

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

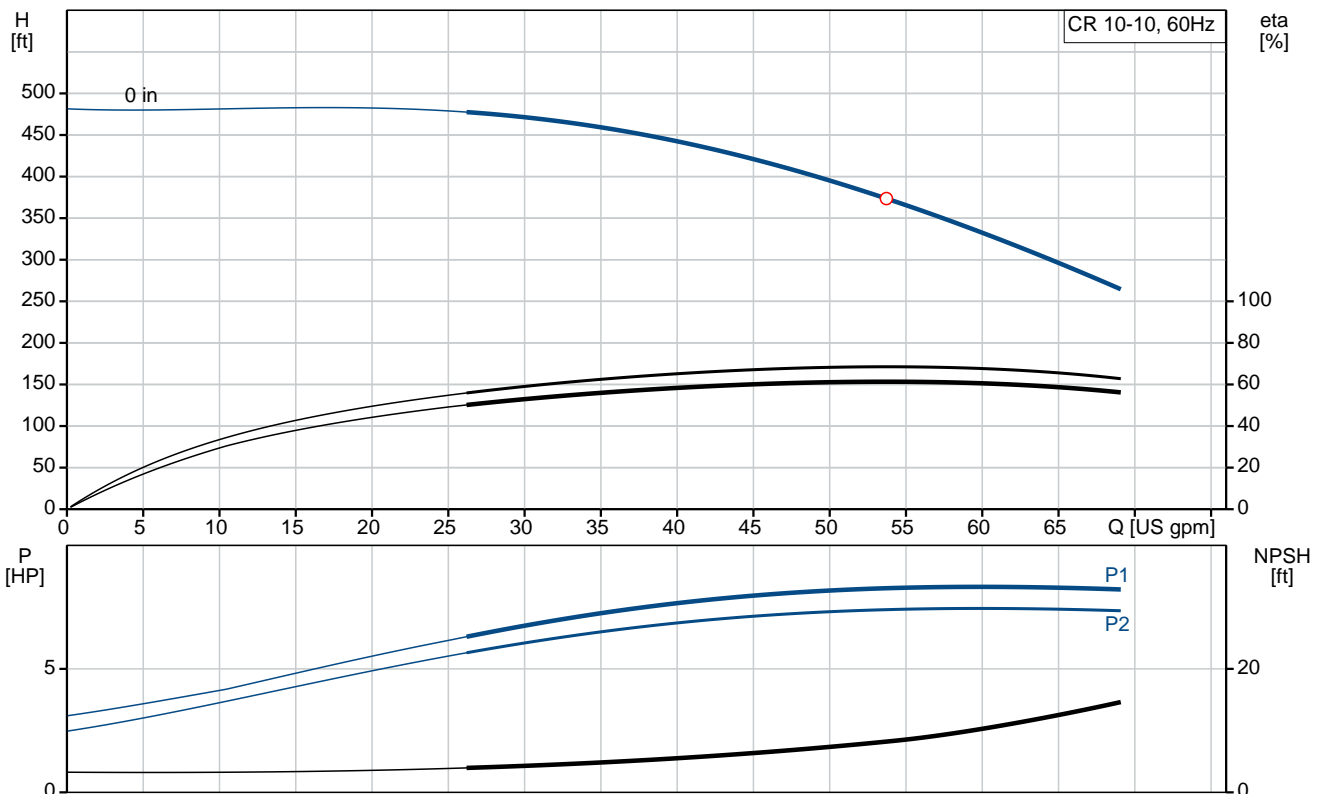


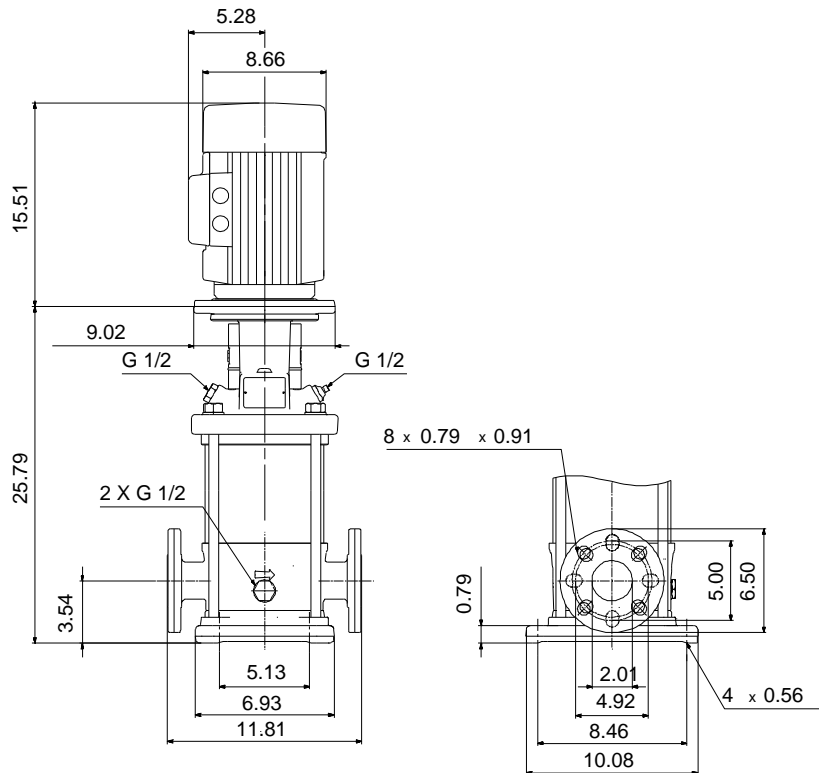
### CR 10-10

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: _____	Max pressure at stated temperature: 232 psi / 194 °F	Rated power - P2: 7.5 HP
Head: _____	Maximum ambient temperature: 140 °F	Rated voltage: 208-230YY/460Y V
Efficiency: _____	Approvals: CURUS	Main frequency: 60 Hz
Liquid: Water	Shaft seal: HQQV	Enclosure class: 55 Dust/Jetting
Temperature: 68 °F	Product number: 96523190	Insulation class: F
NPSH required: 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:	V

## Tender Text



Product No.: [96523190](#)

### CR 10-10 A-GJ-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/ft<sup>3</sup>

#### Technical:

Speed for pump data: 3467 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: 140 °F

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

Type of connection: ANSI / JIS

Size of inlet connection: DN 50

Size of suction port: 2 inch

Size of outlet connection: DN 50



Company name:

Created by:

Phone:

Date:

2/20/2018

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: 203 lb  
Gross weight: 223 lb  
Shipping volume: 10.1 ft<sup>3</sup>





Company name:

Created by:

Phone:

Date:

2/20/2018

Position	Count	Description
		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: 203 lb Gross weight: 223 lb Shipping volume: 10.1 ft <sup>3</sup>



Company name:

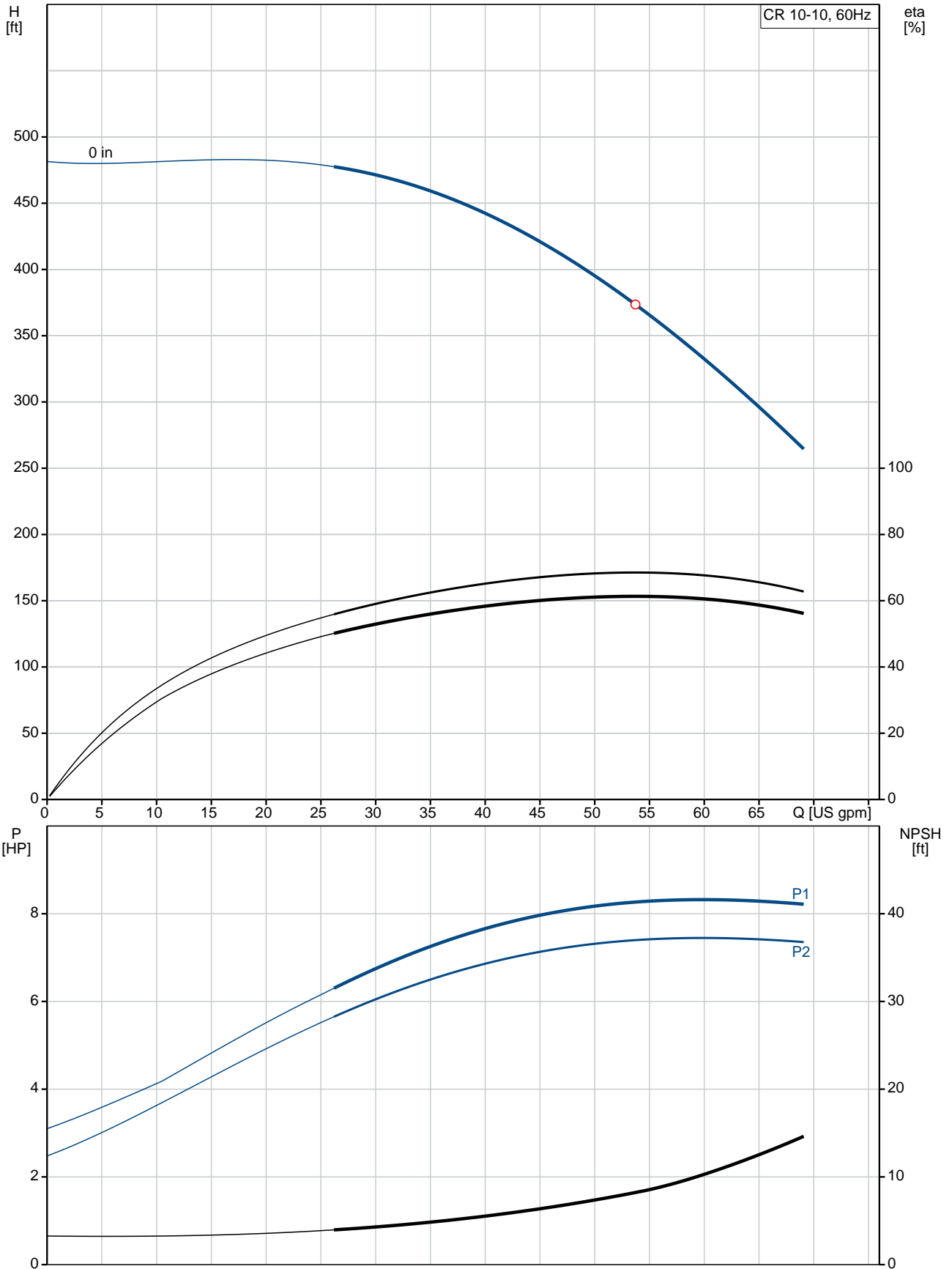
Created by:

Phone:

Date:

2/20/2018

# 96523190 CR 10-10 60 Hz



Description	Value
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**General information:**

Product name:	CR 10-10 A-GJ-A-V-HQQV
Product No.:	96523190
EAN:	5700396899770

**Technical:**

Speed for pump data:	3467 rpm
Stages:	10
Impellers:	10
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:**

