

2-3 NKV AD 10-15

CONSTANT PRESSURE RESIDENTIAL SETS WITH ACTIVE DRIVER

ACTIVE DRIVER
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TECHNICAL DATA

Operating range: from 4 to 45 m³/h

Pumped liquid: clean, free of solids and abrasives, non viscous, non aggressive, non crystallised and chemically neutral, with properties similar to water.

Pumped liquid temperature range: from 0 °C to +50 °C for domestic use

Maximum ambient temperature: +40°C

Maximum operating pressure: PN16

Special executions on request: contact our sales network

Protection class: IP44

APPLICATIONS

Pressure booster sets particularly suited for civil or industrial use, irrigation systems and washing systems. Their main features are reliability, simple operation, and minimum maintenance requirements.

CONSTRUCTION FEATURES

HYDRAULIC SECTION

NKV 10-15 vertical multistage centrifugal electric pumps.

Galvanised metal sheet base.

Suction and delivery manifolds in galvanized steel (stainless steel on request).

Ball valves with unions on the suction and delivery ports of each pump.

Check valves on the suction port of each pump.

2 galvanized steel plugs or blind flanges for closing the manifolds.

Radial manometer with isolator valve.

1 8 litre membrane tank.

ELECTRICAL SECTION

1 Active Driver module on the delivery of each pump.

1 protection control unit.

MULTI INVERTER SYSTEM WITH ACTIVE DRIVER

The inverter provides constant control of the rotation speed of the electric pump, ensuring constant pressure despite flow rate variations.

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.

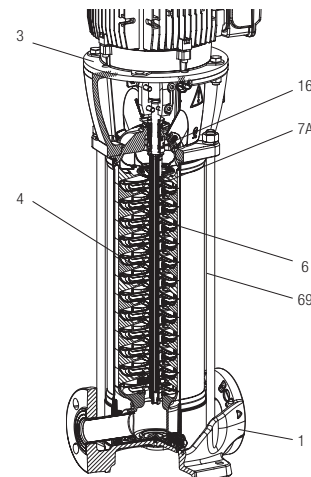
It is possible to set operation times for each individual pump, switching to another pump after such set times.

The "SP" pressure can be adjusted by the user using two "+" and "-" keys on the A.D. (as a rule, all the pumps are set to the same pressure value).

