
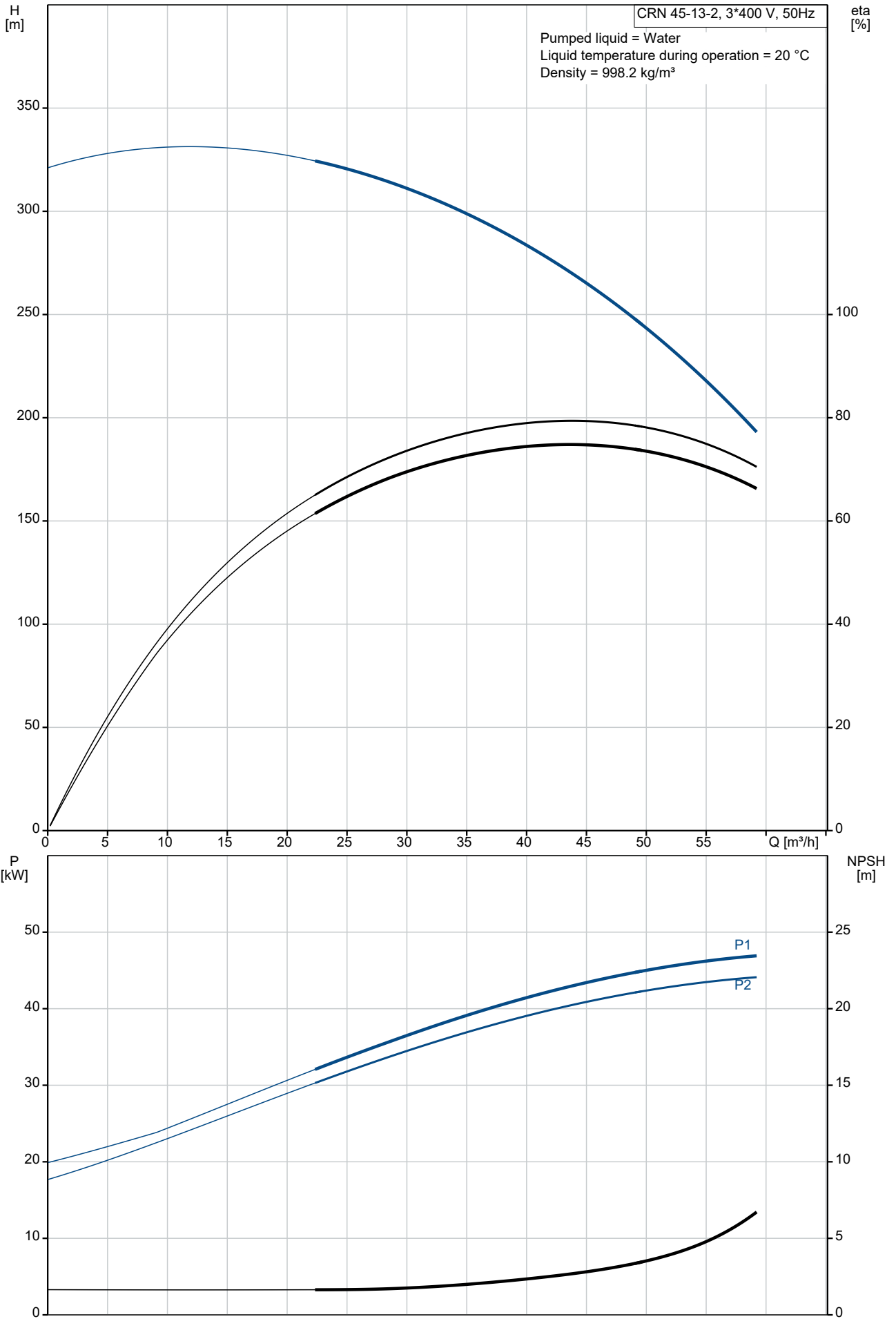


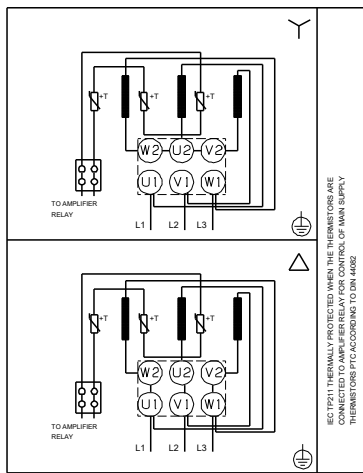
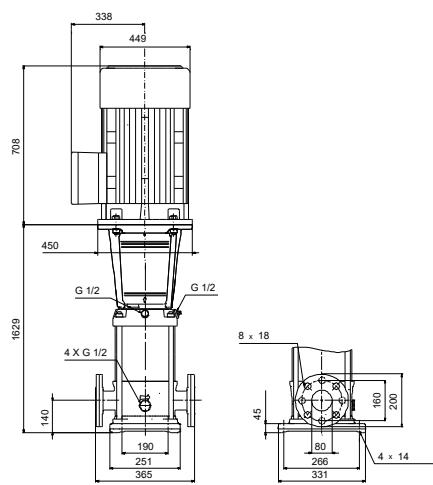
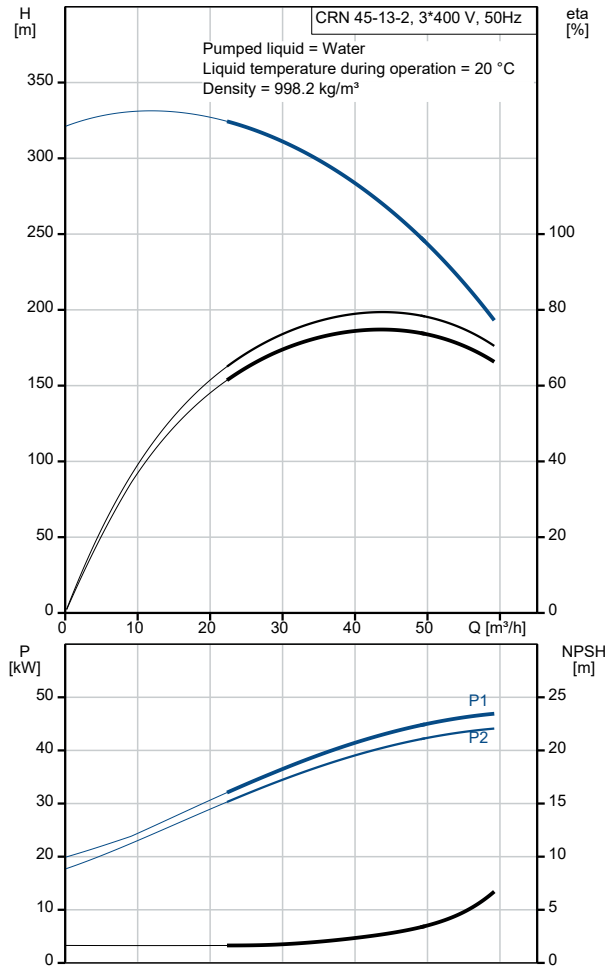
Qty.	Description
1	<p data-bbox="199 159 523 188">CRN 45-13-2 A-F-H-E-HQQE</p>  <p data-bbox="592 506 1062 530">Note! Product picture may differ from actual product</p> <p data-bbox="199 539 480 564">Product No.: On request</p> <p data-bbox="199 600 1453 674">Vertical, multistage centrifugal pump with 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 DIN flanges.</p> <p data-bbox="199 710 916 734">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="199 770 276 795">Liquid:</p> <p data-bbox="199 797 703 916"> Pumped liquid: Water Liquid temperature range: -40 .. 120 °C Selected liquid temperature: 20 °C Density: 998.2 kg/m³ </p> <p data-bbox="199 952 316 976">Technical:</p> <p data-bbox="199 978 820 1245"> Pump speed on which pump data are based: 2960 rpm Rated flow: 45 m³/h Rated head: 262.6 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals: CE,EAC,UKCA,SEPRO Approvals for drinking water: WRAS,ACS Curve tolerance: ISO9906:2012 3B </p> <p data-bbox="199 1281 309 1305">Materials:</p> <p data-bbox="199 1308 724 1541"> Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC Support bearing: Graflon </p> <p data-bbox="199 1576 325 1601">Installation:</p> <p data-bbox="199 1603 732 1870"> t max amb: 55 °C Maximum operating pressure: 33 bar Max pressure at stated temp: 33 bar / 120 °C 33 bar / -40 °C Type of connection: DIN Size of inlet connection: DN 80 Size of outlet connection: DN 80 Pressure rating for connection: PN 40 Flange size for motor: FF400 </p> <p data-bbox="199 1906 363 1930">Electrical data:</p> <p data-bbox="199 1933 676 2107"> Motor standard: IEC Motor type: SIEMENS IE Efficiency class: IE3 Rated power - P2: 45 kW Power (P2) required by pump: 45 kW Mains frequency: 50 Hz </p>

