



Data sheet

Hydraulic data

| | |
|-------------------------------------|--------|
| Maximum operating pressure P_N | 16 bar |
| Min. fluid temperature T_{\min} | -20 °C |
| Max. fluid temperature T_{\max} | 140 °C |
| Min. ambient temperature T_{\min} | -15 °C |
| Max. ambient temperature T_{\max} | 40 °C |

Motor data

| | |
|-----------------------------------|----------------|
| Mains connection | 3~400 V, 50 Hz |
| Voltage tolerance | ±10 % |
| Rated power P_2 | 37 kW |
| Motor efficiency class | IE3 |
| Rated current I_N | 67.8 A |
| Rated speed n | 2960 1/min |
| Power factor $\cos \varphi_{100}$ | 0.79 |
| Insulation class | F |
| Protection class motor | IP55 |

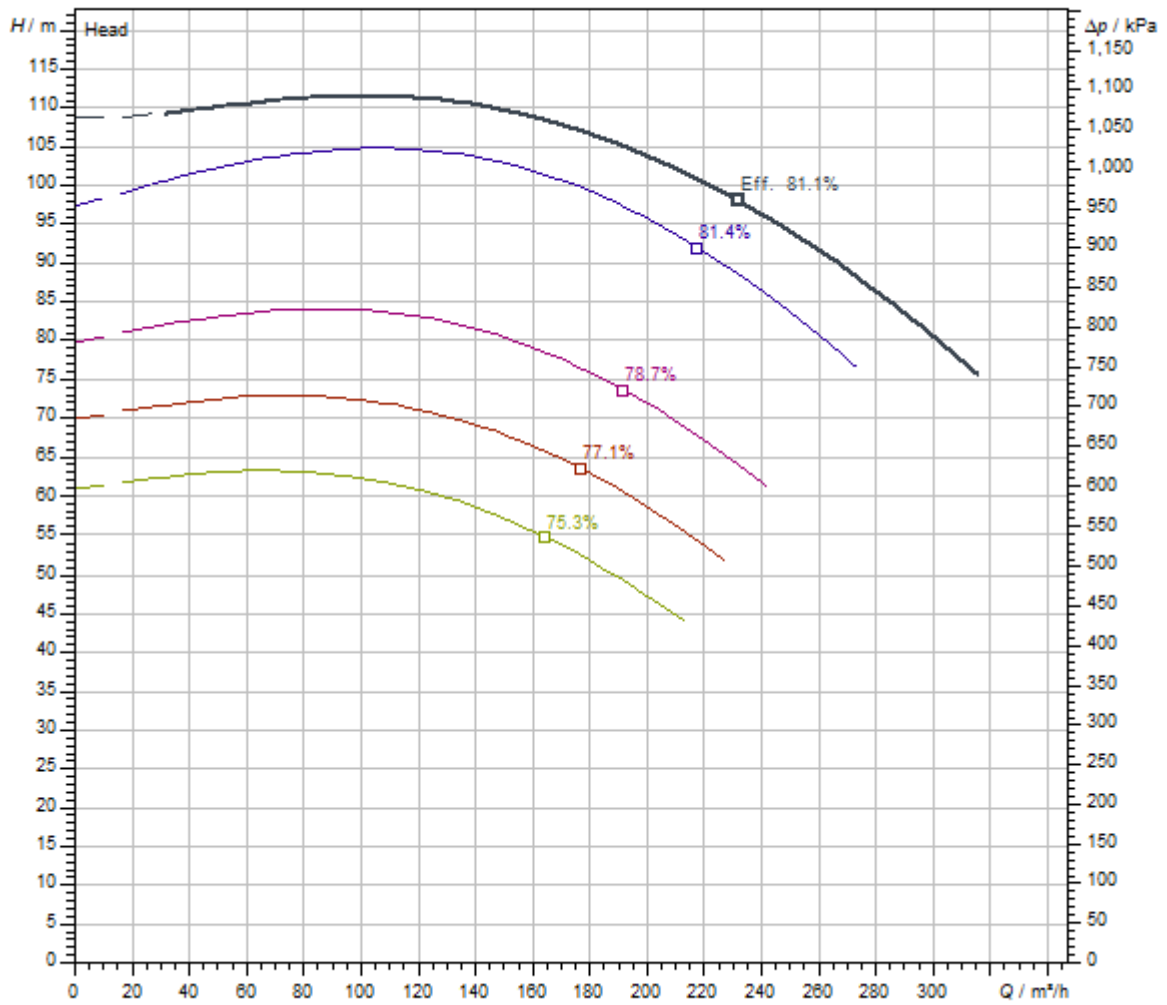
Installation dimensions

| | |
|---|--------|
| Pipe connection on the suction side DNs | DN 100 |
