

26/11/2019

Qty.   Descriptio	n
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## CRNE 20-8 N-FGJ-A-E-HQQE



Note! Product picture may differ from actual product

Product No.: 96514731

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via combined DIN-ANSI-JIS flanges.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement. An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The operating panel has indicator lights for "Operation" and "Fault".

Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".

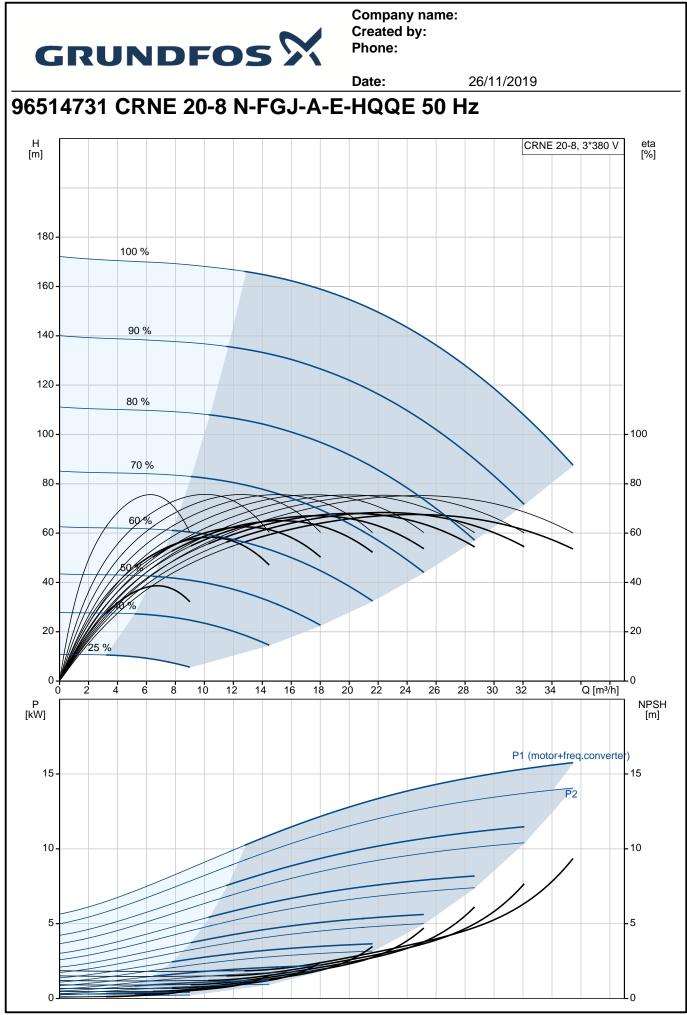
The terminal box holds terminals for these connections:

- pump start/stop input (potential-free contact)
- remote setpoint setting via analog signal, 0-10 V, 0(4)-20 mA
- 10 V voltage supply for setpoint potentiometer, Imax = 5 mA
- three analog sensor inputs, 0-10 V, 0(4)-20 mA; the factory-fitted pressure sensor is connected to one of these inputs
- 24 V voltage supply for sensor, Imax = 40 mA
- one analog output
- three digital inputs
- two Pt100 inputs
- two potential-free fault signal relays with changeover contact, reporting "Fault", "Operation" or "Ready"
- RS-485 GENIbus connection
- interface for Grundfos CIM fieldbus module.

