

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

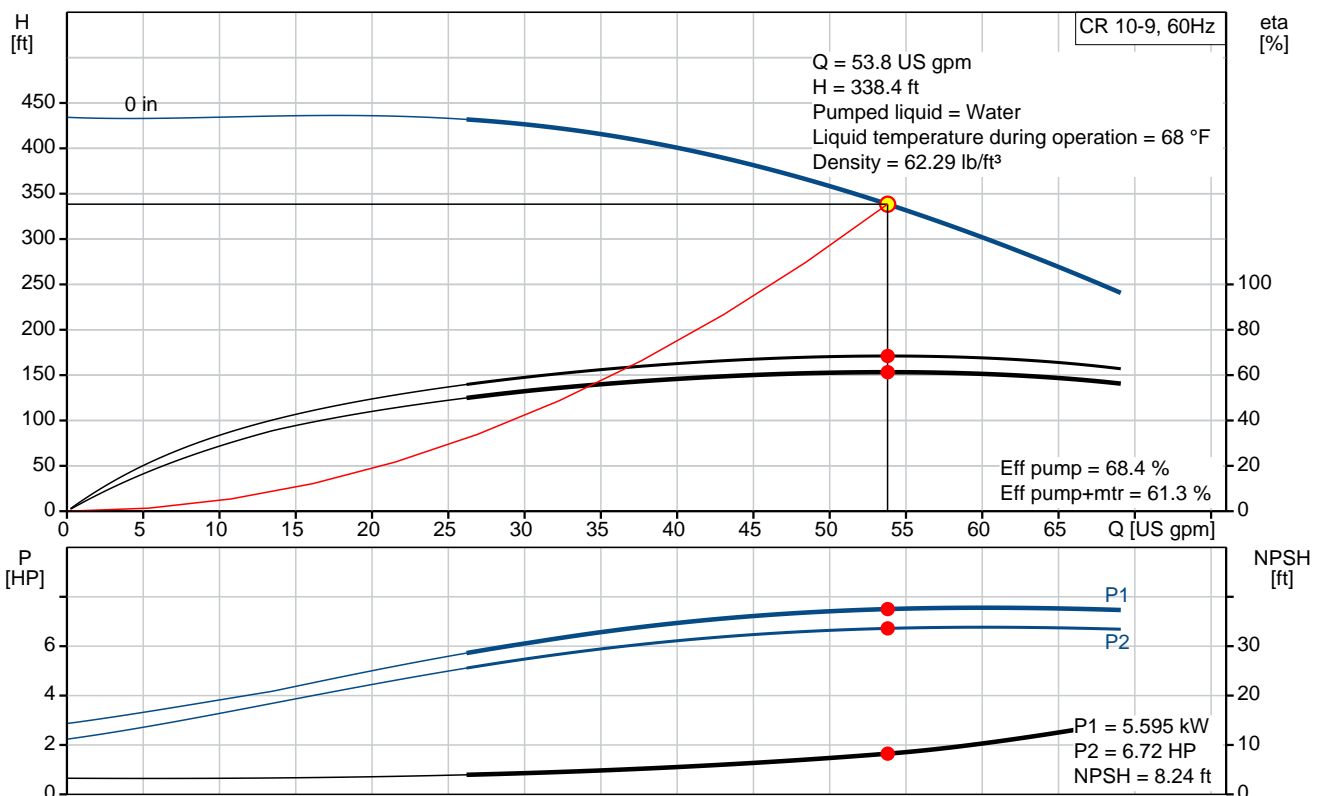


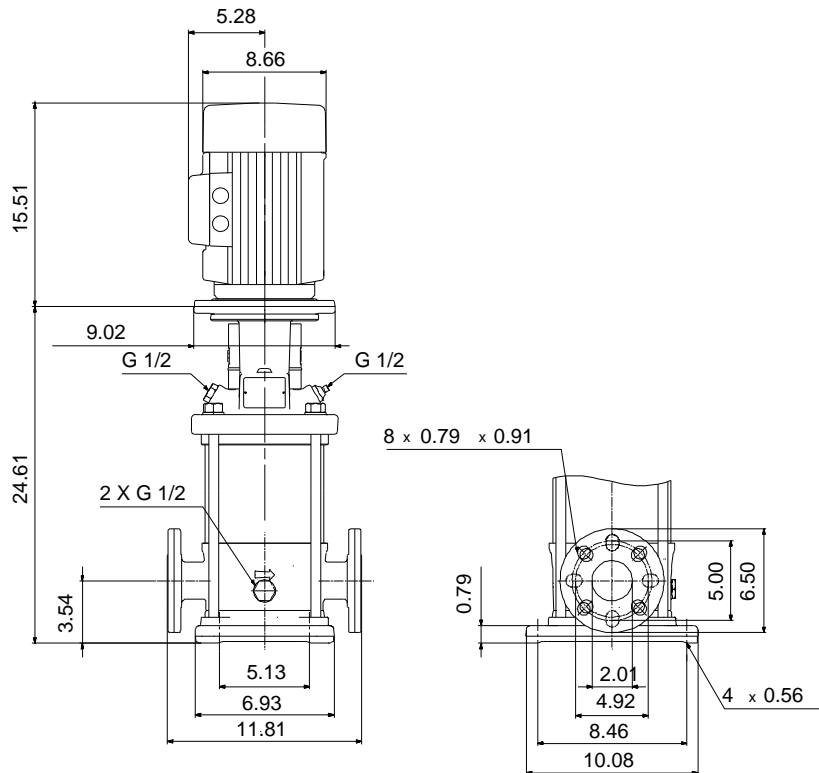
### CR 10-9

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:	53.8 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Rated power - P2:	7.5 HP
Head:	338.4 ft	Maximum ambient temperature:	140 °F	Rated voltage:	208-230YY/460Y V
Efficiency:	61.3 %	Approvals:	CURUS	Main frequency:	60 Hz
Liquid:	Water	Shaft seal:	HQQE	Enclosure class:	55 Dust/Jetting
Temperature:	68 °F	Product number:	96523177	Insulation class:	F
NPSH required:	8.24 ft			Motor protection:	PTC
Viscosity:	_____			Motor type:	132DA
Specific Gravity:	1.000			Motor_efficiency:	89.5 %





**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: E

## Tender Text



Product No.: [96523177](#)

### CR 10-9 A-GJ-A-E-HQQE

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/ft<sup>3</sup>

#### Technical:

Speed for pump data: 3467 rpm

Actual calculated flow: 53.8 US gpm

Resulting head of the pump: 338.4 ft

Pump orientation: Vertical

Shaft seal arrangement: Single

Code for shaft seal: HQQE

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 / 250 °F  
232 psi / -4 °F

Type of connection: ANSI / JIS

Size of inlet connection: DN 50



Company name:

Created by:

Phone:

Date:

2/20/2018


Size of suction port: 2 inch  
Size of outlet connection: DN 50  
Size of outlet port: 2 inch  
Pressure rating: PN 25  
Flange size for motor: 213TC  
Flange rating inlet: 300 lb

**Electrical data:**

Motor standard: NEMA  
Motor type: 132DA  
IE Efficiency class: NEMA Premium / IE3 60Hz  
Rated power - P2: 7.5 HP  
Power (P2) required by pump: 7.5 HP  
Main frequency: 60 Hz  
Rated voltage: 3 x 208-230YY/460Y V  
Service factor: 1,15  
Rated current: 19,5-18,1/9,09 A  
Starting current: 1020-1480 %  
Cos phi - power factor: 0,89-0,86  
Rated speed: 3490-3515 rpm  
IE efficiency: IE3 89,5%  
Motor efficiency at full load: 89.5 %  
Motor efficiency at 3/4 load: 89.7 %  
Motor efficiency at 1/2 load: 88.3 %  
Number of poles: 2  
Enclosure class (IEC 34-5): 55 Dust/Jetting  
Insulation class (IEC 85): F

**Others:**

Net weight: 201 lb  
Gross weight: 221 lb  
Shipping volume: 10.1 ft<sup>3</sup>

Position	Count	Description
