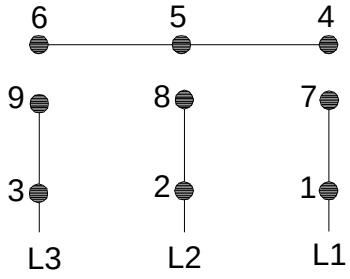
96080964 CR 1S-11 60 Hz

WARNING

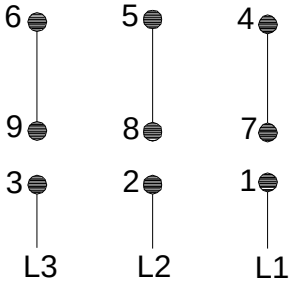
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

TO SERVICE MOTOR, DISCONNECT POWER SOURCE FROM MOTOR AND ANY ACCESSORY DEVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL.

LOW VOLTAGE
60Hz. 208-230V



HIGH VOLTAGE
60Hz: 460V
50Hz: 400V



96553852

INTERCHANGE ANY TWO LINE
WIRES TO REVERSE ROTATION

THERMOSTAT LEADS
(WHEN PROVIDED)

J
J

All units are [mm] unless otherwise presented.

Company name:
Created by:
Phone:

Date: 2/20/2018

Order Data:

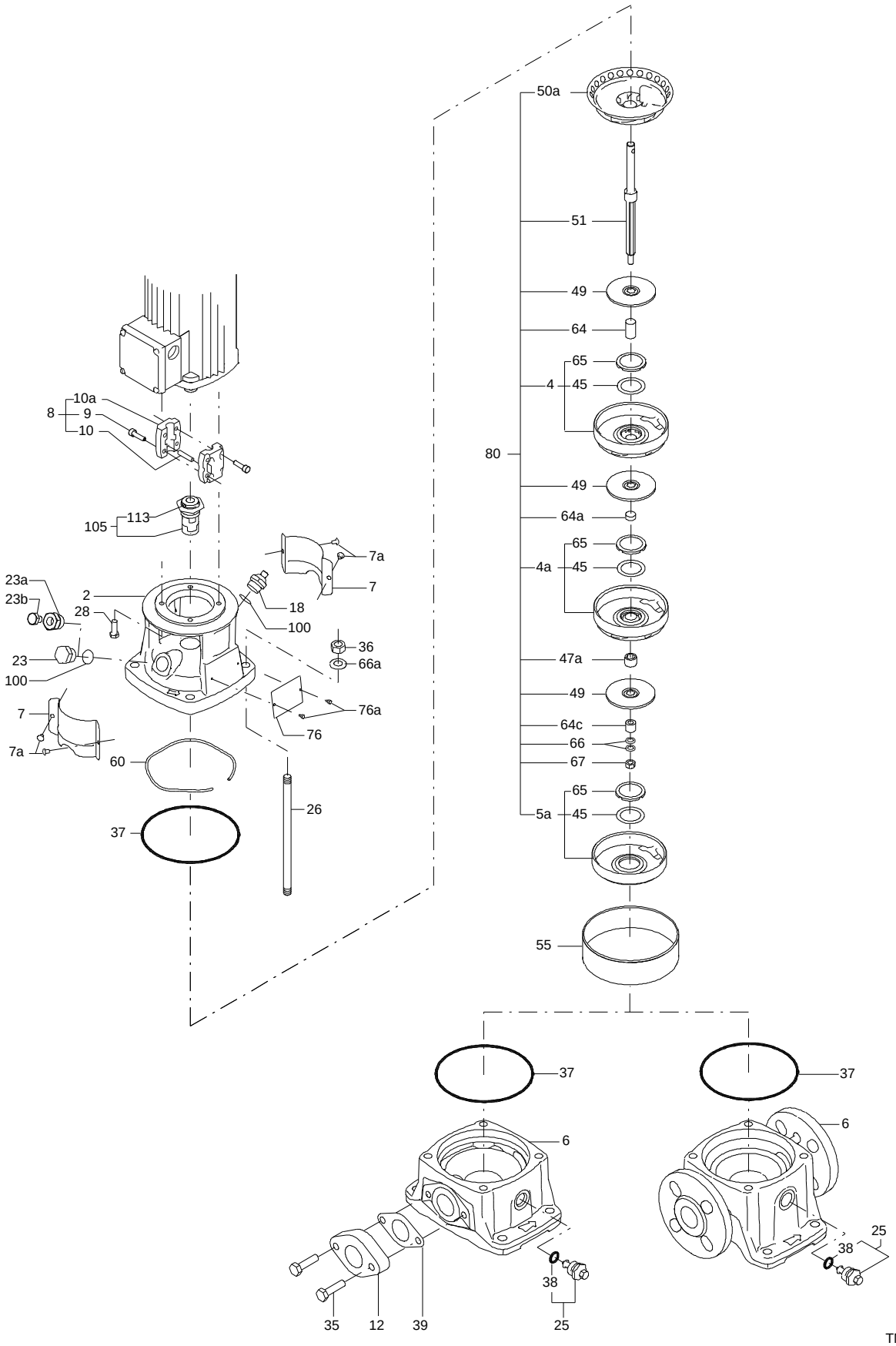
Product name: CR 1S-11 A-B-A-V-HQQV
Amount: 1
Product No.: 96080964