MATERIALS

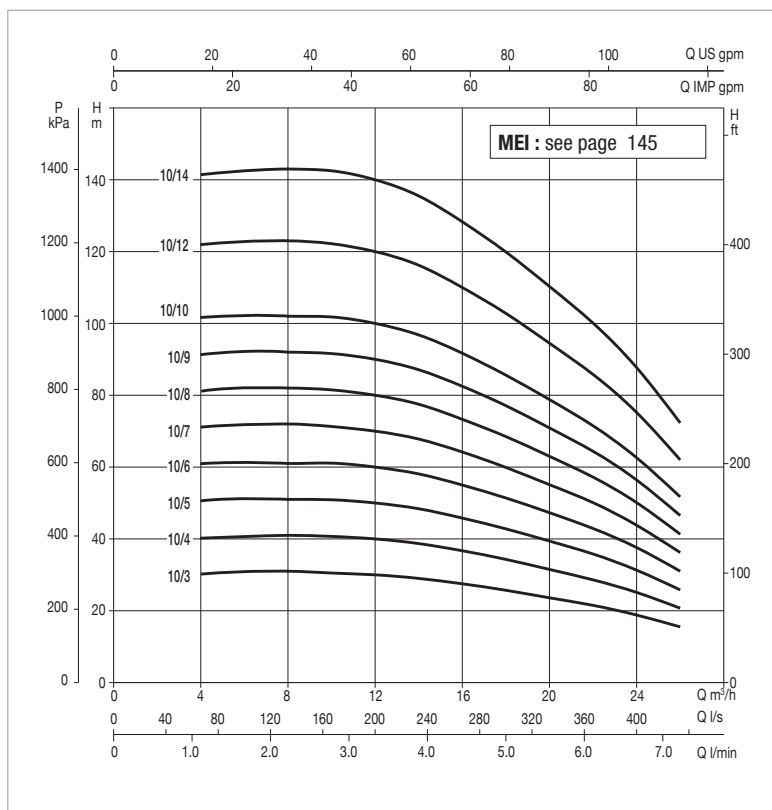
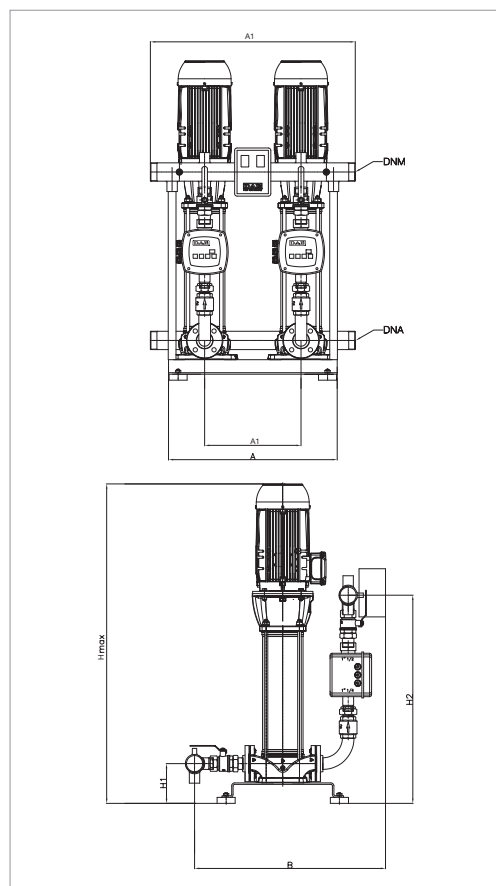
N.	PARTS	MATERIALS *
1	EXTERNAL PUMP BODY	CATAPHORESIS TREATED CAST IRON
	INTERNAL PUMP BODY*	AISI 304 STAINLESS STEEL
3	SUPPORT	CATAPHORESIS TREATED CAST IRON
4	IMPELLER*	AISI 304 STAINLESS STEEL
6	DIFFUSER*	"ULTEM" TECHNOPOLYMER
7A	PUMP SHAFT*	AISI 431 STAINLESS STEEL
16	MECHANICAL SEAL*	SiC/GRAPHITE/EPDM CARTRIDGE
69	OUTER LINER	AISI 304 STAINLESS STEEL

* In contact with the liquid



2 NKV AD 10 - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +50 °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.