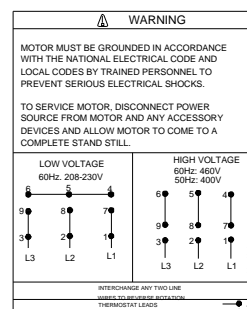
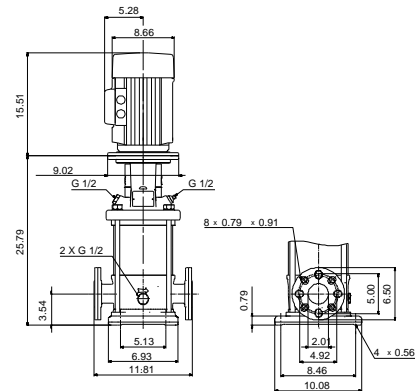
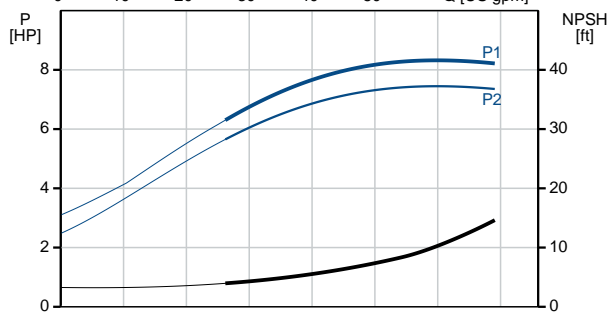
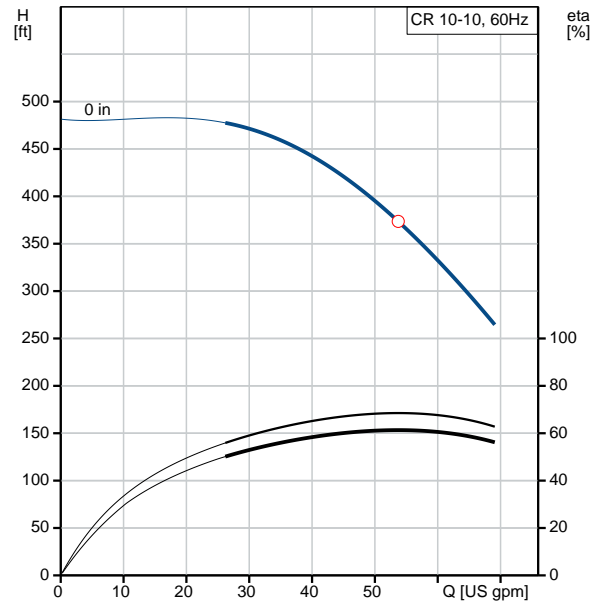
Maximum ambient temperature:	140 °F
Max pressure at stated temperature:	232 psi / 194 °F
	232 psi / -4 °F
Type of connection:	ANSI / JIS
Connect code:	GJ
Size of inlet connection:	DN 50
Size of suction port:	2 inch
Size of outlet connection:	DN 50
Size of outlet port:	2 inch
Pressure rating:	PN 25
Flange size for motor:	213TC
Flange rating inlet:	300 lb

**Liquid:**

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

**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/460V V
Service factor:	1,15
Rated current:	19,5-18,1/9,09 A







Company name:

Created by:

Phone:

Date:

2/20/2018

Description	Value
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
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
Net weight:	203 lb
Gross weight:	223 lb
Shipping volume:	10.1 ft <sup>3</sup>