Total: Price on request

Company name:
Created by:
Phone:

Date: 2/20/2018

Exploded view (tm020210 4100)

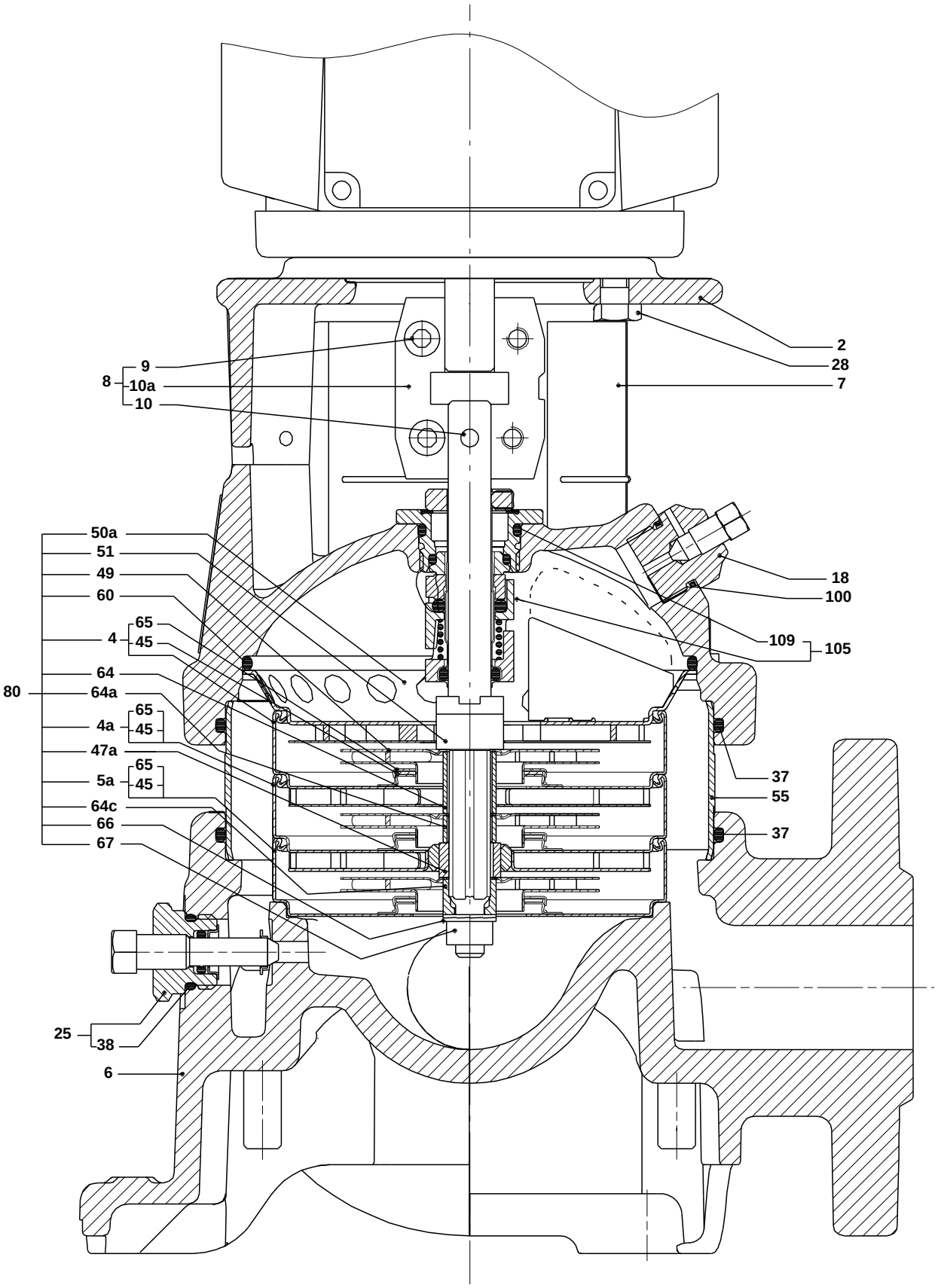


TM020210

Company name:
Created by:
Phone:

Date: 2/20/2018

Sectional drawing (tm020211 4100)



