
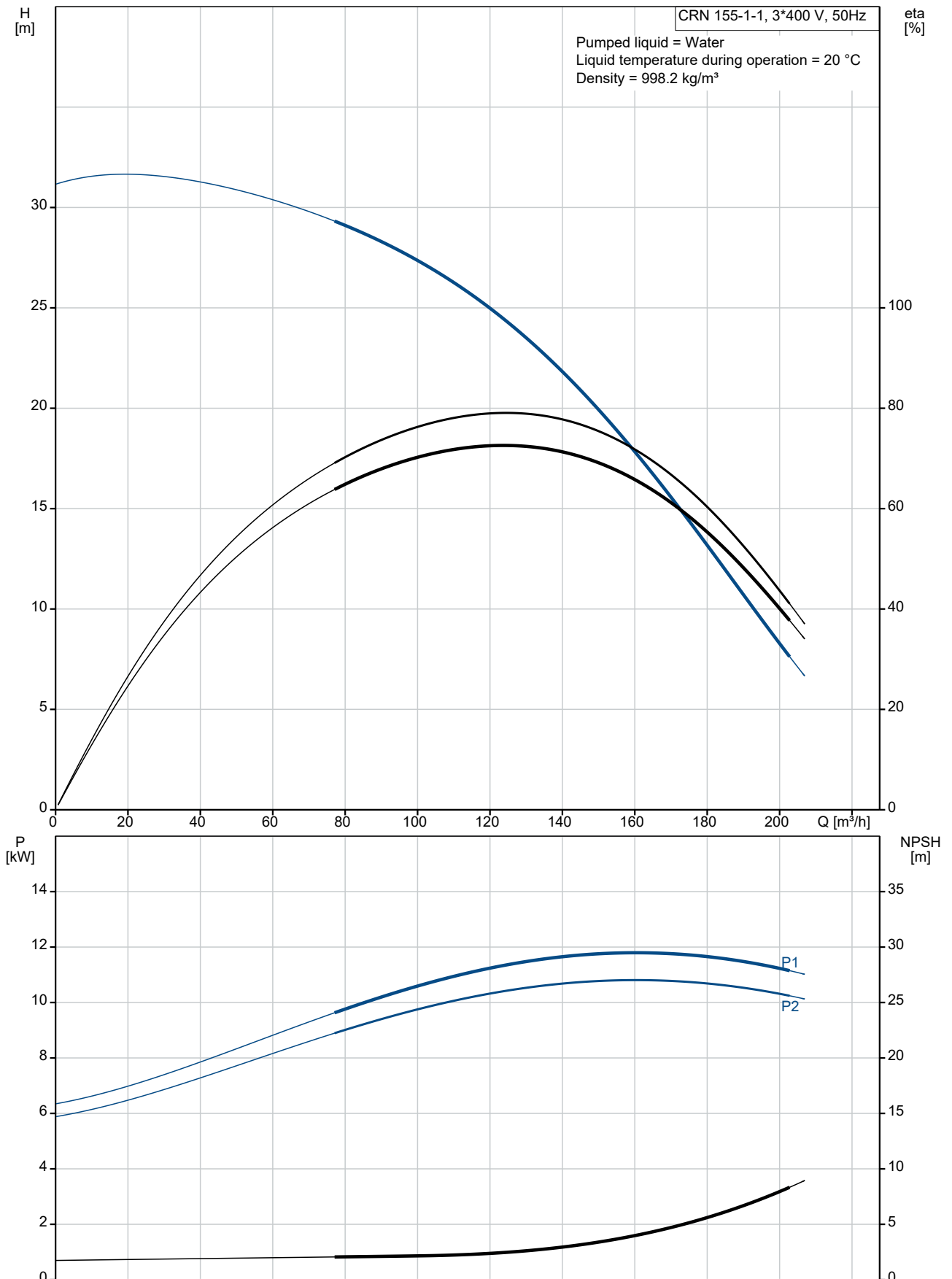


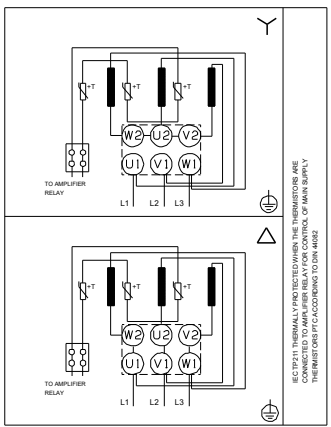
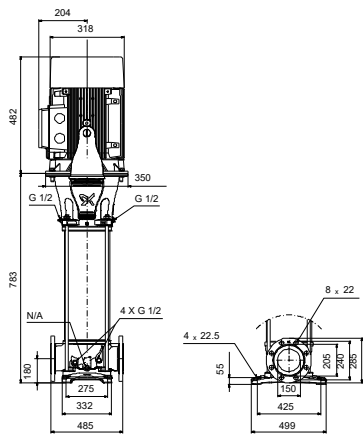
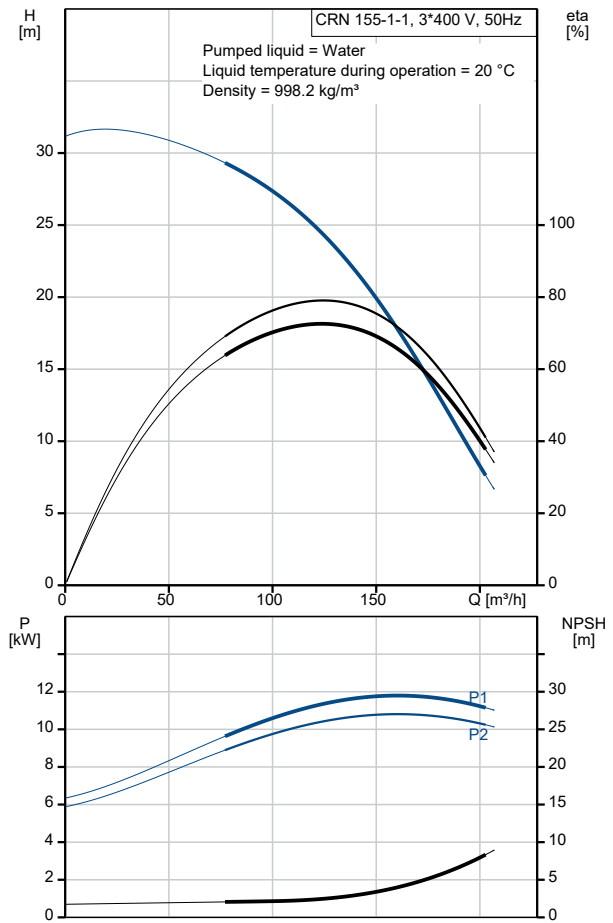
Qty.	Description																																																				
1	<p data-bbox="199 313 518 347">CRN 155-1-1 A-F-A-E-HQQE</p> <div data-bbox="331 353 422 654" style="text-align: center;">  </div> <p data-bbox="590 660 1061 683" style="text-align: center;">Note! Product picture may differ from actual product</p> <p data-bbox="199 689 478 716">Product No.: On request</p> <p data-bbox="199 750 1436 851">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. 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="199 862 917 889">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="199 922 279 949">Liquid:</p> <table data-bbox="199 952 702 1070"> <tr> <td>Pumped liquid:</td> <td>Water</td> </tr> <tr> <td>Liquid temperature range:</td> <td>-20 .. 120 °C</td> </tr> <tr> <td>Selected liquid temperature:</td> <td>20 °C</td> </tr> <tr> <td>Density:</td> <td>998.2 kg/m³</td> </tr> </table> <p data-bbox="199 1104 311 1131">Technical:</p> <table data-bbox="199 1133 821 1366"> <tr> <td>Pump speed on which pump data are based:</td> <td>2951 rpm</td> </tr> <tr> <td>Rated flow:</td> <td>155 m³/h</td> </tr> <tr> <td>Rated head:</td> <td>19.1 m</td> </tr> <tr> <td>Pump