| Pipe connection on the discharge side DNd | DN 80 |

Materials

| | |
|-----------------|-----------------|
| Pump housing | Grey cast iron |
| Impeller | Grey cast iron |
| Shaft | Stainless steel |
| Mechanical seal | AQ1EGG |
| Lantern | Grey cast iron |

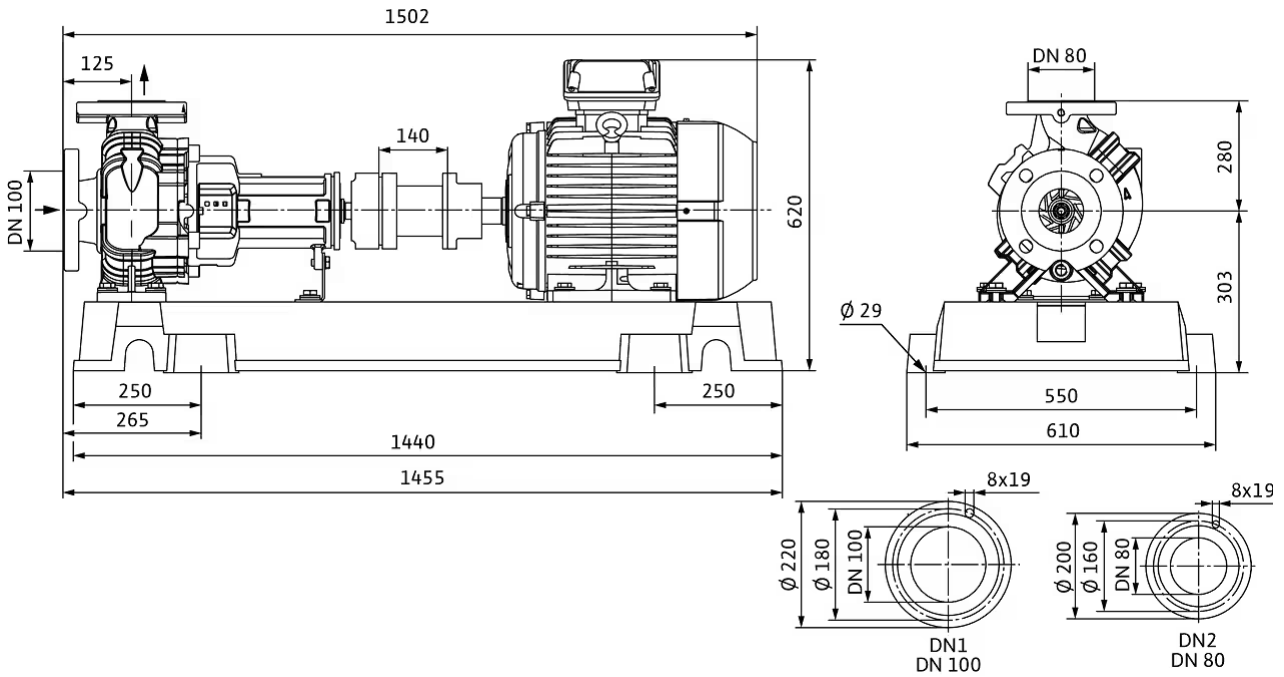
Pump curves



| | |
|---|-------------|
| Standard | ISO 9906 3B |
| Fluid media | Water 100 % |
| Fluid temperature <i>T</i> | 20.00 °C |
| speed at duty point <i>n hydr. @ OP</i> | 2,984 1/min |
| Impeller diameter <i>d imp.</i> | 273 mm |

Dimensions and dimensions drawings

Atmos GIGA-N 80/250-37/2



Wiring diagram



Δ: Connection diagram delta connection

Y: Connection diagram star connection

Motor protection switch required on-site. Check the direction of rotation! To change the direction of rotation, exchange any two phases.