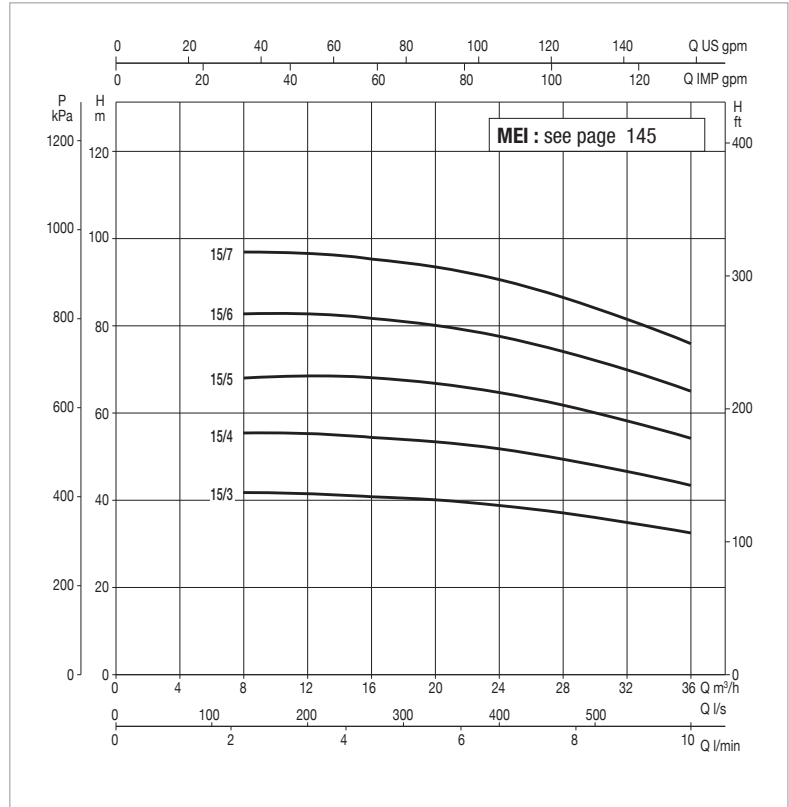
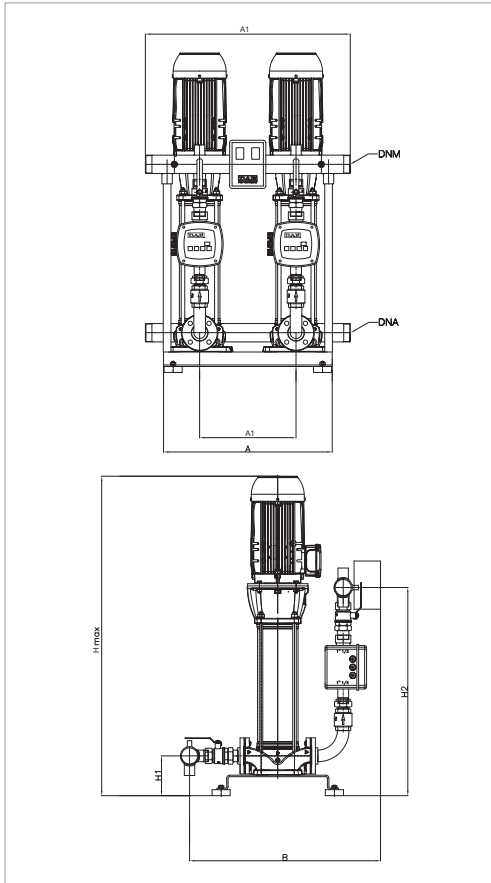
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	ACTIVE DRIVER MODEL	FLOW m ³ /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE BAR
		kW	HP					
2 NKV AD 10/3	1x220-240 V	2x1,1	2x1,5	2x7,5	M/T 2,2	26 - 4	3	2,5
2 NKV AD 10/4	1x220-240 V	2x1,5	2x2	2x9,6	M/T 2,2	26 - 4	4	3,0
2 NKV AD 10/5	3x400 V	2x2,2	2x3	2x4,7	T/T 3,0	26 - 4	5	4,0
2 NKV AD 10/6	3x400 V	2x2,2	2x3	2x4,7	T/T 3,0	26 - 4	6	5,0
2 NKV AD 10/7	3x400 V	2x3	2x4	2x5,8	T/T 3,0	26 - 4	7	6
2 NKV AD 10/8	3x400 V	2x3	2x4	2x5,8	T/T 3,0	26 - 4	8	6,5
2 NKV AD 10/9	3x400 V	2x3	2x4	2x5,8	T/T 3,0	26 - 4	9	7,7
2 NKV AD 10/10	3x400 V	2x4	2x5,5	2x7,6	T/T 5,5	26 - 4	10	8,5
2 NKV AD 10/12	3x400 V	2x4	2x5,5	2x7,6	T/T 5,5	26 - 4	12	10
2 NKV AD 10/14	3x400 V	2x5,5	2x7,5	2x11	T/T 5,5	26 - 4	14	12

MODEL	A	B	A1	C	H1	H2	H max	DNA	DNM	PACKING DIMENSIONS			VOLUME m ³	WEIGHT kg
										L/A	L/B	H		
2 NKV AD 10/3	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	258
2 NKV AD 10/4	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	268
2 NKV AD 10/5	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	276
2 NKV AD 10/6	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	278
2 NKV AD 10/7	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	298
2 NKV AD 10/8	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	300
2 NKV AD 10/9	800	850	900	400	180	940	1095	2" 1/2	2" 1/2	1000	1000	1400	1,4	302
2 NKV AD 10/10	800	850	900	400	180	940	1143	2" 1/2	2" 1/2	1000	1000	1400	1,4	322
2 NKV AD 10/12	800	850	900	400	180	940	1209	2" 1/2	2" 1/2	1000	1000	1400	1,4	326
2 NKV AD 10/14	800	850	900	400	180	940	1405	2" 1/2	2" 1/2	1000	1000	2000	1,4	382

The sets are supplied in a sturdy cardboard packaging on wooden pallet and installation / maintenance manual.

2 NKV AD 15 - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +50 °C - Maximum ambient temperature: +40 °C - Max flow rate: 30 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.