orientation:</td> <td>Vertical</td> </tr> <tr> <td>Shaft seal arrangement:</td> <td>Single</td> </tr> <tr> <td>Code for shaft seal:</td> <td>HQQE</td> </tr> <tr> <td>Approvals:</td> <td>CE,EAC,UKCA,SEPRO</td> </tr> <tr> <td>Curve tolerance:</td> <td>ISO9906:2012 3B</td> </tr> </table> <p data-bbox="199 1400 311 1426">Materials:</p> <table data-bbox="199 1429 790 1691"> <tr> <td>Base:</td> <td>Stainless steel EN 1.4408 ASTM A351 CF8M</td> </tr> <tr> <td>Impeller:</td> <td>Stainless steel EN 1.4401 AISI 316</td> </tr> <tr> <td>Bearing:</td> <td>WC/WC</td> </tr> <tr> <td>Support bearing:</td> <td>Graflon</td> </tr> <tr> <td>Material certified according to:</td> <td>European standards</td> </tr> </table> <p data-bbox="199 1724 327 1751">Installation:</p> <table data-bbox="199 1753 734 1993"> <tr> <td>t max amb:</td> <td>60 °C</td> </tr> <tr> <td>Maximum operating pressure:</td> <td>16 bar</td> </tr> <tr> <td>Max pressure at stated temp:</td> <td>16 bar / 120 °C</td> </tr> <tr> <td>Type of connection:</td> <td>DIN</td> </tr> <tr> <td>Size of inlet connection:</td> <td>DN 150</td> </tr> <tr> <td>Size of outlet connection:</td> <td>DN 150</td> </tr> <tr> <td>Pressure rating for connection:</td> <td>PN 16</td> </tr> <tr> <td>Flange size for motor:</td> <td>FF300</td> </tr> </table> <p data-bbox="199 2027 359 2054">Electrical data:</p> <table data-bbox="199 2056 606 2083"> <tr> <td>Motor standard:</td> <td>IEC</td> </tr> </table>	Pumped liquid:	Water	Liquid temperature range:	-20 .. 