	1	<p><b>CR 10-9 A-GJ-A-E-HQQE</b></p>  <p>Product No.: <a href="#">96523177</a>            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 and intermediate chambers are made of</li> <li>- The shaft seal has assembly length according to EN 12756.</li> <li>- Power transmission is via cast iron split coupling.</li> </ul> <p>The motor is a 3-phase AC motor.</p> <p>Controls:            Frequency converter: NONE</p> <p><b>Liquid:</b>            Pumped liquid: Water            Liquid temperature during operation: 68 °F            Density: 62.29 lb/ft<sup>3</sup></p> <p><b>Technical:</b>            Speed for pump data: 3467 rpm            Actual calculated flow: 53.8 US gpm            Resulting head of the pump: 338.4 ft            Pump orientation: Vertical            Shaft seal arrangement: Single            Code for shaft seal: HQQE            Approvals on nameplate: CURUS            Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b>            Base: Cast iron                      EN 1561 EN-GJL-200                      ASTM A48-25B            Impeller: Stainless steel                      EN 1.4301                      AISI 304            Bearing material: SIC</p> <p><b>Installation:</b>            Maximum ambient temperature: 140 °F            Max pressure at stated temperature: 232 psi / 250 °F              232 psi / -4 °F</p> <p>Type of connection: ANSI / JIS            Size of inlet connection: DN 50            Size of suction port: 2 inch</p>



Company name:

Created by:

Phone:

Date:

2/20/2018

Position	Count	Description
		Size of outlet connection: DN 50
		Size of outlet port: 2 inch
		Pressure rating: PN 25
		Flange size for motor: 213TC
		Flange rating inlet: 300 lb
		<b>Electrical data:</b>
		Motor standard: NEMA
		Motor type: 132DA
		IE Efficiency class: NEMA Premium / IE3 60Hz
		Rated power - P2: 7.5 HP
		Power (P2) required by pump: 7.5 HP
		Main frequency: 60 Hz
		Rated voltage: 3 x 208-230YY/460Y V
		Service factor: 1,15
		Rated current: 19,5-18,1/9,09 A
		Starting current: 1020-1480 %
		Cos phi - power factor: 0,89-0,86
		Rated speed: 3490-3515 rpm
		IE efficiency: IE3 89,5%
		Motor efficiency at full load: 89.5 %
		Motor efficiency at 3/4 load: 89.7 %
		Motor efficiency at 1/2 load: 88.3 %
		Number of poles: 2
		Enclosure class (IEC 34-5): 55 Dust/Jetting
		Insulation class (IEC 85): F
		<b>Others:</b>
		Net weight: 201 lb
		Gross weight: 221 lb
		Shipping volume: 10.1 ft <sup>3</sup>



