

Submittal Data

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

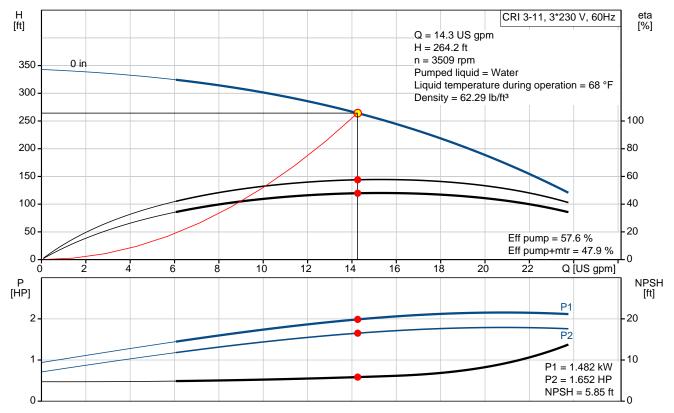


CRI 3-11

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)

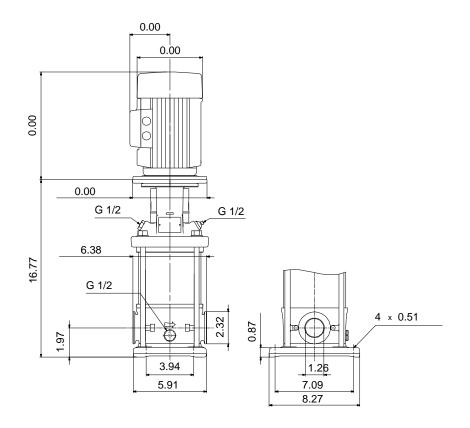
Product photo could vary from the actual product

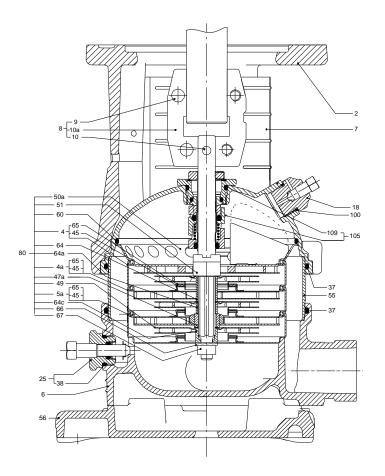
Conditions	of Service	Pump Data		Moto	or Data
Flow:	14.3 US gpm	Max pressure at stated temperature:	363 psi / 194 °F	Rated power - P2:	2 HP
Head:	264.2 ft	Maximum ambient temperature:	140 °F	Rated voltage:	208-230YY/460Y V
Efficiency:	47.9 %	Approvals:	CURUS	Main frequency:	60 Hz
Liquid:	Water	Shaft seal:	HQQV	Enclosure class:	55 Dust/Jetting
Temperature:	68 °F	Product number:	96083488	Insulation class:	F
NPSH required:	5.85 ft			Motor protection:	NONE
Viscosity:				Motor type:	90CC
Specific Gravity:	1.000			Motor_efficiency:	85.5 %



Submittal Data







Mata	riala	
wate	rials:	

Base:

Impeller:

•

AISI 304 EN 1.4301

Stainless steel

Stainless steel

EN 1.4408

AISI 316

Material code: I Code for rubber: V



Date:

2/20/2018

Tender Text



Product No.: 96083488 CRI 3-11 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: 3452 rpm Actual calculated flow: 14.3 US gpm Resulting head of the pump: 264.2 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CURUS ISO9906:2012 3B Curve tolerance: 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

Company name: Created by: Phone:

Date:

2/20/2018

Type of connection: Size of inlet connection: Size of suction port: Size of outlet connection: Size of outlet port: Pressure rating: Flange size for motor:	FlexiClamp DN 32 1 1/4 inch DN 32 1 1/4 inch PN 25 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

