
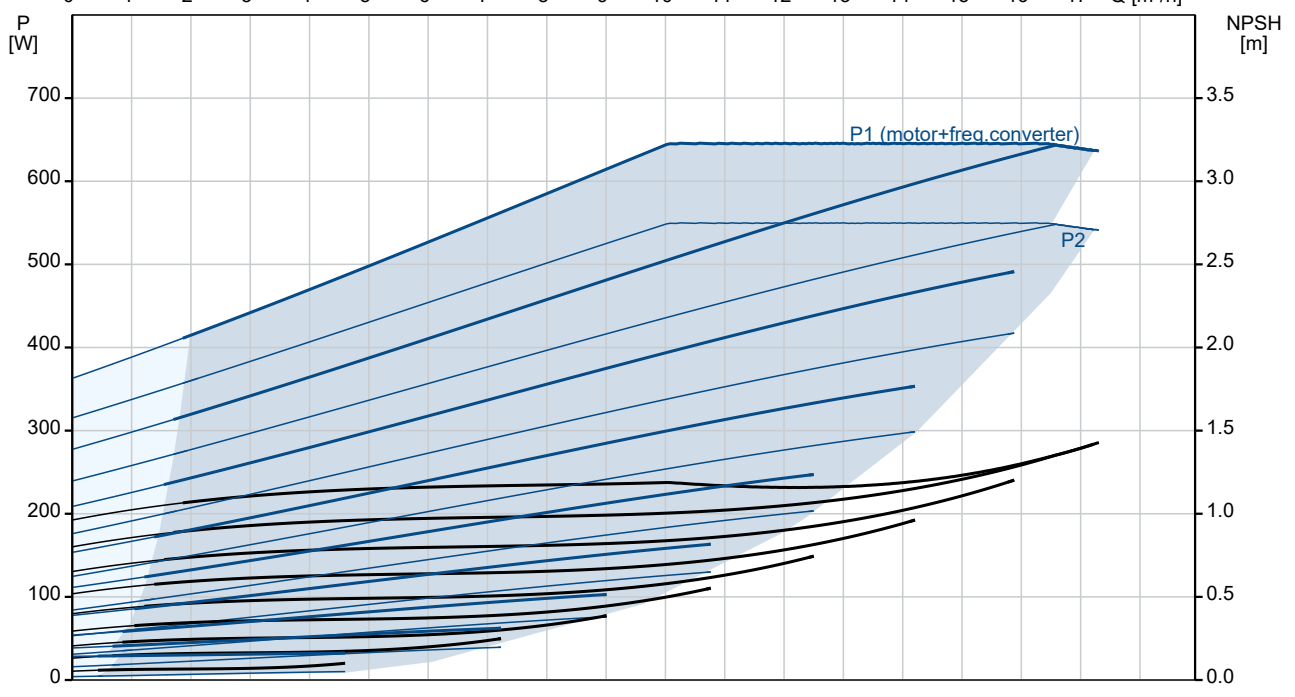
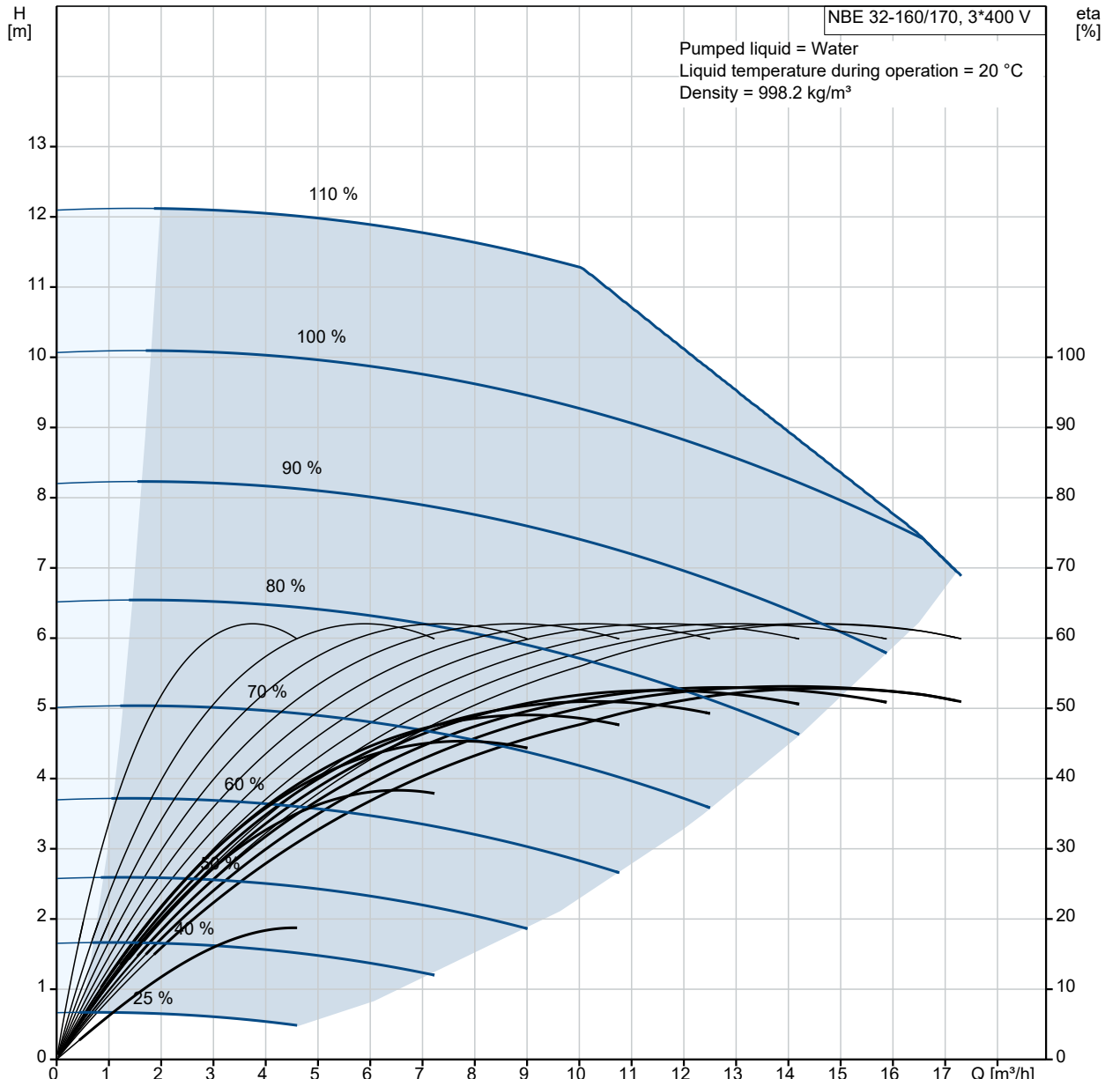


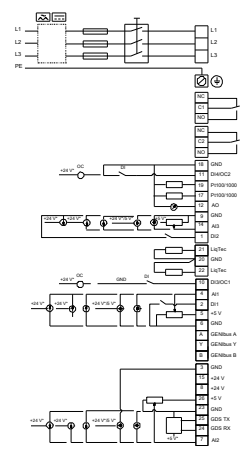
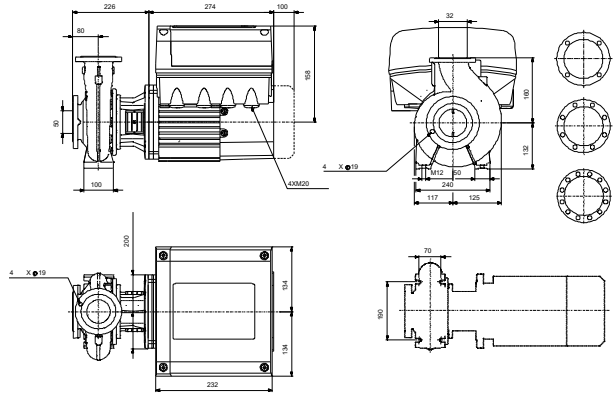
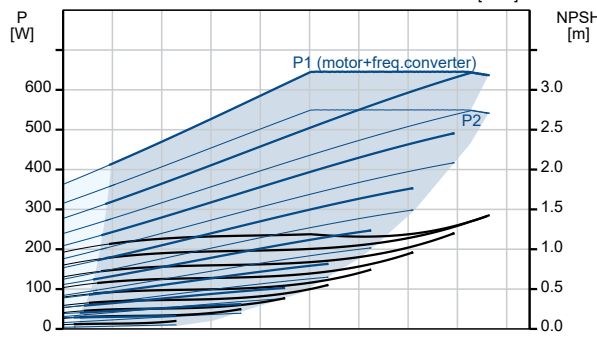
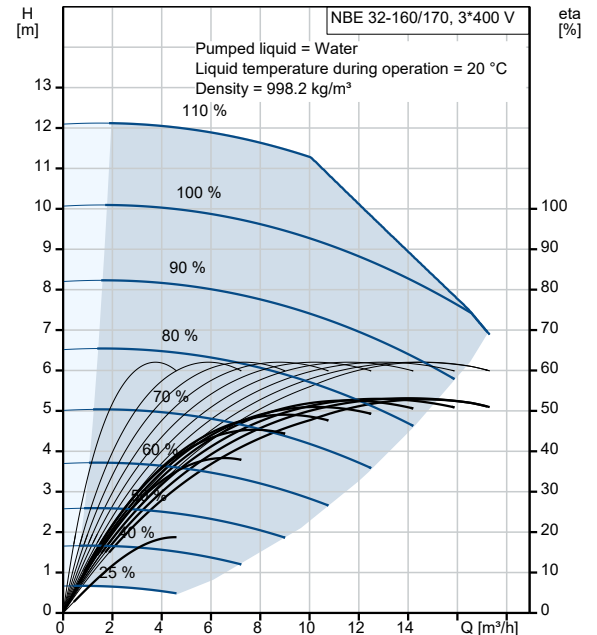
Qty.	Description																																																				
1	<p data-bbox="193 159 630 190"><b>NBE 32-160/170 AAF2AESBQQEWA</b></p>  <p data-bbox="592 506 1062 533" style="text-align: center;"><b>Note! Product picture may differ from actual product</b></p> <p data-bbox="193 539 464 566">Product No.: <a href="#">99104648</a></p> <p data-bbox="193 600 1428 651">Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).</p> <p data-bbox="193 658 1417 732">Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.</p> <p data-bbox="193 741 922 768">The unbalanced rubber bellows seal is according to DIN EN 12756.</p> <p data-bbox="193 775 1091 801">The pump is close-coupled to a fan-cooled, permanent-magnet synchronous motor.</p> <p data-bbox="193 808 1396 860">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.</p> <p data-bbox="193 891 300 918"><b>Controls:</b></p> <table data-bbox="193 920 639 976"> <tr> <td>Frequency converter:</td> <td>Built-in</td> </tr> <tr> <td>Pressure sensor:</td> <td>N</td> </tr> </table> <p data-bbox="193 1010 276 1037"><b>Liquid:</b></p> <table data-bbox="193 1039 703 1160"> <tr> <td>Pumped liquid:</td> <td>Water</td> </tr> <tr> <td>Liquid temperature range:</td> <td>-25 .. 120 °C</td> </tr> <tr> <td>Selected liquid temperature:</td> <td>20 °C</td> </tr> <tr> <td>Density:</td> <td>998.2 kg/m<sup>3</sup></td> </tr> </table> <p data-bbox="193 1189 316 1216"><b>Technical:</b></p> <table data-bbox="193 1218 818 1485"> <tr> <td>Pump speed on which pump data are based:</td> <td>1450 