

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

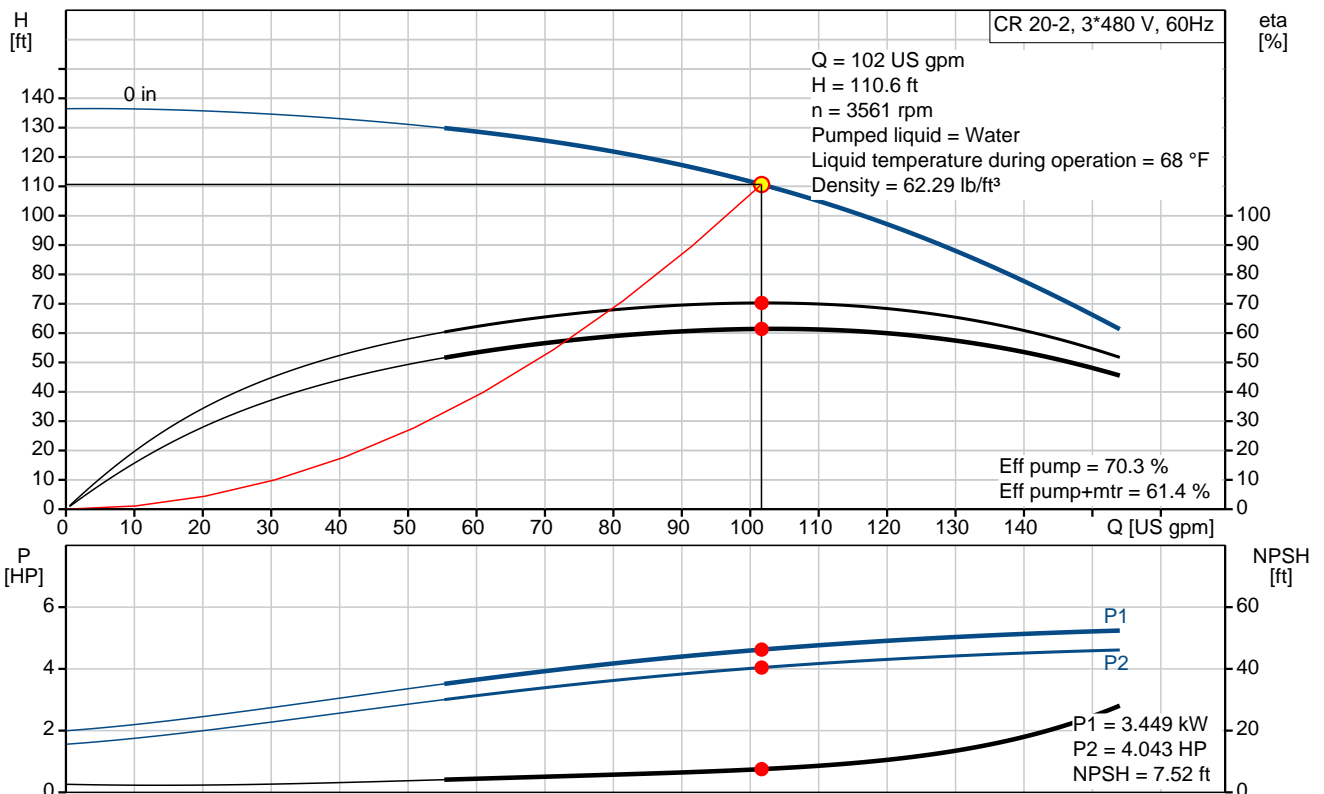


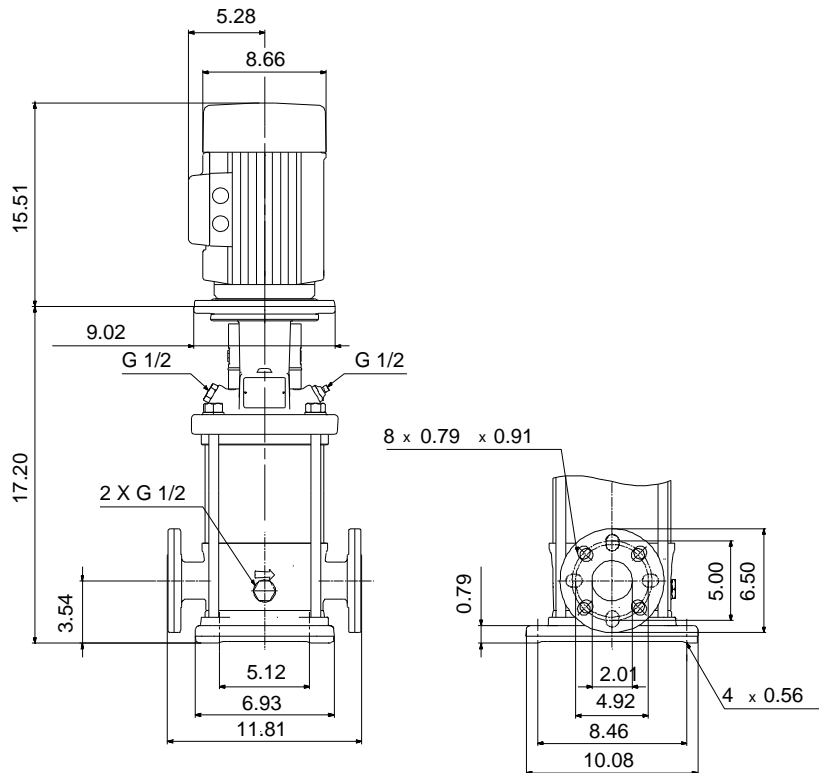
CR 20-2

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:	102 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Rated power - P2:	5.5 HP
Head:	110.6 ft	Maximum ambient temperature:	140 °F	Rated voltage:	208-230YY/460Y V
Efficiency:	61.4 %	Approvals:	CURUS	Main frequency:	60 Hz
Liquid:	Water	Shaft seal:	HQQE	Enclosure class:	55 Dust/Jetting
Temperature:	68 °F	Product number:	96524009	Insulation class:	F
NPSH required:	7.52 ft			Motor protection:	PTC
Viscosity:	_____			Motor type:	112CA
Specific Gravity:	1.000			Motor_efficiency:	88.5 %





