

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

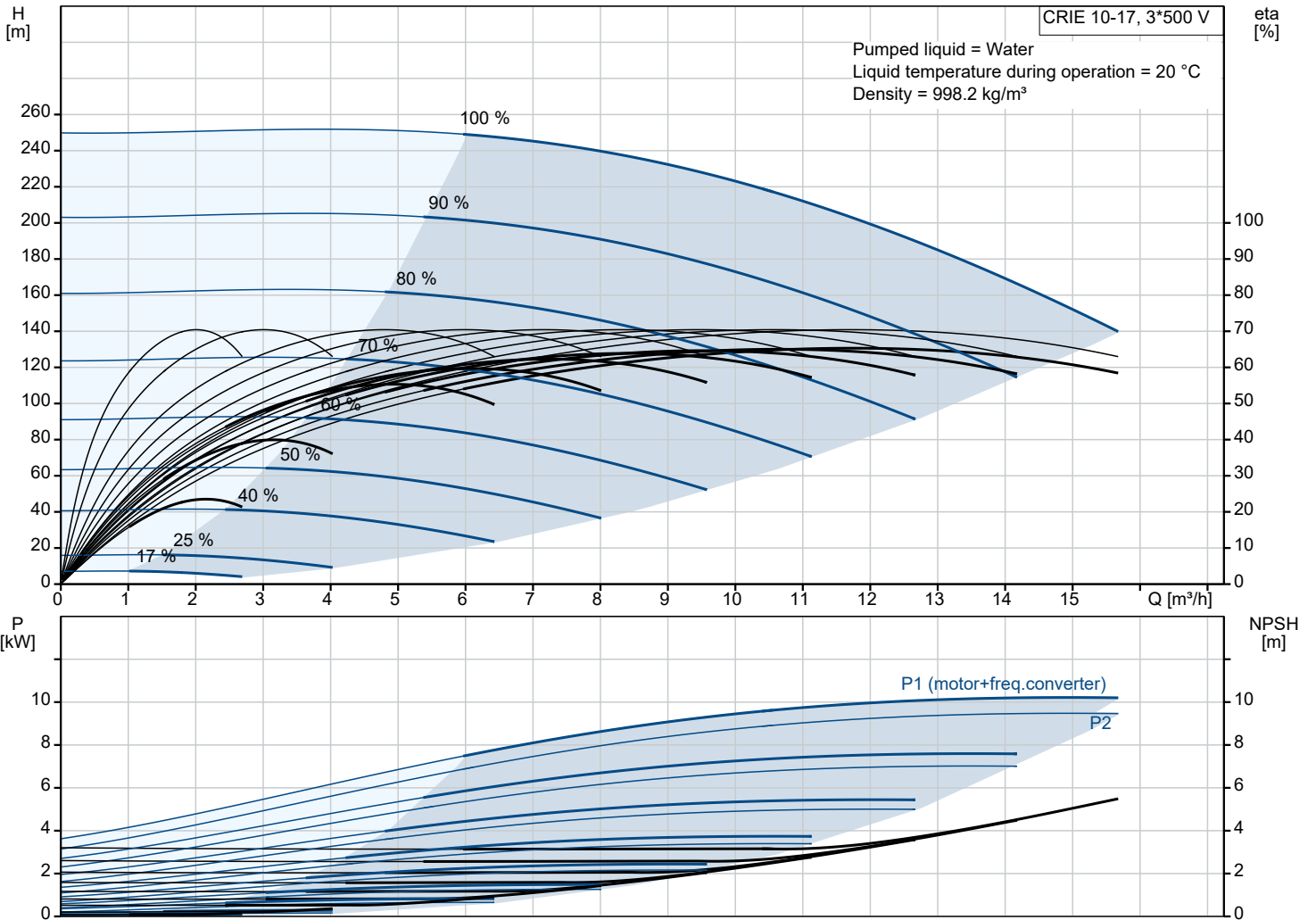


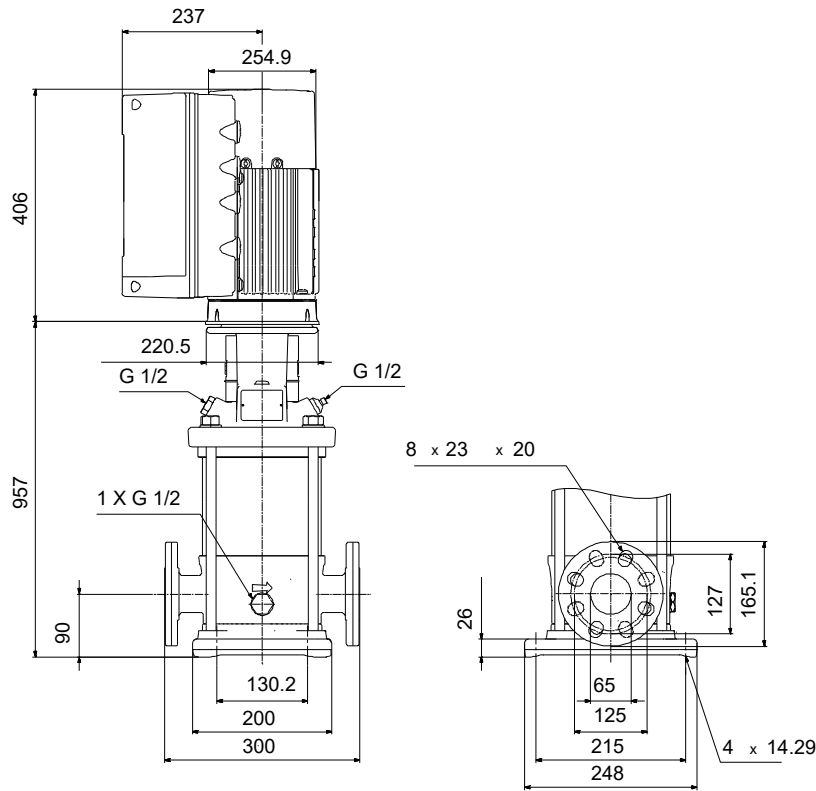
### CRIE 10-17 N-FGJ-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter.  
 Pump materials in contact with the liquid are in stainless steel (EN 1.4301)