rpm</td> </tr> <tr> <td>Rated flow:</td> <td>14.8 m<sup>3</sup>/h</td> </tr> <tr> <td>Rated head:</td> <td>8 m</td> </tr> <tr> <td>Actual impeller diameter:</td> <td>170 mm</td> </tr> <tr> <td>Nominal impeller diameter:</td> <td>160</td> </tr> <tr> <td>Shaft seal arrangement:</td> <td>Single</td> </tr> <tr> <td>Code for shaft seal:</td> <td>BQQE</td> </tr> <tr> <td>Curve tolerance:</td> <td>ISO9906:2012 3B2</td> </tr> <tr> <td>Bearing design:</td> <td>Standard</td> </tr> </table> <p data-bbox="193 1518 309 1545"><b>Materials:</b></p> <table data-bbox="193 1547 730 1868"> <tr> <td>Pump housing:</td> <td>Cast iron EN-GJL-250 ASTM class 35</td> </tr> <tr> <td>Wear ring:</td> <td>Brass</td> </tr> <tr> <td>Impeller:</td> <td>Cast iron EN-GJL-200 ASTM class 30</td> </tr> <tr> <td>Internal pump house coating:</td> <td>CED</td> </tr> <tr> <td>Shaft:</td> <td>Stainless steel EN 1.4301 AISI 304</td> </tr> </table> <p data-bbox="193 1901 325 1928"><b>Installation:</b></p> <table data-bbox="193 1930 691 2107"> <tr> <td>Range of ambient temperature:</td> <td>-20 .. 50 °C</td> </tr> <tr> <td>Maximum operating pressure:</td> <td>16 bar</td> </tr> <tr> <td>Pipe connection standard:</td> <td>EN 1092-2</td> </tr> <tr> <td>Size of inlet connection:</td> <td>DN 50</td> </tr> <tr> <td>Size of outlet connection:</td> <td>DN 32</td> </tr> <tr> <td>Pressure rating for connection:</td> <td>PN 16</td> </tr> </table>	Frequency converter:	Built-in	Pressure sensor:	N	Pumped liquid:	Water	Liquid temperature range:	-25 .. 120 °C	Selected liquid temperature:	20 °C	Density:	998.2 kg/m <sup>3</sup>	Pump speed on which pump data are based:	1450 rpm	Rated flow:	14.8 m <sup>3</sup> /h	Rated head:	8 m	Actual impeller diameter:	170 mm	Nominal impeller diameter:	160	Shaft seal arrangement:	Single	Code for shaft