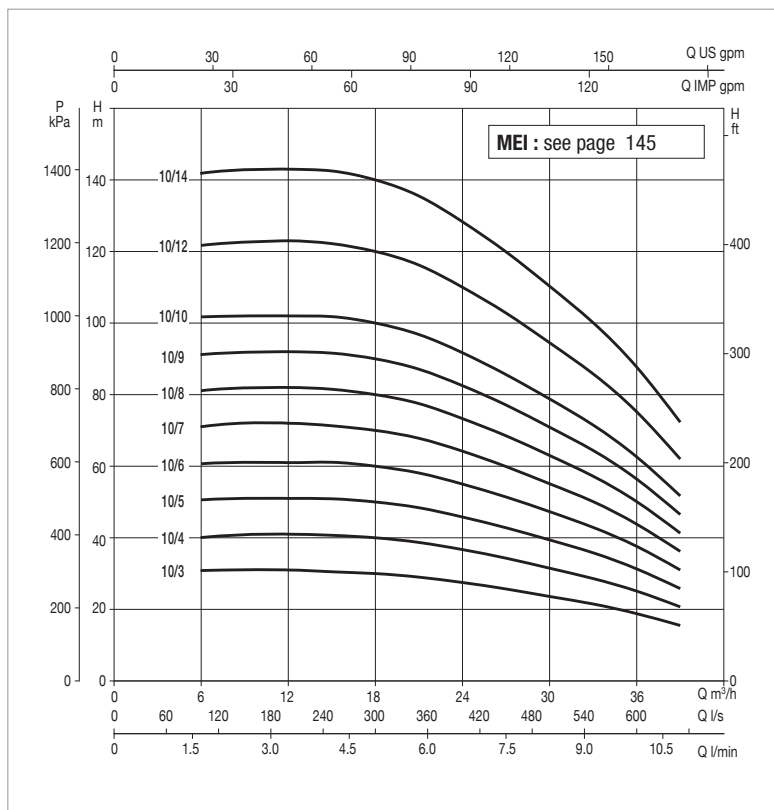
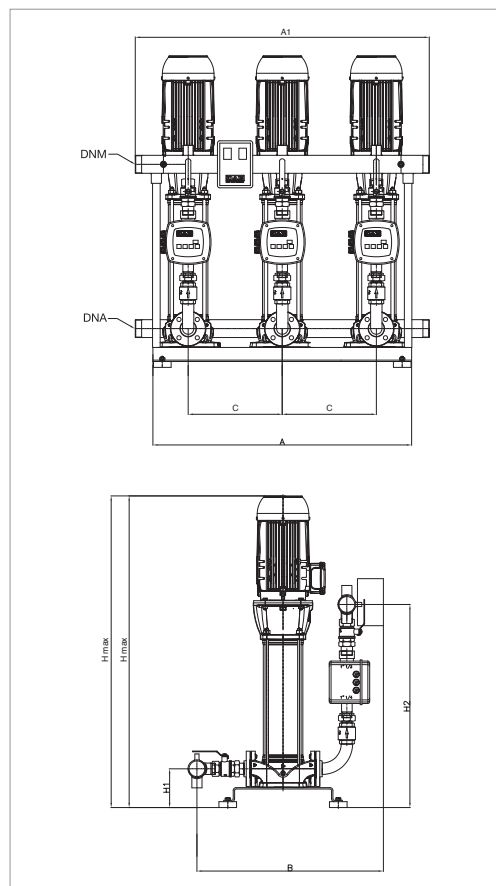
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	ACTIVE DRIVER MODEL	FLOW m ³ /h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP					
2 NKV AD 15/3	3x400 V	2x3	2x4	2x5,8	T/T 3,0	30 - 8	4	3,5
2 NKV AD 15/4	3x400 V	2x4	2x5,5	2x7,6	T/T 5,5	30 - 8	5	4
2 NKV AD 15/5	3x400 V	2x4	2x5,5	2x7,6	T/T 5,5	30 - 8	6,5	5
2 NKV AD 15/6	3x400 V	2x5,5	2x7,5	2x11	T/T 5,5	30 - 8	7,5	6,5
2 NKV AD 15/7	3x400 V	2x5,5	2x7,5	2x11	T/T 5,5	30 - 8	9	8