Company name:

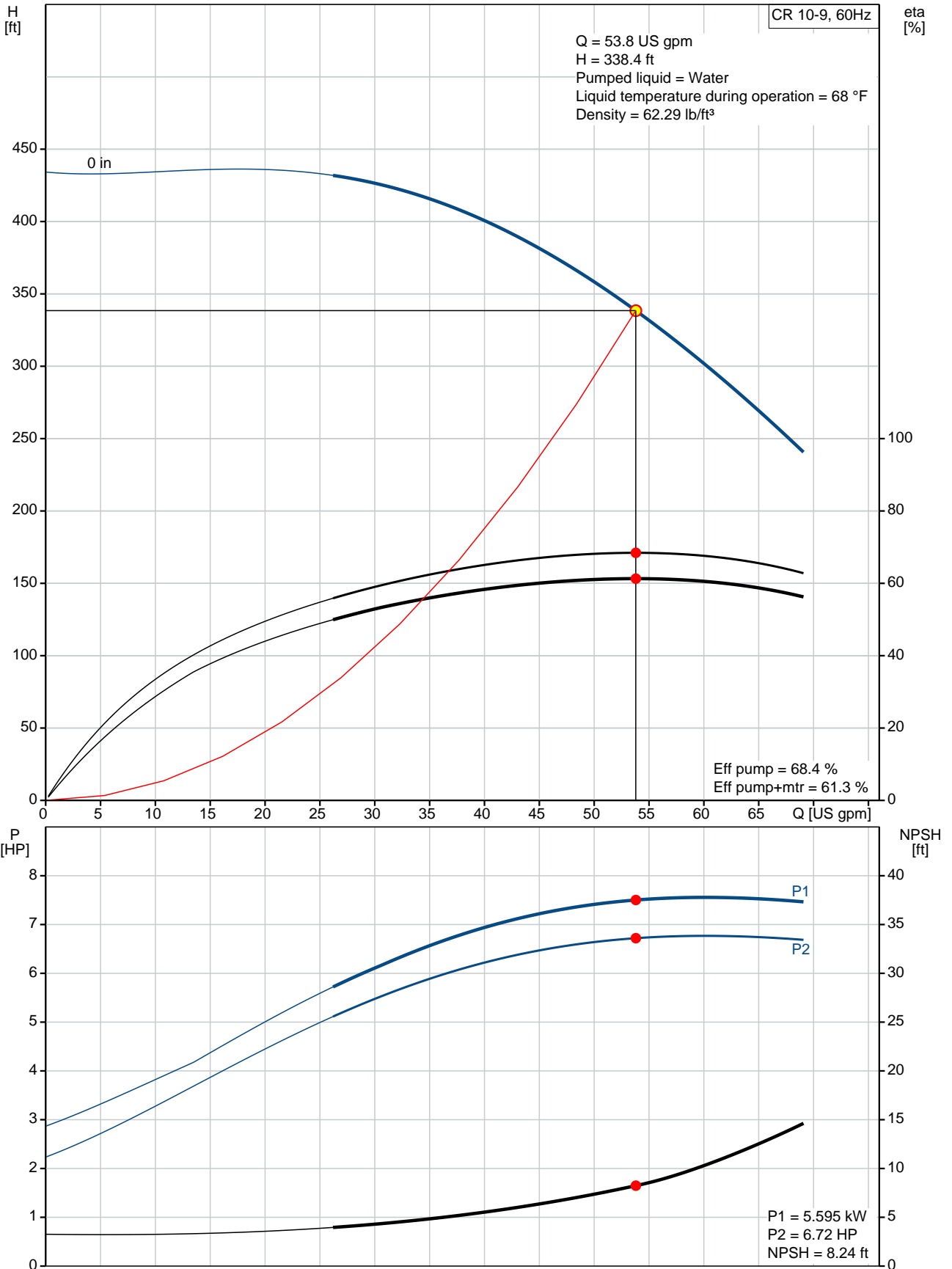
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Phone:

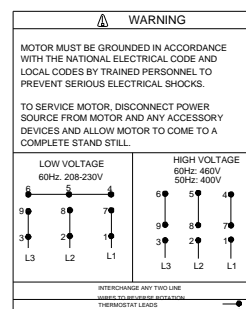
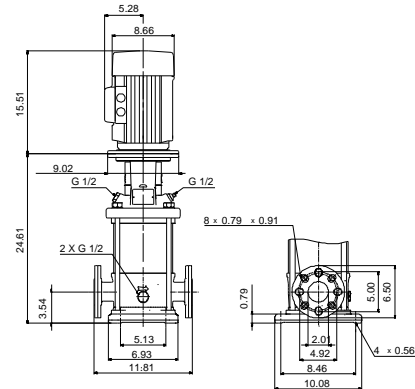
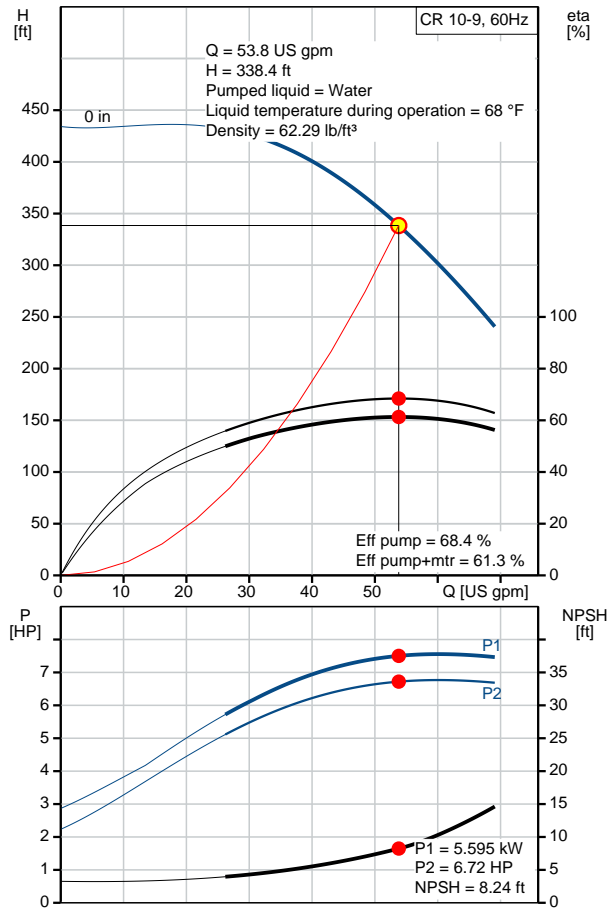
Date:

2/20/2018

### 96523177 CR 10-9 60 Hz



Description	Value
<b>General information:</b>	
Product name:	CR 10-9 A-GJ-A-E-HQQE
Product No.:	96523177
EAN:	5700396899510
<b>Technical:</b>	
Speed for pump data:	3467 rpm
Actual calculated flow:	53.8 US gpm
Resulting head of the pump:	338.4 ft
Stages:	9
Impellers:	9
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC
<b>Materials:</b>	
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:	E
Bearing material:	SIC
<b>Installation:</b>	
Maximum ambient temperature:	140 °F
Max pressure at stated temperature:	232 psi / 250 °F 232 psi / -4 °F
Type of connection:	ANSI / JIS
Connect code:	GJ
Size of inlet connection:	DN 50
Size of suction port:	2 inch
Size of outlet connection:	DN 50
Size of outlet port:	2 inch
Pressure rating:	PN 25
Flange size for motor:	213TC
Flange rating inlet:	300 lb
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	NEMA
Motor type:	132DA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	7.5 HP
Power (P2) required by pump:	7.5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V







Company name:

Created by:

Phone:

Date:

2/20/2018

Description	Value
Service factor:	1,15
Rated current:	19,5-18,1/9,09 A
Starting current:	1020-1480 %
Load current:	22,4-20,8/10,4 A
Cos phi - power factor:	0,89-0,86
Rated speed:	3490-3515 rpm
IE efficiency:	IE3 89,5%
Motor efficiency at full load:	89.5 %
Motor efficiency at 3/4 load:	89.7 %
Motor efficiency at 1/2 load:	88.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	PTC
Motor Number:	85904392

