

# Submittal Data

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

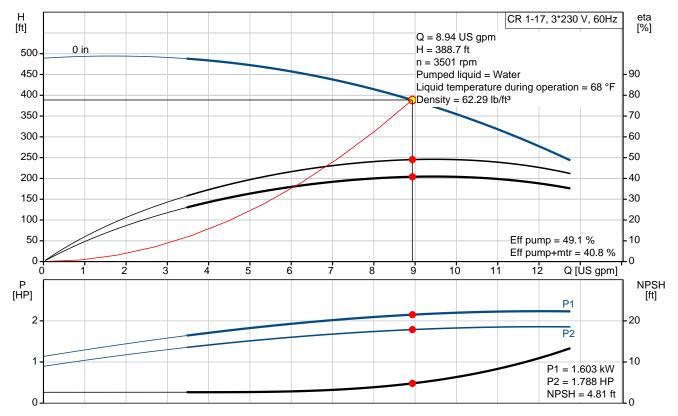


## CR 1-17

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)

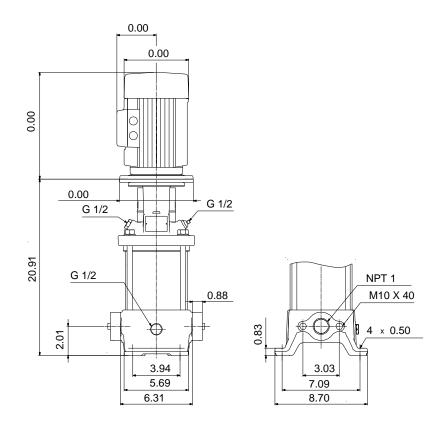
Product photo could vary from the actual product

Conditions of Service		Pump Data	Motor Data			
Flow:	8.94 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Rated power - P2:	2 HP	
Head:	388.7 ft	Maximum ambient temperature:	140 °F	Rated voltage:	208-230YY/460Y V	
Efficiency:	40.8 %	Approvals:	CURUS,NSF61	Main frequency:	60 Hz	
Liquid:	Water	Shaft seal:	HQQE	Enclosure class:	55 Dust/Jetting	
Temperature:	68 °F	Product number:	96081992	Insulation class:	F	
NPSH required:	4.81 ft			Motor protection:	NONE	
Viscosity:				Motor type:	90CC	
Specific Gravity:	1.000			Motor_efficiency:	85.5 %	



# Submittal Data





Materials:

Impeller:

Base:

Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Stainless steel AISI 304 EN 1.4301 A

Material code:

Code for rubber: E



2/20/2018

**Tender Text** 



Product No.: 96081992 CR 1-17 A-B-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: 3452 rpm Actual calculated flow: 8.94 US gpm Resulting head of the pump: 388.7 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CURUS,NSF61 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 / 250 °F 232 psi / -4 °F Type of connection: Oval / NPT(F)

1 inch

Size of suction port:



Date:

2/20/2018

Size of outlet port:	1 inch
Pressure rating:	PN 16
Flange size for motor:	56C

#### Electrical data:

NEMA
90CC
NEMA Premium / IE3 60Hz
2 HP
2 HP
60 Hz
3 x 208-230YY/460Y V
1,15
5,70-5,40/2,70 A
810-900 %
0,88-0,84
3480-3510 rpm
IE3 85,5%
85.5 %
85.0 %
83.0 %
2
55 Dust/Jetting
F

