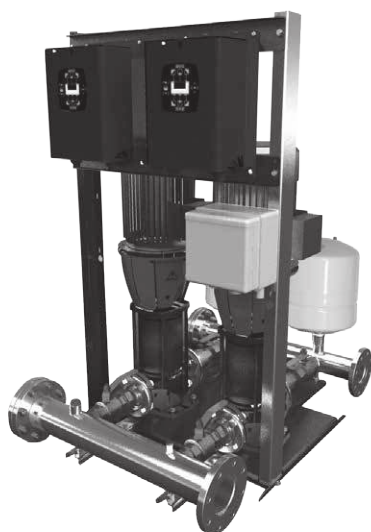


2 NKVE 10-15-20 ADAC

CONSTANT PRESSURE SETS WITH "ADAC" MULTI INVERTER SYSTEM



ADAC
PAGE 171



TECHNICAL DATA

Line voltage: 400V three phase.
Voltage of electric pump: 400V three phase.
Power frequency: 50-60 Hz.
Installation: vertical only.
Pumped liquid temperature range: from 0 °C to 80 °C.
Maximum ambient temperature: 40°C.
Max pressure: 14bar.
Pumped liquid: clean, free from solids.
Operating range: from 4 to 58 m³/h.
Pressure regulation range: 3 to 14 bar.
Protection class: IP20.

APPLICATIONS

The sets with on-board inverter have been designed and manufactured to meet the constant pressure requirements of modern system engineering solutions. The constant pressure adjustment is a requirement in the most varied sectors: Water pipelines, Irrigation, Industry, Hotel, Residential building, Spas. The fundamental concept that has driven our Engineers in developing these pumps sets, was to offer a simple to use, flexible, and extremely reliable product. Differently from traditional fixed speed pumps, inverter driven pumps give the possibility to adapt the performance curve to the needs of the system. In the most classic case, inverter driven pumps are used to maintain constant pressure in the system against variations in the requested flow rate, avoiding pressure fluctuations caused by small flow rate variations.

ADVANTAGES OF USE

Operating pressure stability – Excellent energy savings (up to 60 %) – Reduced hammering effects – Reduced space requirements – Less maintenance – Reduced pump wear – Less power factor correction required – Less water consumption – Integrated protections.

CONSTRUCTION FEATURES

The sets with ADAC inverters are built in the standard version with two centrifugal electric pumps, completely assembled on galvanised steel base, tested and ready for installation. Complete with isolator and check valves for each pump, suction and delivery manifolds, expansion vessels, pressure sensor, inverter, protection control unit. (possibility of optional flow sensor for pressure control).

ADAC MULTI INVERTER SYSTEM

The inverter continuously adjusts the rotation speed of the electric pump, keeping the pressure constant, even when the flow rate varies. The other electric pumps, also with variable speed, are activated in cascade after the first one has reached maximum speed. Through modulation, they compensate the pressure fluctuations of the system.

For every operating cycle, it is possible to switch the restart to a different pump, therefore ensuring even use of all electric pumps.

It is possible to set operation times for each individual pump, switching to another pump after such set times.

The "SP" pressure can be adjusted by the user using the "+" and "-" keys found on the ADAC (as a rule, all the pumps are set to the same pressure value). With the new ADAC, it is sufficient to set the data on one of the devices, and it will automatically be propagated to the other pumps of the system.