seal:	BQQE	Curve tolerance:	ISO9906:2012 3B2	Bearing design:	Standard	Pump housing:	Cast iron EN-GJL-250 ASTM class 35	Wear ring:	Brass	Impeller:	Cast iron EN-GJL-200 ASTM class 30	Internal pump house coating:	CED	Shaft:	Stainless steel EN 1.4301 AISI 304	Range of ambient temperature:	-20 .. 50 °C	Maximum operating pressure:	16 bar	Pipe connection standard:	EN 1092-2	Size of inlet connection:	DN 50	Size of outlet connection:	DN 32	Pressure rating for connection:	PN 16
Frequency converter:	Built-in																																																				
Pressure sensor:	N																																																				
Pumped liquid:	Water																																																				
Liquid temperature range:	-25 .. 120 °C																																																				
Selected liquid temperature:	20 °C																																																				
Density:	998.2 kg/m <sup>3</sup>																																																				
Pump speed on which pump data are based:	1450 rpm																																																				
Rated flow:	14.8 m <sup>3</sup> /h																																																				
Rated head:	8 m																																																				
Actual impeller diameter:	170 mm																																																				
Nominal impeller diameter:	160																																																				
Shaft seal arrangement:	Single																																																				
Code for shaft seal:	BQQE																																																				
Curve tolerance:	ISO9906:2012 3B2																																																				
Bearing design:	Standard																																																				
Pump housing:	Cast iron EN-GJL-250 ASTM class 35																																																				