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.: [96524009](#)

CR 20-2 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/ft³

Technical:

Speed for pump data: 3461 rpm

Actual calculated flow: 102 US gpm

Resulting head of the pump: 110.6 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



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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: 182TC
Flange rating inlet: 250 lb

Electrical data:

Motor standard: NEMA
Motor type: 112CA
IE Efficiency class: NEMA Premium / IE3 60Hz
Rated power - P2: 5.5 HP
Power (P2) required by pump: 5.5 HP
Main frequency: 60 Hz
Rated voltage: 3 x 208-230YY/460Y V
Service factor: 1,15
Rated current: 14,1-13,1/7,29 A
Starting current: 1000-1470 %
Cos phi - power factor: 0,89-0,86
Rated speed: 3525-3540 rpm
IE efficiency: IE3 88,5%
Motor efficiency at full load: 88.5 %
Motor efficiency at 3/4 load: 88.6 %
Motor efficiency at 1/2 load: 85.2 %
Number of poles: 2
Enclosure class (IEC 34-5): 55 Dust/Jetting
Insulation class (IEC 85): F

Others:

Net weight: 174 lb
Gross weight: 192 lb
Shipping volume: 8.26 ft³

Position	Count	Description
	1	<p>CR 20-2 A-GJ-A-E-HQQE</p>  <p>Product No.: 96524009 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: 3461 rpm Actual calculated flow: 102 US gpm Resulting head of the pump: 110.6 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE 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 / 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:

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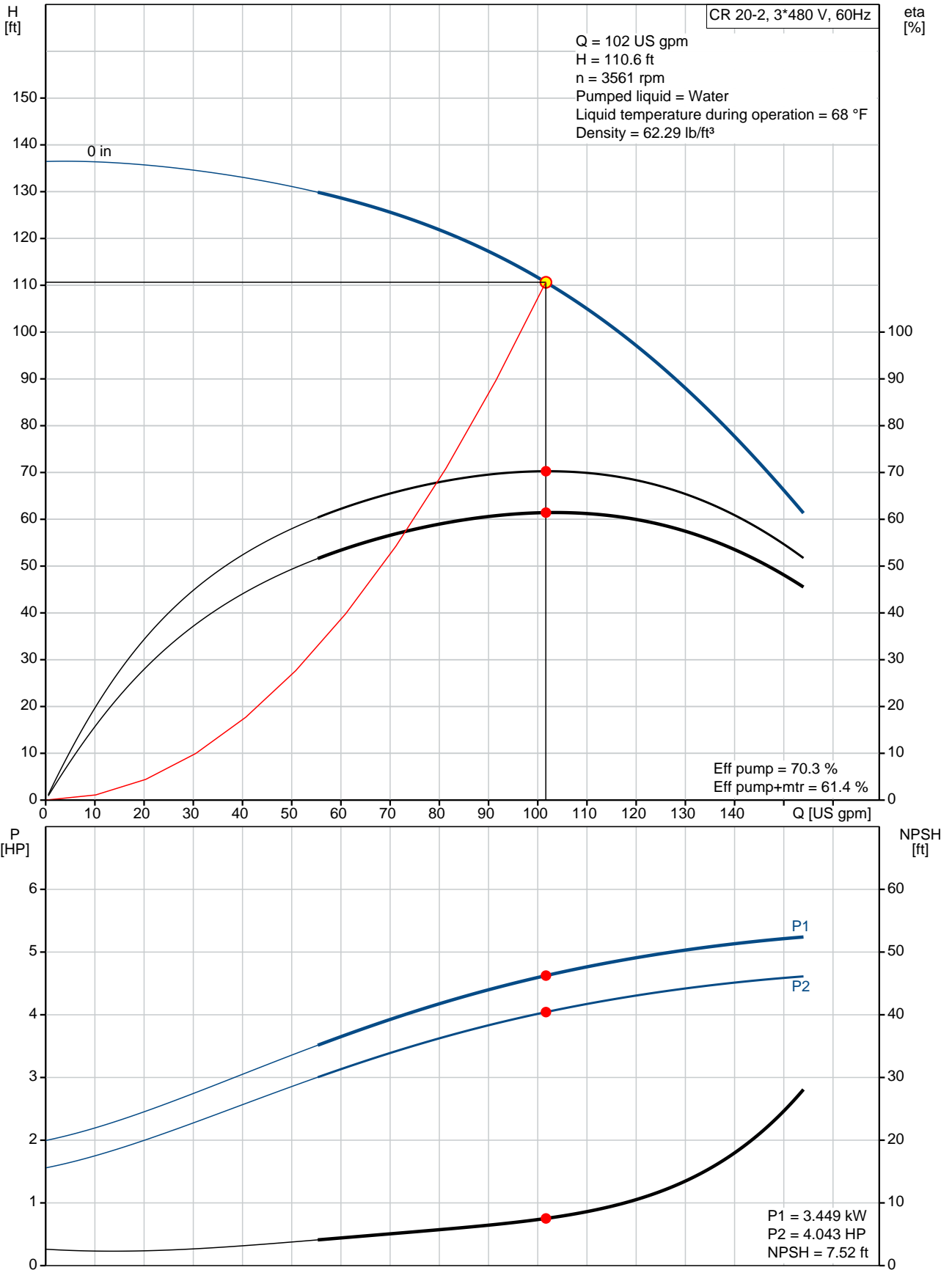
Position	Count	Description
		Size of outlet connection: DN 50 Size of outlet port: 2 inch Pressure rating: PN 25 Flange size for motor: 182TC Flange rating inlet: 250 lb
		Electrical data: Motor standard: NEMA Motor type: 112CA IE Efficiency class: NEMA Premium / IE3 60Hz Rated power - P2: 5.5 HP Power (P2) required by pump: 5.5 HP Main frequency: 60 Hz Rated voltage: 3 x 208-230YY/460Y V Service factor: 1,15 Rated current: 14,1-13,1/7,29 A Starting current: 1000-1470 % Cos phi - power factor: 0,89-0,86 Rated speed: 3525-3540 rpm IE efficiency: IE3 88,5% Motor efficiency at full load: 88.5 % Motor efficiency at 3/4 load: 88.6 % Motor efficiency at 1/2 load: 85.2 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F
		Others: Net weight: 174 lb Gross weight: 192 lb Shipping volume: 8.26 ft ³