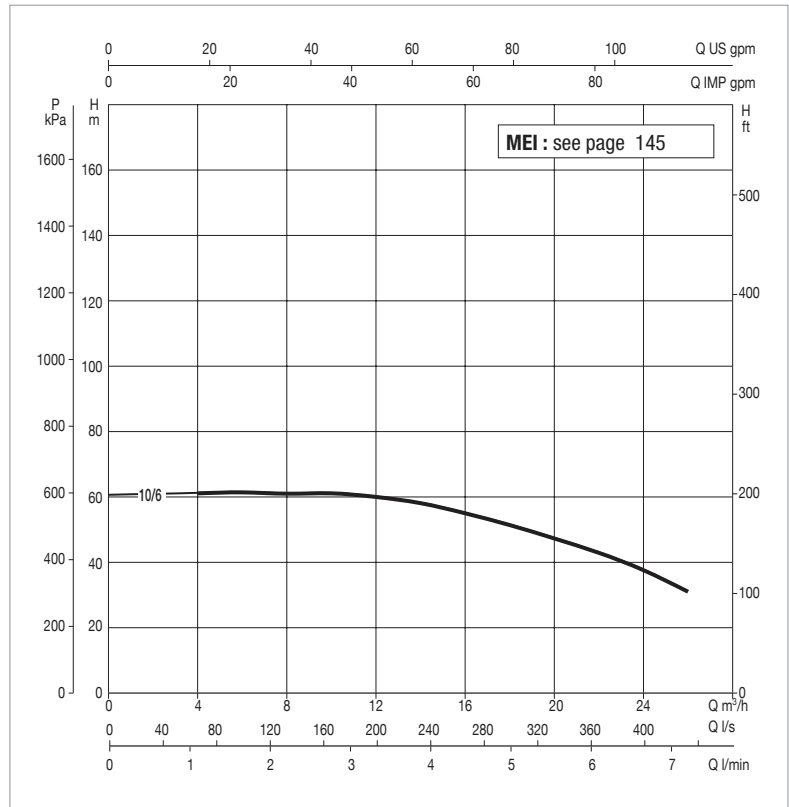
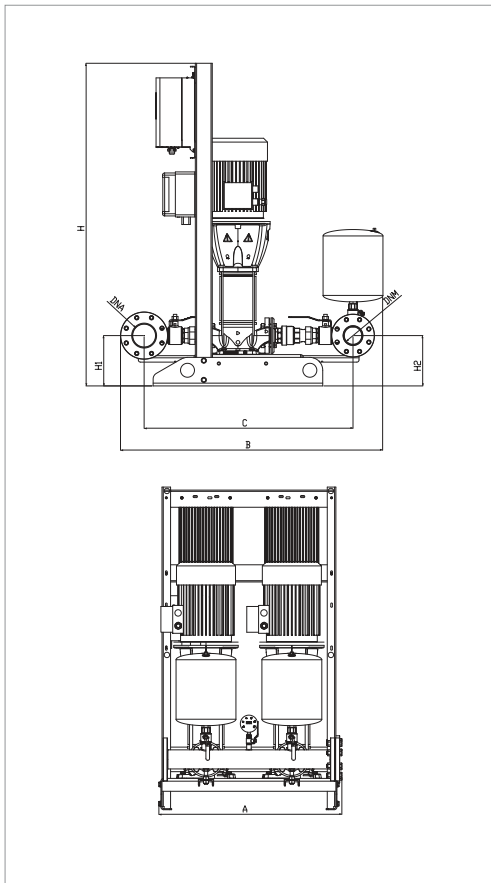
ELECTRIC COMPONENTS SUPPLIED

ADAC inverter with the following features:

- Abnormal voltage protection.
- Adjustable amperometric protection.
- Dry run protection (without minimum manometer).
- Output phases short circuit protection.
- Overtemperature and overvoltage protection.
- Anti-seizing and anti-freeze functions.
- Pressure sensor fault.
- Thermal magnetic protection control unit (simplified connection).
- Pressure sensor on the delivery manifold.

2 NKVE 10/6 - ADAC - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from -15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 26 m³/h



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³.
Curve tolerance according to ISO 9906.