Qty.	Description
1	<p>Rated voltage: 3 x 380-420D/660-725Y V</p> <p>Rated current: 78/45 A</p> <p>Starting current: 690-690 %</p> <p>Cos phi - power factor: 0.89</p> <p>Rated speed: 2960 rpm</p> <p>Efficiency: IE3 94,0%</p> <p>Motor efficiency at full load: 94.0-94.0 %</p> <p>Motor efficiency at 3/4 load: 94.5-94.5 %</p> <p>Motor efficiency at 1/2 load: 94.4-94.4 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 81U15336</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Others:</p> <p>Minimum efficiency index, MEI \geq 0.70</p> <p>Net weight: 463 kg</p> <p>Gross weight: 565 kg</p> <p>Shipping volume: 1.24 m³</p> <p>Country of origin: GB</p> <p>Custom tariff no.: 84137075</p>

On request CRN 45-13-2 A-F-H-E-HQQE 50 Hz

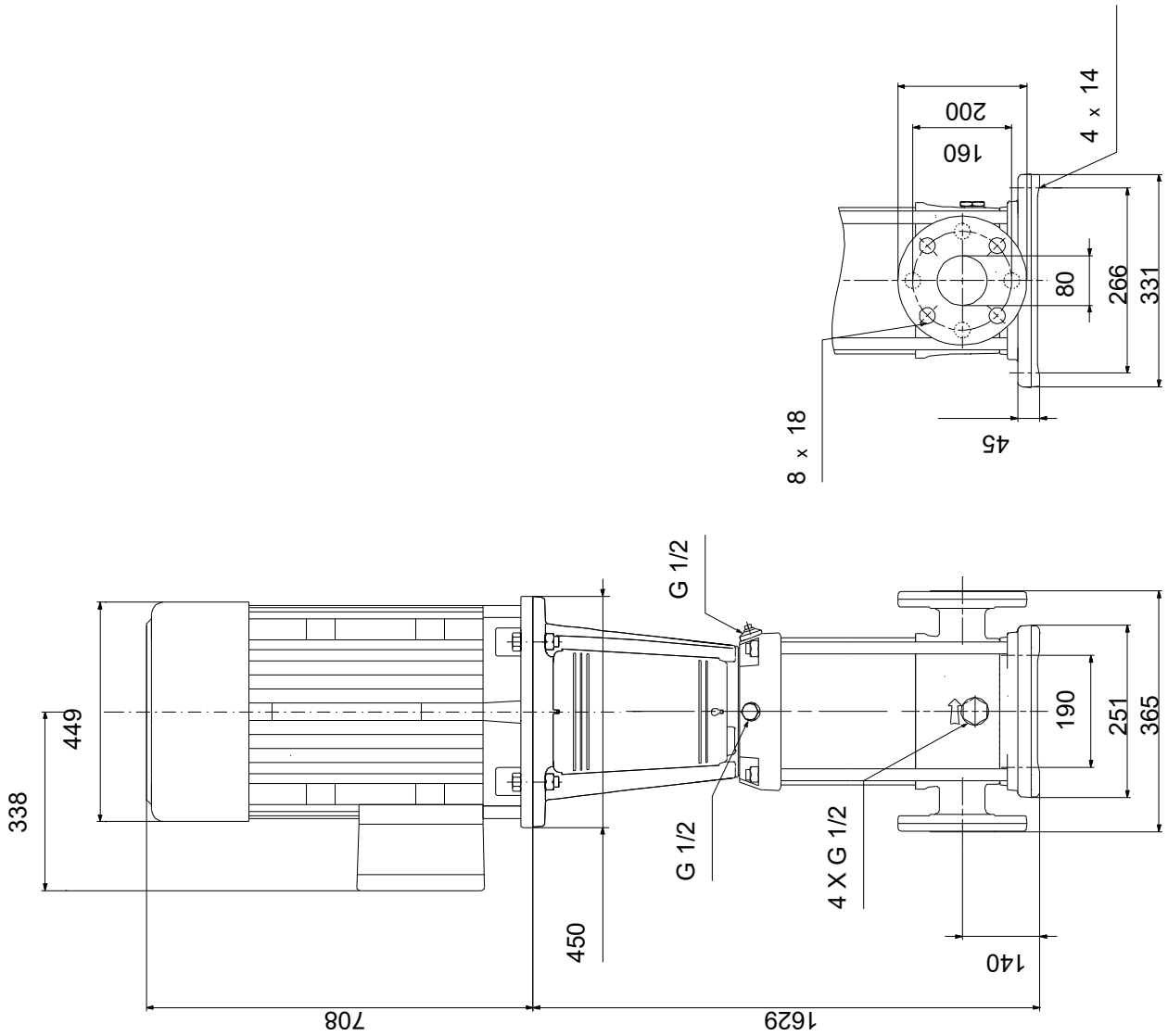


Description	Value
General information:	
Product name:	CRN 45-13-2 A-F-H-E-HQQE
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	2960 rpm
Rated flow:	45 m ³ /h
Rated head:	262.6 m
Maximum head:	321 m
Stages:	13
Impellers:	13
Number of reduced-diameter impellers:	2
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals:	CE, EAC, UKCA, SEPRO
Approvals for drinking water:	WRAS, ACS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
Materials:	
Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
Impeller:	EN 1.4401
Impeller:	AISI 316
Material code:	H
Code for rubber:	E
Bearing:	SIC
Support bearing:	Graflon
Installation:	
t max amb:	55 °C
Maximum operating pressure:	33 bar
Max pressure at stated temp:	33 bar / 120 °C
Max pressure at stated temp:	33 bar / -40 °C
Type of connection:	DIN
Size of inlet connection:	DN 80
Size of outlet connection:	DN 80
Pressure rating for connection:	PN 40
Flange size for motor:	FF400
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-40 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor standard:	IEC
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	45 kW
Power (P2) required by pump:	45 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	78/45 A
Starting current:	690-690 %
Cos phi - power factor:	0.89
Rated speed:	2960 rpm
Efficiency:	IE3 94,0%
Motor efficiency at full load:	94.0-94.0 %



Description	Value
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	81U15336
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	463 kg
Gross weight:	565 kg
Shipping volume:	1.24 m ³
Sales region:	Great Britain
Country of origin:	GB
Custom tariff no.:	84137075

On request CRN 45-13-2 A-F-H-E-HQQE 50 Hz



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

On request CRN 45-13-2 A-F-H-E-HQQE 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.