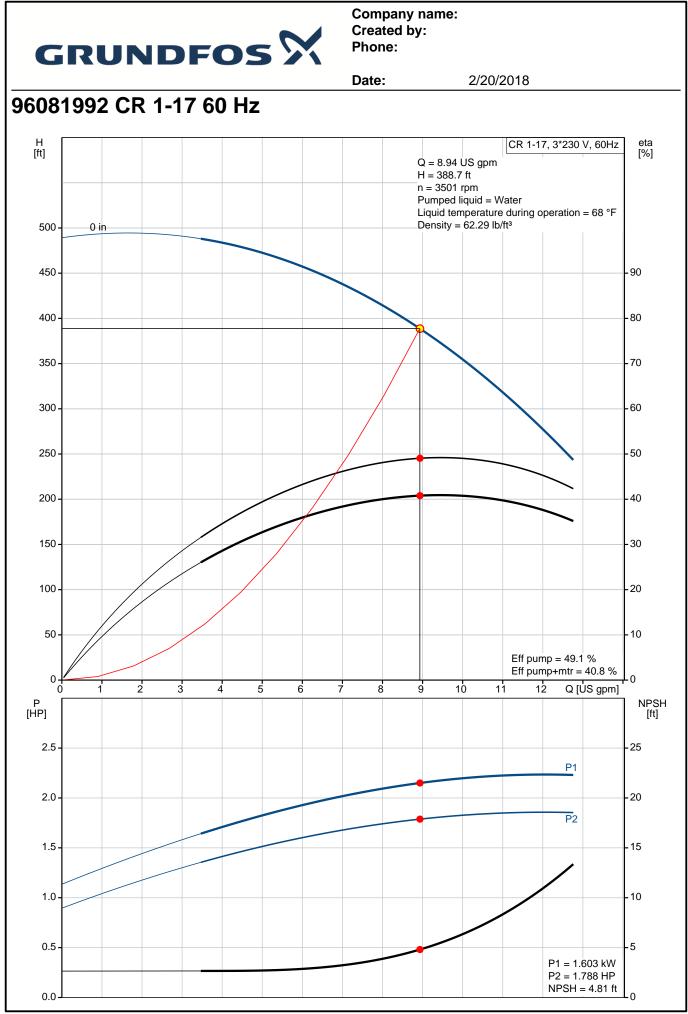
#### Others:

Net weight:	81.7 lb
Gross weight:	96.2 lb
Shipping volume:	8.26 ft <sup>3</sup>

G	RU	INDFOS	Company n Created by: Phone:		
			Date:	2/20/2018	
Position	Count	Description			
	1	CR 1-17 A-B-A-E-HQQE			
		Product No.: 96081992 Vertical, non-self-priming, multis centrifugal pump for installation and mounting on a foundation. The pump has the following cha - Impellers and intermedia - The shaft seal has asser according to EN 12756. - Power transmission is via coupling.	in pipe systems aracteristics: te chambers are made o nbly length	of	
		The motor is a 3-phase AC mot	or.		
		Controls: Frequency converter:	NONE		
		Liquid: Pumped liquid: Liquid temperature during opera Density:	Water ation: 68 °F 62.29 lb/ft <sup>3</sup>		
		<b>Technical:</b> Speed for pump data: Actual calculated flow: Resulting head of the pump: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals on nameplate: Curve tolerance:	3452 rpm 8.94 US gpm 388.7 ft Vertical Single HQQE CURUS,NSF61 ISO9906:2012 3B		
		Materials:	Cootiron		
		Base: Impeller:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Stainless steel EN 1.4301		
		Bearing material:	AISI 304 SIC		
		Installation: Maximum ambient temperature: Max pressure at stated tempera	ature: 232 psi / 250 °F 232 psi / -4 °F		
		Type of connection: Size of suction port: Size of outlet port:	Oval / NPT(F) 1 inch 1 inch		



			Date:	2/20/2018
osition	Count	Description		
		Pressure rating:	PN 16	
		Flange size for motor:	56C	
		Electrical data:		
		Motor standard:	NEMA	
		Motor type:	90CC NEMA Premium / IE3 60Hz	
		IE Efficiency class: 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: Rated current:	1,15 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: Motor efficiency at full load:	IE3 85,5% 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 F	
		Insulation class (IEC 85):	Г	
		Others:		
		Net weight:	81.7 lb	
		Gross weight:	96.2 lb 8.26 ft <sup>3</sup>	
		Shipping volume:	0.20 11	