MODEL	A	B	A1	C	H1	H2	H max	DNA	DNM	PACKING DIMENSIONS			VOLUME m ³	WEIGHT kg
										L/A	L/B	H		
2 NKV AD 15/3	800	850	900	400	190	1000	1160	DN100	DN80	1000	1000	1400	1,4	314
2 NKV AD 15/4	800	850	900	400	190	1000	1160	DN100	DN80	1000	1000	1400	1,4	334
2 NKV AD 15/5	800	850	900	400	190	1000	1160	DN100	DN80	1000	1000	1400	1,4	336
2 NKV AD 15/6	800	850	900	400	190	1000	1320	DN100	DN80	1000	1000	1400	1,4	392
2 NKV AD 15/7	800	850	900	400	190	1000	1355	DN100	DN80	1000	1000	1400	1,4	395

The sets are supplied in a sturdy cardboard packaging on wooden pallet and installation / maintenance manual.

3 NKV AD 10 - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +50 °C - Maximum ambient temperature: +40 °C - Max flow rate: 36 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 THREE pumps working at the same time.

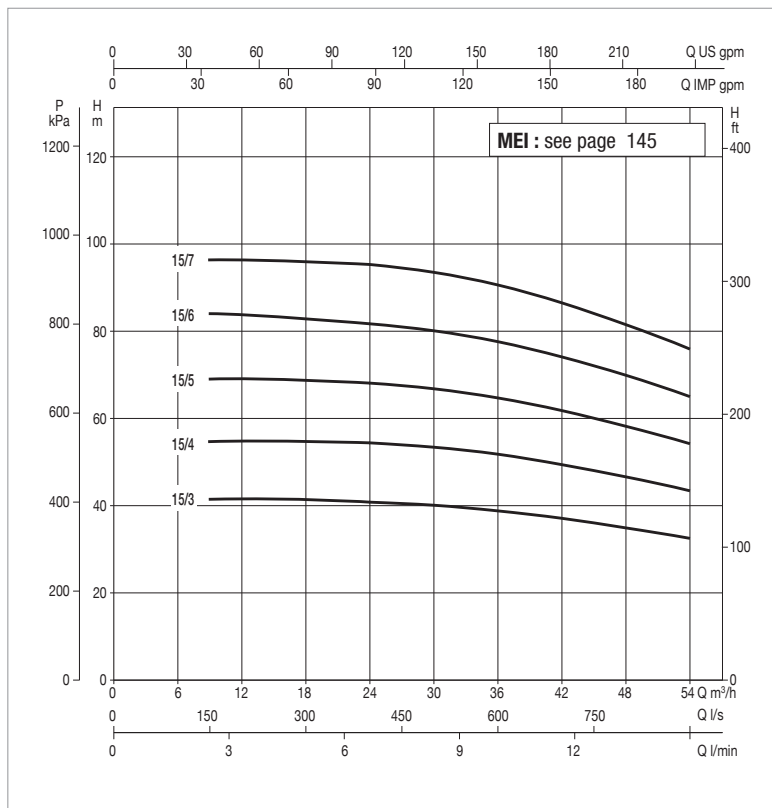
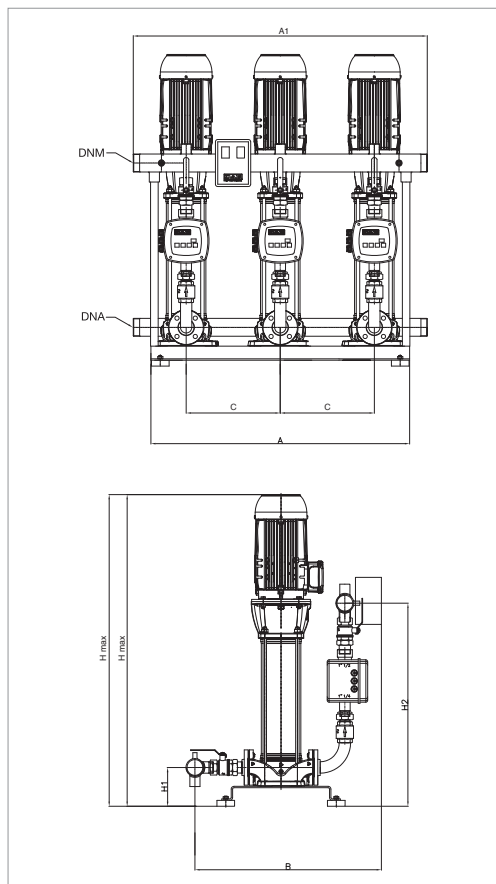
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	ACTIVE DRIVER MODEL	FLOW m ³ /h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP					
3NKV AD 10/3	1x220-240 V	3x1,1	3x1,5	3x7,5	MT 2,2	36 - 4	3	2,5
3NKV AD 10/4	1x220-240 V	3x1,5	3x2	3x9,6	MT 2,2	36 - 4	4	3,0
3NKV AD 10/5	3x400 V	3x2,2	3x3	3x4,7	T/T 3,0	36 - 4	5	4,0
3NKV AD 10/6	3x400 V	3x2,2	3x3	3x4,7	T/T 3,0	36 - 4	6	5,0
3NKV AD 10/7	3x400 V	3x3	3x4	3x5,8	T/T 3,0	36 - 4	7	6
3NKV AD 10/8	3x400 V	3x3	3x4	3x5,8	T/T 3,0	36 - 4	8	6,5
3NKV AD 10/9	3x400 V	3x3	3x4	3x5,8	T/T 3,0	36 - 4	9	7,7
3NKV AD 10/10	3x400 V	3x4	3x5,5	3x7,6	T/T 5,5	36 - 4	10	8,5
3NKV AD 10/12	3x400 V	3x4	3x5,5	3x7,6	T/T 5,5	36 - 4	12	10
3NKV AD 10/14	3x400 V	3x5,5	3x7,5	3x11	T/T 5,5	36 - 4	14	12

