

## 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

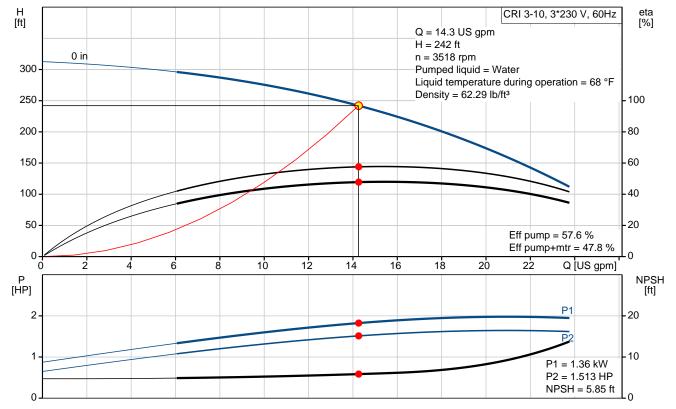
## **CRI 3-10**

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

Conditions	of Service	
Flow:	14.3 US gpm	ı
Head:	242 ft	ı
Efficiency:	47.8 %	1
Liquid:	Water	5
Temperature:	68 °F	ı
NPSH required:	5.85 ft	
Viscosity:		
Specific Gravity:	1.000	L

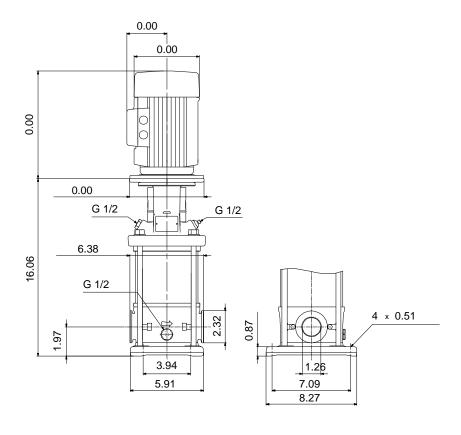
Pump Data	
Max pressure at stated temperature:	363 psi / 194 °F
Maximum ambient temperature:	140 °F
Approvals:	CURUS
Shaft seal:	HQQV
Product number:	96083486

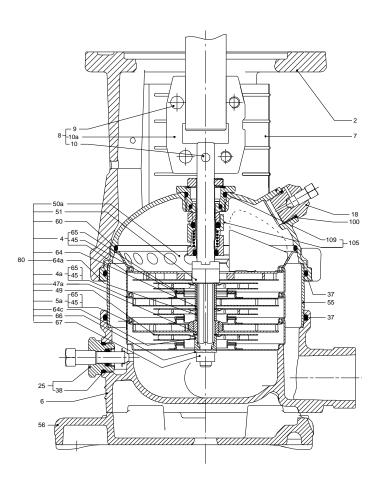
Motor Data					
Datad namer D2	2 HP				
Rated power - P2:	2 NP				
Rated voltage:	208-230YY/460Y V				
Main frequency:	60 Hz				
Enclosure class:	55 Dust/Jetting				
Insulation class:	F				
Motor protection:	NONE				
Motor type:	90CC				
Motor_efficiency:	85.5 %				











#### Materials:

Base: Stainless steel

EN 1.4408

**AISI 316** 

Impeller: Stainless steel

**AISI 304** 

EN 1.4301

Material code: I Code for rubber: V



**Date:** 2/20/2018

## **Tender Text**



Product No.: 96083486 CRI 3-10 A-CA-I-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 EN 12756.
- Power transmission is via cast iron split coupling.

flanges/couplings.

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:

Actual calculated flow:
Resulting head of the pump:
Pump orientation:
Shaft seal arrangement:
Code for shaft seal:
Approvals on nameplate:

3452 rpm
14.3 US gpm
242 ft
Vertical
Single
HQQV
CURUS

Curve tolerance: ISO9906:2012 3B

Materials:

Base: Stainless steel

EN 1.4408 AISI 316 Stainless steel

Impeller: Stainless stee

EN 1.4301 AISI 304

Bearing material: SIC

Installation:

Maximum ambient temperature: 140 °F

Max pressure at stated temperature: 363 psi / 194 °F



**Date:** 2/20/2018

363 psi / -4 °F
Type of connection:
Size of inlet connection:
Size of suction port:
Size of outlet connection:
DN 32
1 1/4 inch
DN 32
Size of outlet port:
1 1/4 inch
Pressure rating:
PN 25
Flange size for motor:
56C

**Electrical data:** 

Motor standard: NEMA Motor type: 90CC

IE Efficiency class: NEMA Premium / IE3 60Hz

Rated power - P2: 2 HP Power (P2) required by pump: 2 HP Main frequency: 60 Hz

Rated voltage: 3 x 208-230YY/460Y V

Service factor: 1,15

Rated current: 5,70-5,40/2,70 A Starting current: 810-900 % Cos phi - power factor: 0,88-0,84 Rated speed: 3480-3510 rpm IE efficiency: IE3 85,5% Motor efficiency at full load: 85.5 % Motor efficiency at 3/4 load: 85.0 % Motor efficiency at 1/2 load: 83.0 %

Number of poles: 2

Enclosure class (IEC 34-5): 55 Dust/Jetting

Insulation class (IEC 85): F

Others:

Net weight: 71.1 lb Gross weight: 82.1 lb Shipping volume: 6.11 ft³



**Date:** 2/20/2018

Position | Count | Description

1 CRI 3-10 A-CA-I-V-HQQV



Product No.: 96083486

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 EN 12756.
- Power transmission is via cast iron split coupling.

flanges/couplings.

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: 3452 rpm
Actual calculated flow: 14.3 US gpm
Resulting head of the pump: 242 ft
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQV

Approvals on nameplate: CURUS
Curve tolerance: ISO9906:2012 3B

Materials:

Base: Stainless steel

EN 1.4408 AISI 316

Impeller: Stainless steel

EN 1.4301 AISI 304

Bearing material: SIC

Installation:

Maximum ambient temperature: 140 °F

Max pressure at stated temperature: 363 psi / 194 °F

363 psi / -4 °F



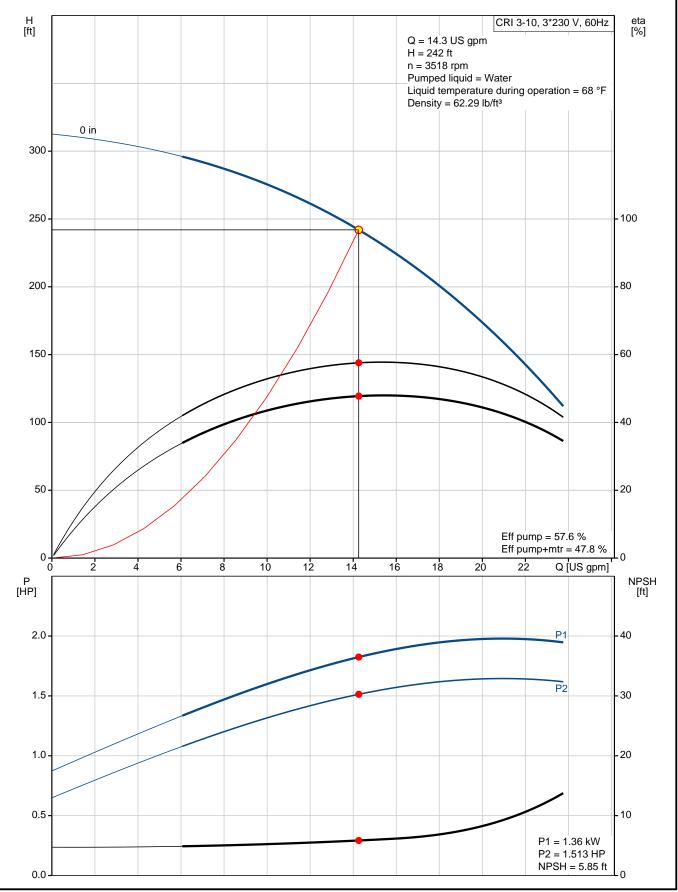
**Date:** 2/20/2018

			Date:	2/20/2018
Position	Count	Description		
		Type of connection:	FlexiClamp	
		Size of inlet connection:	DN 32	
		Size of suction port:	1 1/4 inch	
		Size of outlet connection:	DN 32	
		Size of outlet port:	1 1/4 inch	
		Pressure rating:	PN 25	
		Flange size for motor:	56C	
		Electrical data:	NUTAAA	
		Motor standard:	NEMA	
		Motor type:	90CC	
		IE Efficiency class:	NEMA Premium / IE3 60Hz 2 HP	
		Rated power - P2: Power (P2) required by pump:	2 HP	
		Main frequency:	60 Hz	
		Rated voltage:	3 x 208-230YY/460Y V	
		Service factor:	1,15	
		Rated current:	5,70-5,40/2,70 A	
		Starting current:	810-900 %	
		Cos phi - power factor:	0,88-0,84	
		Rated speed:	3480-3510 rpm	
		IE efficiency:	IE3 85,5%	
		Motor efficiency at full load:	85.5 %	
		Motor efficiency at 3/4 load:	85.0 %	
		Motor efficiency at 1/2 load:	83.0 %	
		Number of poles:	2	
		Enclosure class (IEC 34-5):	55 Dust/Jetting	
		Insulation class (IEC 85):	F	
		Others:		
		Net weight:	71.1 lb	
		Gross weight:	82.1 lb	
		Shipping volume:	6.11 ft <sup>3</sup>	
		Company volumes	5 n	
	1			



**Date:** 2/20/2018

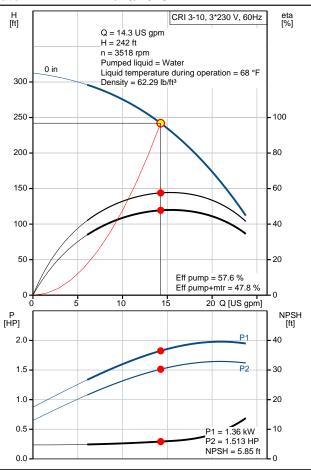
# 96083486 CRI 3-10 60 Hz

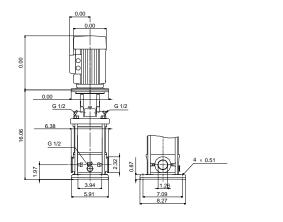


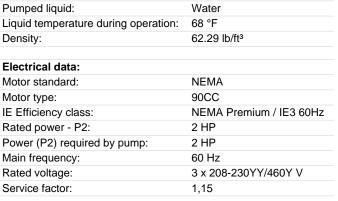


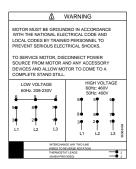
Date: 2/20/2018

Description	Value
General information:	
Product name:	CRI 3-10 A-CA-I-V-HQQV
Product No.:	96083486
EAN:	5700395186840
Technical:	
Speed for pump data:	3452 rpm
Actual calculated flow:	14.3 US gpm
Resulting head of the pump:	242 ft
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:	Stainless steel
Dase.	EN 1.4408
	AISI 316
Impeller:	Stainless steel
ппрепет.	EN 1.4301
	AISI 304
Material code:	A   304
Code for rubber:	V
Bearing material:	SIC
Dearing Material.	OIO
Installation:	440.0=
Maximum ambient temperature:	140 °F
Max pressure at stated temperature:	363 psi / 194 °F 363 psi / -4 °F
Type of connection:	FlexiClamp
Connect code:	CA
Size of inlet connection:	DN 32
Size of suction port:	1 1/4 inch
Size of outlet connection:	DN 32
Size of outlet port:	1 1/4 inch
Pressure rating:	PN 25
Flange size for motor:	56C
Liquid:	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F









Density:

Electrical data: Motor standard:

Rated power - P2:

Main frequency:

Rated voltage:

Service factor:

Motor type: IE Efficiency class:



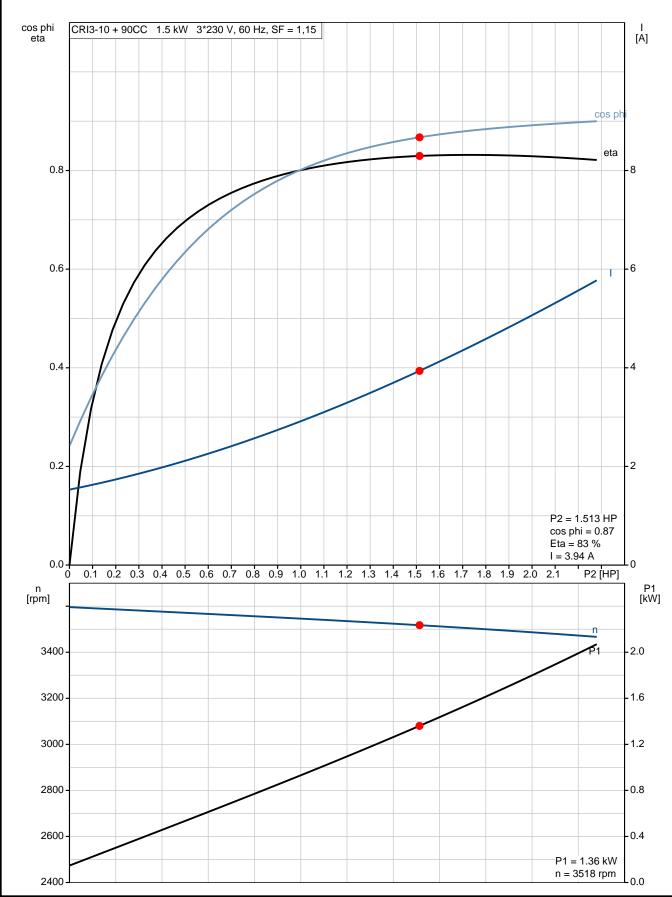
**Date:** 2/20/2018

Description	Value
Rated current:	5,70-5,40/2,70 A
Starting current:	810-900 %
Load current:	6,55-6,1/3,05 A
Cos phi - power factor:	0,88-0,84
Rated speed:	3480-3510 rpm
IE efficiency:	IE3 85,5%
Motor efficiency at full load:	85.5 %
Motor efficiency at 3/4 load:	85.0 %
Motor efficiency at 1/2 load:	83.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	85900705
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	71.1 lb
Gross weight:	82.1 lb
Shipping volume:	6.11 ft <sup>3</sup>



**Date:** 2/20/2018

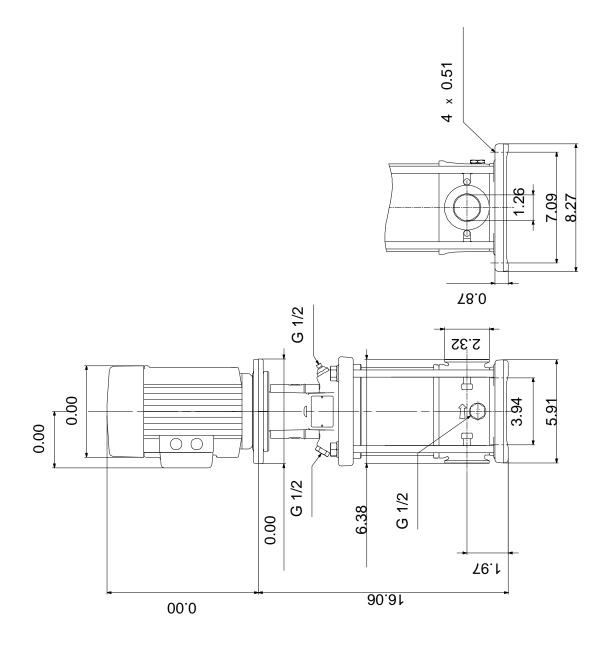
# 96083486 CRI 3-10 60 Hz





Date: 2/20/2018

96083486 CRI 3-10 60 Hz



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



**Date:** 2/20/2018

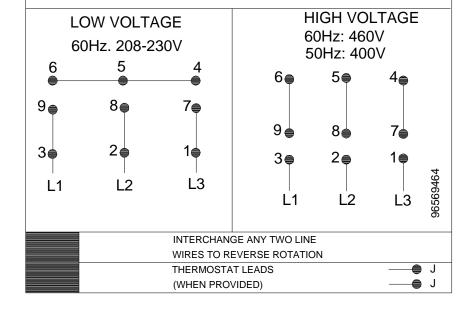
96083486 CRI 3-10 60 Hz



#### **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.



All units are [mm] unless otherwise presented.



