

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	45 kW
Motor efficiency class	IE3
Rated current I_N	80.9 A
Rated speed n	1475 1/min
Power factor $\cos \varphi_{100}$	0.81
Insulation class	F
Protection class motor	IP55

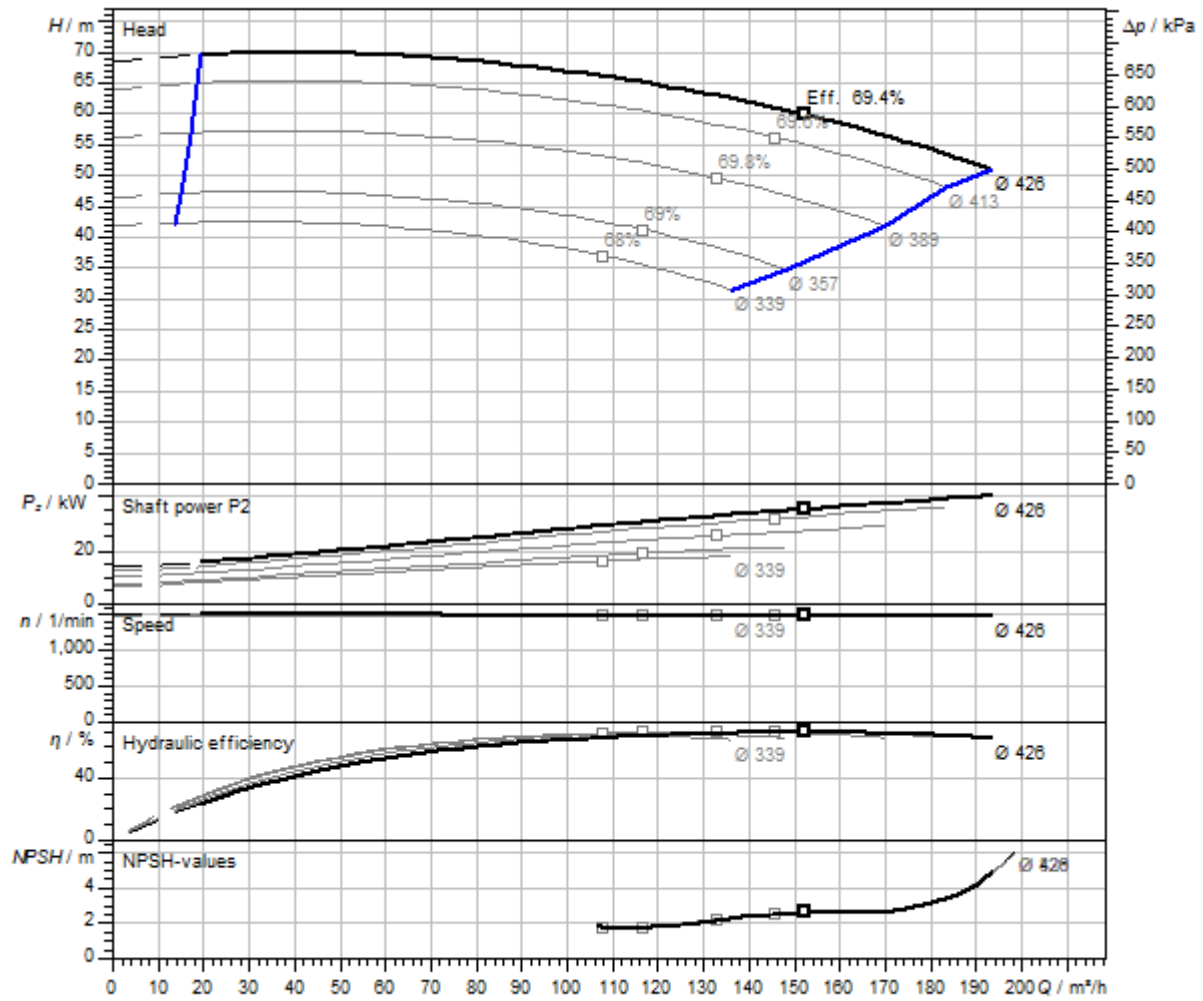
Installation dimensions

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