120 °C	Selected liquid temperature:	20 °C	Density:	998.2 kg/m ³	Pump speed on which pump data are based:	2951 rpm	Rated flow:	155 m ³ /h	Rated head:	19.1 m	Pump orientation:	Vertical	Shaft seal arrangement:	Single	Code for shaft seal:	HQQE	Approvals:	CE,EAC,UKCA,SEPRO	Curve tolerance:	ISO9906:2012 3B	Base:	Stainless steel EN 1.4408 ASTM A351 CF8M	Impeller:	Stainless steel EN 1.4401 AISI 316	Bearing:	WC/WC	Support bearing:	Graflon	Material certified according to:	European standards	t max amb:	60 °C	Maximum operating pressure:	16 bar	Max pressure at stated temp:	16 bar / 120 °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	Motor standard:	IEC
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Qty.	Description
1	<p>Motor type: 160MB</p> <p>IE Efficiency class: IE3</p> <p>Rated power - P2: 11 kW</p> <p>Power (P2) required by pump: 11 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-415D/660-690Y V</p> <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 ≥: 0.70</p> <p>Net weight: 234 kg</p> <p>Gross weight: 298 kg</p> <p>Shipping volume: 1.14 m³</p> <p>Danish VVS No.: 386937211</p> <p>Finnish LVI No.: 4925638</p> <p>Thrust handling device: N</p>