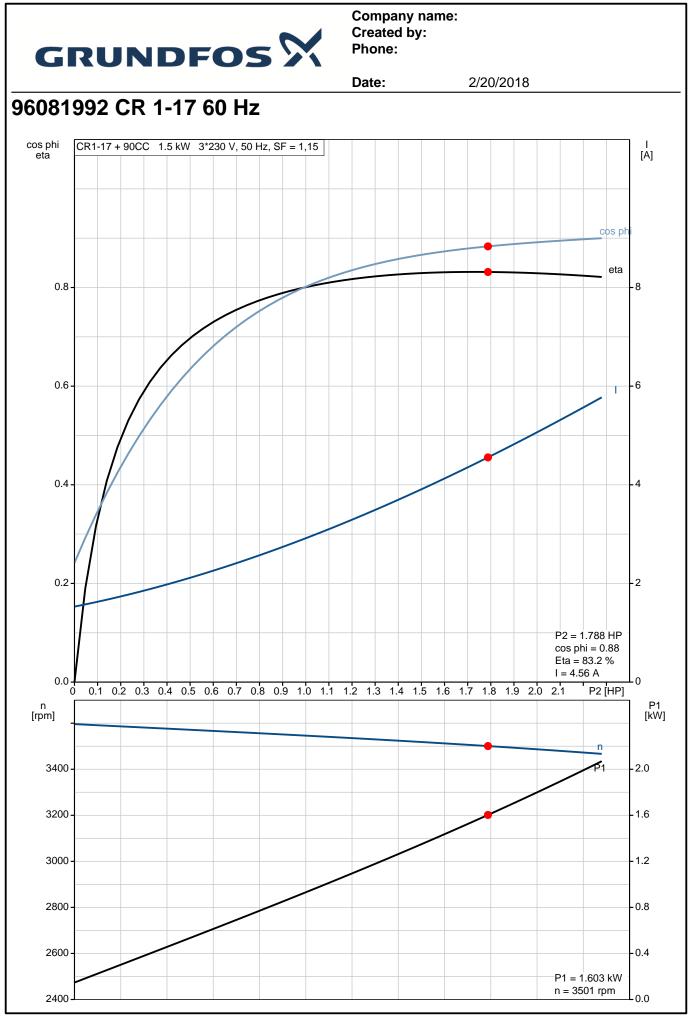


		Date:			2/20	/2018				
Description	Value	- H [ft]					CR 1-1	7, 3*230	V, 60Hz	eta [%]
General information:		.,			Q = 8.94 I = 388.	US gpm				
Product name:	CR 1-17 A-B-A-E-HQQE	500	0 in		i = 388. = 3501					
Product No.:	96081992	500 -		P	bedmu	liquid = W	ater		60 cT	
EAN:	5700395167306	450 -		D	iquid ter ensity =	nperature 62.29 lb/	during c ft <sup>3</sup>	peration	= 68 °F	- 90
Technical:		400 -					Q			- 80
Speed for pump data:	3452 rpm	350 -								- 70
Actual calculated flow:	8.94 US gpm						/	$\mathbf{i}$		
Resulting head of the pump:	388.7 ft	300 -								- 60
Stages:	17	050								50
Impellers:	17	250 -					-	$\sim$		- 50
•		200 -				7	_			- 40
Low NPSH:	N	-								
Pump orientation:	Vertical	150 <b>-</b>								- 30
Shaft seal arrangement:	Single	_								
Code for shaft seal:	HQQE	100 -		/ /						- 20
Approvals on nameplate:	CURUS,NSF61	50 -								- 10
Curve tolerance:	ISO9906:2012 3B	- 50-						np = 49.1		
Pump version:	A	0 -	$\square$					np+mtr =		-0
Model:	A		) 2	4	6	8	10	) Q[	ÚS gpm]	
Cooling:	TEFC	P [HP]								NPS [ft]
coomig.		2.5 -								- 25
Materials:									P1	
	Cast iron	2.0 -								- 20
Base:									P2	
	EN 1561 EN-GJL-200	1.5 <b>-</b>								- 15
	ASTM A48-25B									10
Impeller:	Stainless steel	1.0 -								- 10
	EN 1.4301	0.5 -						P1 = 1.	603 kW	-5
	AISI 304	0.0-		_				P2 = 1.	788 HP	- 5
Material code:	A	0.0 -						NPSH	= 4.81 ft	Lo
Code for rubber:	E	-9								
	SIC			0.00						
Bearing material:	310	_		0.00	1					
Installation:		-								
	140 °F	00.0			[					
Maximum ambient temperature:				Le						
Max pressure at stated temperature:	232 psi / 250 °F	-		يسيسكي	)					
	232 psi / -4 °F	_	0.00		G 1/2					
Type of connection:	Oval / NPT(F)	_	<u>G 1/2</u>	<u>_</u>						
Connect code:	В	도		'IFFI	ľ	·	_ /			
