

# 1/2/3 KV AD 3-6-10

## DOMESTIC CONSTANT PRESSURE BOOSTER SETS WITH ACTIVE DRIVER

ACTIVE DRIVER  
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### TECHNICAL DATA

**Operating range:** from 1,8 to 43 m<sup>3</sup>/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 +40°C

**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 domestic use, small civil or industrial systems, irrigation systems, and washing systems. Their main features are reliability, simple operation, and minimum maintenance requirements.

### CONSTRUCTION FEATURES - COMPONENTS

#### HYDRAULIC SECTION

KV multistage centrifugal electric pumps.

Galvanized sheet steel base complete with 4 rubber anti-vibration feet.

Suction and delivery manifolds in galvanized steel.

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 for closing the manifolds.

Radial manometer with isolator valve.

1 18 litre membrane pressure tank (it optimises the number of pump starts).

#### ELECTRICAL SECTION

1 Active Driver module on the delivery line of each pump (see Active Driver information at the beginning of this section).

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.

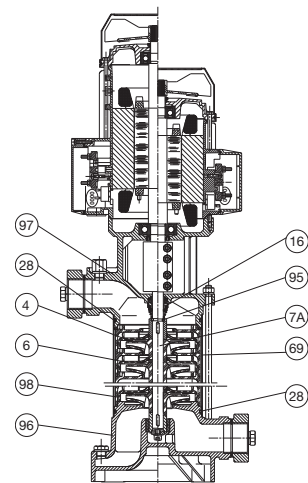
The other electric pumps, also with variable speed, are activated in cascade after the first one has reached maximum speed. Through modulation, they compensate the pressure fluctuations of the system. For every operating cycle, it is possible to switch the restart to a different pump, therefore ensuring 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).

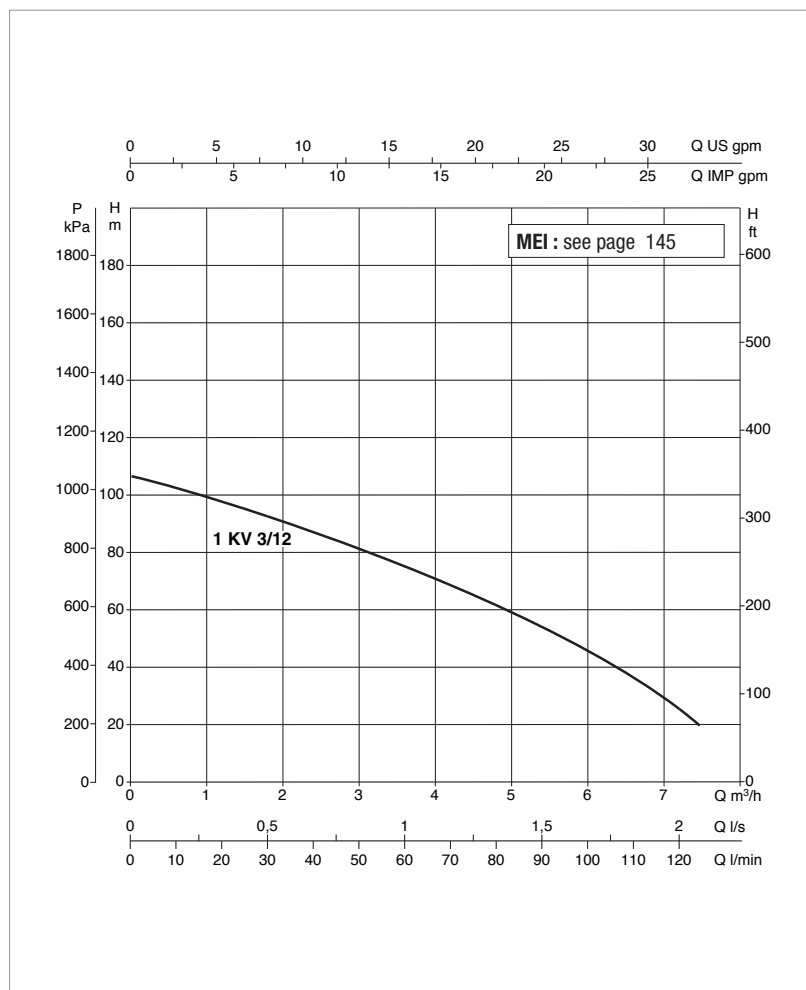
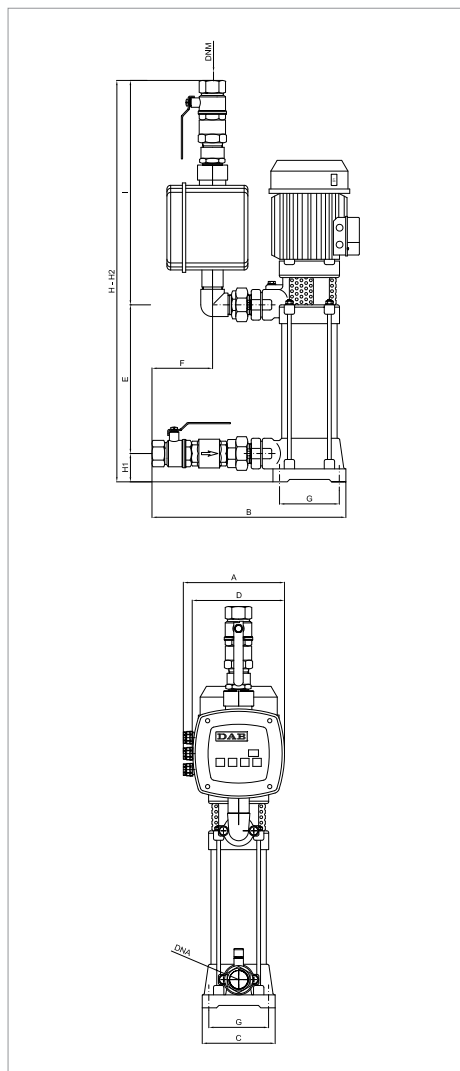
### MATERIALS