## 96523190 CR 10-10 60 Hz



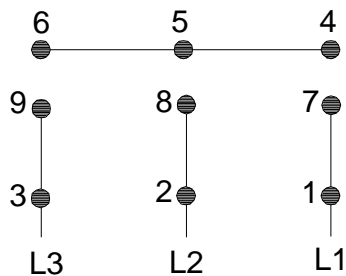
### WARNING

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

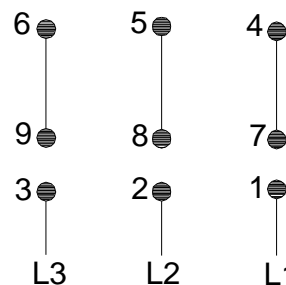
60Hz. 208-230V



#### HIGH VOLTAGE

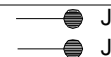
60Hz: 460V

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 10-10 A-GJ-A-V-HQQV

Amount: 1

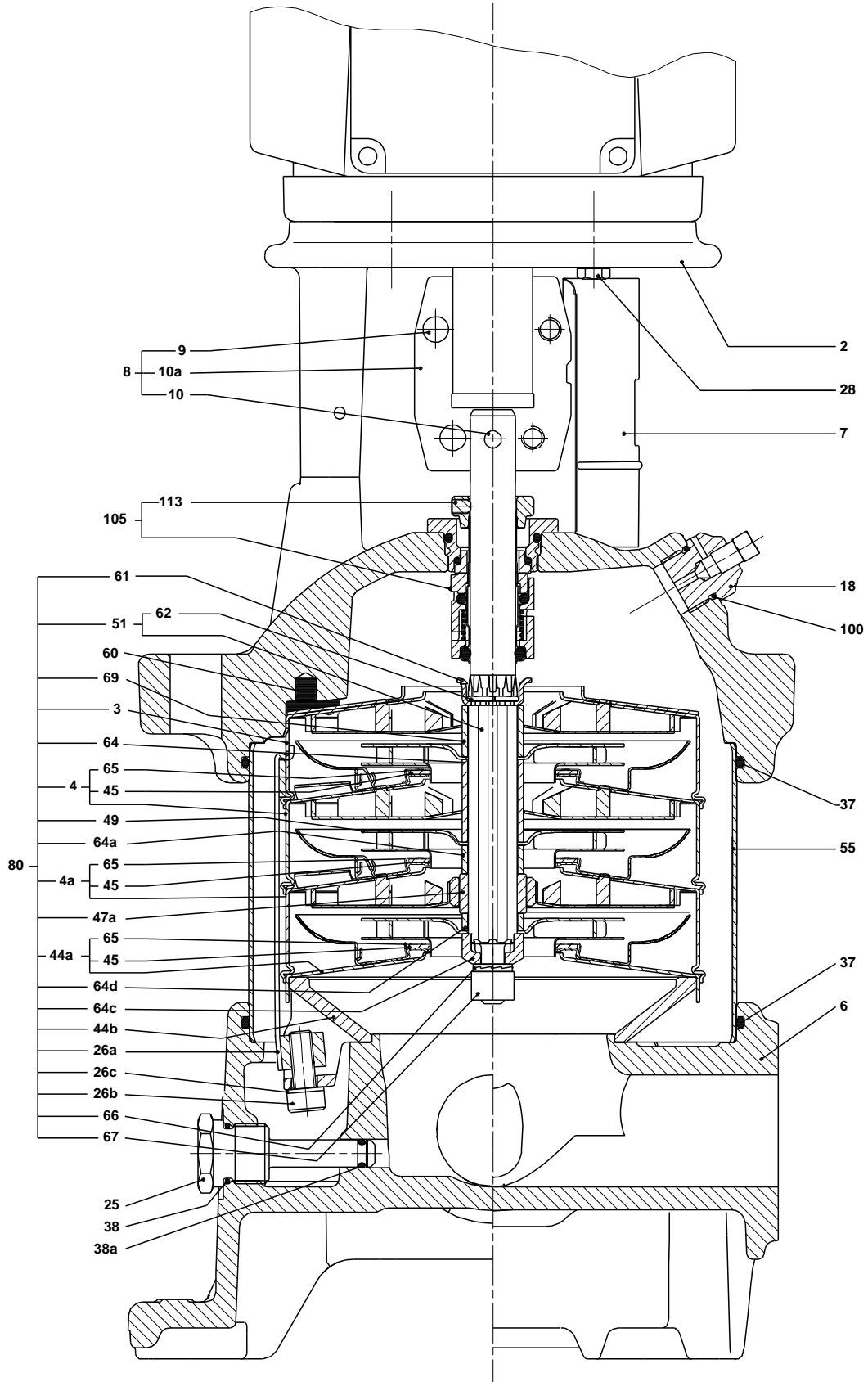
Product No.: 96523190

Total: Price on request

