

Submittal Data

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

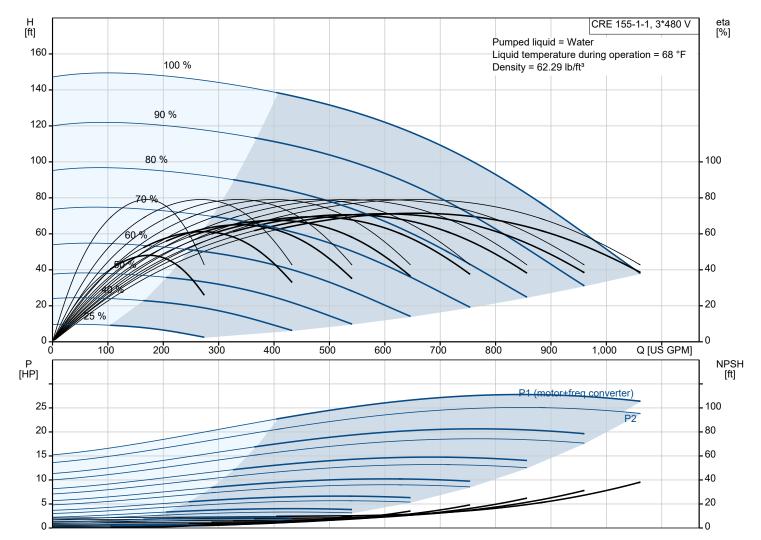


CRE 155-1-1 N-G-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

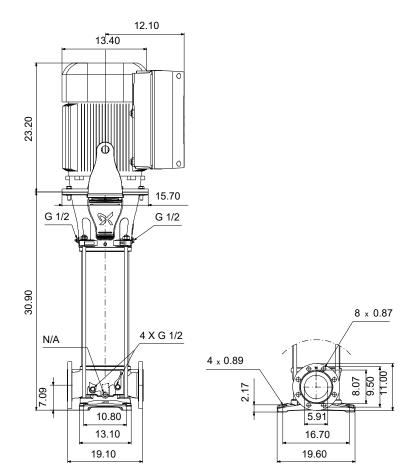
Note! Product picture may differ from actual product

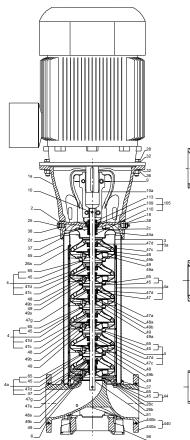
Conditions of Service		Pump Data		Motor Data	
Liquid: Temperature: Specific Gravity:	Water 68 °F 1.000	Liquid temperature range: Maximum ambient temperature: Shaft seal: Product number:	-4 248 °F 104 °F HQQE 99266513	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	25 HP 460 V 60 Hz IP55 F YES 160AC 91.7 %