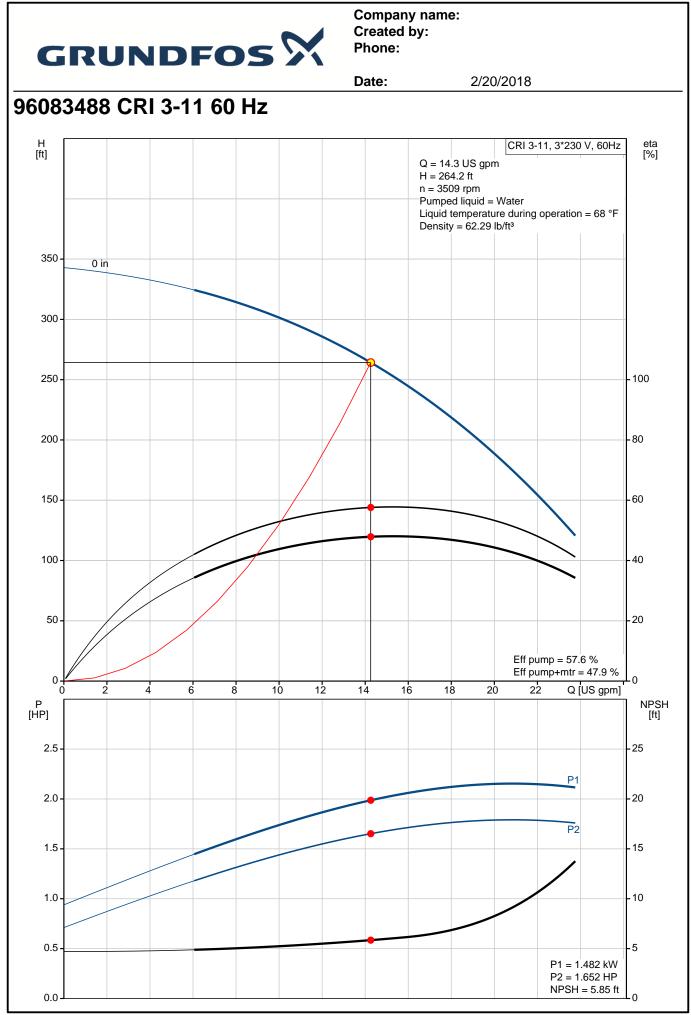
Others:

Net weight:	71.8 lb
Gross weight:	82.8 lb
Shipping volume:	6.11 ft ³

G	RU	NDFOS	Company n Created by: Phone:		
			Date:	2/20/2018	
Position	Count	Description			
	1	CRI 3-11 A-CA-I-V-HQQV			
		Product No.: 96083488 Vertical, non-self-priming, multi centrifugal pump for installation and mounting on a foundation.			
		The pump has the following ch	aractoristica		
		- Impellers, intermediate			
		sleeve are made of - Pump head cover and b	ase are made of		
		- The shaft seal has asse			
		according to EN 12756. - Power transmission is v	ia cast iron salit		
		coupling. flanges/couplings.	la cast iron spin		
		The motor is a 3-phase AC mo	tor.		
		Controls: Frequency converter:	NONE		
		Liquid: Pumped liquid: Liquid temperature during oper Density:	Water ation: 68 °F 62.29 lb/ft³		
		Technical:			
		Speed for pump data:	3452 rpm		
		Actual calculated flow: Resulting head of the pump:	14.3 US gpm 264.2 ft		
		Pump orientation:	Vertical		
		Shaft seal arrangement: Code for shaft seal:	Single HQQV		
		Approvals on nameplate:	CURUS		
		Curve tolerance:	ISO9906:2012 3B		
		Materials:			
		Base:	Stainless steel EN 1.4408		
		Impeller	AISI 316 Stainlaga staal		
		Impeller:	Stainless steel EN 1.4301		
		Bearing material:	AISI 304 SIC		
		-	30		
		Installation: Maximum ambient temperature	• 140 °F		
		Max pressure at stated temperature			



