

**Qty. Description**

1 CRNE 20-10 N-FGJ-A-E-HQQE



Product No.: [96514732](#)

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, I<sub>max</sub> = 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, I<sub>max</sub> = 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.

**Controls:**

Frequency converter: Built-in  
 Pressure sensor: Yes

**Liquid:**

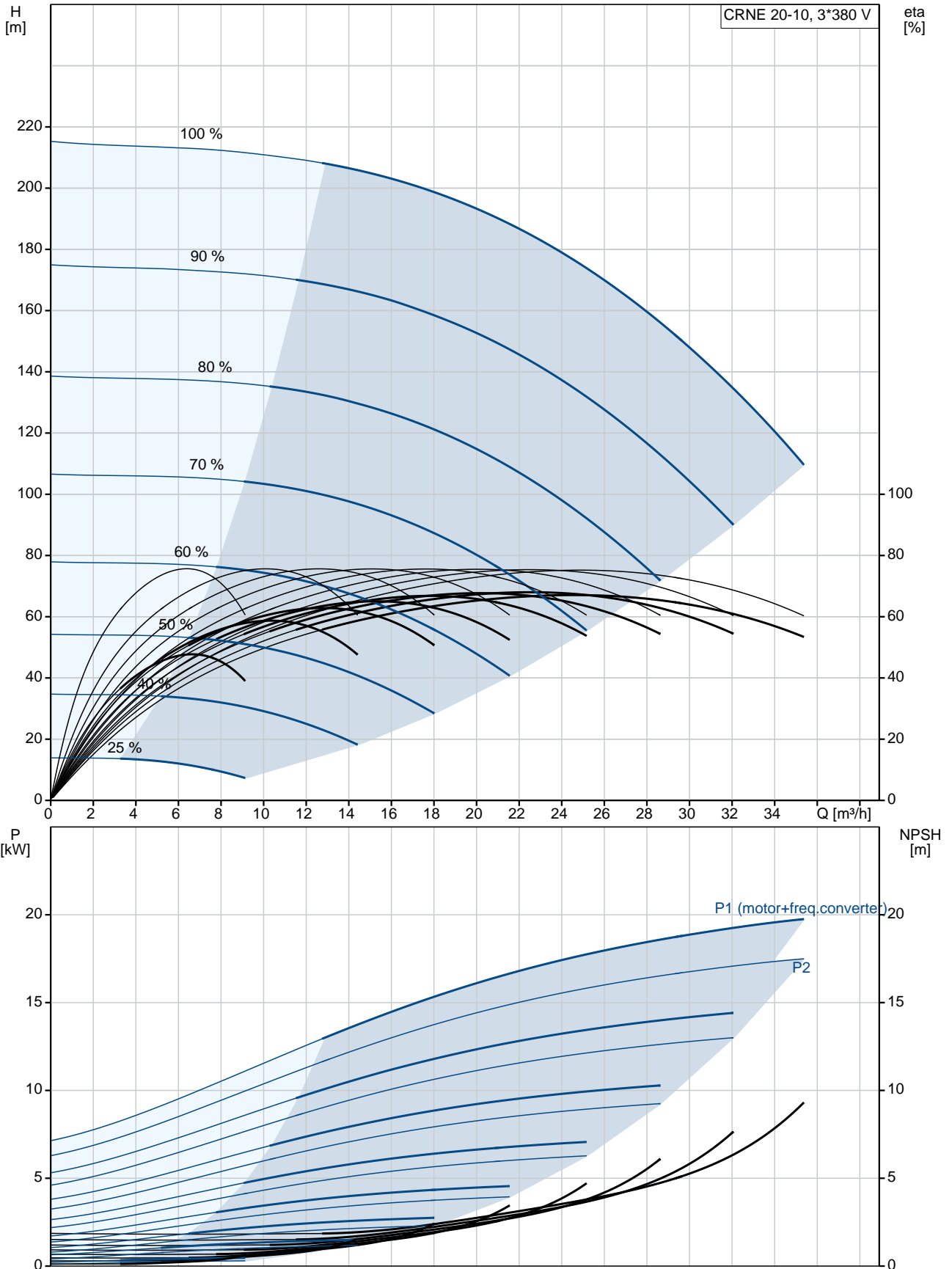
Pumped liquid: Water  
 Liquid temperature range: -20 .. 120 °C  
 Selected liquid temperature: 20 °C  
 Density at selected liquid temperature: 998.2 kg/m<sup>3</sup>

