
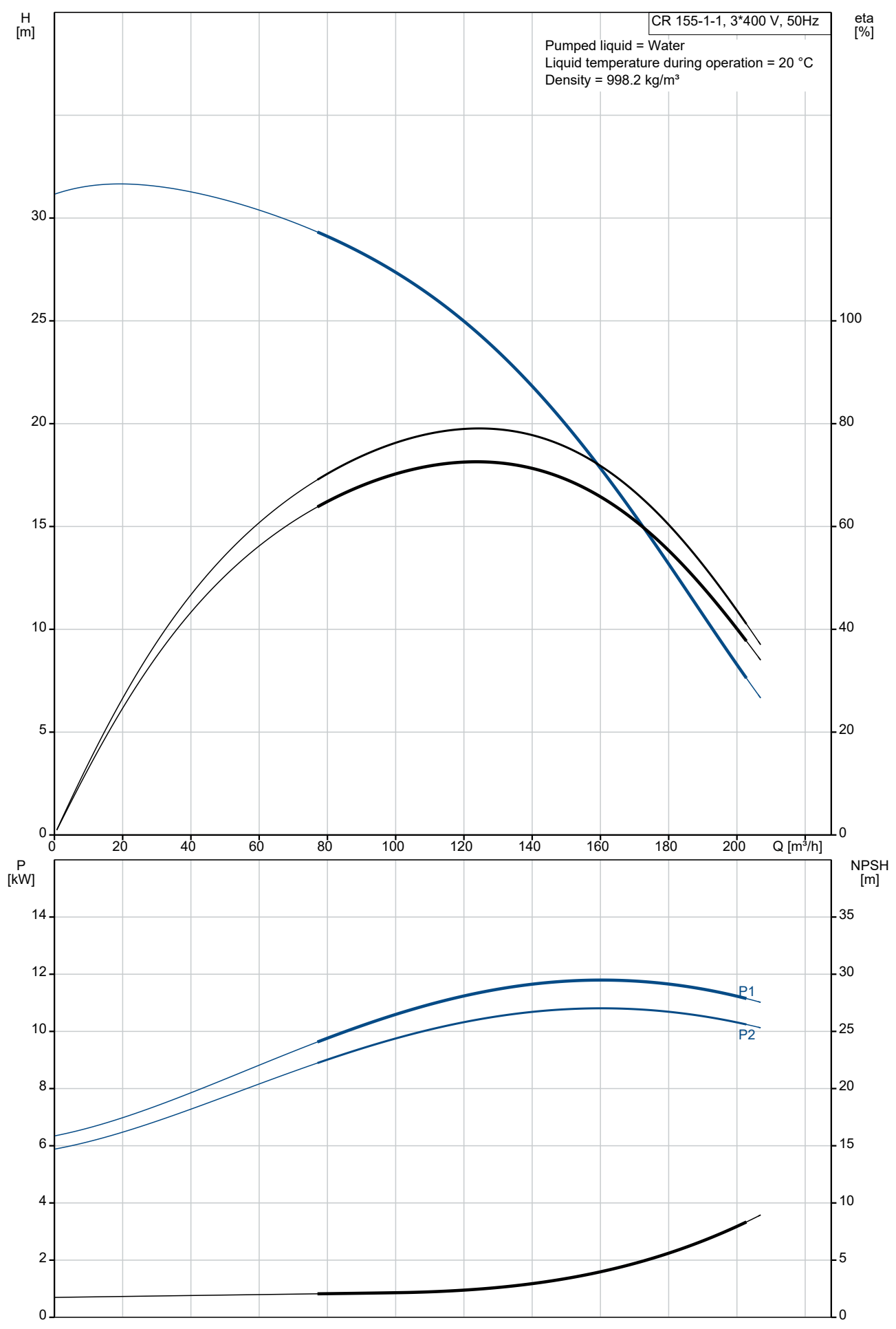


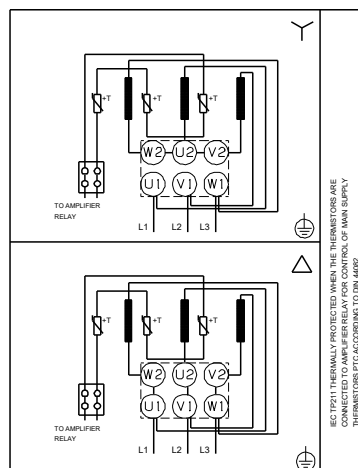
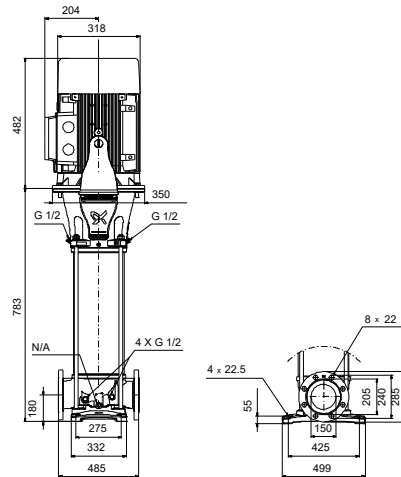
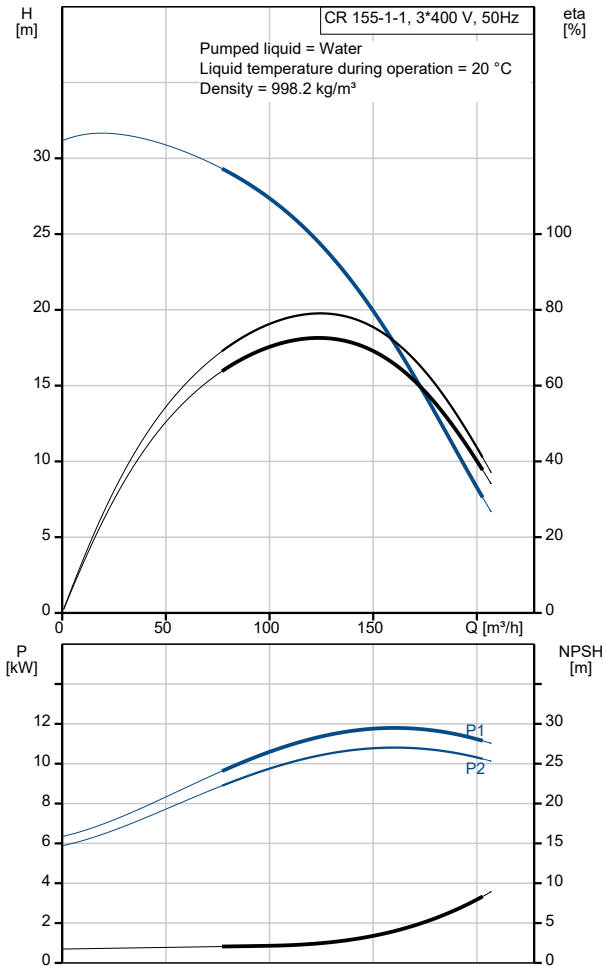
Qty.	Description
1	<p data-bbox="199 159 507 190">CR 155-1-1 A-F-A-V-HQQV</p>  <p data-bbox="592 506 1066 533" style="text-align: center;">Note! Product picture may differ from actual product</p> <p data-bbox="199 539 480 566">Product No.: On request</p> <p data-bbox="199 600 1433 696">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. The Grundfos 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 DIN flanges.</p> <p data-bbox="199 712 919 739">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="199 772 277 799">Liquid:</p> <p data-bbox="199 799 699 920"> Pumped liquid: Water Liquid temperature range: -20 .. 90 °C Selected liquid temperature: 20 °C Density: 998.2 kg/m³ </p> <p data-bbox="199 949 316 976">Technical:</p> <p data-bbox="199 976 820 1216"> Pump speed on which pump data are based: 2951 rpm Rated flow: 155 m³/h Rated head: 19.1 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals: CE,EAC,UKCA,SEPRO Curve tolerance: ISO9906:2012 3B </p> <p data-bbox="199 1245 309 1272">Materials:</p> <p data-bbox="199 1272 836 1361"> Base: Ductile cast iron EN 1563 EN-GJS-500-7 ASTM A536-84 65-45-12 </p> <p data-bbox="199 1361 724 1451"> Impeller: Stainless steel EN 1.4301 AISI 304 </p> <p data-bbox="199 1451 788 1541"> Bearing: WC/WC Support bearing: Graflon Material certified according to: European standards </p> <p data-bbox="199 1570 325 1597">Installation:</p> <p data-bbox="199 1597 719 1836"> t max amb: 60 °C Maximum operating pressure: 16 bar Max pressure at stated temp: 16 bar / 90 °C Type of connection: DIN Size of inlet connection: DN 150 Size of outlet connection: DN 150 Pressure rating for connection: PN 16 Flange size for motor: FF300 </p> <p data-bbox="199 1865 363 1892">Electrical data:</p> <p data-bbox="199 1892 847 2107"> Motor standard: IEC Motor type: 160MB IE Efficiency class: IE3 Rated power - P2: 11 kW Power (P2) required by pump: 11 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-415D/660-690Y V </p>