N.	PARTS	MATERIALS
4	IMPELLER	TECHNOPOLYMER B
6	DIFFUSER	TECHNOPOLYMER B
7A	PUMP SHAFT	AISI 416 STAINLESS STEEL X12 CrS 13 UNI 6900/71
16	MECHANICAL SEAL	CARBON / CERAMIC
28	OR RING	EPDM RUBBER
69	LINER	AISI 304 STAINLESS STEEL X5 CrNi 1810 UNI 6900/71
95	OR RING	EPDM RUBBER
96	SUCTION BODY	CAST IRON 200 UNI ISO 185
97	DELIVERY BODY	CAST IRON 200 UNI ISO 185
98	DIFFUSER BODY	TECHNOPOLYMER B



# 1 KV AD 3 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 7.2 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>.  
Curve tolerance according to ISO 9906.

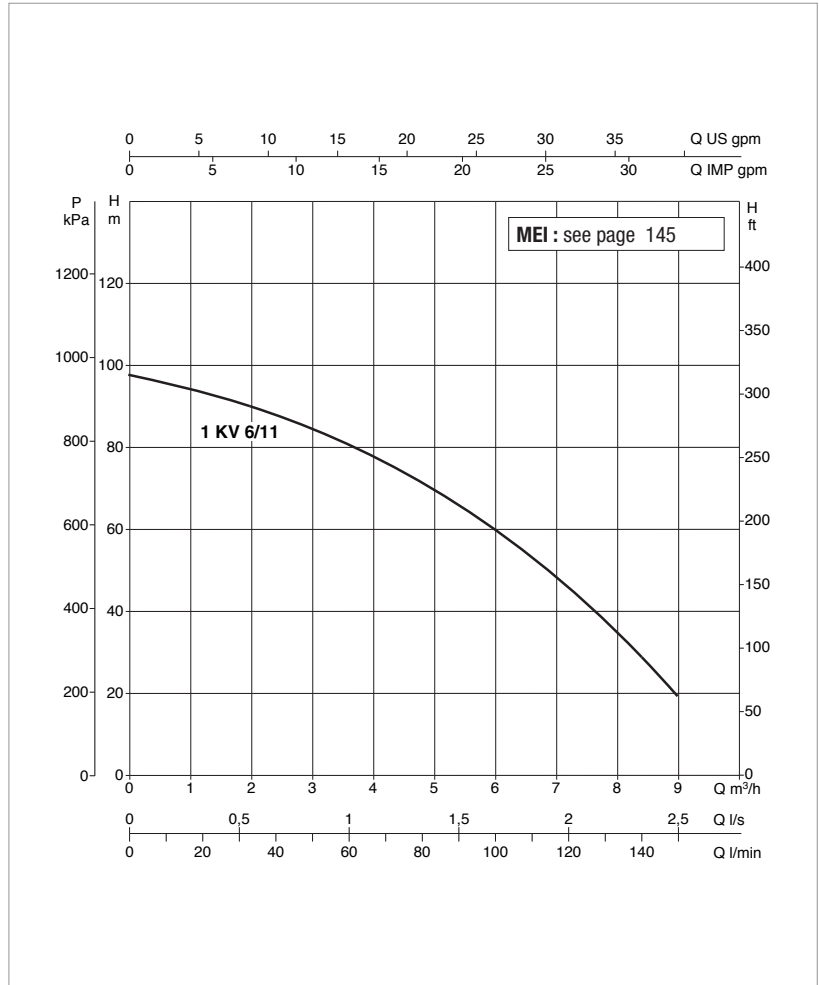
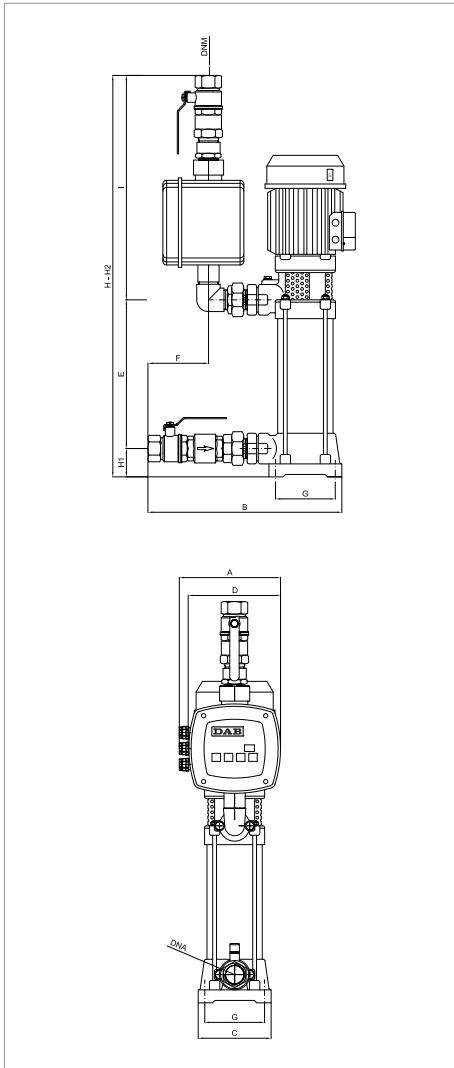
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
<b>1 KV A.D. 3/12 M</b>	1x230	1,5	2	8,5	A.D. M/T 2,2	7,2	10,5	6,5

MODEL	A	B	C	D	E	F	G	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
														L/A	L/B	H		
<b>1 KV A.D. 3/12 M</b>	215	412	155	195	476	130	127	1016	60	1016	480	1"¼	1"¼	850	610	895	0,5	38

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

# 1 KV AD 6 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 8.4 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.