Wear ring:	Brass																																																				
Impeller:	Cast iron EN-GJL-200 ASTM class 30																																																				
Internal pump house coating:	CED																																																				
Shaft:	Stainless steel EN 1.4301 AISI 304																																																				
Range of ambient temperature:	-20 .. 50 °C																																																				
Maximum operating pressure:	16 bar																																																				
Pipe connection standard:	EN 1092-2																																																				
Size of inlet connection:	DN 50																																																				
Size of outlet connection:	DN 32																																																				
Pressure rating for connection:	PN 16																																																				

Qty.	Description																																																				
1	<table border="0"> <tr> <td>Bearing lubrication:</td> <td>Grease</td> </tr> <tr> <td>Pump housing with feet:</td> <td>Yes</td> </tr> <tr> <td>Support block (Yes/No):</td> <td>N</td> </tr> <tr> <td colspan="2">Electrical data:</td> </tr> <tr> <td>IE Efficiency class:</td> <td>IE5</td> </tr> <tr> <td>Rated power - P2:</td> <td>0.55 kW</td> </tr> <tr> <td>Mains frequency:</td> <td>50 Hz</td> </tr> <tr> <td>Rated voltage:</td> <td>3 x 380-500 V</td> </tr> <tr> <td>Rated current:</td> <td>1.30-1.25 A</td> </tr> <tr> <td>Cos phi - power factor:</td> <td>0.80-0.64</td> </tr> <tr> <td>Rated speed:</td> <td>180-2000 rpm</td> </tr> <tr> <td>Efficiency:</td> <td>84.6%</td> </tr> <tr> <td>Motor efficiency at full load:</td> <td>84.6 %</td> </tr> <tr> <td>Number of poles:</td> <td>4</td> </tr> <tr> <td>Enclosure class (IEC 