

**Date:** 20/02/2018

Position | Qty. | Description

1 CRIE 1-6 A-CA-I-E-HQQE



Product No.: 98389361

Vertical, multistage centrifugal pump with suction and discharge ports on same the level (in-line) enabling installation in a horizontal one-pipe system. Pump materials in contact with the liquid are in stainless steel.

A cartridge shaft seal ensures high reliability, safe handling and easy service and access. Power transmission is via a rigid split coupling. Pipework connection is via FlexiClamps.

The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

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. A control 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 Grundfos Eye indicator on the control panel provides visual indication of pump status:

- "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)
- "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently vellow indicator lights)
- "Alarm": Motor has stopped (flashing red indicator lights).

Communication with the pump is possible by means of the 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 has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:

- two dedicated digital inputs
- three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 3.5 V
- 5 V voltage supply to potentiometer and sensor
- one analog output, 0-10 V, 0(4)-20 mA
- two configurable digital inputs or open-collector outputs
- two Pt100/Pt1000 inputs
- LiqTec, dry-running protection sensor input
- Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- two signal relay outputs (potential-free contacts)
- GENIbus connection
- interface for Grundfos CIM fieldbus module.

## Liquid:

Pumped liquid: Water
Liquid temperature range: -20 .. 120 °C
Liquid temperature during operation: 20 °C
Density: 998.2 kg/m³

Technical:

Speed for pump data: 3447 rpm



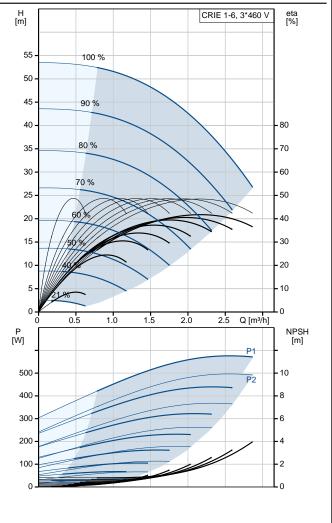
**Date:** 20/02/2018

			Date:	20/02/2018
Position	Qty.	Description		
		Rated flow:	2.2 m³/h	
		Rated head:	41.2 m	
		Pump orientation:	Vertical	
		Shaft seal arrangement:	Single	
		Code for shaft seal:	HQQE	
		Approvals on nameplate:	CE, EAC,ACS	
		Curve tolerance:	ISO9906:2012 3B	
		Curve tolerance.	1309900.2012 36	
		Materials:		
		Base:	Stainless steel	
			EN 1.4408	
			AISI 316	
		Impeller:	Stainless steel	
		pener.	EN 1.4301	
			AISI 304	
		Bearing material:	SIC	
		Boaring matorial.	0.0	
		Installation:		
		Maximum ambient temperature:		
		Maximum operating pressure:	25 bar	
		Max pressure at stated temp:	25 bar / 120 °C	
			25 bar / -20 °C	
		Type of connection:	FlexiClamp	
		Size of inlet connection:	DN 32	
			1 1/4 inch	
		Size of outlet connection:	DN 32	
			1 1/4 inch	
		Pressure rating:	PN 25	
		Flange size for motor:	FT85	
		Electrical data:		
		Motor standard:	IEC	
		Motor type:	71A	
		IE Efficiency class:	IE5	
		Rated power - P2:	0.55 kW	
		Power (P2) required by pump:	0.55 kW	
		Mains frequency:	50 Hz	
		Rated voltage:	3 x 380-500 V	
		Rated current:	1,35-1,30 A	
		Cos phi - power factor:	0,77-0,61	
		Rated speed:	360-4000 rpm	
		Efficiency:	85,9%	
		Motor efficiency at full load:	85.9 %	
		Enclosure class (IEC 34-5):	IP55	
		Insulation class (IEC 85):	F	
		Controls:		
		Frequency converter:	Built-in	
		Pressure sensor:	N	
		Others:		
		Minimum efficiency index, MEI		
		Net weight:	22.3 kg	
		Gross weight:	25.2 kg	
		Shipping volume:	0.143 m³	
1				



**Date:** 20/02/2018

Description	Value
General information:	
Product name:	CRIE 1-6 A-CA-I-E-HQQE
Product No:	98389361
EAN number:	5711494176397
L/11 Hamber.	0711404170007
Technical:	
Speed for pump data:	3447 rpm
Rated flow:	2.2 m³/h
Rated head:	41.2 m
Stages:	6
Impellers:	6
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
	CE, EAC,ACS
Approvals on nameplate:	ISO9906:2012 3B
Curve tolerance:	
Pump version:	A
Model:	A
Matariala	
Materials:	Otoinless start
Base:	Stainless steel
	EN 1.4408
	AISI 316
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Material code:	I
Code for rubber:	E
Bearing material:	SIC
Installation:	
Maximum ambient temperature:	50 °C
Maximum operating pressure:	25 bar
Max pressure at stated temp:	25 bar / 120 °C
	25 bar / -20 °C
Type of connection:	FlexiClamp
Connect code:	CA
Size of inlet connection:	DN 32
	1 1/4 inch
Size of outlet connection:	DN 32
	1 1/4 inch
Pressure rating:	PN 25
Flange size for motor:	FT85
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m³
	-
Electrical data:	
Motor standard:	IEC
Motor type:	71A
IE Efficiency class:	IE5
Rated power - P2:	0.55 kW
Power (P2) required by pump:	0.55 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V





**Date:** 20/02/2018

Description	Value
Rated current:	1,35-1,30 A
Cos phi - power factor:	0,77-0,61
Rated speed:	360-4000 rpm
Efficiency:	85,9%
Motor efficiency at full load:	85.9 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	YES
Motor No:	98248297
Controls:	
Control panel:	Standard
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI :	0.7
Net weight:	22.3 kg
Gross weight:	25.2 kg
Shipping volume:	0.143 m³