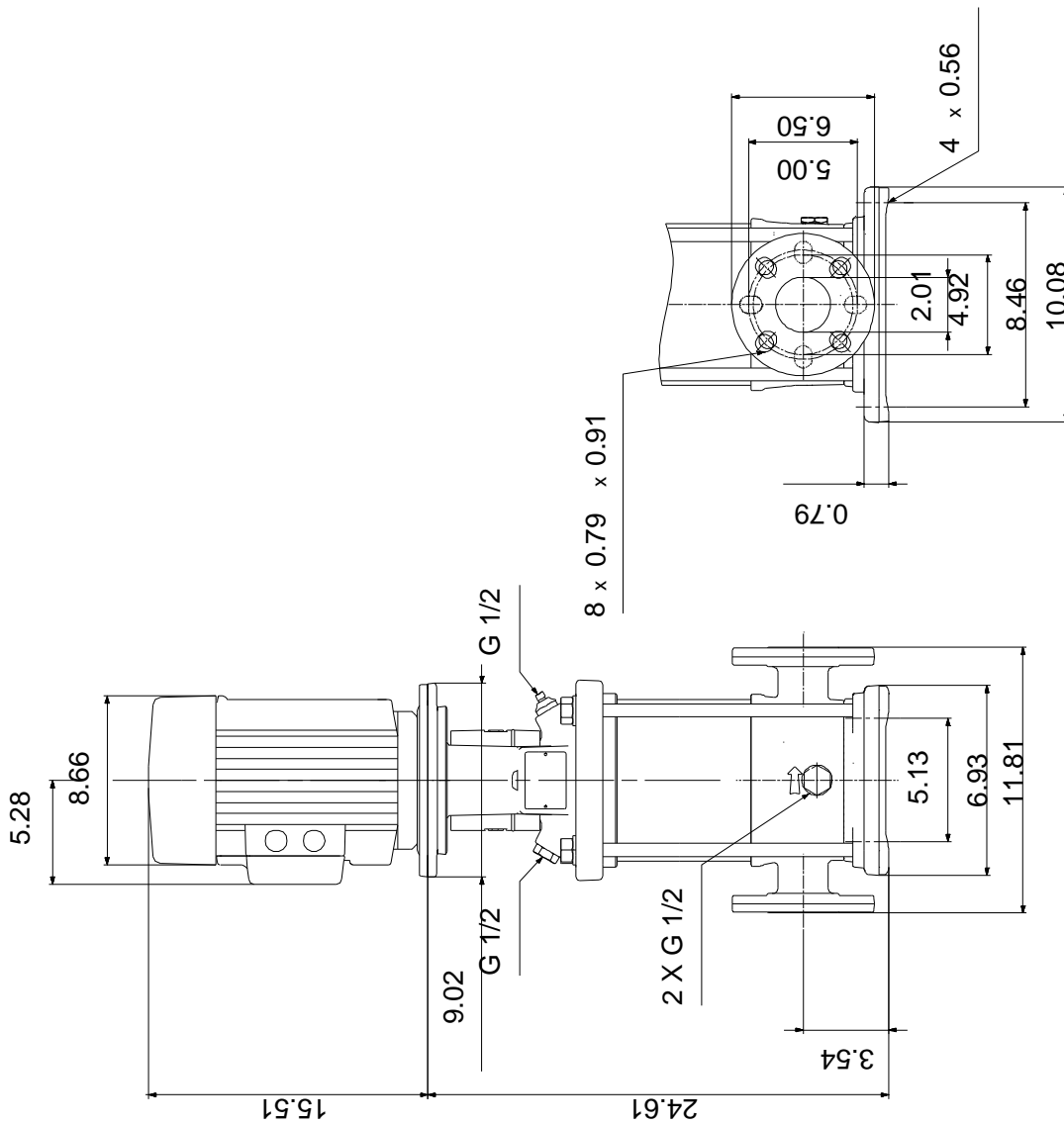
**Controls:**

Frequency converter:	NONE
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**Others:**

Net weight:	201 lb
Gross weight:	221 lb
Shipping volume:	10.1 ft <sup>3</sup>

## 96523177 CR 10-9 60 Hz



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

## 96523177 CR 10-9 60 Hz

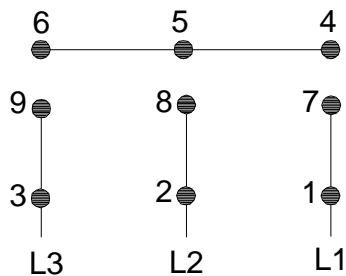


### WARNING

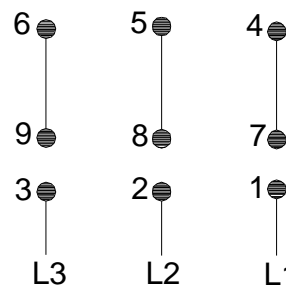
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

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

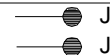


#### HIGH VOLTAGE 60Hz: 460V 50Hz: 400V



96553852

INTERCHANGE ANY TWO LINE WIRES TO REVERSE ROTATION  
THERMOSTAT LEADS  
(WHEN PROVIDED)





Company name:

Created by:

Phone:

Date: 2/20/2018

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**Order Data:**

Product name: CR 10-9 A-GJ-A-E-HQQE

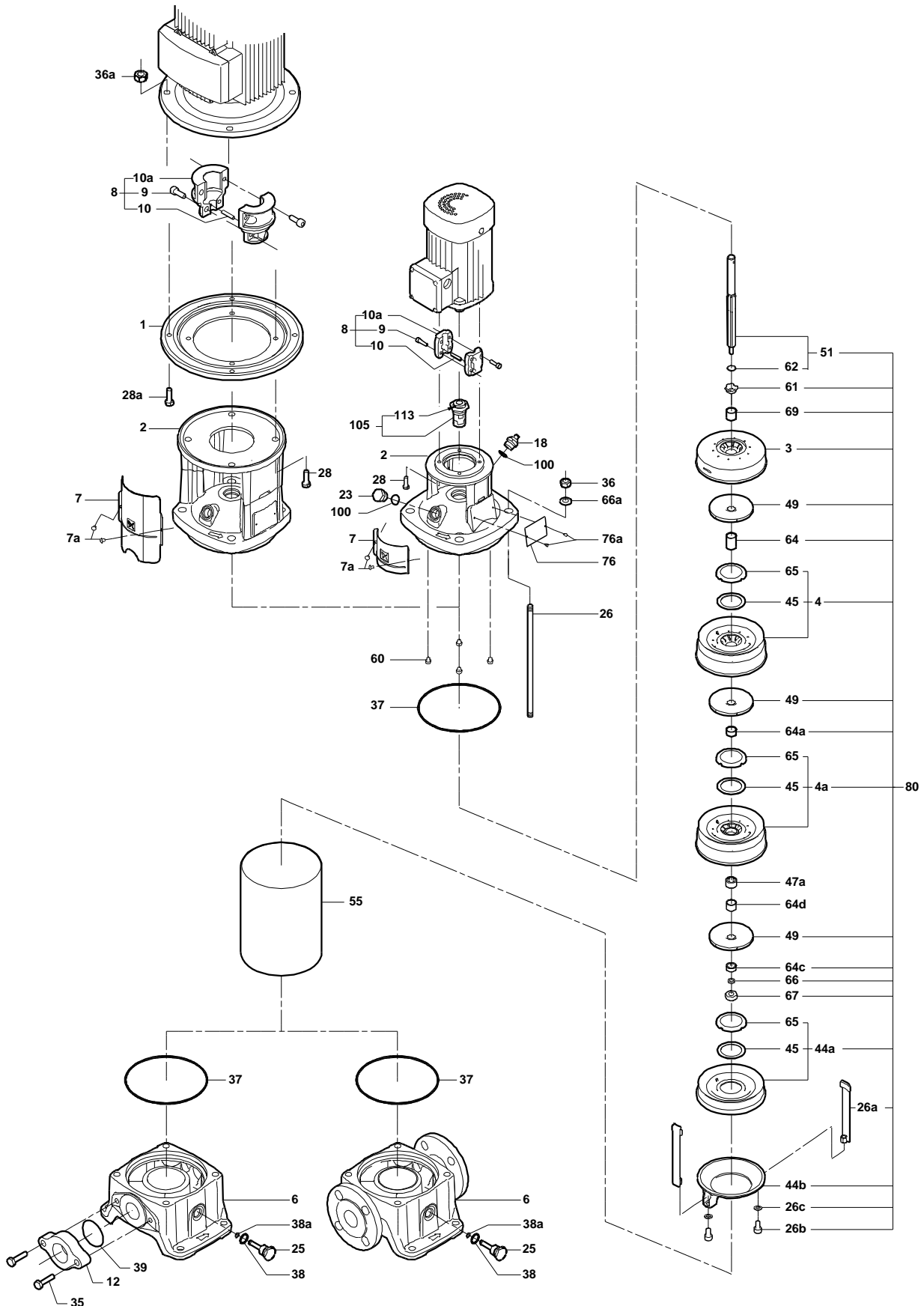
Amount: 1

Product No.: 96523177