Qty.	Description
1	<p>Rated current: 20,8-19,8/12,0-11,8 A</p> <p>Starting current: 660-780 %</p> <p>Cos phi - power factor: 0.88-0.84</p> <p>Rated speed: 2940-2950 rpm</p> <p>Efficiency: IE3 91,2%</p> <p>Motor efficiency at full load: 91.2-91.2 %</p> <p>Motor efficiency at 3/4 load: 91.8 %</p> <p>Motor efficiency at 1/2 load: 91.3 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): 55 Dust/Jetting</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 85U17524</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Others:</p> <p>Minimum efficiency index, MEI \geq: 0.70</p> <p>Net weight: 234 kg</p> <p>Gross weight: 298 kg</p> <p>Shipping volume: 1.14 m³</p> <p>Thrust handling device: N</p>

On request CR 155-1-1 A-F-A-V-HQQV 50 Hz

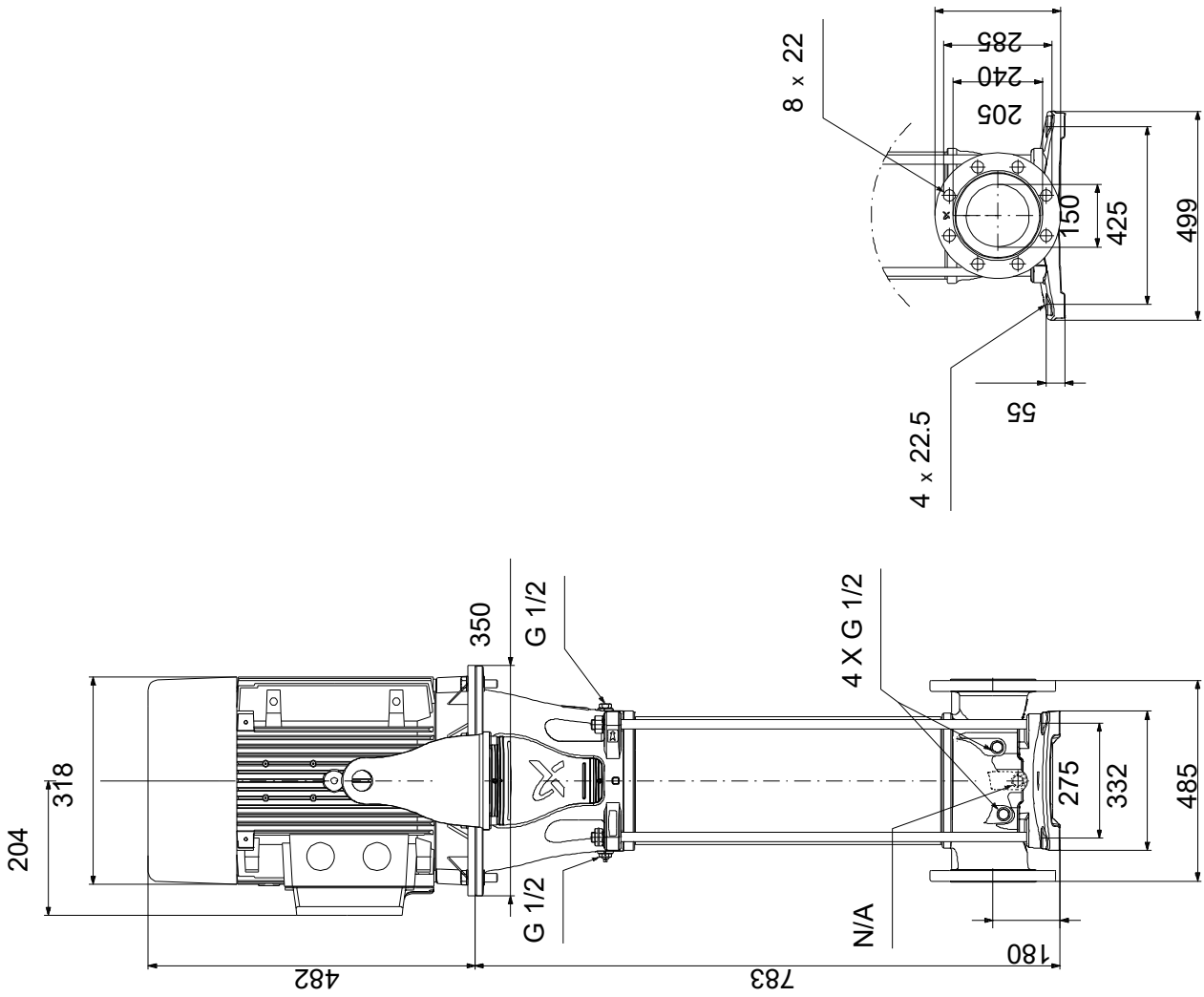


Description	Value
General information:	
Product name:	CR 155-1-1 A-F-A-V-HQQV
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	2951 rpm
Rated flow:	155 m ³ /h
Rated head:	19.1 m
Maximum head:	31.6 m
Impellers:	1
Number of reduced-diameter impellers:	1
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals:	CE,EAC,UKCA,SEPRO
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	IC 411
Materials:	
Base:	Ductile cast iron
Base:	EN 1563 EN-GJS-500-7
Base:	ASTM A536-84 65-45-12
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
Code for rubber:	V
Bearing:	WC/WC
Support bearing:	Graflon