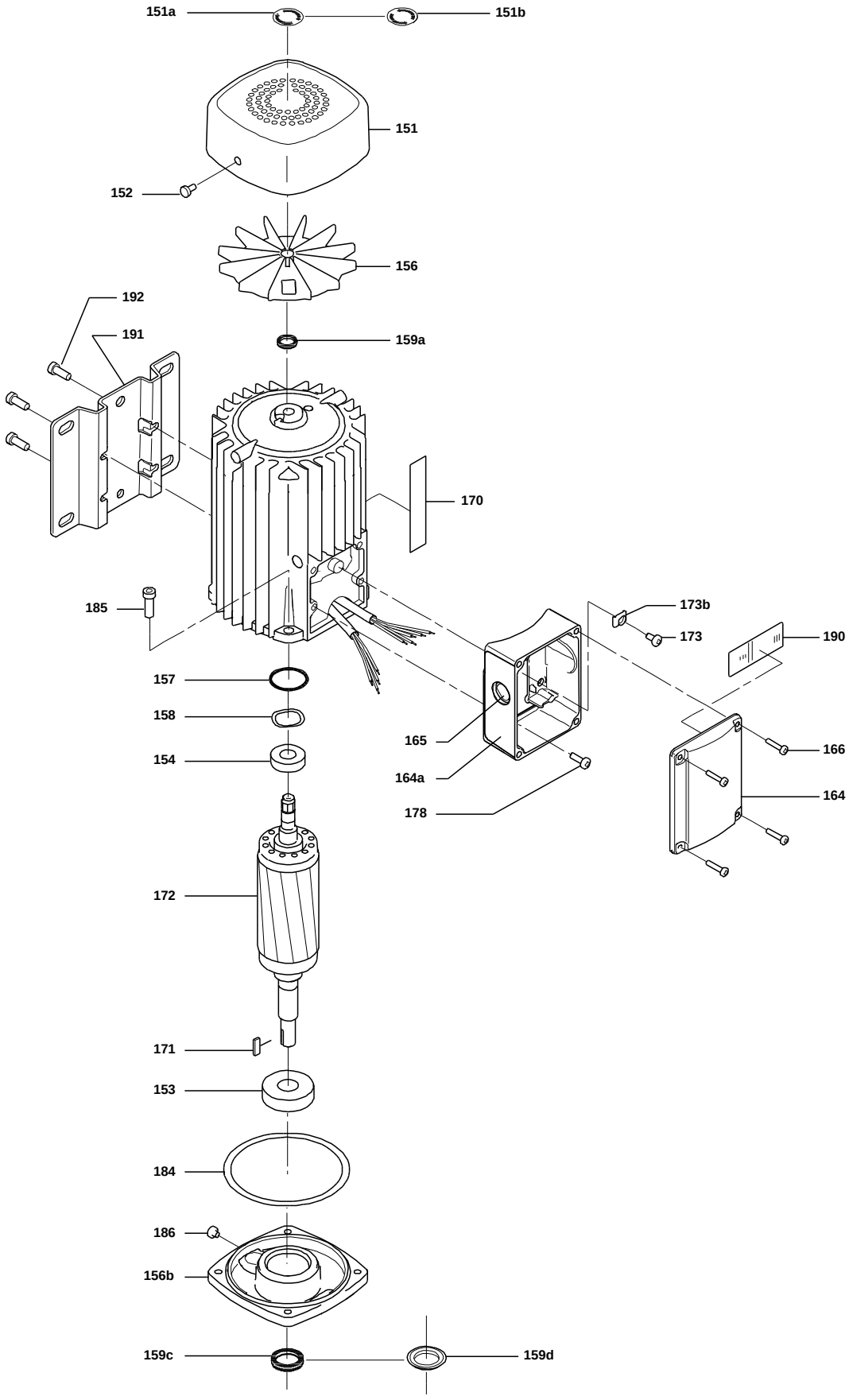
TM020211

GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

Exploded view (tm030552)