**Technical:**

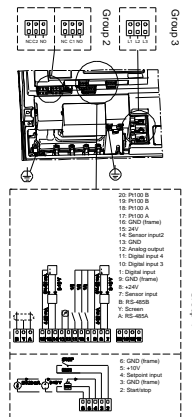
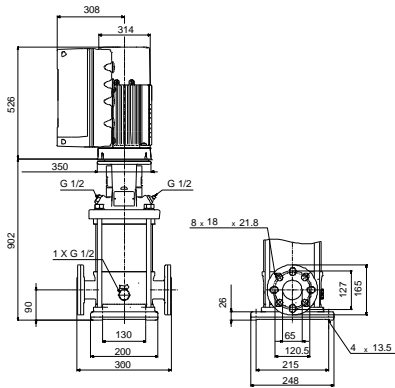
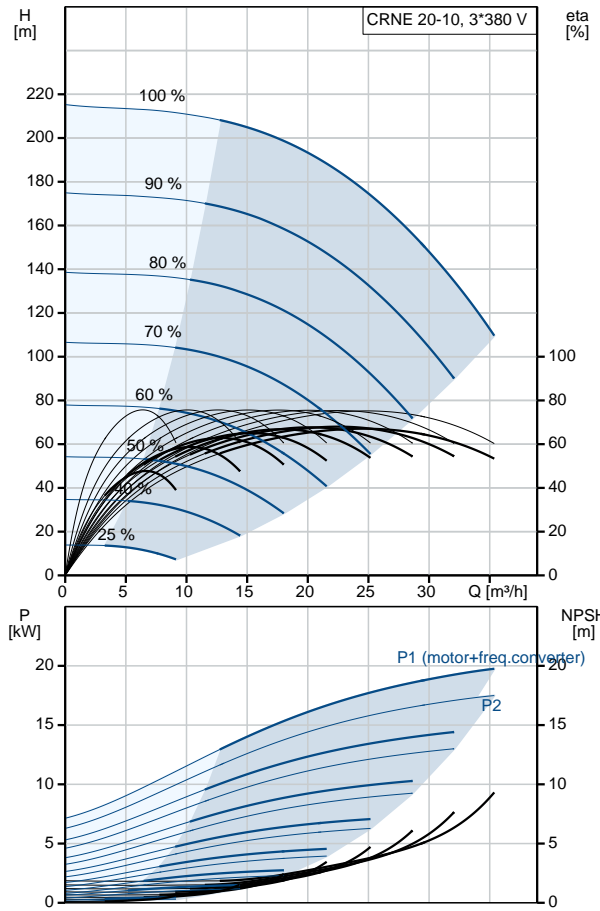
Pump speed on which pump data are based: 3540 rpm  
 Rated flow: 25.3 m<sup>3</sup>/h  
 Rated head: 172.4 m  
 Pump orientation: Vertical  
 Shaft seal arrangement: Single  
 Code for shaft seal: HQQE  
 Approvals on nameplate: CE, EAC, ACS  
 Curve tolerance: ISO9906:2012 3B

Qty.	Description
	<p><b>Materials:</b></p> <p>Base: Stainless steel EN 1.4408 AISI 316</p> <p>Impeller: Stainless steel EN 1.4401 AISI 316</p> <p>Bearing: SIC</p> <p><b>Installation:</b></p> <p>Maximum ambient temperature: 40 °C Maximum operating pressure: 25 bar Max pressure at stated temp: 25 bar / 120 °C 25 bar / -20 °C</p> <p>Type of connection: DIN / ANSI / JIS Size of inlet connection: DN 50 Size of outlet connection: DN 50 Pressure rating for pipe connection: PN 25 Flange rating inlet: 300 lb Flange size for motor: FF300</p> <p><b>Electrical data:</b></p> <p>Motor standard: IEC Motor type: 160LB IE Efficiency class: IE3 Rated power - P2: 18.5 kW Power (P2) required by pump: 18.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-480 V Rated current: 37.0-31.0 A Cos phi - power factor: 0.91-0.88 Rated speed: 480-3540 rpm Efficiency: IE3 92,4% Motor efficiency at full load: 92.4 % Number of poles: 2 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 85901026</p> <p><b>Others:</b></p> <p>Minimum efficiency index, MEI : 0.70 Net weight: 219 kg Gross weight: 271 kg Shipping volume: 0.82 m<sup>3</sup> Country of origin: GB Custom tariff no.: 84137075</p>