			Date:	2/20/2018
Position	Count	Description		
		Type of connection:	FlexiClamp	
		Size of inlet connection:	DN 32	
		Size of suction port: Size of outlet connection:	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: Motor type:	NEMA 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: Service factor:	3 x 208-230YY/460Y V 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: IE efficiency:	3480-3510 rpm 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: Enclosure class (IEC 34-5):	2 55 Dust/Jetting	
		Insulation class (IEC 85):	F	
		Others:		
		Net weight: Gross weight:	71.8 lb 82.8 lb	
		Shipping volume:	6.11 ft ³	
		11 5		

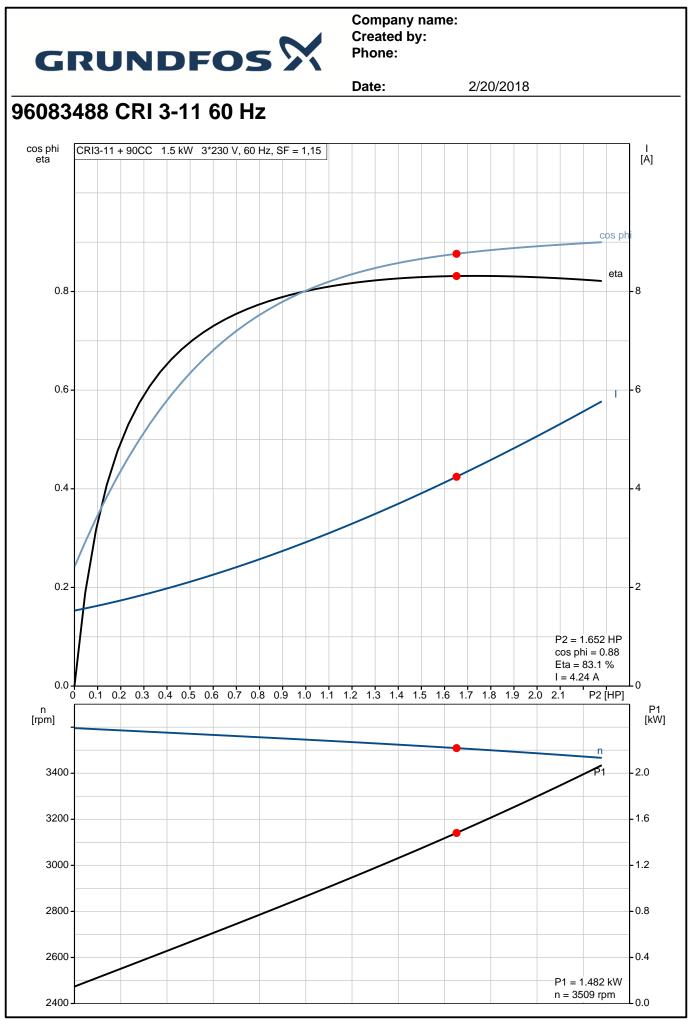


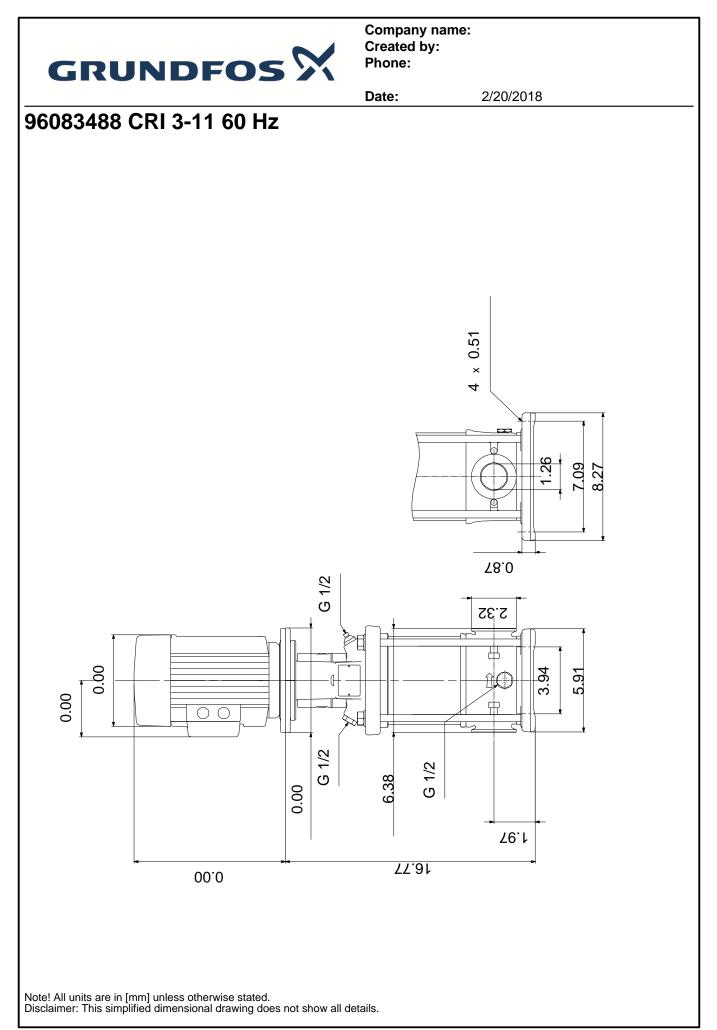


		Date:	2/20/2018
Description	Value	- H [ft]	CRI 3-11, 3*230 V, 60Hz [%]
Description General information:	Value	נתן	Q = 14.3 US gpm
			H = 264.2 ft n = 3509 rpm
Product name:	CRI 3-11 A-CA-I-V-HQQV		n = 3509 rpm Pumped liquid = Water
Product No.:	96083488	350 -	 0 in Liquid temperature during operation = 68 °F
EAN:	5700395186864		Density = 62.29 lb/ft ³
Technical:		300 -	
Speed for pump data:	3452 rpm		
Actual calculated flow:		250 -	- 100
	14.3 US gpm		
Resulting head of the pump:	264.2 ft	200 -	
Stages:	11	200-	
Impellers:	11		
Low NPSH:	Ν	150 -	
Pump orientation:	Vertical		
Shaft seal arrangement:	Single	100 -	40
	_	-	
Code for shaft seal:	HQQV		
Approvals on nameplate:	CURUS	50 -	
Curve tolerance:	ISO9906:2012 3B		Eff pump = 57.6%
Pump version:	A	0 -	Eff pump+mtr = 47.9% 0
Model:	A		0 5 10 15 20 Q [US gpm]
Cooling:	TEFC	P [HP]	NPS [ft
ecomig.		2.5 -	