<b>Controls:</b> Frequency converter: Pressure sensor:	Built-in Yes
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density at selected liquid temper	Water -20 120 °C 20 °C rature: 998.2 kg/m <sup>3</sup>
Technical:	



Description			
Description			
Pump speed on which pump da		om	
Rated flow:	25.3 m³/h		
Rated head:	136.6 m		
Pump orientation:	Vertical		
Shaft seal arrangement:	Single		
Code for shaft seal:	HQQE		
Approvals on nameplate:	CE, EAC,ACS		
Curve tolerance:	ISO9906:2012 3B		
Materials:			
Base:	Stainless steel		
2000	EN 1.4408		
	AISI 316		
less alla ru			
Impeller:	Stainless steel		
	EN 1.4401		
	AISI 316		
Bearing:	SIC		
Installation:			
Maximum ambient temperature	: 40 °C		
Maximum operating pressure:	25 bar		
Max pressure at stated temp:	25 bar / 120 °C		
	25 bar / -20 °C		
Type of connection:	DIN / ANSI / JIS		
Size of inlet connection:	DN 50		
Size of outlet connection:			
	DN 50		
Pressure rating for pipe connect			
Flange rating inlet:	300 lb		
Flange size for motor:	FF300		
Electrical data:			
Motor standard:	IEC		
Motor type:	160MD		
IE Efficiency class:	IE3		
Rated power - P2:	15 kW		
Power (P2) required by pump:	15 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-480 V		
Rated current:	30.0-26.0 A		
Cos phi - power factor:	0.91-0.86		
Rated speed:	480-3540 rpm		
Efficiency:	IE3 91,9%		
Motor efficiency at full load:	91.9 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	- IP55		
Insulation class (IEC 85):	F		
Motor No:	85901025		
Others:			
Minimum efficiency index, MEI	: 0.70		
Net weight:	204 kg		
Gross weight:	255 kg		
Shipping volume:	0.82 m <sup>3</sup>		
Country of origin:	GB		
Custom tariff no .:	84137075		



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CRNE 20-8, 3\*380 V

25

30

Q [m³/h]

F2

P1 (motor+freq.cor

eta [%]

- 100 - 80

- 60 - 40 - 20 - 0

> NPSH [m]