## 96514732 CRNE 20-10 N-FGJ-A-E-HQQE 50 Hz



Description	Value
<b>General information:</b>	
Product name:	CRNE 20-10 N-FGJ-A-E-HQQE
Product No:	96514732
EAN number:	5700396712079 5700396712079
<b>Technical:</b>	
Pump speed on which pump data are based:	3540 rpm
Rated flow:	25.3 m <sup>3</sup> /h
Rated head:	172.4 m
Head max:	214 m
Stages:	10
Impellers:	10
Number of reduced-diameter impellers:	0
Low NPSH:	No
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CE, EAC, ACS
Curve tolerance:	ISO9906:2012 3B
Pump version:	N
Model:	A
<b>Materials:</b>	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4401 AISI 316
Material code:	A
Code for rubber:	E
Bearing:	SIC
<b>Installation:</b>	
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 connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	FF300
Connect code:	FGJ
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 120 °C
Selected liquid temperature:	20 °C
Density at selected liquid temperature:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	IEC
Motor type:	160LB
IE Efficiency class:	IE3
Rated power - P2:	18.5 kW
Power (P2) required by pump:	18.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-480 V





Company name:

Created by:

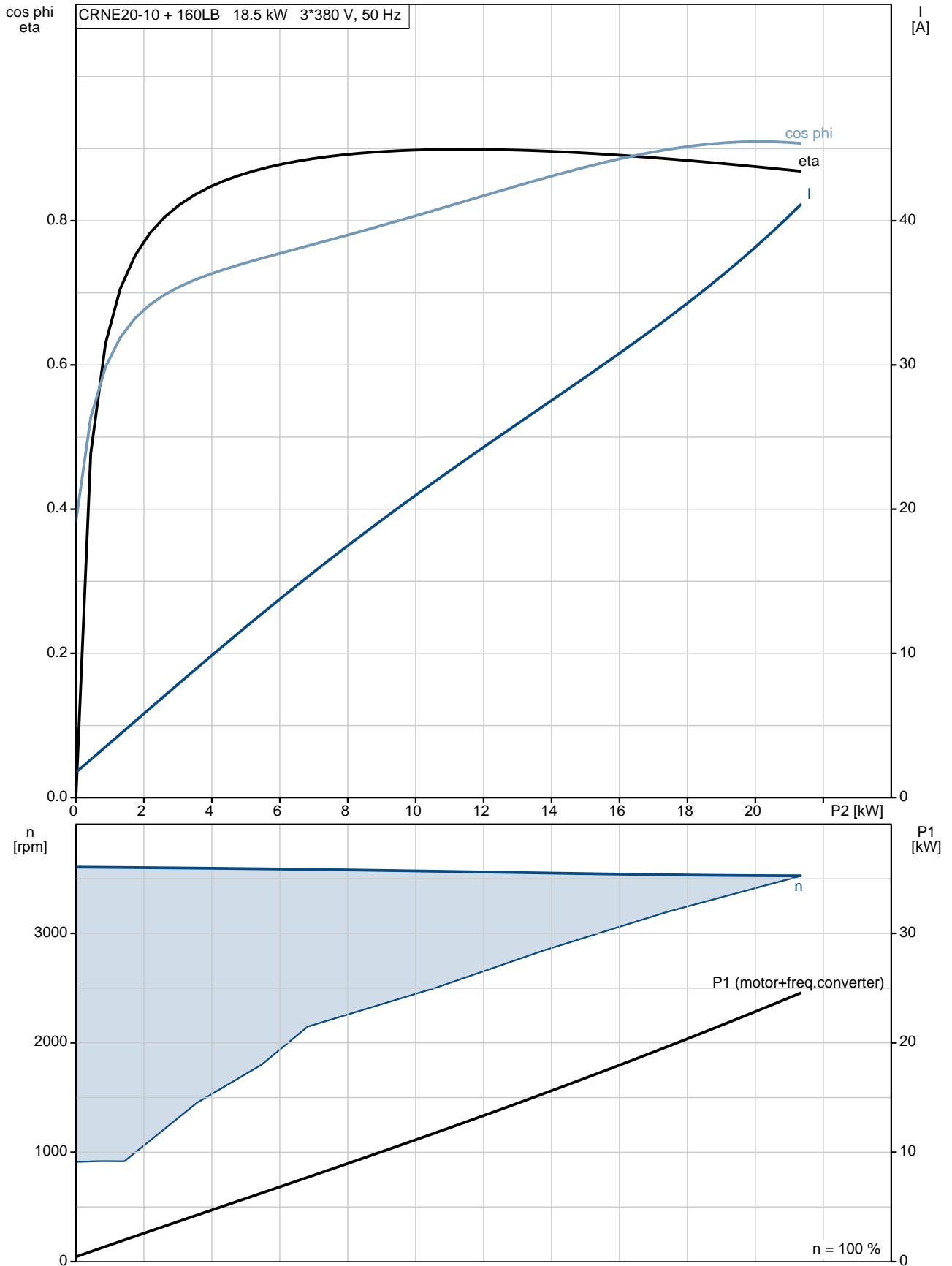
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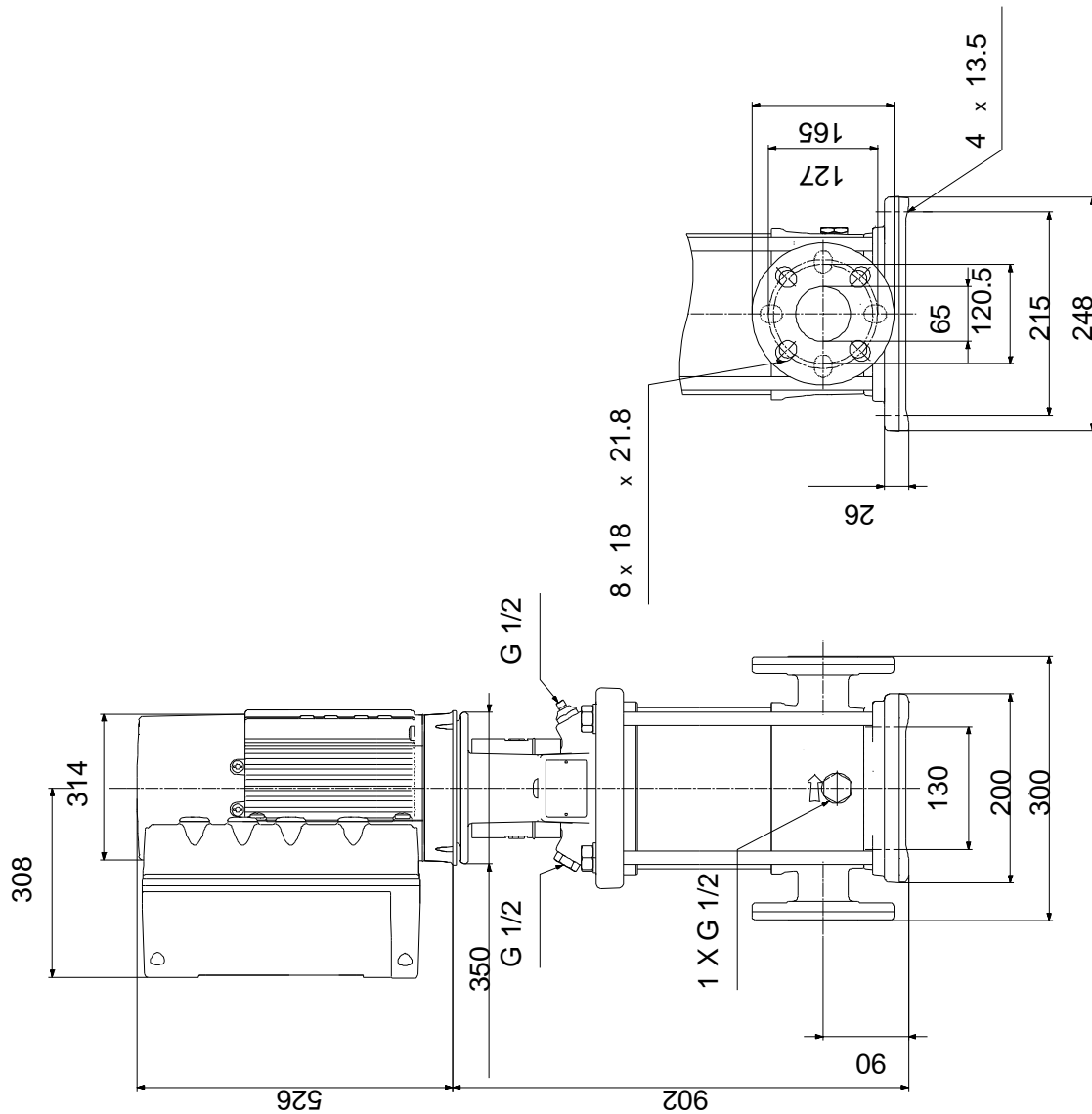
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Description	Value
Rated current:	37.0-31.0 A
Cos phi - power factor:	0.91-0.88
Rated speed:	480-3540 rpm
Efficiency:	IE3 92,4%
Motor efficiency at full load:	92.4 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	YES
Motor No:	85901026
<b>Controls:</b>	
Function Module:	ADVANCED I/O
Frequency converter:	Built-in
Pressure sensor:	Yes
<b>Others:</b>	
Minimum efficiency index, MEI :	0.70
Net weight:	219 kg
Gross weight:	271 kg
Shipping volume:	0.82 m <sup>3</sup>
Country of origin:	GB
Custom tariff no.:	84137075

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