34-5):</td> <td>IP55</td> </tr> <tr> <td>Insulation class (IEC 85):</td> <td>F</td> </tr> <tr> <td>Motor No:</td> <td>99305806</td> </tr> <tr> <td>Bearing insulation type N-end:</td> <td>STEEL BEARING</td> </tr> <tr> <td colspan="2">Others:</td> </tr> <tr> <td>Minimum efficiency index, MEI ≥:</td> <td>0.65</td> </tr> <tr> <td>Net weight:</td> <td>39 kg</td> </tr> <tr> <td>Gross weight:</td> <td>49 kg</td> </tr> <tr> <td>Shipping volume:</td> <td>0.134 m<sup>3</sup></td> </tr> <tr> <td>Danish VVS No.:</td> <td>386100164</td> </tr> <tr> <td>Country of origin:</td> <td>HU</td> </tr> <tr> <td>Custom tariff no.:</td> <td>84137051</td> </tr> </table>	Bearing lubrication:	Grease	Pump housing with feet:	Yes	Support block (Yes/No):	N	Electrical data:		IE Efficiency class:	IE5	Rated power - P2:	0.55 kW	Mains frequency:	50 Hz	Rated voltage:	3 x 380-500 V	Rated current:	1.30-1.25 A	Cos phi - power factor:	0.80-0.64	Rated speed:	180-2000 rpm	Efficiency:	84.6%	Motor efficiency at full load:	84.6 %	Number of poles:	4	Enclosure class (IEC 34-5):	IP55	Insulation class (IEC 85):	F	Motor No:	99305806	Bearing insulation type N-end:	STEEL BEARING	Others:		Minimum efficiency index, MEI ≥:	0.65	Net weight:	39 kg	Gross weight:	49 kg	Shipping volume:	0.134 m <sup>3</sup>	Danish VVS No.:	386100164	Country of origin:	HU	Custom tariff no.:	84137051
Bearing lubrication:	Grease																																																				
Pump housing with feet:	Yes																																																				
Support block (Yes/No):	N																																																				
Electrical data:																																																					
IE Efficiency class:	IE5																																																				
Rated power - P2:	0.55 kW																																																				