verter) - 15

10

- 5

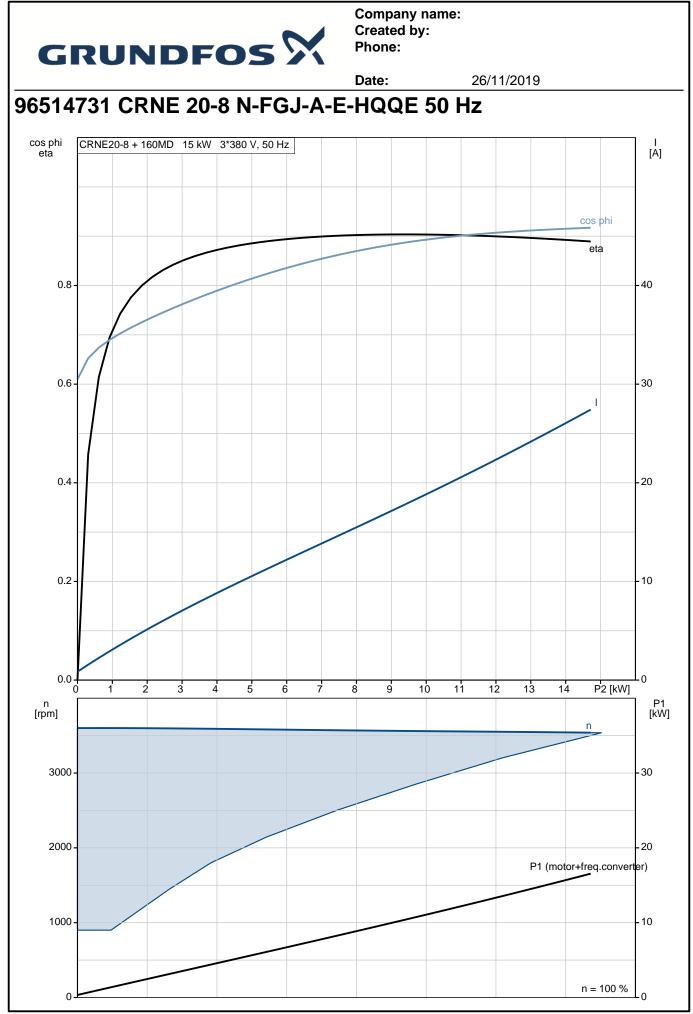
-0

		Date:	26/11/2019
Description	Value	H [m]	
General information:			
Product name:	CRNE 20-8 N-FGJ-A-E-HQQE	180 -	100 %
Product No:	96514731		100 %
EAN number:	5700396712055	160 -	
	5700396712055	140 -	90 %
Price:	9.049,00 GBP	140 -	
Technical:	0.0 10,00 001	120 -	
Pump speed on which pump data are			80 %
based:	3528 rpm	100 -	
Rated flow:	25.3 m³/h	80 -	70 %
Rated head:	136.6 m		
Head max:	170 m	60 - /	60%
Stages:	8		
Impellers:	8	40 -	
Number of reduced-diameter impellers:	0	20	10 %
	-	20 - 25	%
Low NPSH:	No	o	
Pump orientation:	Vertical	o <u>́</u>	5 10 15 20 2
Shaft seal arrangement:	Single	P [kW]	
Code for shaft seal:	HQQE		
Approvals on nameplate:	CE, EAC,ACS	15 -	
Curve tolerance:	ISO9906:2012 3B		
Pump version:	Ν	10 -	
Model:	A		
Materials:			
Base:	Stainless steel	5-	
	EN 1.4408		
	AISI 316	0	
Impeller:	Stainless steel	٦	
	EN 1.4401		308
	AISI 316		
Material code:	A		
Code for rubber:	E	482	
Bearing:	SIC		
Installation:			
Maximum ambient temperature:	40 °C		<u>G 1/2</u> <u>G 1/2</u>
Maximum operating pressure:	25 bar	812	<u>8 x 18 x 21.8</u>
Max pressure at stated temp:	25 bar / 120 °C		1 X G 1/2
	25 bar / -20 °C	+	
Type of connection:	DIN / ANSI / JIS	6	▁ <u>╜</u> ┟╡╤╪╅╢ <sup>×</sup> ╞╌╬╋
Size of inlet connection:	DN 50		130 200 120
Size of outlet connection:	DN 50		300 215 248
Pressure rating for pipe connection:	PN 25		
Flange rating inlet:	300 lb		
Flange size for motor:	FF300		
Connect code:	FGJ		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-20 120 °C		
Selected liquid temperature:	20 °C	¢	<b>\</b>
Density at selected liquid temperature:	998.2 kg/m <sup>3</sup>		20: P1100 B 10: P1100 B 18: P1100 A 17: P1100 A
Electrical data:	150		16: CND (Hame) 15: 24V 14: Sensor Input2 13: CND 12: Anabo subst
Motor standard:	IEC	A	1: Diplai Input 1 1: Diplai Input 1 1: Diplai Input 1
Motor type:	160MD		
IE Efficiency class:	IE3	(한편에 Hotelological (************************************	C. Sanac Input C. C. Since Input RE-A-ROS C.
Rated power - P2:	15 kW		6. GND (frame) 5. +10V
Power (P2) required by pump:	15 kW		4: Selpoint input 3: GND (frame) 2: Startistop
Mains frequency:	50 Hz		

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		Date:	26/11/20
Description	Value		
Rated voltage:	3 x 380-480 V		
Rated current:	30.0-26.0 A		
Cos phi - power factor:	0.91-0.86		
Rated speed:	480-3540 rpm		
Efficiency:	IE3 91,9%		
Motor efficiency at full load:	91.9 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Motor protec:	YES		
Motor No:	85901025		
Controls:			
Function Module:	ADVANCED I/O		
Frequency converter:	Built-in		
Pressure sensor:	Yes		
Others:			
Minimum efficiency index, MEI :	0.70		
Net weight:	204 kg		
Gross weight:	255 kg		
Shipping volume:	0.82 m <sup>3</sup>		
Country of origin:	GB		
Custom tariff no .:	84137075		



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