On request CRN 155-1-1 A-F-A-E-HQQE 50 Hz



Description	Value
General information:	
Product name:	CRN 155-1-1 A-F-A-E-HQQE
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:	HQQE
Approvals:	CE,EAC,UKCA,SEPRO
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	IC 411
Materials:	
Base:	Stainless steel
Base:	EN 1.4408
Base:	ASTM A351 CF8M
Impeller:	Stainless steel
Impeller:	EN 1.4401
Impeller:	AISI 316
Material code:	A
Code for rubber:	E
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 / 120 °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 .. 120 °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 %





Company name: Pump Sales Direct

Created by:

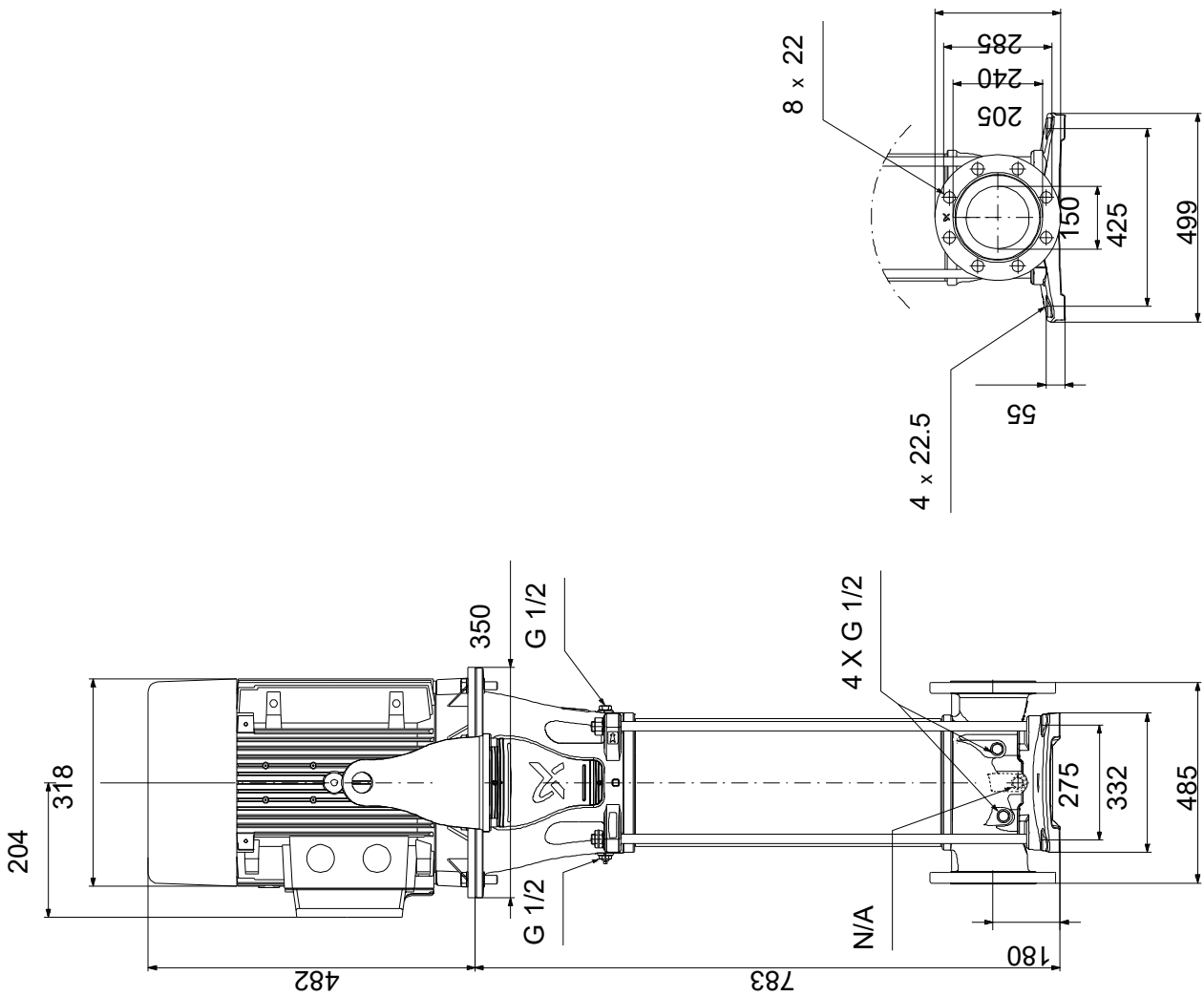
Phone: 08000086405