Mains frequency:	50 Hz																																																				
Rated voltage:	3 x 380-500 V																																																				
Rated current:	1.30-1.25 A																																																				
Cos phi - power factor:	0.80-0.64																																																				
Rated speed:	180-2000 rpm																																																				
Efficiency:	84.6%																																																				
Motor efficiency at full load:	84.6 %																																																				
Number of poles:	4																																																				
Enclosure class (IEC 34-5):	IP55																																																				
Insulation class (IEC 85):	F																																																				
Motor No:	99305806																																																				
Bearing insulation type N-end:	STEEL BEARING																																																				
Others:																																																					
Minimum efficiency index, MEI ≥:	0.65																																																				
Net weight:	39 kg																																																				
Gross weight:	49 kg																																																				
Shipping volume:	0.134 m <sup>3</sup>																																																				
Danish VVS No.:	386100164																																																				
Country of origin:	HU																																																				
Custom tariff no.:	84137051																																																				

# 99104648 NBE 32-160/170 AAF2AESBQQEEWA 50 Hz

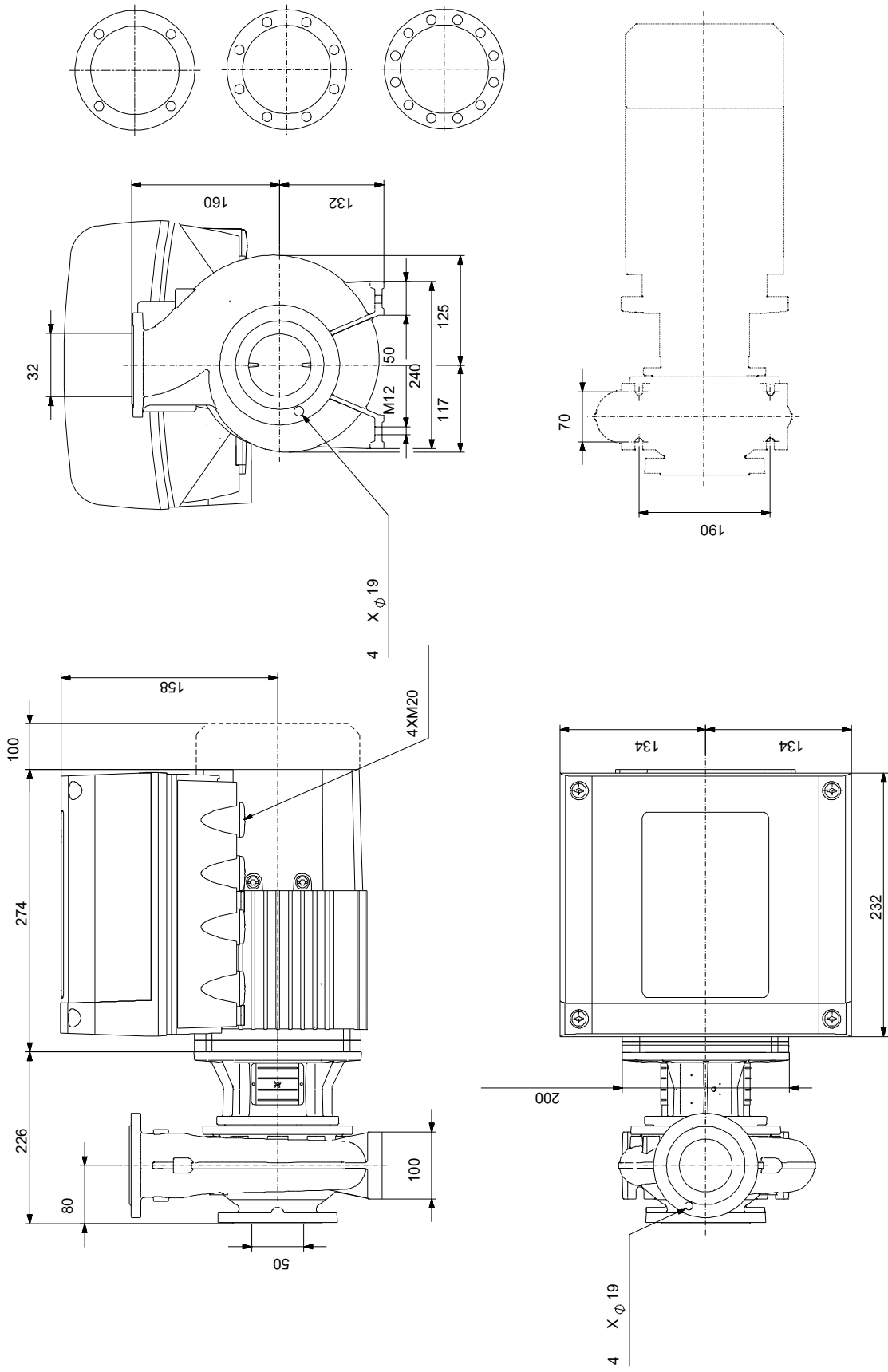


Description	Value
<b>General information:</b>	
Product name:	NBE 32-160/170 AAF2AESBQQEEWA
Product No:	99104648