$P_2 \leq 3 \text{ kW}$ 3~400 V Y

3~230 V Δ

$P_2 \geq 4 \text{ kW}$ 3~690 V Y

3~400 V Δ

After removing the bridges, Y-Δ start is possible.

Tender text

Single-stage centrifugal pump as baseplate pump in accordance with EN 733, with axial suction ports and radial pressure ports for installation on a base. Pump with support foot and flanged bearing bracket, coupling, coupling guard and motor mounted to same baseplate.

IEC motor with 3 PTC thermistor sensors. Shaft sealing with bidirectional bellows mechanical seal. Grey cast iron housing, stainless steel shaft, grey cast iron impeller. Cathaphoretic coating as standard for all cast iron components in contact with fluid.

Coupling variants:

- > Spacer coupling (standard)
- > Elastic coupling (variant P5, at a reduced price)

Impeller variants (for an additional charge):

- > Bronze

> Stainless steel

NOTICE

The elastic coupling does not contain a spacer.

The spacer coupling is an elastic coupling with a spacer. The spacer reduces maintenance costs, and further motor orientation when changing the mechanical seal is not necessary.

Materials

| | |
|--------------|-----------------|
| Pump housing | Grey cast iron |
| Impeller | Grey cast iron |
| Lantern | Grey cast iron |
| Shaft | Stainless steel |
| Shaft seal | AQ1EGG |

Operating Data

| | |
|------------------------------------|----------|
| Min. fluid temperature T_{min} | -20 °C |
| Max. fluid temperature T_{max} | 140 °C |
| Maximum operating pressure p | 16.0 bar |
| Max. ambient temperature T_{max} | 40 °C |
| Minimum efficiency index (MEI) | ≥0.4 |

Motor data

| | |
|--------------------------------------|----------------|
| Mains connection | 3-400 V, 50 Hz |
| Voltage tolerance | ±10 % |
| Motor efficiency class | IE3 |
| Rated power P_2 | 37000 W |
| Rated speed n | 2960 1/min |
| Rated current I_N | 67.8 A |
| Power factor $\cos \varphi_{100}$ | 0.79 |
| Motor efficiency 50% $\eta_M 50\%$ | 92.6 % |
| Motor efficiency 75% $\eta_M 75\%$ | 93.4 % |
| Motor efficiency 100% $\eta_M 100\%$ | 93.8 % |
| Protection class | IP55 |
| Insulation class | F |

Installation dimensions

| | |
|--|--------|
| Pipe connection on the suction side DN_s | DN 100 |
| Pipe connection on the discharge side DN_d | DN 80 |

Ordering information

| | |
|-------------------------|--------------------------|
| Brand | Wilo |
| Net weight, approx. m | 532 kg |
| Product description | Atmos GIGA-N 80/250-37/2 |
| Article number | 6086446 |

Installation type

Continuous, infinitely variable control, differential pressure-sensitive CC-HVAC system

CC-HVAC system

| | |
|-----------------------------------|---------|
| CC-HVAC-System 2x72A-T34-SD-FC-BM | 2527873 |
| CC-HVAC-System 3x72A-T34-SD-FC-BM | 2527874 |
| CC-HVAC-System 4x72A-T34-SD-FC-BM | 2527875 |

Antenna GSM/GPRS

| | |
|--|---------|
| D-network dual-band antenna with 3 m cable | 2533862 |
| D-network tri-band antenna 10 m cable | 2533863 |
| D-network tri-band antenna 15 m cable | 2533864 |

Outdoor temperature sensor Pt 100

| | |
|-----------------------------------|---------|
| Outdoor temperature sensor Pt 100 | 2533772 |
|-----------------------------------|---------|