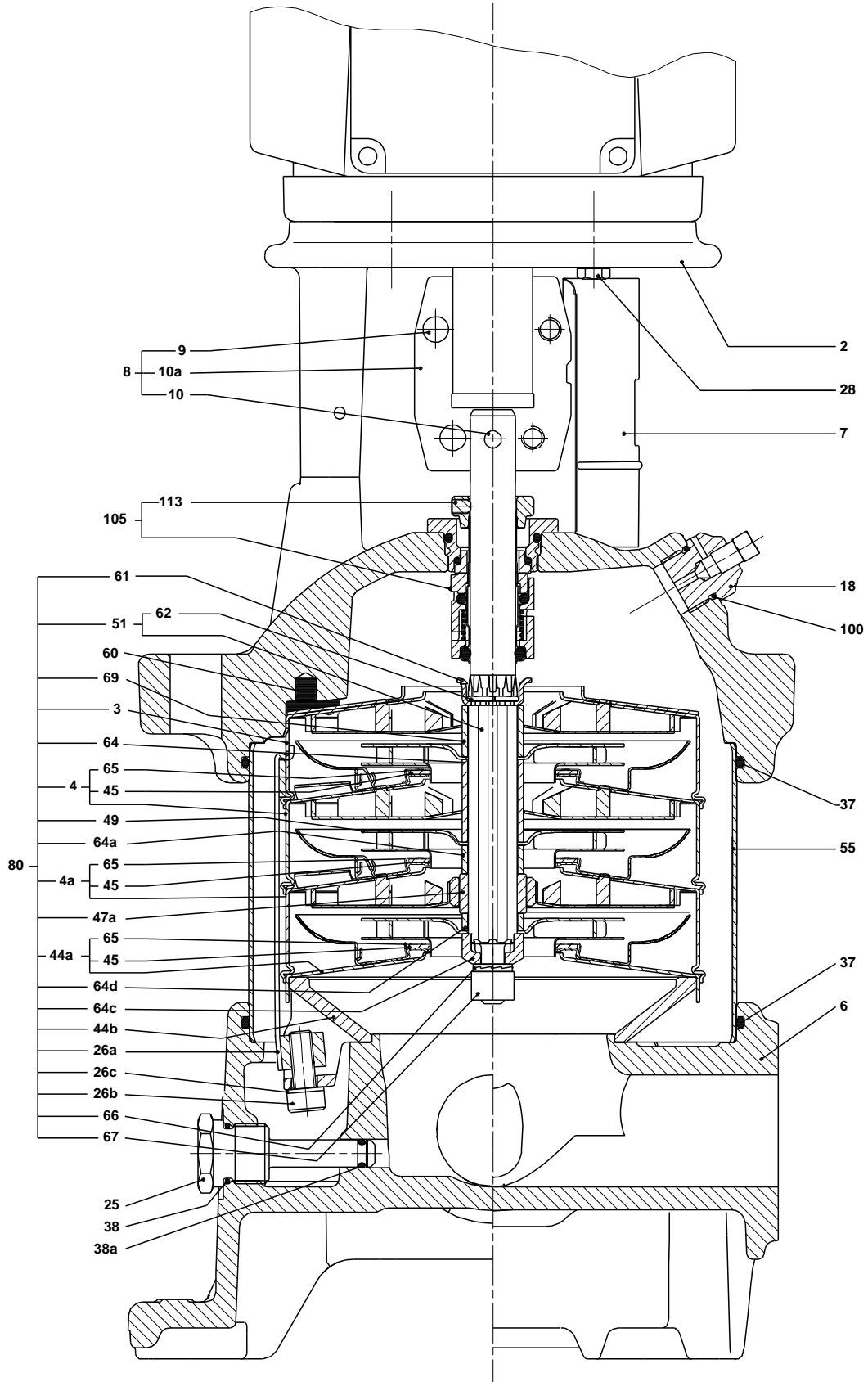
Total: Price on request

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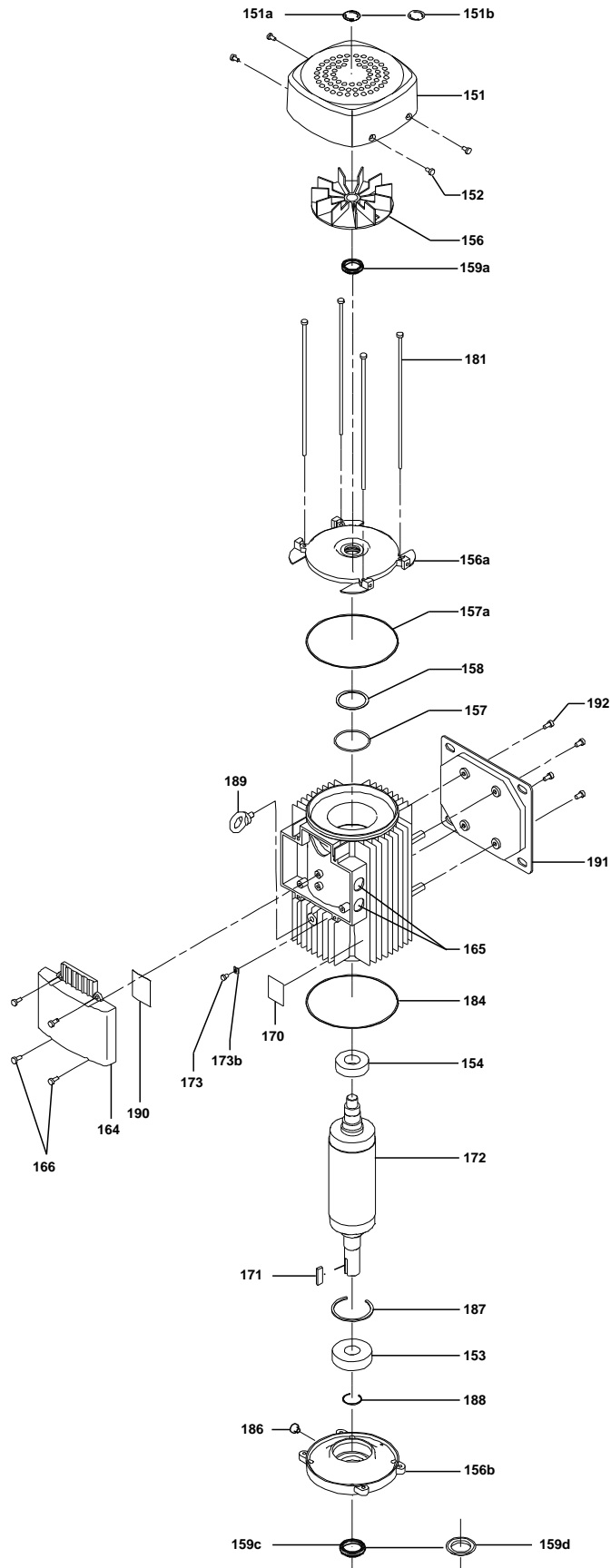
## Exploded view