Materials:			P1
		2.0 -	
Base:	Stainless steel		P2
	EN 1.4408	1.5 -	12 15
	AISI 316		
Impeller:	Stainless steel	1.0 -	10
-	EN 1.4301	-	
	AISI 304	0.5 -	P1 = 1.482 kW -5 P2 = 1.652 HP
Material and a	AISI 304	0.0 -	NPSH = 5.85 ft
Material code:	1	0.0-	0
Code for rubber:	V		
Bearing material:	SIC		
Installation:			
Maximum ambient temperature:	140 °F	0.0	
Max pressure at stated temperature:	363 psi / 194 °F	0	
	363 psi / -4 °F		
Tuno of connection:			
Type of connection:	FlexiClamp		
Connect code:	CA	-	
Size of inlet connection:	DN 32	16.77	G 1/2
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		<u>3.94</u> <u>5.91</u> <u>1.26</u> <u>7.09</u>
			8.27
Flange size for motor:	56C		
Liquid:			
Pumped liquid:	Water		
Liquid temperature during operation:	68 °F		▲ WARNING
Density:	62.29 lb/ft ³	MC	NOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND
Density.	02.23 ID/II ⁻	LO	OCAL CODES NAT ELECTRICAL CODE AND OCAL CODES NY TRAINED PERSONNEL TO REVENT SERIOUS ELECTRICAL SHOCKS.
		то	O SERVICE MOTOR. DISCONNECT POWER
Electrical data:		DE	SOURCE FROM MOTOR AND ANY ACCESSORY EVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL.
Motor standard:	NEMA		HIGH VOLTAGE
Motor type:	90CC	2	EUW VOLTAGE 60Hz: 460V 6 GHz: 268-230V 5 GHz: 400V 6 5 4 6 5 € 4
IE Efficiency class:	NEMA Premium / IE3 60Hz	99	● 8● 7● 3 1 1 1
Rated power - P2:	2 HP	30	9 9 8 7 2 1 1 3 2 1 1 3
			L1 L2 L3 L1 L2 L3 8
Power (P2) required by pump:	2 HP	_	NTERCHARGE ANY THO LINE WRITE TO REVERSE ROTATION
Main frequency:	60 Hz		THERMOSTATLELOS J (IMEN PROVIDED) J
Rated voltage:	3 x 208-230YY/460Y V		
Service factor:	1,15		