DDG impulse selector

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| DDG impulse selector | 2533770 |
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BMS base module

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| BMS base module | 2533800 |
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CC communication module BACnet

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|--|---------|
| CC-communication module BACnet IP (slave) | 2537051 |
| CC-communication module BACnet MS/TP (slave) | 2537050 |

Communication module LON

| | |
|--------------------------|---------|
| Communication module LON | 2533868 |
|--------------------------|---------|

Communication module ModBus

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|---------------------------------|---------|
| Communication module Modbus RTU | 2533869 |
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Communication module Profibus

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|----------------------------------|---------|
| Communication module Profibus DP | 2533866 |
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Communication module GSM

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|------------|---------|
| GSM module | 2533861 |
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Pump signalling module

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|----------------------------|---------|
| Signalling module pump 1-2 | 2533812 |
| Signalling module pump 3-6 | 2533836 |

Signal converter retrofit kit

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|-----------------------------------|---------|
| Signal converter 0-10 V / 0-20 mA | 2534992 |
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Connection cable control modules/signalling modules

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|-------------------------------------|---------|
| Control modules connecting cable | 2533790 |
| Signalling modules connecting cable | 2533890 |

DDG (4-20mA)

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|---|---------|
| Wilo-DDG 10 Signal Trans.(4-20mA)2G VP. | 2136454 |
| Wilo-DDG 100 Signal Trans.(4-20mA) | 2211740 |
| Wilo-DDG 20 Signal Trans.(4-20mA)2G VP. | 2136456 |
| Wilo-DDG 40 Signal Trans.(4-20mA)2G VP. | 2136458 |
| Wilo-DDG 60 Signal Trans.(4-20mA)2G VP. | 2136460 |

DDG transducer

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|----------------|-----------|
| DDG transducer | 501771990 |
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DDG power supply unit

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| DDG power supply unit | 501865293 |
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PTC thermistor tripping unit

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| PTC thermistor tripping unit | 509275993 |
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Continuous, infinitely variable control, temperature-dependent CC-HVAC system

CC-HVAC system

| | |
|-----------------------------------|---------|
| CC-HVAC-System 2x72A-T34-SD-FC-BM | 2527873 |
| CC-HVAC-System 3x72A-T34-SD-FC-BM | 2527874 |
| CC-HVAC-System 4x72A-T34-SD-FC-BM | 2527875 |

Antenna GSM/GPRS

| | |
|--|---------|
| D-network dual-band antenna with 3 m cable | 2533862 |
| D-network tri-band antenna 10 m cable | 2533863 |
| D-network tri-band antenna 15 m cable | 2533864 |

Outdoor temperature sensor Pt 100

| | |
|-----------------------------------|---------|
| Outdoor temperature sensor Pt 100 | 2533772 |
|-----------------------------------|---------|

BMS base module

| | |
|-----------------|---------|
| BMS base module | 2533800 |
|-----------------|---------|

CC communication module BACnet

| | |
|--|-----------|
| CC-communication module BACnet IP (slave) | 2537051 |
| CC-communication module BACnet MS/TP (slave) | 2537050 |
| Communication module LON | |
| Communication module LON | 2533868 |
| Communication module ModBus | |
| Communication module Modbus RTU | 2533869 |
| Communication module Profibus | |
| Communication module Profibus DP | 2533866 |
| Communication module GSM | |
| GSM module | 2533861 |
| Pump signalling module | |
| Signalling module pump 1-2 | 2533812 |
| Signalling module pump 3-6 | 2533836 |
| Signal converter retrofit kit | |
| Signal converter 0-10 V / 0-20 mA | 2534992 |
| Temperature module | |
| Temperature module for systems with 1-3 pumps | 2534991 |
| Temperature module for systems with 4-6 pumps | 2533771 |
| Connection cable control modules/signalling modules | |
| Control modules connecting cable | 2533790 |
| Signalling modules connecting cable | 2533890 |
| PTC thermistor tripping unit | |
| PTC thermistor tripping unit | 509275993 |