Size of suction port:	1 inch	20.91	<u>G 1/2</u>					PT 1		
Size of outlet port:	1 inch	-		╓╙╲┼─╜	0.88	JL	<u>↓</u> ∦_'	110 X 40		
Pressure rating:	PN 16	-	2.01	ᡛᡰᢩᡇ᠂	Ħ	8 JÆ	¶ <b>X</b>  }₄	× 0.50		
Flange size for motor:	56C		~	3.94	1	FF/	3.03			
1 101 11 11 11 11 11 11 11 11 11 11 11 1	000			5.69 6.31	1		7.09 1.70			
Liquid:				N 3.01	*	•				
Pumped liquid:	Water									
Liquid temperature during operation:	68 °F									
Density:	62.29 lb/ft <sup>3</sup>		A	WARNING		7				
Electrical data:		мо	TOR MUST BE GI	ROUNDED IN ACCC		1				
Motor standard:	NEMA	LO	CAL CODES BY T	RAINED PERSONNI ELECTRICAL SHOO	EL TO					
		то	SERVICE MOTOR	R. DISCONNECT PO	WER					
Motor type:	90CC	SO	URCE FROM MOT	TOR AND ANY ACCI W MOTOR TO COM STILL.	ESSORY					
IE Efficiency class:	NEMA Premium / IE3 60Hz		LOW VOLTAGE		H VOLTAGE	-				
Rated power - P2:	2 HP	8	60Hz. 208-230V	4 60- 50-	tz: 460V tz: 400V 5♥ 4♥					
Power (P2) required by pump:	2 HP	94	89 7	۳   Ľ	I					
Main frequency:	60 Hz	3●	2	• 3•	2 1 1	3				
Rated voltage:	3 x 208-230YY/460Y V		L2	L3 I L1	L2 L3	888				
Service factor:	1,15	-	INT WF TH	ERCHANGE ANY TWO LINE RES TO REVERSE ROTATION ERMOSTAT LEADS	-•	i				
			00	HEN PROVIDED)	_•	<u>.                                     </u>				
Rated current:	5,70-5,40/2,70 A									
Starting current:	810-900 %									

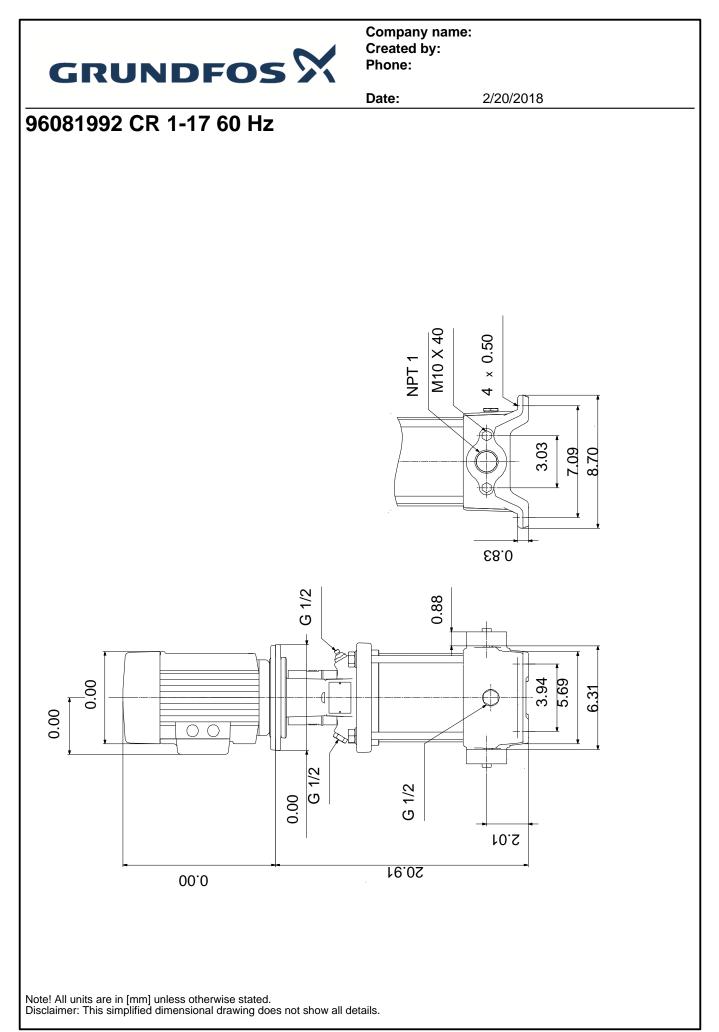
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		Date:	2/20/2018	
Description	Value			
Load current:	6,55-6,1/3,05 A			
Cos phi - power factor:	0,88-0,84			
Rated speed:	3480-3510 rpm			
IE efficiency:	IE3 85,5%			
Motor efficiency at full load:	85.5 %			
Motor efficiency at 3/4 load:	85.0 %			
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:	81.7 lb			
Gross weight:	96.2 lb			
Shipping volume:	8.26 ft <sup>3</sup>			