Email: customerservices@pumpsalesdirect.co.uk

Date: 01/08/2022

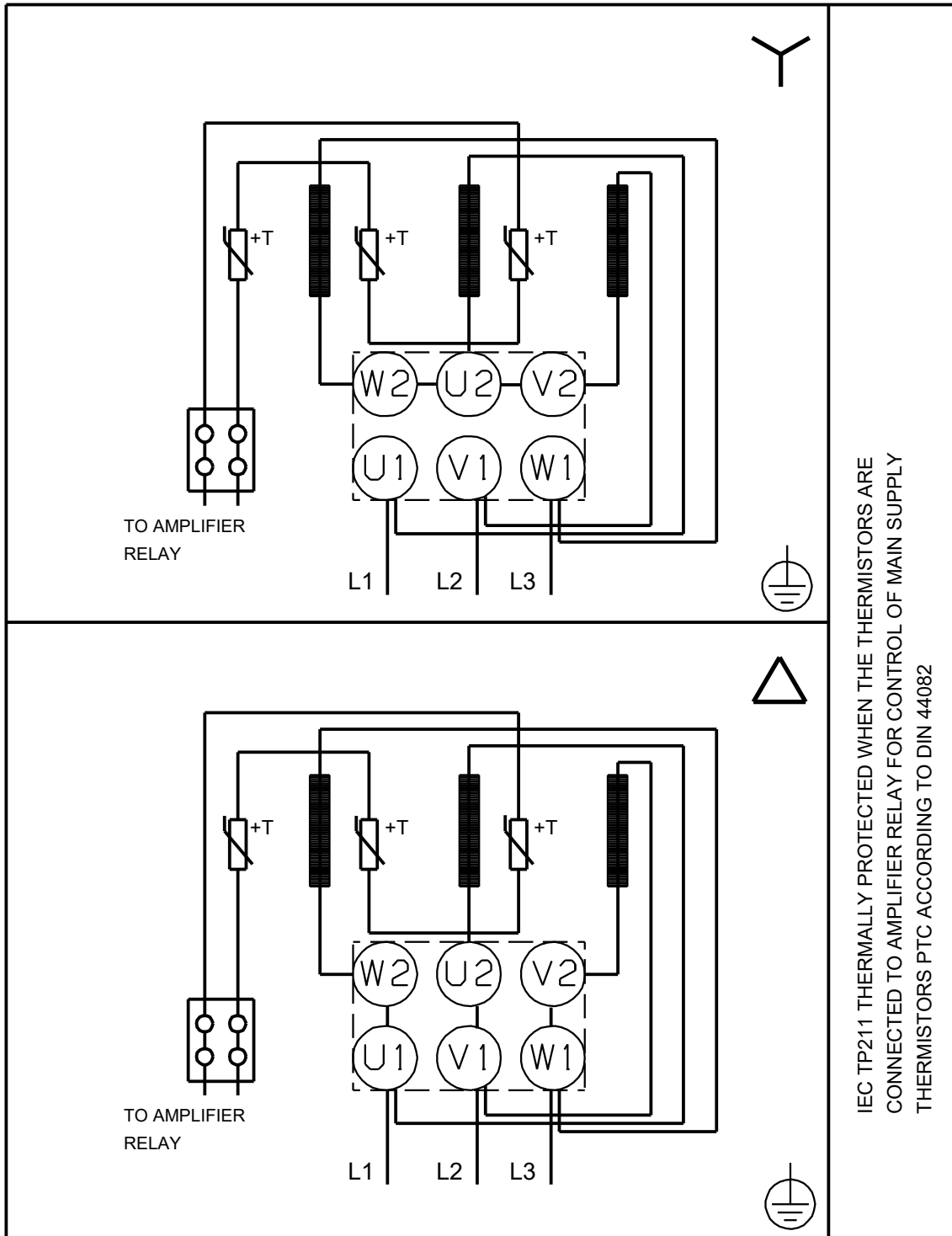
Description	Value
Cos phi - power factor:	0.88-0.84
Rated speed:	2940-2950 rpm
Efficiency:	IE3 91,2%
Motor efficiency at full load:	91.2-91.2 %
Motor efficiency at 3/4 load:	91.8 %
Motor efficiency at 1/2 load:	91.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	85U17524
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI \geq :	0.70
Net weight:	234 kg
Gross weight:	298 kg
Shipping volume:	1.14 m ³
Danish VVS No.:	386937211
Finnish LVI No.:	4925638
Thrust handling device:	N

On request CRN 155-1-1 A-F-A-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 155-1-1 A-F-A-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.