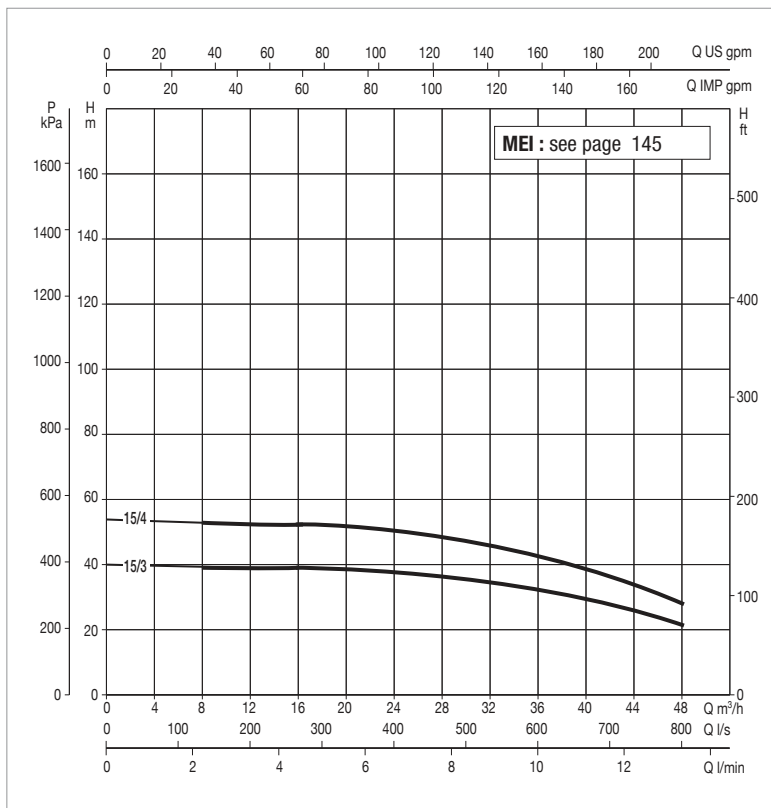
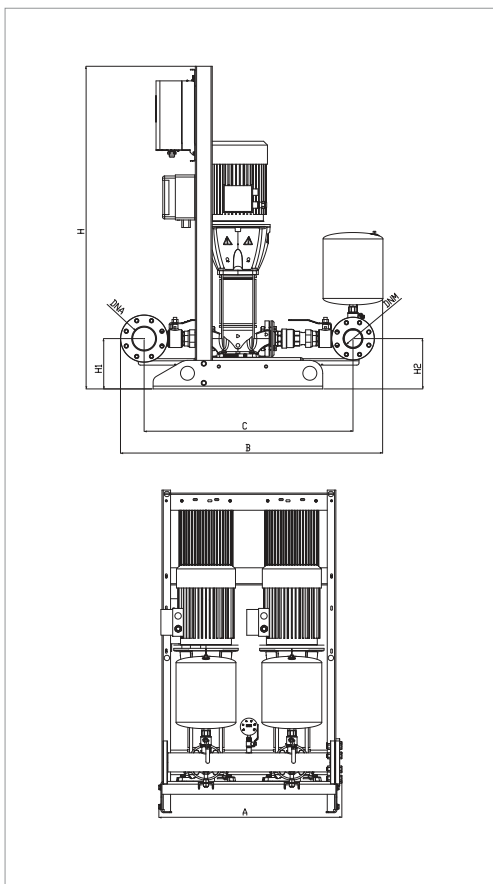
Overall performance taking into account TWO pumps working at the same time.

MODEL	POWER INPUT	P2 NOMINAL		In A	INVERTER MODEL	CONTROL PANEL MODEL	MAXIMUM FLOW RATE m ³ /h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP						
2 NKVE 10/6 T ADAC 400-50	3 x 400 50-60 Hz	2x2.2	2x3	2x5,4	AD T/T 3.0 AC	E2G11T MCE (16A MAX) 400V C/CAVI	26	6	5

MODEL	A	B	C	H	H1	H2	DNA	DNM	WEIGHT	PACKING (wxhxd)
2 NKVE 10/6 T ADAC 400-50	853	1060	875	1503	225	225	2" 1/2	2" 1/2	207	1000x1400x2000

2 NKVE 15/3 - 15/4 - ADAC - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from -15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 48 m³/h



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³.
Curve tolerance according to ISO 9906.