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96524009 CR 20-2 60 Hz



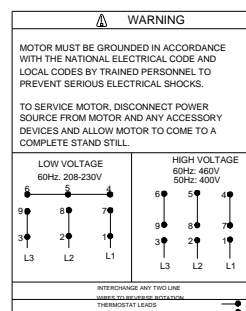
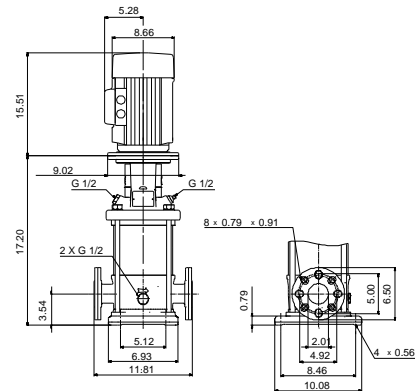
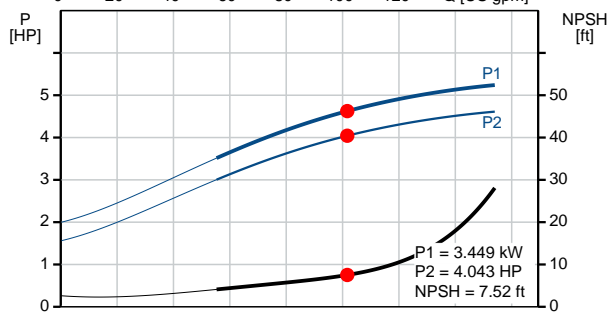
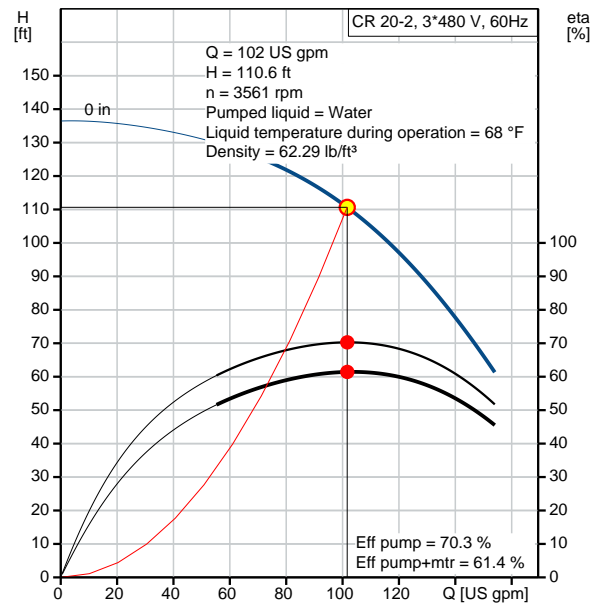
Description	Value
General information:	
Product name:	CR 20-2 A-GJ-A-E-HQQE
Product No.:	96524009
EAN:	5700396915678
Technical:	
Speed for pump data:	3461 rpm
Actual calculated flow:	102 US gpm
Resulting head of the pump:	110.6 ft
Stages:	2
Impellers:	2
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC

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:	E
Bearing material:	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
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:	182TC
Flange rating inlet:	250 lb

Liquid:	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft ³

Electrical data:	
Motor standard:	NEMA
Motor type:	112CA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	5.5 HP
Power (P2) required by pump:	5.5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V





Company name:

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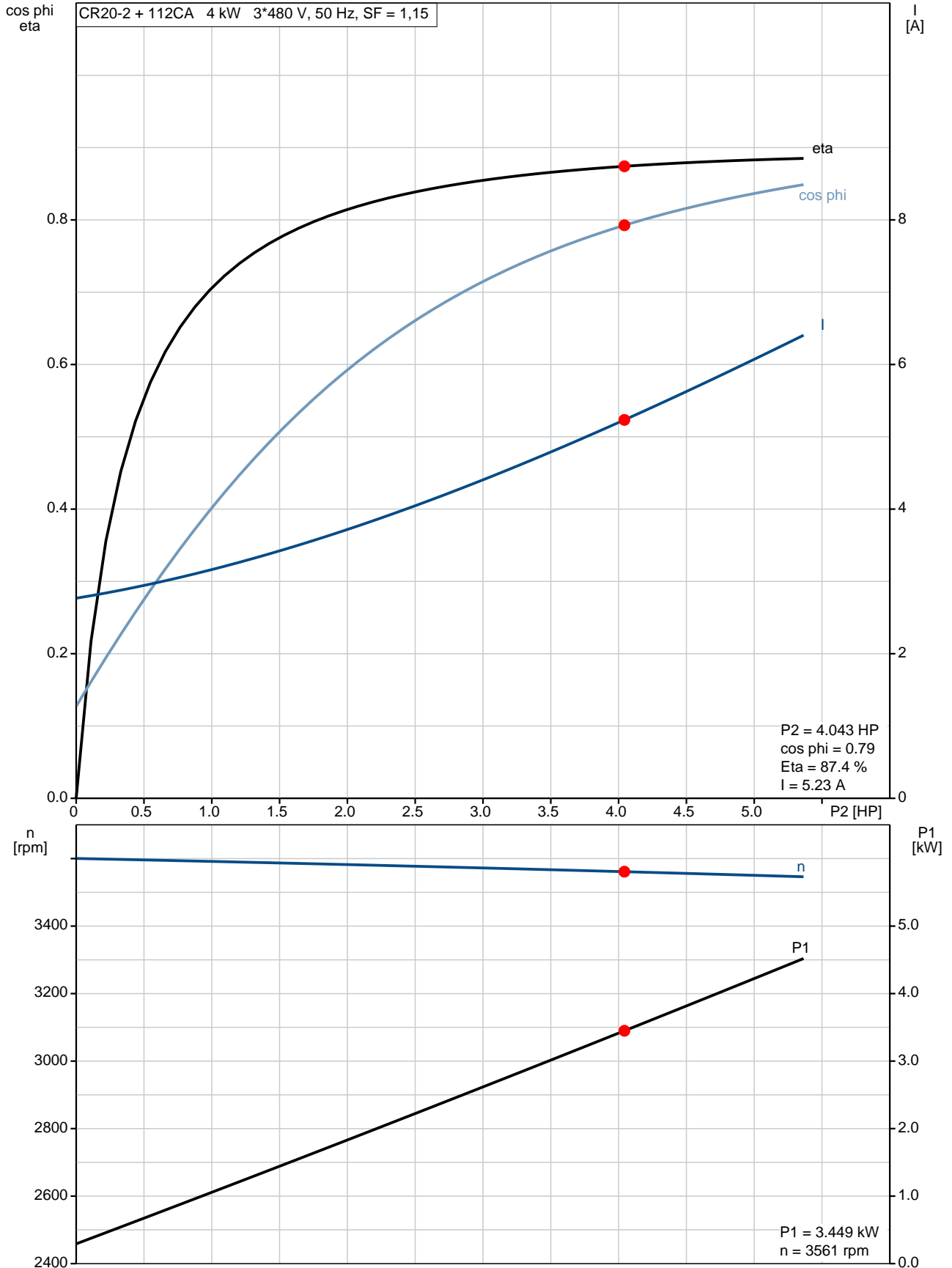
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Date:

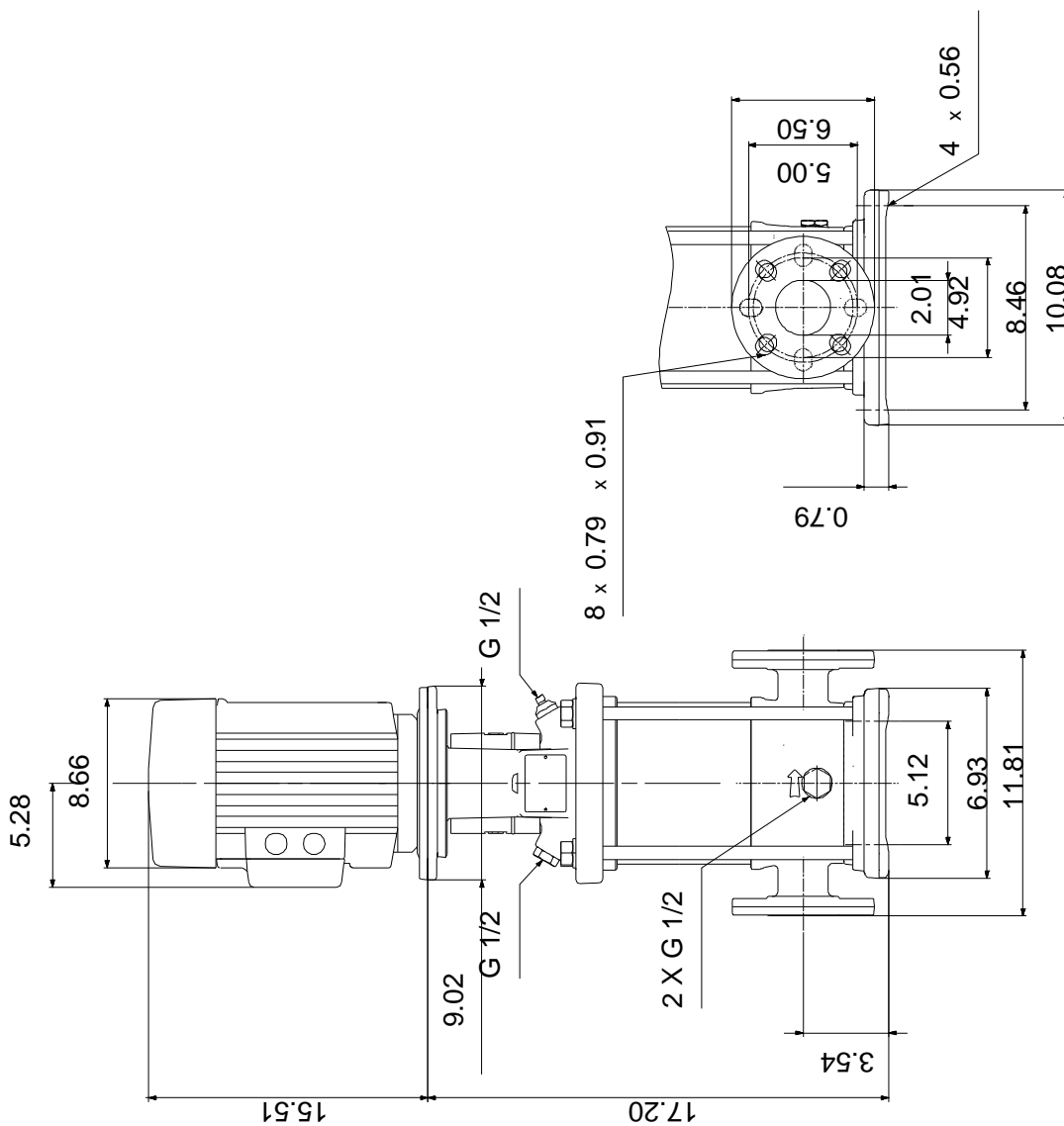
2/20/2018

Description	Value
Service factor:	1,15
Rated current:	14,1-13,1/7,29 A
Starting current:	1000-1470 %
Load current:	16,2-15,0/8,40 A
Cos phi - power factor:	0,89-0,86
Rated speed:	3525-3540 rpm
IE efficiency:	IE3 88,5%
Motor efficiency at full load:	88.5 %
Motor efficiency at 3/4 load:	88.6 %
Motor efficiency at 1/2 load:	85.2 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	PTC
Motor Number:	85904389
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	174 lb
Gross weight:	192 lb
Shipping volume:	8.26 ft ³

96524009 CR 20-2 60 Hz



96524009 CR 20-2 60 Hz



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

96524009 CR 20-2 60 Hz

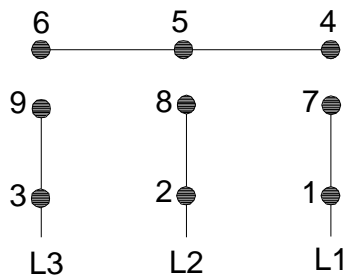


WARNING

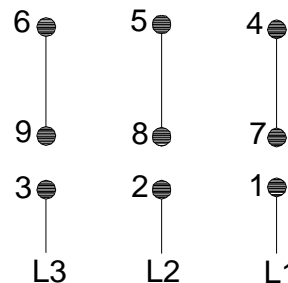
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