Note! Product picture may differ from actual product


Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Max pressure at stated temp:	25 bar / 120 °C	Rated power - P2:	11 kW
Temperature:	20 °C	Liquid temperature range:	-20 .. 120 °C	Rated voltage:	440-480 V
Specific Gravity:	1.000	Maximum ambient temperature:	50 °C	Mains frequency:	60 Hz
		Shaft seal:	HQQE	Enclosure class:	IP55
		Product number:	99076383	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	160H
				Eta 1/1:	93.2 %





**Materials:**

Base: Stainless steel  
 Base: EN 1.4408  
 Base: AISI 316  
 Impeller: Stainless steel  
 Impeller: AISI 304  
 Impeller: EN 1.4301  
 Material code: A  
 Code for rubber: E

Qty.	Description
1	<p data-bbox="124 85 462 116"><b>CRIE 10-17 N-FGJ-A-E-HQQE</b></p>  <p data-bbox="518 436 989 459"><b>Note! Product picture may differ from actual product</b></p> <p data-bbox="124 465 391 497">Product No.: <a href="#">99076383</a></p> <p data-bbox="124 526 1508 600">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in 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.</p> <p data-bbox="124 611 1053 642">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 642 941 674">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 674 1516 725">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.</p> <p data-bbox="124 725 1468 757">The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.</p> <p data-bbox="124 786 885 817">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 817 1460 869">The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".</p> <p data-bbox="124 936 1516 1010">Communication with the pump is also 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".</p> <p data-bbox="124 1048 1117 1079">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="167 1079 1436 1167" style="list-style-type: none"> <li>• "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)</li> <li>• "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)</li> <li>• "Alarm": Motor has stopped (flashing red indicator lights).</li> </ul> <p data-bbox="124 1167 1500 1218">The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:</p> <ul data-bbox="167 1218 1500 1608" style="list-style-type: none"> <li>• two dedicated digital inputs</li> <li>• three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these inputs</li> <li>• 5 V voltage supply to potentiometer and sensor</li> <li>• one analog output, 0-10 V, 0(4)-20 mA</li> <li>• two configurable digital inputs or open-collector outputs</li> <li>• two Pt100/Pt1000 inputs</li> <li>• LiqTec, dry-running protection sensor input</li> <li>• Grundfos Digital Sensor input and output</li> <li>• 24 V voltage supply for sensors</li> <li>• two signal-relay outputs (potential-free contacts)</li> <li>• GENIbus connection</li> <li>• interface for Grundfos CIM fieldbus module.</li> </ul> <p data-bbox="124 1641 199 1673">Liquid:</p> <p data-bbox="124 1673 558 1704">Pumped liquid: Water</p> <p data-bbox="124 1704 630 1736">Liquid temperature range: -20 .. 120 °C</p> <p data-bbox="124 1736 550 1767">Selected liquid temperature: 20 °C</p> <p data-bbox="124 1767 622 1798">Density: 998.2 kg/m<sup>3</sup></p> <p data-bbox="124 1821 239 1852">Technical:</p> <p data-bbox="124 1852 742 1883">Pump speed on which pump data are based: 3444 rpm</p> <p data-bbox="124 1883 598 1915">Rated flow: 12.1 m<sup>3</sup>/h</p> <p data-bbox="124 1915 582 1946">Rated head: 194.5 m</p> <p data-bbox="124 1946 598 1977">Actual impeller diameter: 92.96 mm</p> <p data-bbox="124 1977 574 2009">Pump orientation: Vertical</p> <p data-bbox="124 2009 550 2040">Shaft seal arrangement: Single</p> <p data-bbox="124 2040 566 2072">Code for shaft seal: HQQE</p> <p data-bbox="124 2072 582 2103">Approvals: CURUS</p> <p data-bbox="124 2103 638 2134">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 2134 686 2166">Curve tolerance: ISO9906:2012 3B</p>

Qty.	Description
	Materials:
	Base: Stainless steel EN 1.4408 AISI 316
	Impeller: Stainless steel EN 1.4301 AISI 304
	Bearing: SIC
	Installation:
	t max amb: 50 °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 connection: PN 25
	Flange rating inlet: 300 lb
	Flange size for motor: 254TC
	Electrical data:
	Motor standard: NEMA
	Motor type: 160H
	IE Efficiency class: IE5
	Rated power - P2: 11 kW
	Power (P2) required by pump: 11 kW
	Mains frequency: 60 Hz
	Rated voltage: 3 x 440-480 V
	Service factor: 1.15
	Rated current: 17.9-16.6 A
	Cos phi - power factor: 0.92-0.91
	Rated speed: 360-4000 rpm
	Efficiency: 93.2%
	Motor efficiency at full load: 93.2 %
	Enclosure class (IEC 34-5): IP55
	Insulation class (IEC 85): F
	Motor No: 99256777
	Controls:
	Frequency converter: Built-in
	Pressure sensor: Y
	Others:
	DOE Pump Energy Index VL: 0.40
	Net weight: 113 kg
	Gross weight: 165 kg
	Shipping volume: 0.488 m <sup>3</sup>

# 99076383 CRIE 10-17 N-FGJ-A-E-HQQE 60 Hz



Note! All units are in [mm] unless others are stated.