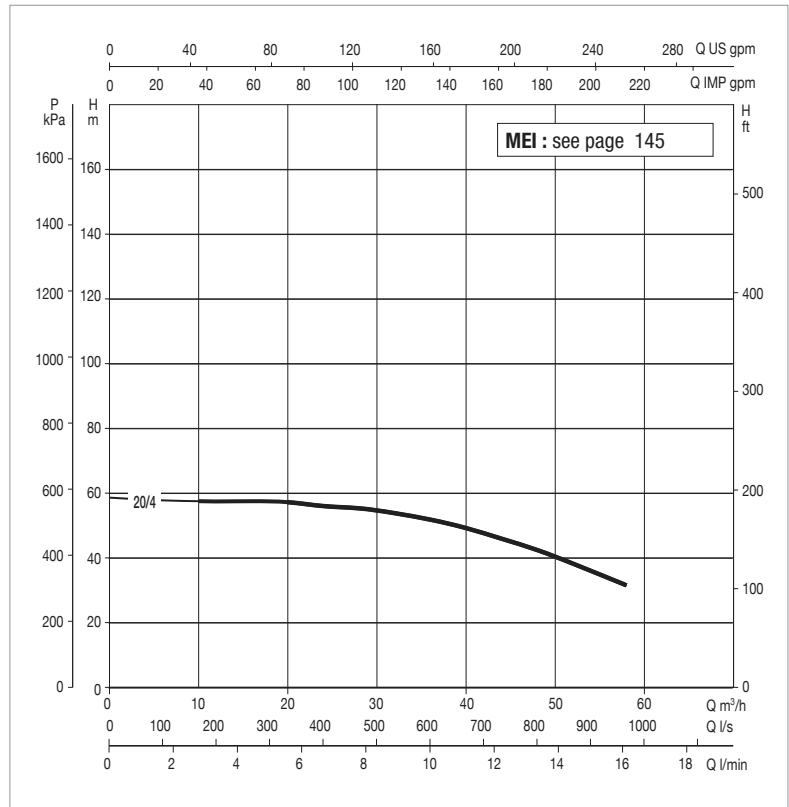
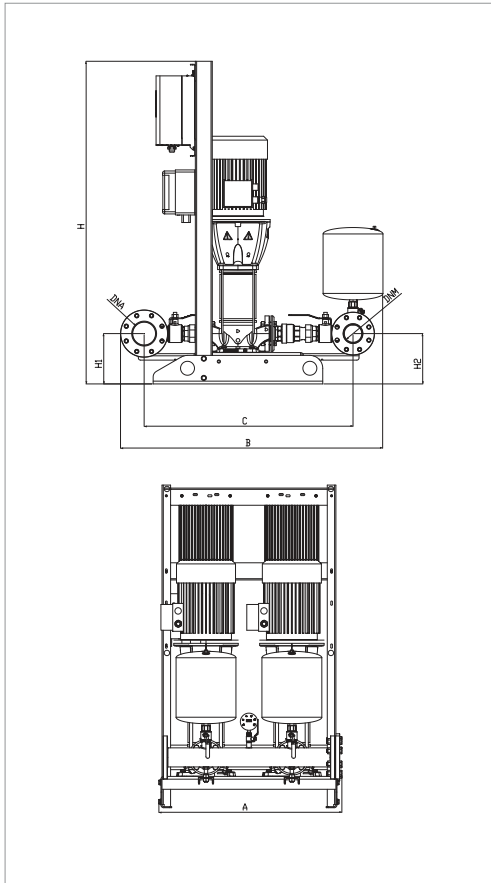
Overall performance taking into account TWO pumps working at the same time.

MODEL	POWER INPUT	P2 NOMINAL		In A	INVERTER MODEL	CONTROL PANEL MODEL	MAXIMUM FLOW RATE m ³ /h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP						
2 NKVE 15/3 T ADAC 400-50	3 x 400 50-60 Hz	2x3	2x4	2x7.37	AD T/T 3.0 AC	E2G11T MCE (16A MAX) 400V CABLE CONN.	48	4	3.5
2 NKVE 15/4 T ADAC 400-50	3 x 400 50-60 Hz	2x4	2x5.5	2x10.1	AD T/T 3.0 AC	E2G11T MCE (16A MAX) 400V CABLE CONN.	48	5	4.0

MODEL	A	B	C	H	H1	H2	DNA	DNM	WEIGHT	PACKING (wxhxd)
2 NKVE 15/3 T ADAC 400-50	853	1221	973	1503	235	235	100	80	258	1000x1400x2000
2 NKVE 15/4 T ADAC 400-50	853	1221	973	1503	235	235	100	80	278	1000x1400x2000

2 NKVE 20/4 - ADAC - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from -15 °C to +80 °C - Maximum ambient temperature: +40 °C - Max flow rate: 58 m³/h



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³.
Curve tolerance according to ISO 9906.

Overall performance taking into account TWO pumps working at the same time.

MODEL	POWER INPUT	P2 NOMINAL		In A	INVERTER MODEL	CONTROL PANEL MODEL	MAXIMUM FLOW RATE m ³ /h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP						
2 NKVE 20/4 T ADAC 400-50	3 x 400 50-60 Hz	2x2.5	2x3	2x7.5	AD T/T 4.0 AC	E2G11T MCE (16A MAX) 400V CABLE CONN.	58	6	5

MODEL	A	B	C	H	H1	H2	DNA	DNM	WEIGHT	PACKING (wxhxd)
2 NKVE 20/4 T ADAC 400-50	853	1221	973	1503	235	235	100	80	280	1000x1400x2000