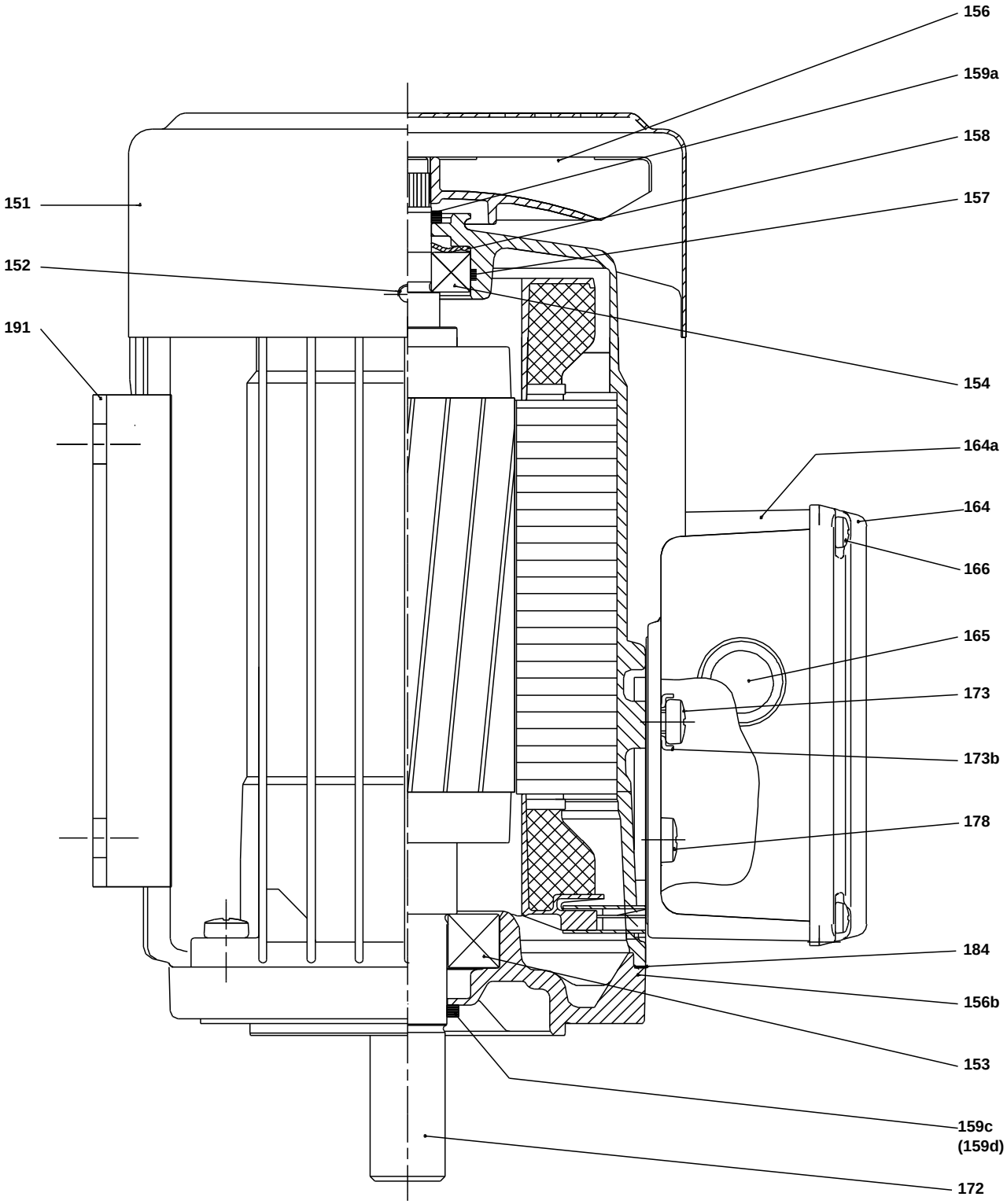


GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

Sectional drawing (TM031466)



TM031466)

GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

Parts list CR 1S-11, Prod number 96080964
Valid from 10.1.2005 (0503)

	Position	Description	Annotation	Classification data	Part No.	Count	Unit
		Motor				1	pcs
+		Motor				1	pcs
-		Base cpl.				1	pcs
	6	Base				1	
	12	Flange				2	
	35	Hex head screw		Length: 40		4	
				Thread: M10			
	37	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		2	
				Material type: FKM			
				Thickness: 3,3			
	100	O-ring		Diameter: 16,3		2	
				Material type: FKM			
				Thickness: 2,4			
-	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		4	
				Thread: UNC 3/8"			
	60	Formed wire spring				1	
+	8	Coupling cpl.				1	pcs
	26	Staybolt		Length: 223		4	pcs
				Thread: M12			
	36a	Washer		Designation: DIN 125 A		4	pcs
				Inner diameter: 13			
				Outer diameter: 24			
				Thickness: 2,5			
	55	Outer sleeve				1	pcs
	66a	Nut		Thread: M12		4	pcs
-	80	Chamber stack		Bearing type: HQQE		1	pcs