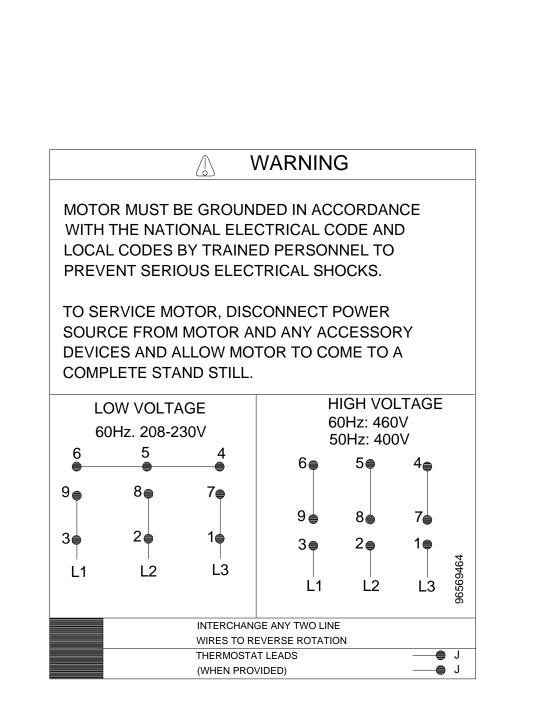
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96081992 CR 1-17 60 Hz



All units are [mm] unless otherwise presented.