**Date:** 2/20/2018

**Order Data:** 

Product name: CRI 3-10 A-CA-I-V-HQQV

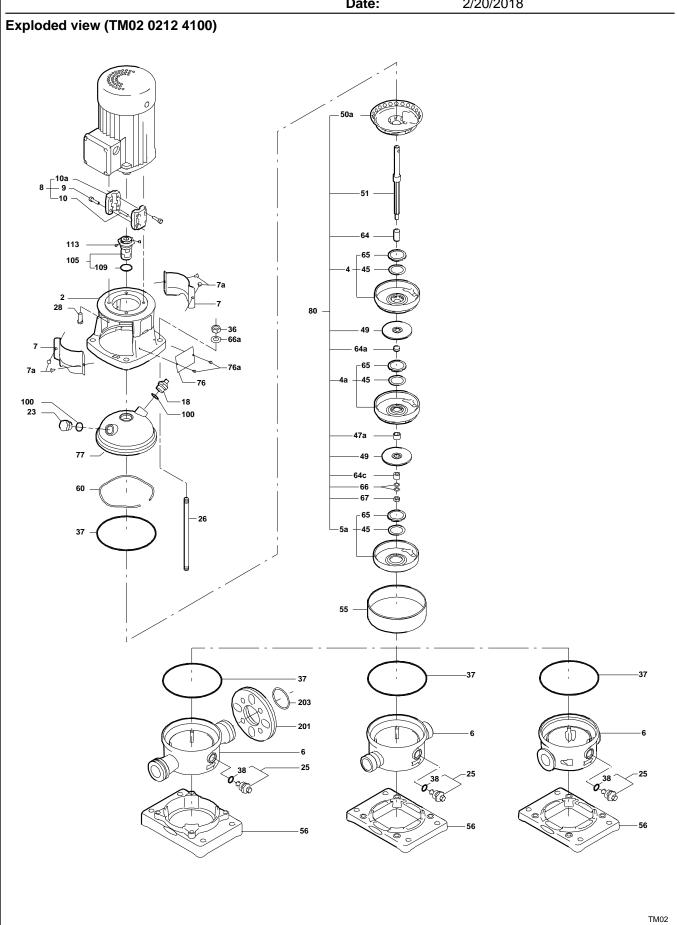
Amount: 1

Product No.: 96083486

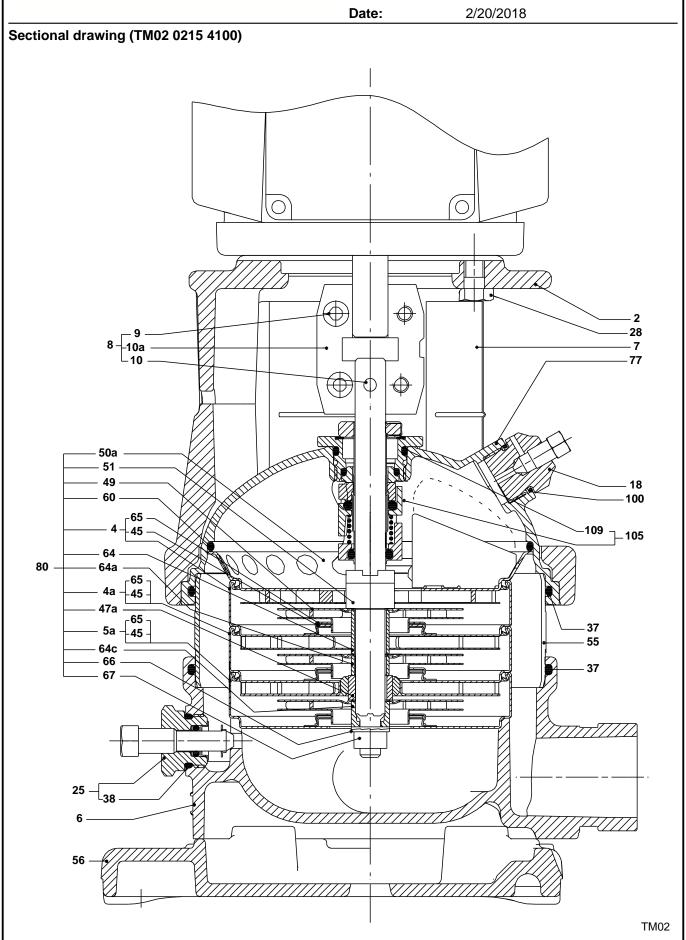
Total: Price on request



Date: 2/20/2018



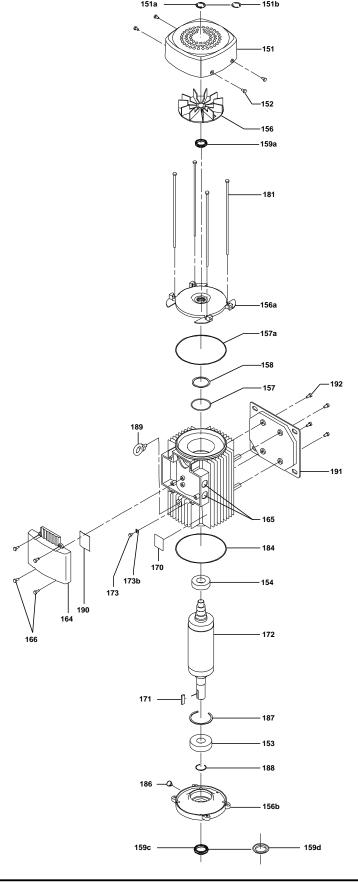






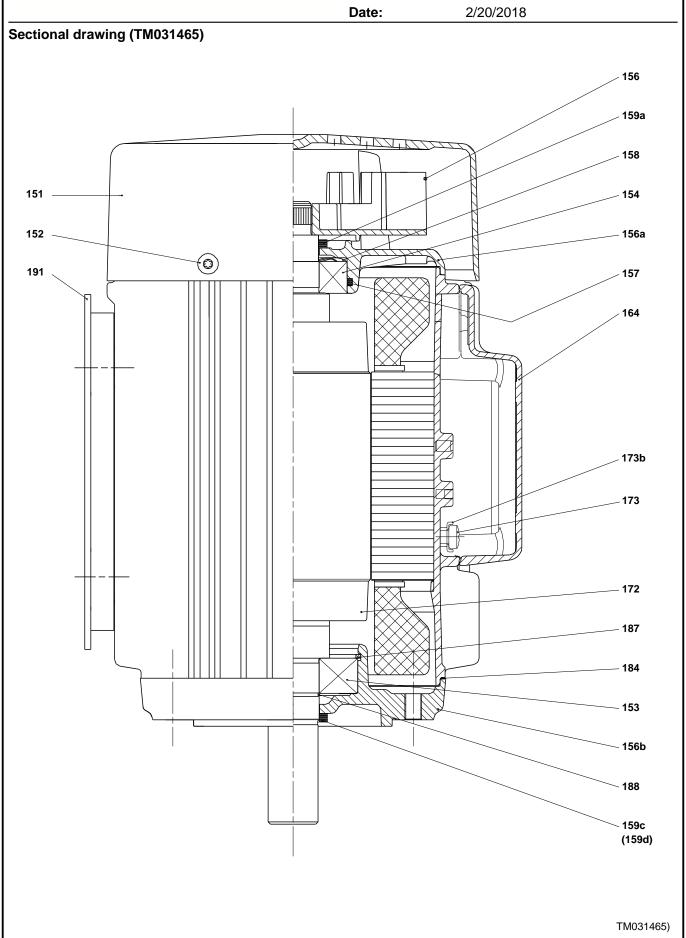
**Date:** 2/20/2018

Exploded view (tm030553)



TM030553)







**Date:** 2/20/2018

# Parts list CRI 3-10, Prod number 96083486 Valid from 10.1.2005 (0503)

	Position		Annotation	Classification data	Part No.		
		Motor				1	pcs
+		Motor				1	pcs
+		Base cpl.				1	pcs
-		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	
		0		Material type: FKM			
				Thickness: 2,4			
_	2	Pump head cpl.				1	pcs
	2	Motor stool				1	Poo
	7	Coupling guard				2	
	7 7a	Thread cutting screw				4	
	7a 18	Air vent screw				1	
-	10	Plug				ı	
		-					
	05	Spindle				4	
	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	
	77	Pump cover				1	
+	8	Coupling cpl.				1	pcs
	26	Staybolt		Length: 277		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				1	pcs
-	105	Shaft seal		Material type: HQQV		1	pcs
		O-ring		71		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	



**Date:** 2/20/2018

Position	Description	Annotation Classification data Part No.	Count	Unit
113	Driver		1	