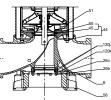


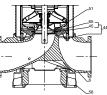
GRUNDFOS

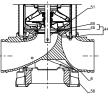
Submittal Data



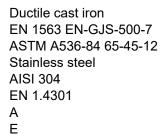






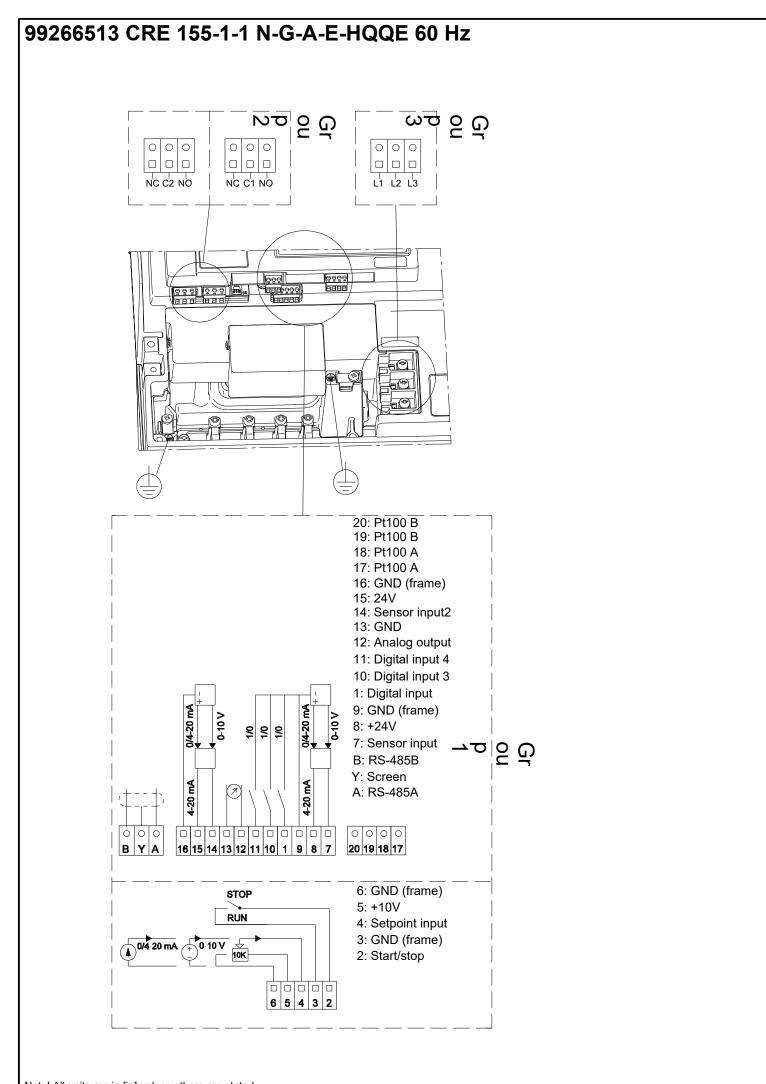


Materials:
Base:
Base:
Base:
Impeller:
Impeller:
Impeller:
Material code:
Code for rubber:



•	Description	
	CRE 155-1-1 N-G-A-E-HQQE	
	₹	
		Note! Product picture may differ from actual product
	Product No.: 99266513	
		way with inlat and a that name an agent the layer (inline). The numer hand and have are in east inc
	– all other wetted parts are in st	ump with inlet and outlet ports on same the level (inline). The pump head and base are in cast irol ainless steel. The Grundfos cartridge shaft seal ensures high reliability, safe handling, and easy
	access and service. Power trans	smission is via a rigid split coupling. Pipe connection is via ANSI flanges.
		e, fan-cooled asynchronous motor.
	the motor includes a frequency	converter and PI controller in the motor terminal box. This enables continuously variable control o nables adaptation of the performance to a given requirement.
	An operating panel on the motor	r terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." ating panel has indicator lights for "Operation" and "Fault".
	settings as well as reading out of	s possible by means of Grundfos GO Remote (accessory). The remote control enables further f a number of parameters such as "Actual value", "Speed", "Power input" and total "Power
	consumption".	π a number of parameters such as Autual value, opecu, rowel input and total rowel
		for the second strengthere is
	The terminal box holds terminals	
	pump start/stop input (po	,
		ia analog signal, 0-10 V, 0(4)-20 mA
		etpoint potentiometer, Imax = 5 mA
		ts, 0-10 V, 0(4)-20 mA; the factory-fitted pressure sensor is connected to one of these inputs
	 24 V voltage supply for s 	ensor, Imax = 40 mA
	 one analog output 	
	one analog outputthree digital inputs	
	three digital inputstwo Pt100 inputs	gnal relays with changeover contact, reporting "Fault", "Operation" or "Ready"
	three digital inputstwo Pt100 inputs	gnal relays with changeover contact, reporting "Fault", "Operation" or "Ready" ction
	 three digital inputs two Pt100 inputs two potential-free fault signal 	tion
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect 	tion
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI 	tion
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI 	ction M fieldbus module.
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: 	tion M fieldbus module. Water
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: 	tion M fieldbus module. Water -4 248 °F
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature:	tion M fieldbus module. Water -4 248 °F 68 °F
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: 	tion M fieldbus module. Water -4 248 °F
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Liquid temperature range: Selected liquid temperature: Density:	tion M fieldbus module. Water -4 248 °F 68 °F
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical:	tion M fieldbus module. -4 248 °F 68 °F 62.29 lb/ft ³
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump date	tion M fieldbus module. -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump date Rated flow:	tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump data Rated flow: Rated head:	tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter:	Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation:	<pre>tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical</pre>
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement:	<pre>tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single</pre>
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: 	Vater -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals:	tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water:	tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals:	tion M fieldbus module. Water -4 248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE
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	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water: Curve tolerance: Materials:	tion M fieldbus module. Water -4248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372 ISO9906:2012 3B
	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water: Curve tolerance:	tion M fieldbus module. Water -4248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372 ISO9906:2012 3B
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	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water: Curve tolerance: Materials:	tion M fieldbus module. Water -4248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372 ISO9906:2012 3B
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	 three digital inputs two Pt100 inputs two potential-free fault signed interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump date flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water: Curve tolerance: Materials: Base: 	<pre>tion M fieldbus module. Water -4248 °F 68 °F 62.29 lb/ft³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372 ISO9906:2012 3B Ductile cast iron EN 1563 EN-GJS-500-7 ASTM A536-84 65-45-12 Stainless steel</pre>
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	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals for drinking water: Curve tolerance: Materials: Base: Impeller: Bearing: Support bearing:	Water
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	 three digital inputs two Pt100 inputs two potential-free fault sig RS-485 GENIbus connect interface for Grundfos CI Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Technical: Pump speed on which pump dat Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals: Approvals for drinking water: Curve tolerance: Materials: Base: Impeller: Bearing: Support bearing: Material certified according to: Installation:	M fieldbus module. Water -4248 °F 68 °F 62.29 lb/ft ³ ta are based: 3530 rpm 820 US GPM 88.92 ft 6.64 in Vertical Single HQQE CE NSF/ANSI 61,NSF/ANSI 372 ISO9906:2012 3B Ductile cast iron EN 1563 EN-GJS-500-7 ASTM A536-84 65-45-12 Stainless steel EN 1.4301 AISI 304 WC/WC Grafton European standards
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ty.	Description		
	Max pressure at stated temp:	232 psi / 250 °F	
	Type of connection:	ANSI	
	Size of inlet connection:	6 inch	
	Size of outlet connection:	6 inch	
	Pressure rating for connection:	150 lb	
	Flange size for motor:	284TC	
	Electrical data:		
	Motor standard:	NEMA	
	Motor type:	160AC	
	IE Efficiency class:	NEMA Premium / IE3 60Hz	
	Rated power - P2:	25 HP	
	Power (P2) required by pump:	25 HP	
	Mains frequency:	60 Hz	
	Rated voltage:	3 x 460 V	
	Service factor:	1.15	
	Rated current:	30.5 A	
	Cos phi - power factor:	0.88	
	Rated speed:	480-3540 rpm	
	Efficiency:	IE3 91,7%	
	Motor efficiency at full load:	91.7 %	
	Number of poles:	2	
	Enclosure class (IEC 34-5):	IP55	
	Insulation class (IEC 85):	F	
	Motor No:	85901138	
	Controls:		
	Frequency converter:	Built-in	
	Pressure sensor:	Y	
	Others:		
	DOE Pump Energy Index VL:	0.58	
	Net weight:	645 lb	
	Gross weight:	908 lb	
	Shipping volume:	44.2 ft ³	
	Thrust handling device:	Ν	



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