MODEL	A	B	A1	C	H1	H2	H max	DNA	DNM	PACKING DIMENSIONS			VOLUME m ³	WEIGHT kg
										L/A	L/B	H		
3NKV AD 10/3	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	385
3NKV AD 10/4	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	400
3NKV AD 10/5	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	412
3NKV AD 10/6	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	415
3NKV AD 10/7	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	445
3NKV AD 10/8	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	448
3NKV AD 10/9	1200	850	1300	400	180	950	1100	DN80	DN80	1400	1800	2000	5,2	452
3NKV AD 10/10	1200	850	1300	400	180	950	1150	DN80	DN80	1400	1800	2000	5,2	481
3NKV AD 10/12	1200	850	1300	400	180	950	1260	DN80	DN80	1400	1800	2000	5,2	485
3NKV AD 10/14	1200	850	1300	400	180	950	1455	DN80	DN80	1400	1800	2000	5,2	571

The sets are supplied in a sturdy cardboard packaging on wooden pallet and installation / maintenance manual.

3 NKV AD 15 - RESIDENTIAL CONSTANT PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +50 °C - Maximum ambient temperature: +40 °C - Max flow rate: 45 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 THREE pumps working at the same time.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	ACTIVE DRIVER MODEL	FLOW m³/h	MAX OBTAINABLE PRESSURE BAR	STANDARD PRESSURE BAR
		kW	HP					
3NKV AD 15/3	3x400 V	3x3	3x4	3x5,8	T/T 3,0	45 - 8	4	3,5
3NKV AD 15/4	3x400 V	3x4	3x5,5	3x7,6	T/T 5,5	45 - 8	5	4
3NKV AD 15/5	3x400 V	3x4	3x5,5	3x7,6	T/T 5,5	45 - 8	6,5	5
3NKV AD 15/6	3x400 V	3x5,5	3x7,5	3x11	T/T 5,5	45 - 8	7,5	6,5
3NKV AD 15/7	3x400 V	3x5,5	3x7,5	3x11	T/T 5,5	45 - 8	9	8

MODEL	A	B	A1	C	H1	H2	H max	DNA	DNM	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
										L/A	L/B	H		
3NKV AD 15/3	1200	850	1300	400	190	1000	1165	DN125	DN100	1400	1800	2000	5,2	545
3NKV AD 15/4	1200	850	1300	400	190	1000	1165	DN125	DN100	1400	1800	2000	5,2	575
3NKV AD 15/5	1200	850	1300	400	190	1000	1165	DN125	DN100	1400	1800	2000	5,2	578
3NKV AD 15/6	1200	850	1300	400	190	1000	1325	DN125	DN100	1400	1800	2000	5,2	662
3NKV AD 15/7	1200	850	1300	400	190	1000	1360	DN125	DN100	1400	1800	2000	5,2	668

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