EAN number:	5712606839452
<b>Technical:</b>	
Pump speed on which pump data are based:	1450 rpm
Rated flow:	14.8 m <sup>3</sup> /h
Rated head:	8 m
Actual impeller diameter:	170 mm
Nominal impeller diameter:	160
Shaft seal arrangement:	Single
Shaft diameter:	24 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Bearing design:	Standard
<b>Materials:</b>	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Wear ring:	Brass
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Internal pump house coating:	CED
Material code:	A
Code for rubber:	E
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
<b>Installation:</b>	
Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 50
Size of outlet connection:	DN 32
Pressure rating for connection:	PN 16
Bearing lubrication:	Grease
Pump housing with feet:	Yes
Support block (Yes/No):	N
Connect code:	F2
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
IE Efficiency class:	IE5
Rated power - P2:	0.55 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	1.30-1.25 A
Cos phi - power factor:	0.80-0.64
Rated speed:	180-2000 rpm
Efficiency:	84.6%
Motor efficiency at full load:	84.6%
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	ELEC
Motor No:	99305806
Mount. design. acc. IEC 34-7:	IM V1/B5



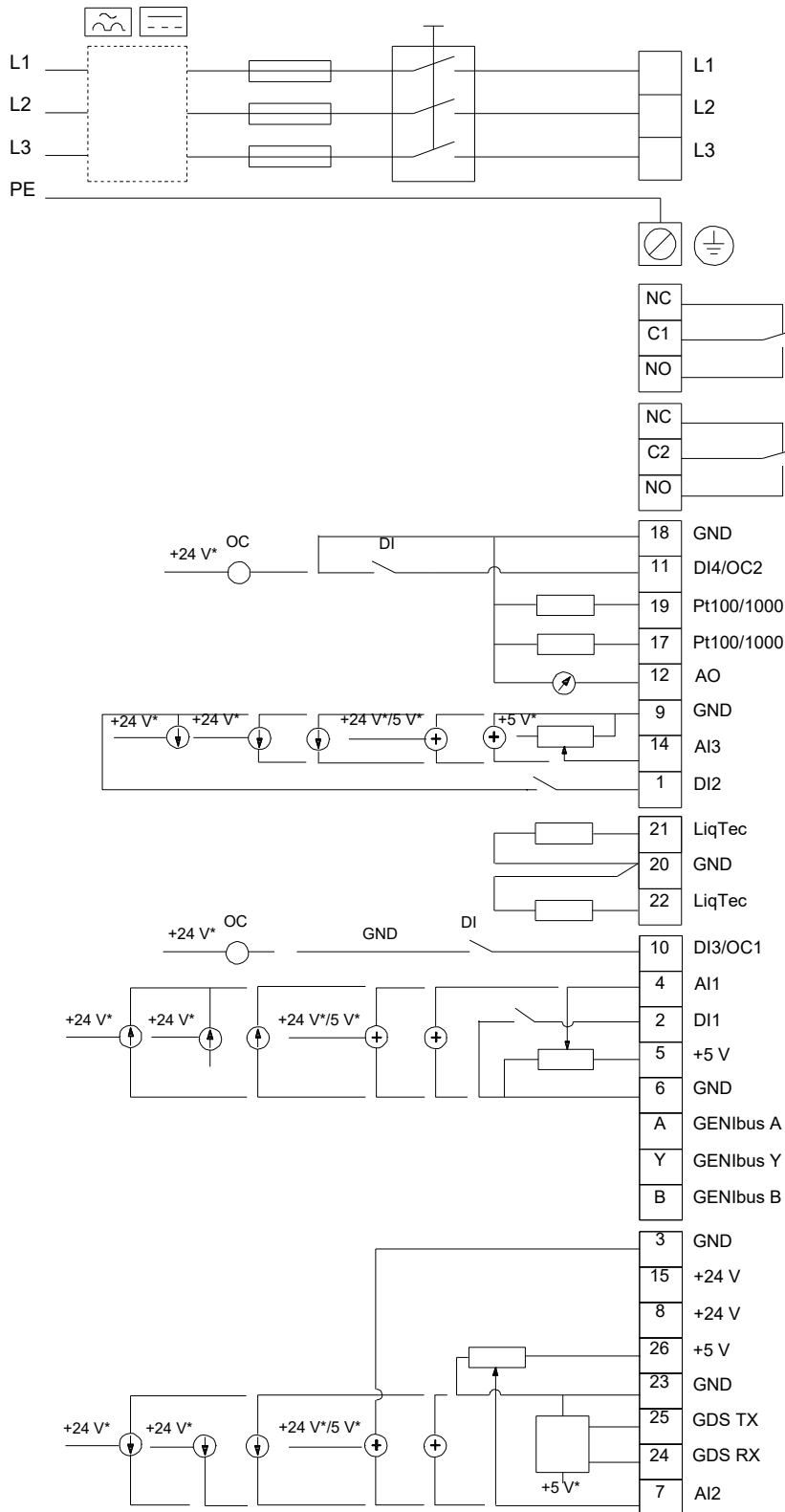
Description	Value
Bearing insulation type N-end:	STEEL BEARING
<b>Controls:</b>	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI ≥:	0.65
Net weight:	39 kg
Gross weight:	49 kg
Shipping volume:	0.134 m <sup>3</sup>
Danish VVS No.:	386100164
Country of origin:	HU
Custom tariff no.:	84137051

# 99104648 NBE 32-160/170 AAF2AESBQQEEWA 50 Hz



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

# 99104648 NBE 32-160/170 AAF2AESBQQEEWA 50 Hz



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