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

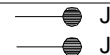


HIGH VOLTAGE 60Hz: 460V 50Hz: 400V



96553852

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





Company name:

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Order Data:

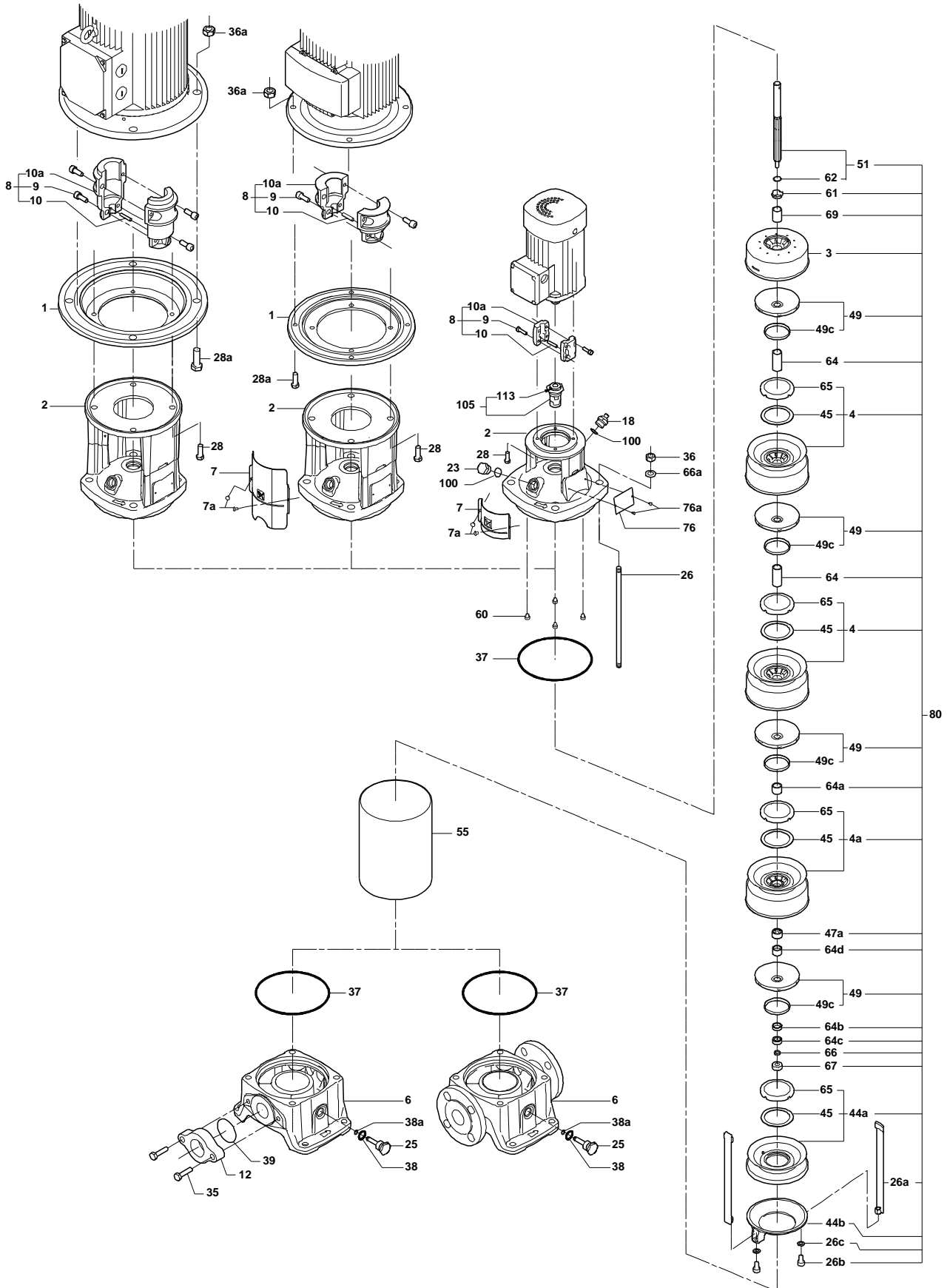
Product name: CR 20-2 A-GJ-A-E-HQQE

Amount: 1

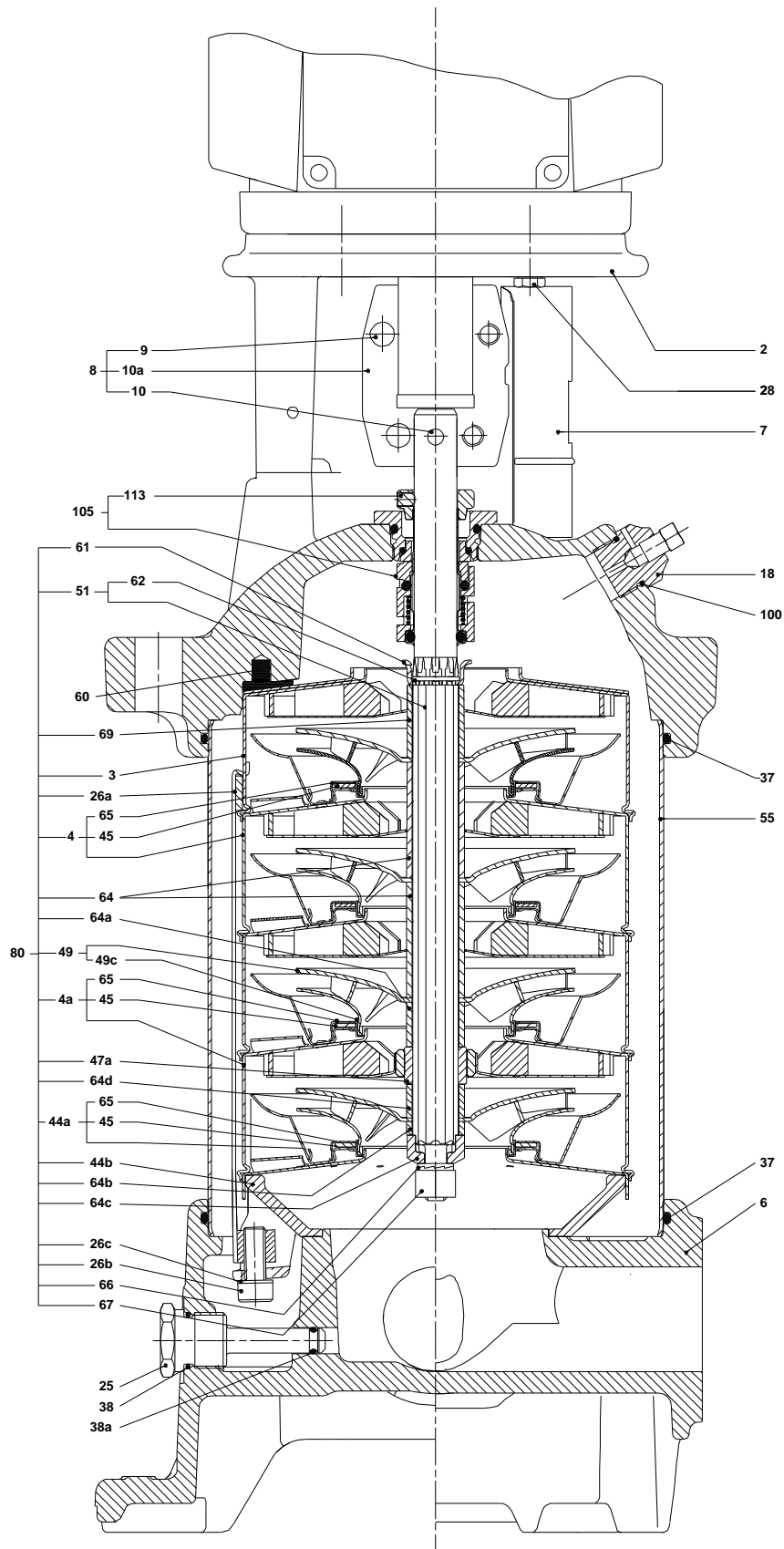
Product No.: 96524009