Materials

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

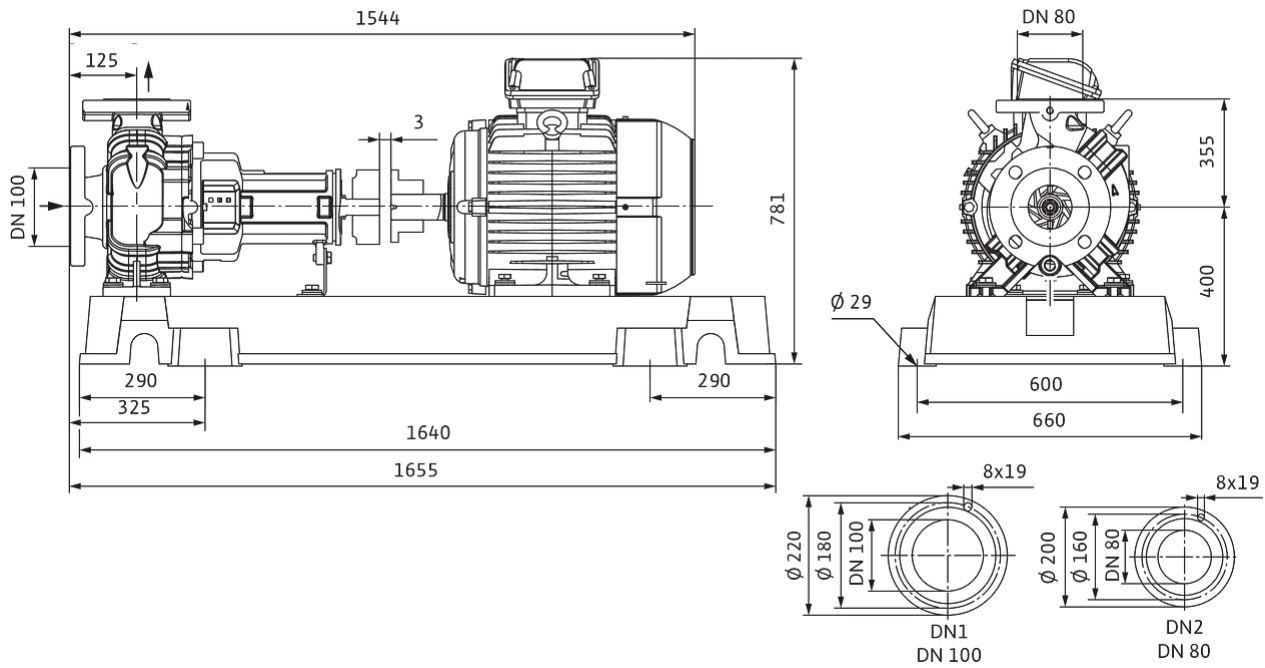
Pump curves



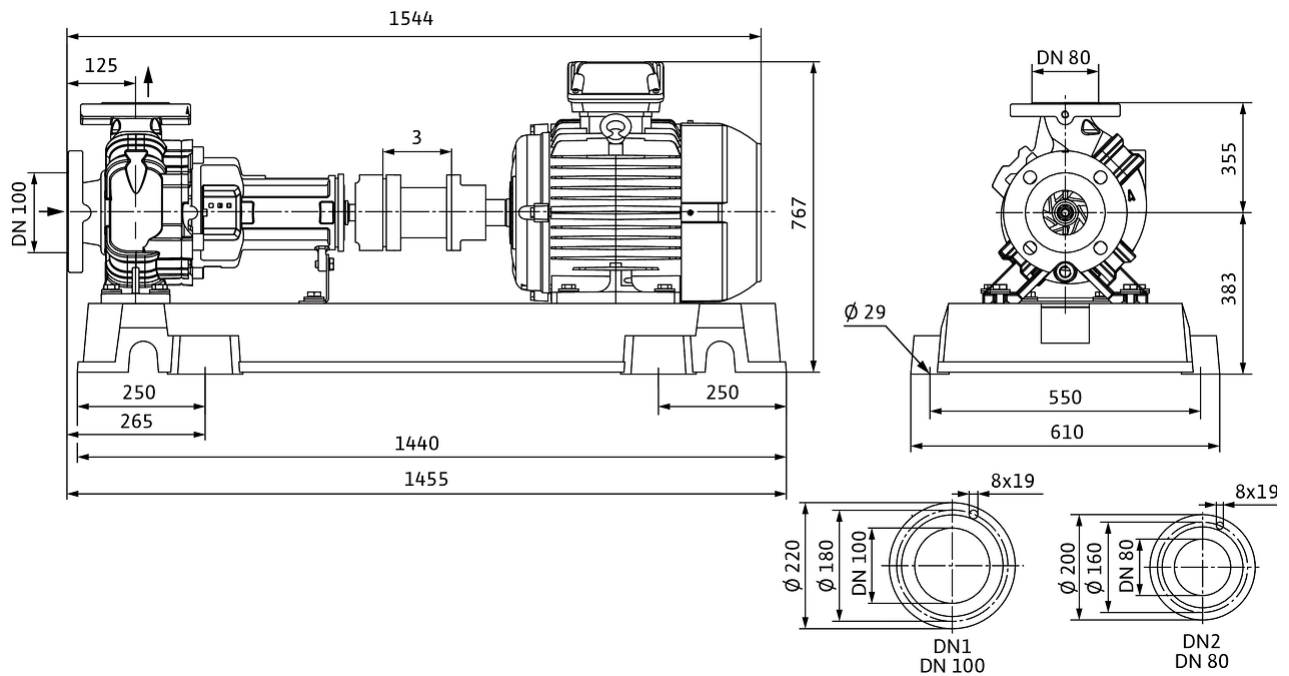
Standard	ISO 9906 3B
Fluid media	Water 100 %
Fluid temperature	20.00 °C
speed at duty point	1,488 1/min
Impeller diameter	426 mm