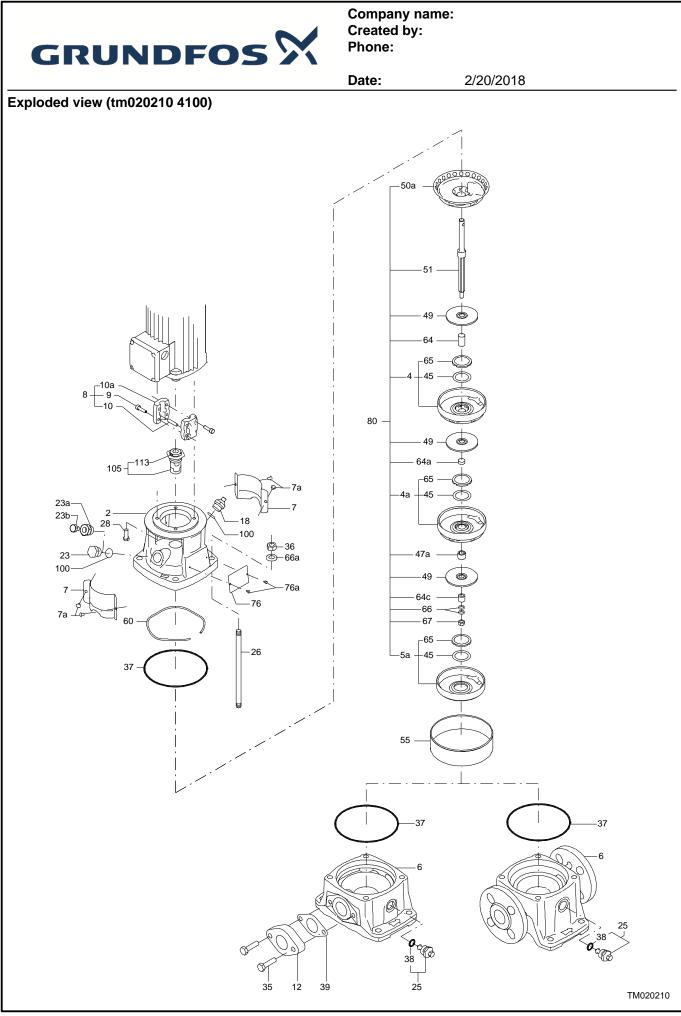


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**Order Data:** 

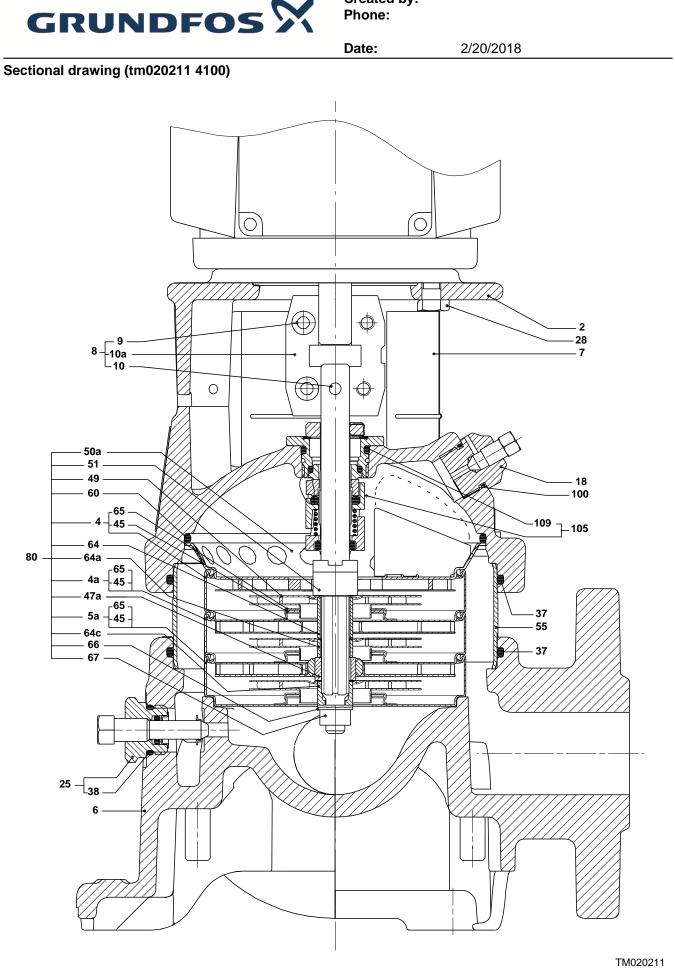
Product name: CR 1-17 A-B-A-E-HQQE Amount: 1 Product No.: 96081992

Total: Price on request





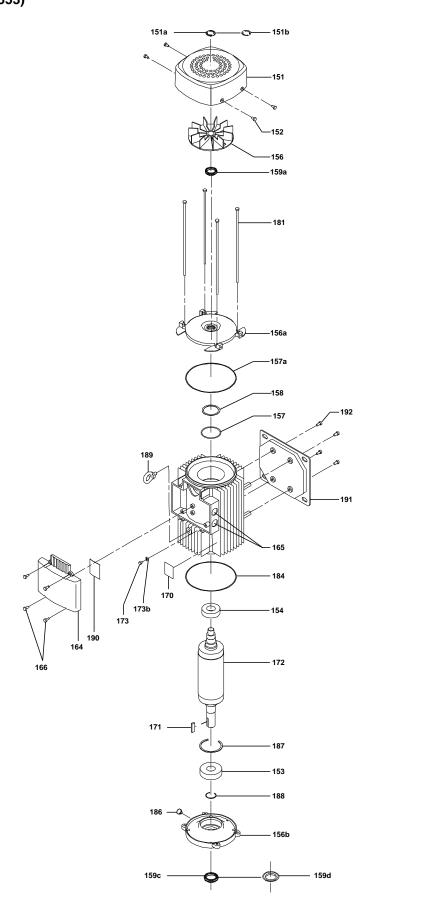
Company name: Created by:





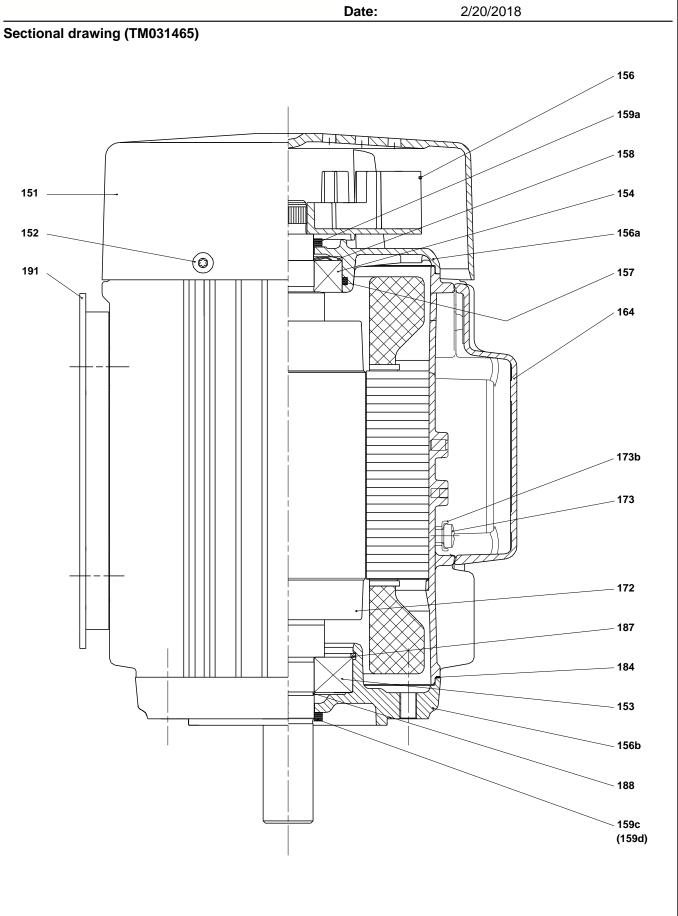
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TM030553)





TM031465)



2/20/2018

## Parts list CR 1-17, Prod number 96081992 Valid from 10.1.2005 (0503)

	Position	•	Annotation	Classification data	Part No.		unt	
		Motor				1		pcs
t		Motor				1		pcs
•		Base cpl.				1		pcs
	6	Base					1	
	12	Flange					2	
	35	Hex head screw		Length: 40			4	
				Thread: M10				
	37	Gasket					2	
-		Sealing parts				1		pcs
-	25	Drain plug w/bypass valve					1	
	38	O-ring		Diameter: 16,3				
				Material type: EPDM				
				Thickness: 2,4				
	37	O-ring					2	
	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	
	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	
+	8	Coupling cpl.				1	-	pcs
·	26	Staybolt		Length: 328		4		pcs
	20	Claybolt		Thread: M12		т		poo
	36a	Washer		Designation: DIN 125 A		4		pcs
	000	Washer		Inner diameter: 13		-		poo
				Outer diameter: 24				
				Thickness: 2,5				
	55	Outer sleeve				1		pcs
	66a	Nut		Thread: M12		4		•
+	80	Chamber stack				4		pcs pcs
Ŧ		Shaft seal		Material type: HQQE		1		•
-	105	O-ring				I	1	pcs
		0						
		O-ring					1	
		Seal driver, upper					1	
		Seal driver, lower						
		Spacer ring					1	
		Pipe					1	
		Plug					1	
		Plug					1	
		Compression spring					1	
		Socket set screw					1	
	102	O-ring		Diameter: 22,00			1	
				Material type: EPDM				



		Date:	2/20/2018
Position	Description	Annotation Classification data	Part No. Count Unit
		Thickness: 2,75	
103	Seal ring, stationary		1
105	Seal ring, rotating		1
107	O-ring		1
113	Driver		1