## Sectional drawing

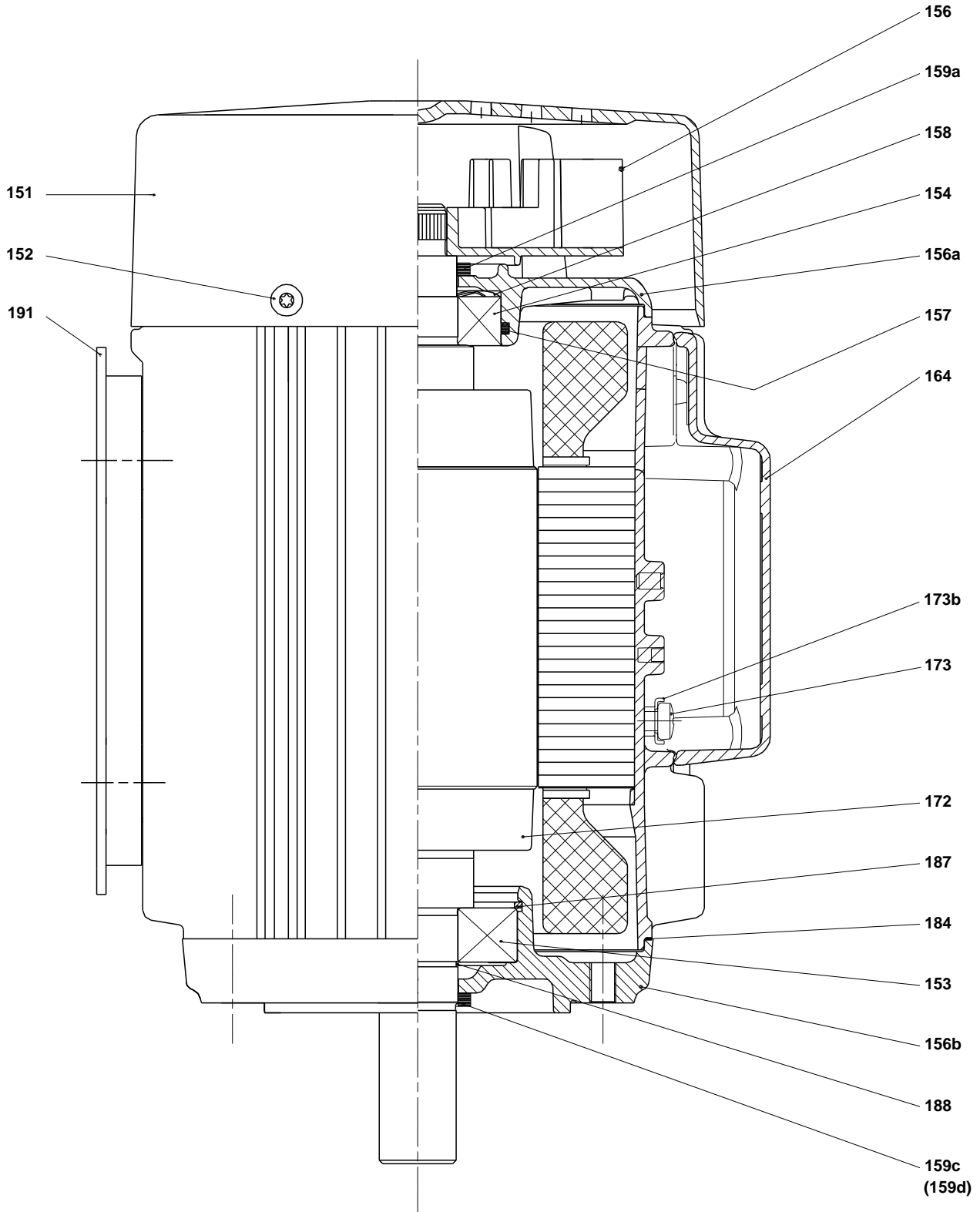


## Exploded view (tm030553)



TM030553)

Sectional drawing (TM031465)





**Parts list CR 10-9, Prod number 96523177**  
**Valid from 1.7.2011 (1127)**

Position	Description	Annotation	Classification data	Part No.	Count	Unit
+	Motor				1	pcs
	Motor				1	pcs
-	Base cpl.				1	pcs
6	Base				1	
25	Drain plug				1	
-	Pump head cpl.				1	pcs
1	Flange cpl.				4	
2	Pump head				1	
7	Coupling guard				2	
7.a	Thread cutting screw				4	
-	18 Air vent screw				1	
	Plug					
	Spindle					
23	Pipe plug				1	
-	Rubber module				1	pcs
20	Spring				4	
37	O-ring				2	
38	O-ring		Diameter: 16,3		1	
			Material type: EPDM			
			Thickness: 2,4			
38a	O-ring		Diameter: 5,3		1	
			Material type: EPDM			
			Thickness: 2,4			
100	O-ring		Diameter: 16,3		2	
			Material type: EPDM			
			Thickness: 2,4			
-	8 Coupling		Dimension: D35/D16		1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 25			
			Thread: M10			
10	Shaft pin		Diameter: 5		1	
			Length: 26			
10a	Coupling				1	
26	Staybolt				4	pcs
36	Hex nut		Thread: M16		4	pcs
55	Outer sleeve				1	pcs
66a	Washer		Designation: DIN 125 A		4	pcs
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
-	80 Chamber stack		Bearing type: SIC		1	pcs
-	Intermediate chamber cpl.				1	
	Guide vane					
3	Top intermediate chamber					
-	4 Intermediate chamber cpl.				6	
	Guide vane					
	Guide cup					
3a	Intermediate chamber					
45	Neck ring cpl.					
65	Retainer					
-	4a Intermediate chamber cpl.				2	
	Guide vane					
	Bearing plate					

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Bearing bush					
	Guide cup					
3a	Intermediate chamber					
45	Neck ring cpl.					
65	Retainer					
26.b	Hex head screw				2	
26.c	Washer		Designation: DIN 125A		2	
			Inner diameter: 8,4			
			Outer diameter: 16			
			Thickness: 1,6			
26a	Strap cpl.				2	
36	Lock nut		Thread: M8		1	
- 44a	Inlet part cpl.				1	
	Inlet part					
	Guide cup					
45	Neck ring cpl.					
65	Retainer					
44b	Inlet part				1	
47a	Bearing ring				2	
49	Impeller cpl.				9	
- 51	Shaft, spline, cpl.				1	
	Bar					
62	Stop ring					
64	Spacing bush		Length: 9.00		2	
64.d	Spacer				2	
64c	Spacing pipe		Length: 12.7		1	
66	Wedge lock washer				1	
69	Spacing pipe		Length: 29.05		6	
69	Spacing bush		Length: 18.00		1	
105	Shaft seal		Material type: HQQE		1	pcs