Dimensions and dimensions drawings

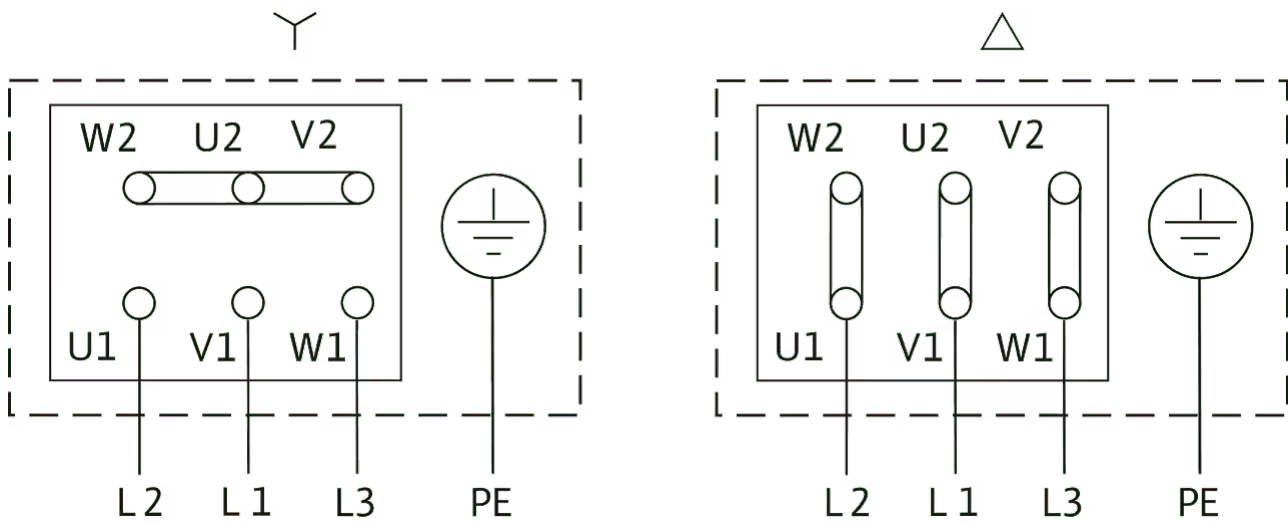
Atmos GIGA-N 80/400-45/4-P5



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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. Cataphoretic 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	45000 W
Rated speed n	1475 1/min
Rated current I_N	80.9 A
Power factor $\cos \varphi_{100}$	0.81
Motor efficiency 50% $\eta_M 50\%$	93.7 %
Motor efficiency 75% $\eta_M 75\%$	94.1 %
Motor efficiency 100% $\eta_M 100\%$	94.4 %
Protection class	IP55
Insulation class	F

Installation dimensions

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

Ordering information

Brand	Wilo
Net weight, approx. m	814 kg
Product description	Atmos GIGA-N 80/400-45/4-P5
Article number	6086838 