		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:	71.8 lb			
Gross weight:	82.8 lb			
Shipping volume:	6.11 ft ³			

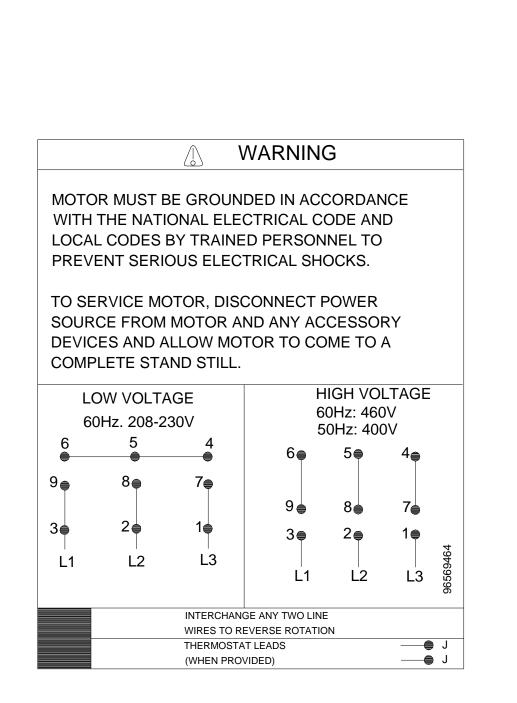






2/20/2018

96083488 CRI 3-11 60 Hz



All units are [mm] unless otherwise presented.



2/20/2018

Order Data:

Product name: CRI 3-11 A-CA-I-V-HQQV Amount: 1 Product No.: 96083488

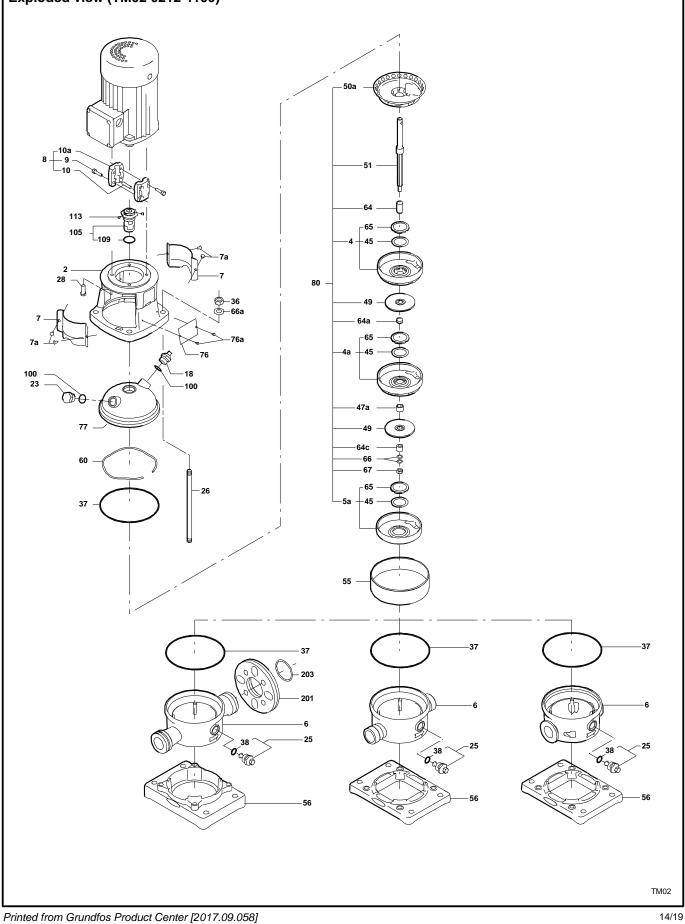
Total: Price on request

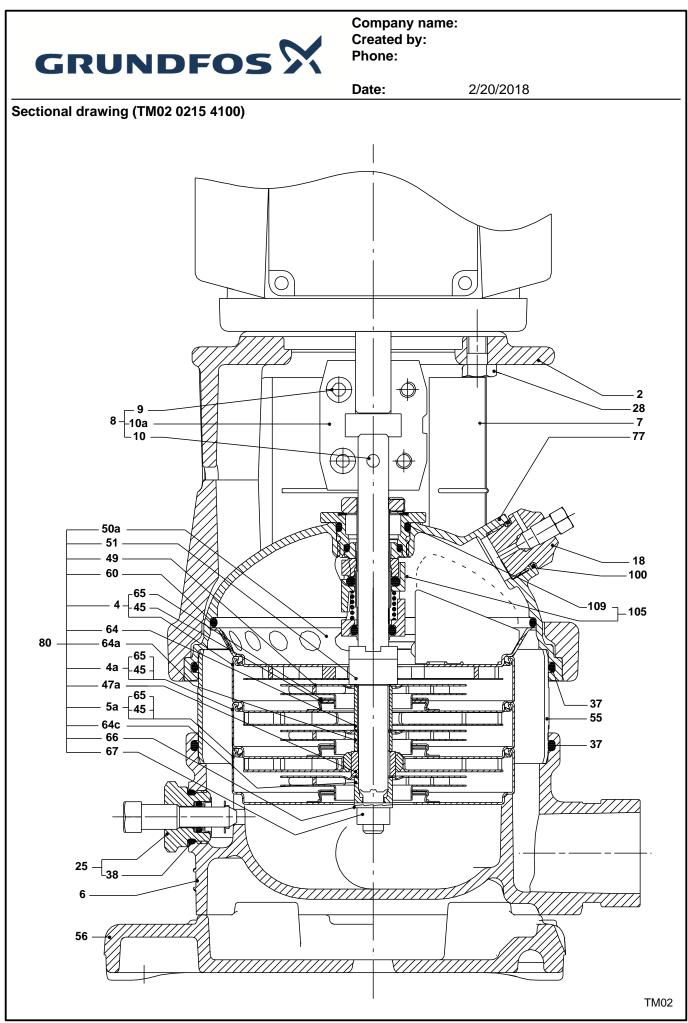


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Date:

Exploded view (TM02 0212 4100)