Total: Price on request

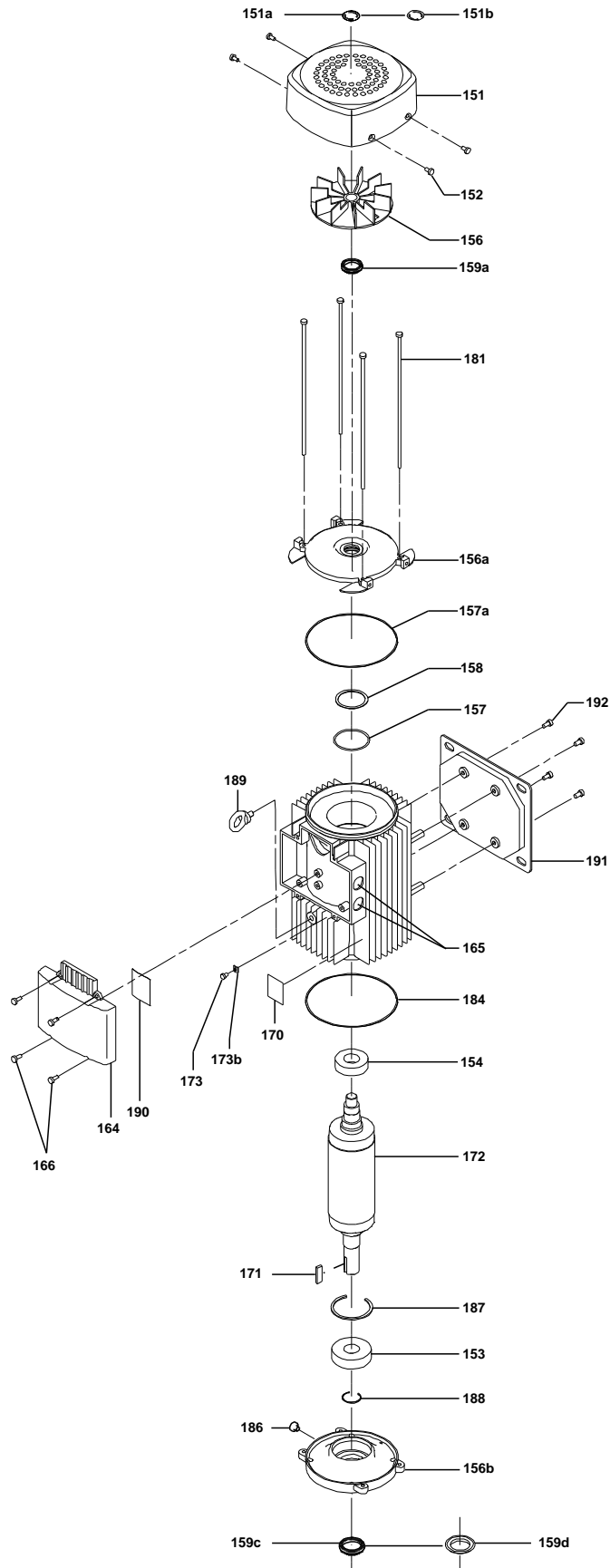
Exploded view



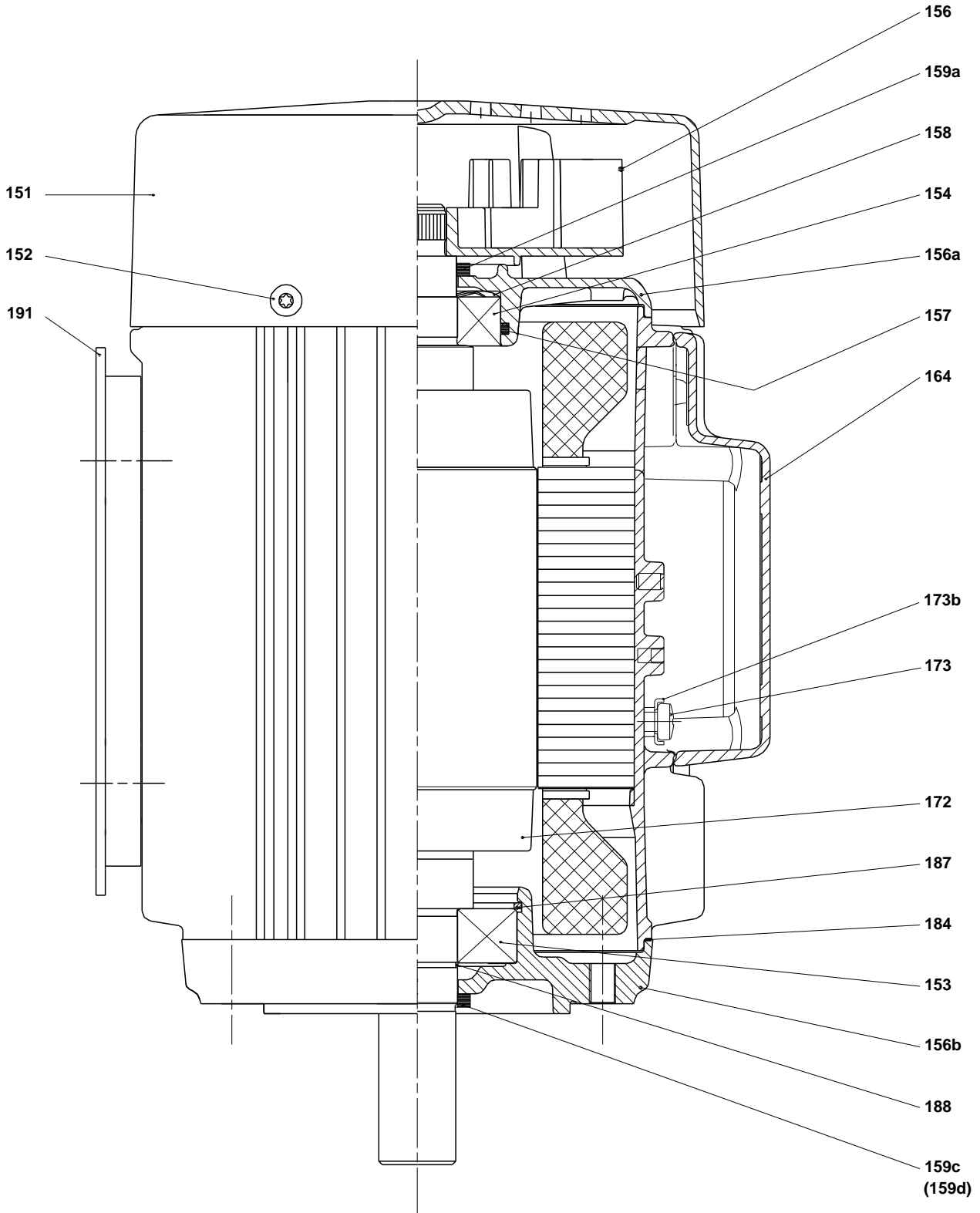
Sectional drawing



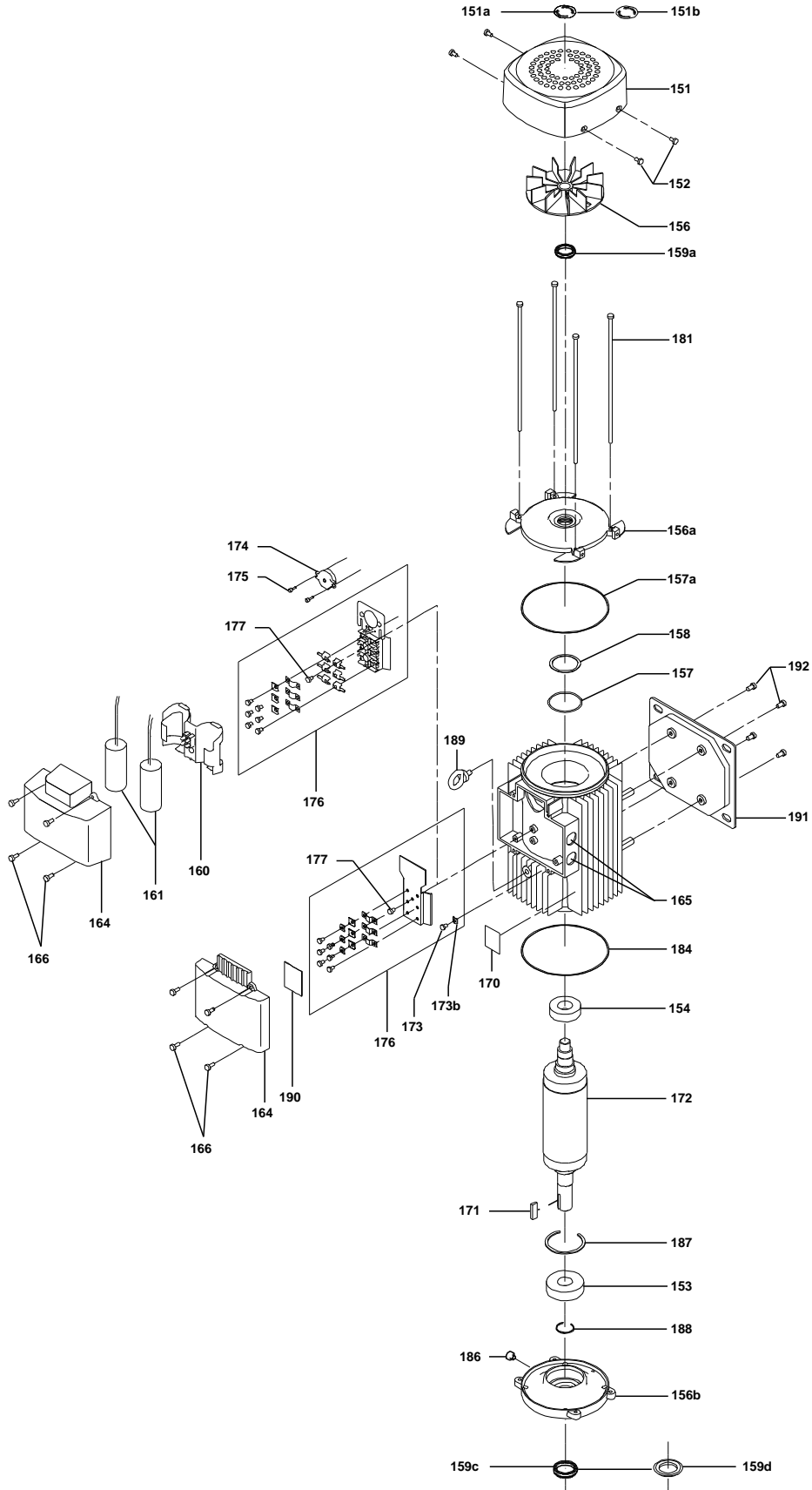
Exploded view (tm030553)