-		Guide vane cpl.				1	
		Plate					
	50a	Guide vane					
	50b	Top plate					
-	4	Chamber cpl.				8	
		Guide vane					
		Plate					
		Retainer					
		Intermediate chamber					
		Vane					
	45	Neck ring					

GRUNDFOS

Company name:
Created by:
Phone:

Date: 2/20/2018

	Position	Description	Annotation	Classification data	Part No.	Count	Unit
	65	Retainer					
-	4a	Chamber w. bearing cpl.				2	
		Guide vane					
		Retainer for bearing					
		Bearing bush					
		Retainer					
		Intermediate chamber					
		Vane					
	45	Neck ring					
	65	Retainer					
-	5a	Chamber cpl.				1	
		Retainer					
		Intermediate chamber					
		Vane					
	45	Neck ring					
	65	Retainer					
	36	Lock nut		Thread: M8		1	
	47a	Bearing ring, rotating				2	
-	49	Impeller cpl.				11	
	49	Impeller					
	51	Shaft, spline, cpl.				1	
	64a	Spacing pipe				8	
	64a	Spacing pipe		Inner diameter: 12,85		2	
				Outer diameter: 15,85			
				Length: 4,50			
	64c	Clamp, splined		Inner diameter: 8,5		1	
				Outer diameter: 15			
	66	Wedge lock washer				1	
-	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	