Material certified according to:	European standards
Installation:	
t max amb:	60 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 90 °C
Type of connection:	DIN
Size of inlet connection:	DN 150
Size of outlet connection:	DN 150
Pressure rating for connection:	PN 16
Flange size for motor:	FF300
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 90 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor standard:	IEC
Motor type:	160MB
IE Efficiency class:	IE3
Rated power - P1:	11 kW
Power (P2) required by pump:	11 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-415D/660-690Y V
Rated current:	20,8-19,8/12,0-11,8 A
Starting current:	660-780 %
Cos phi - power factor:	0.88-0.84
Rated speed:	2940-2950 rpm
Efficiency:	IE3 91,2%
Motor efficiency at full load:	91.2-91.2 %



Description	Value
Motor efficiency at 3/4 load:	91.8 %
Motor efficiency at 1/2 load:	91.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	85U17524
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	234 kg
Gross weight:	298 kg
Shipping volume:	1.14 m ³
Thrust handling device:	N

On request CR 155-1-1 A-F-A-V-HQQV 50 Hz



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

On request CR 155-1-1 A-F-A-V-HQQV 50 Hz



IEC TP211 THERMALLY PROTECTED WHEN THE THERMISTORS ARE
CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAIN SUPPLY
THERMISTORS PTC ACCORDING TO DIN 44082

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