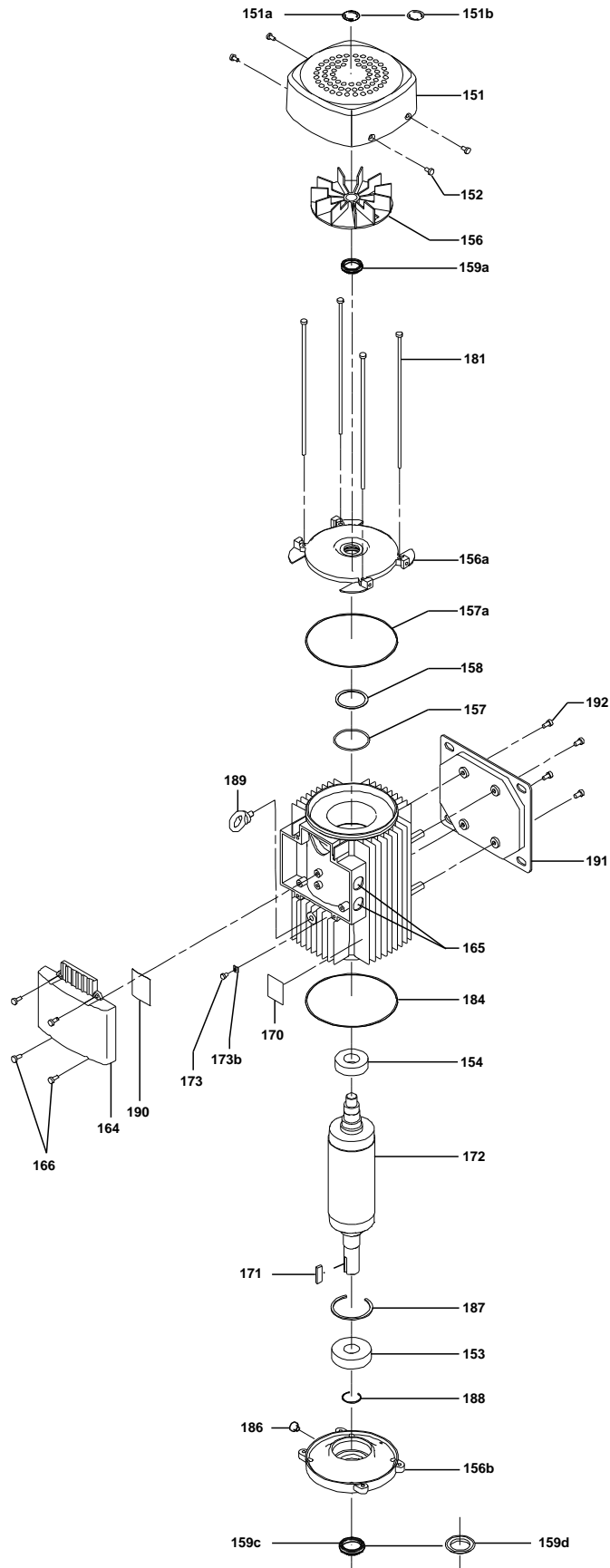
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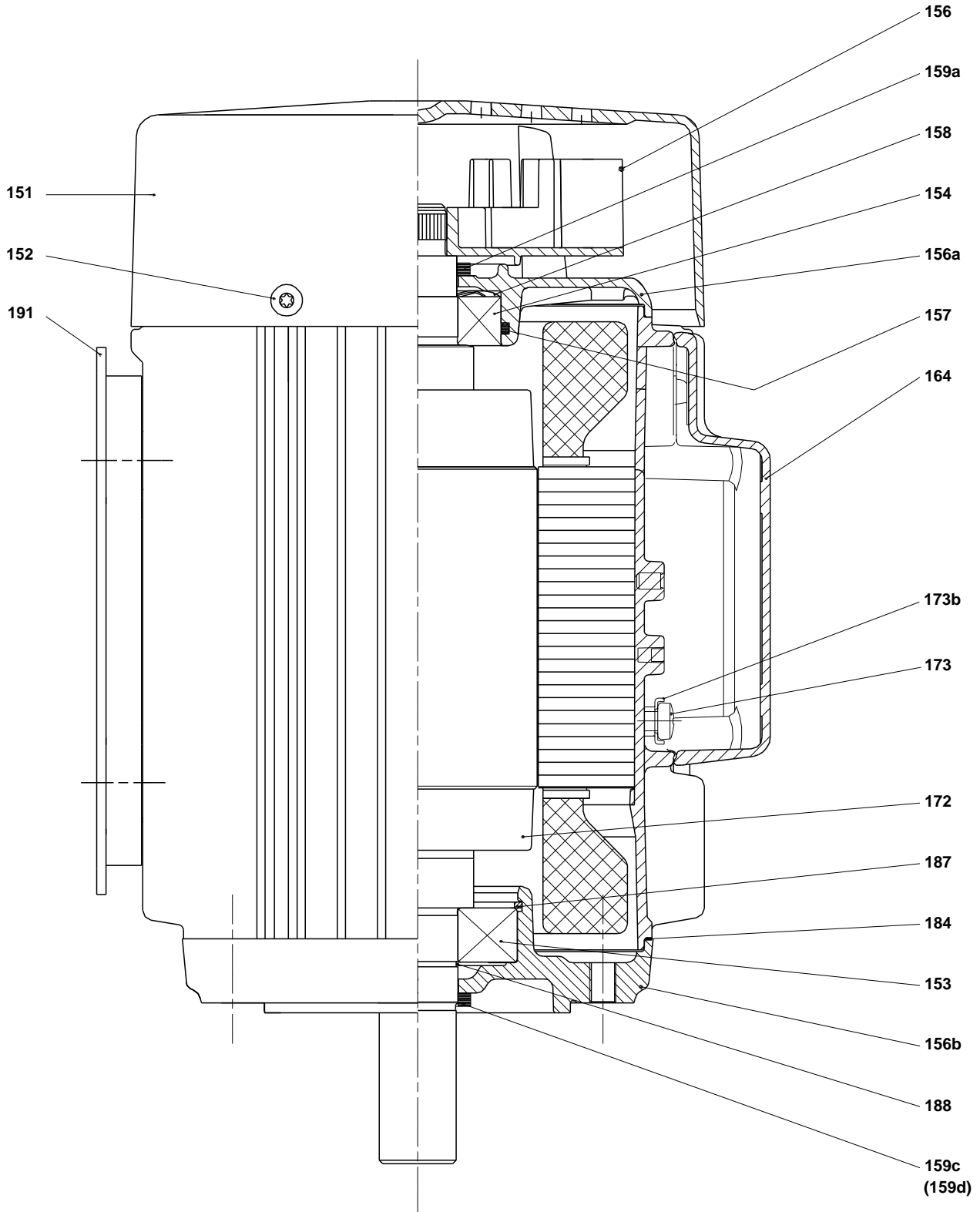
## Sectional drawing



## Exploded view (tm030553)



Sectional drawing (TM031465)





**Parts list CR 10-10, Prod number 96523190  
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
37	O-ring		Material type: FKM		2	
38	O-ring		Diameter: 16,3		1	
			Material type: FKM			
			Thickness: 2,4			
38a	O-ring		Diameter: 5,3		1	
			Material type: FKM			
			Thickness: 2,4			
60	Spring				4	
100	O-ring		Diameter: 16,3		2	
			Material type: FKM			
			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.				7	
	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.		Length: 314MM		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.				10	
- 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		7	
69	Spacing bush		Length: 18.00		1	
105	Shaft seal		Material type: HQQV		1	pcs