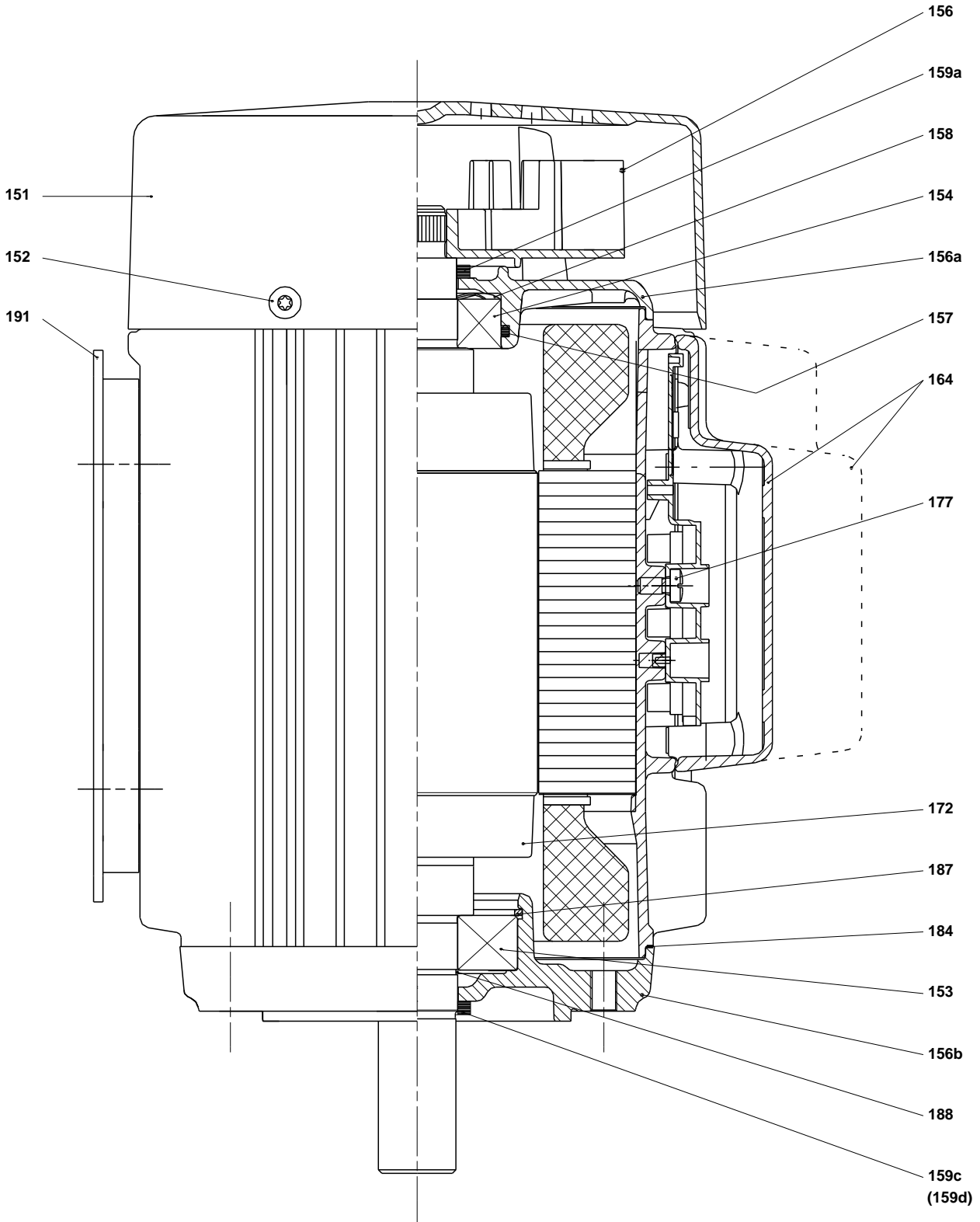
Sectional drawing (TM031465)



Exploded view (tm029184 0505)



Sectional drawing (tm029178 2004)



Parts list CR 20-2, Prod number 96524009

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	
-	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			
- 2	Pump head cpl.				1	pcs
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	
28	Hex head cap screw		Length: 25		4	
			Thread: UNC 1/2"			
- 8	Coupling		Dimension: D29/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		Type: NEMA		1	
26	Staybolt		Length: 163		4	pcs
			Thread: M16			
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				1	pcs
-	Intermediate chamber cpl.				1	
	Guide vane					
	Front plate					
3	Top intermediate chamber					
- 4a	Intermediate chamber cpl.				1	
	Bearing plate					
	Bearing bush					
3a	Intermediate chamber					
45	Neck ring cpl.					
65	Retainer for upper seal ring					



Company name:

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Position	Description	Annotation	Classification data	Part No.	Count	Unit
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	
45	Neck ring cpl.					
65	Retainer for upper seal ring					
47a	Bearing ring				1	
- 49	Impeller cpl.				2	
	Impeller plate					
	Impeller plate					
	Impeller blade					
49c	Wear ring					
- 51	Shaft, spline, cpl.				1	
	Bar					
62	Stop ring					
64b	Spacing bush		Length: 5.00		1	
64b	Spacing bush				1	
64c	Spacing pipe		Length: 12.7		1	
66	Wedge lock washer				1	
69	Spacing pipe		Inner diameter: 17,5		1	
			Length: 17			
69	Spacing bush				1	
105	Shaft seal		Material type: HQQE		1	pcs