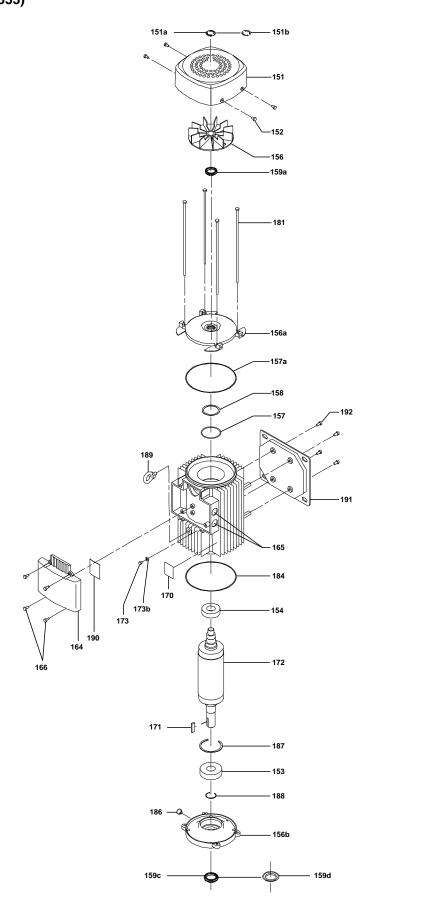


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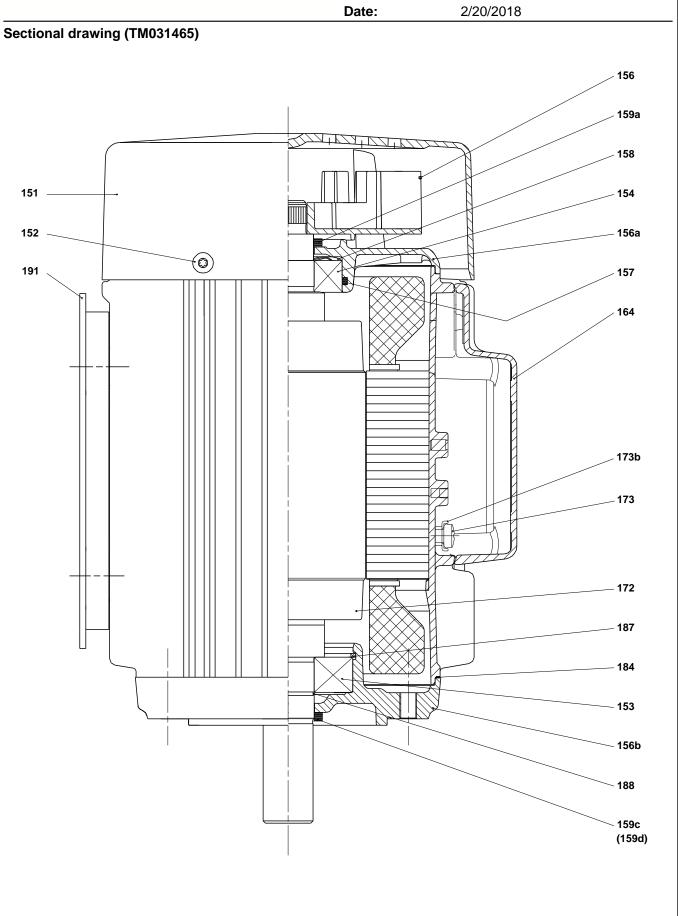
2/20/2018





TM030553)





TM031465)



2/20/2018

Parts list CRI 3-11, Prod number 96083488 Valid from 10.1.2005 (0503)

Pos	sition	•	Annotation	Classification data	Part No.		
		Motor				1	pcs
F		Motor				1	pcs
F		Base cpl.				1	pcs
05		Sealing parts				1	pcs
25		Drain plug w/bypass valve		Diseaster 40.0		1	
38		O-ring		Diameter: 16,3			
				Material type: FKM			
07				Thickness: 2,4		0	
37		O-ring		Diameter: 137,5		2	
				Material type: FKM			
400				Thickness: 3,3		0	
100		O-ring		Diameter: 16,3		2	
				Material type: FKM			
				Thickness: 2,4			
2		Pump head cpl.				1	pcs
2		Motor stool				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	
77		Pump cover				1	
+ 8		Coupling cpl.				1	pcs
26		Staybolt		Length: 292		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
F 80		Chamber stack				1	pcs
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	
10.5						1	
103		Seal ring, rotating					

Date: 2/20/2018 Distribution Annotation Classification Part No. Count Unit	GI	GRUNDF		os X		Company name: Created by: Phone:			
						Date:	2/2	20/201	8
3 Driver 1				Annotation	Classi	ication data	Part No.		Unit
	113	Driver						1	