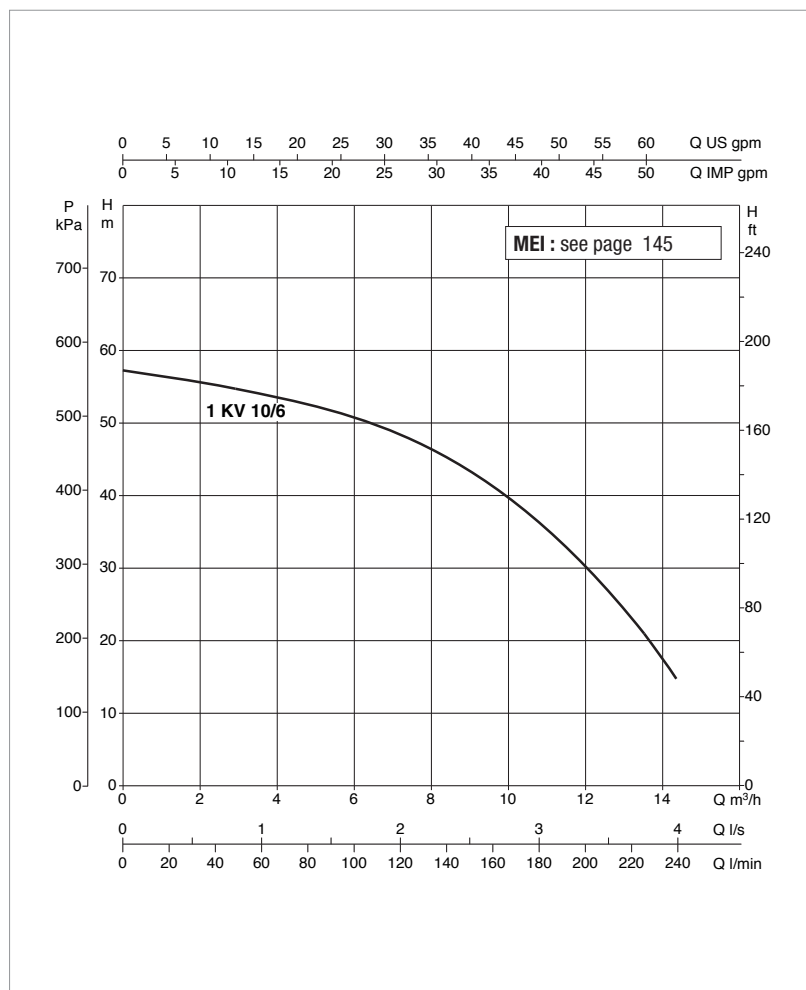
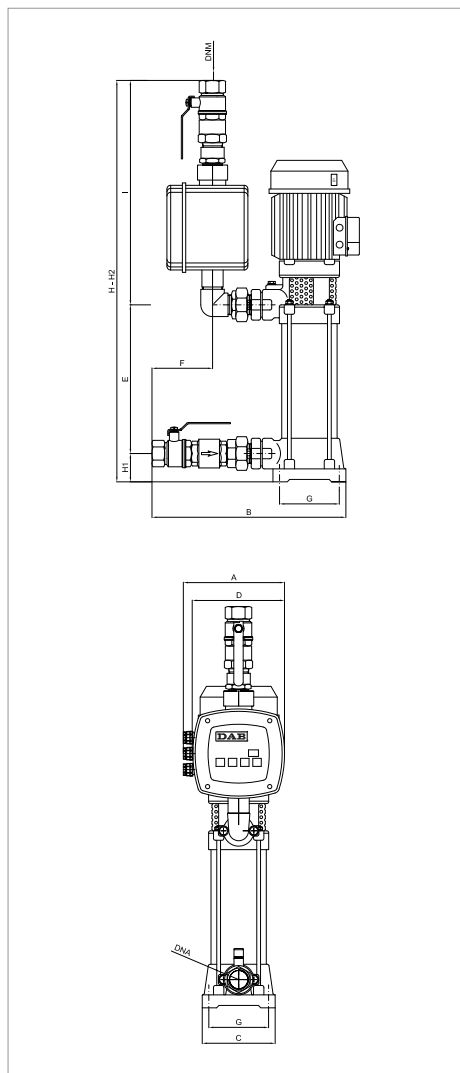
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m³/h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
<b>1 KV A.D. 6/11 M</b>	1x230	1,85	2,5	9,5	A.D. M/T 2,2	8,4	9,8	5,5

MODEL	A	B	C	D	E	F	G	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
														L/A	L/B	H		
<b>1 KV A.D. 6/11 M</b>	215	412	155	195	444	130	127	984	60	984	480	1"¼	1"¼	850	610	895	0,5	41

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

# 1 KV AD 10 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 13.8 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>.  
Curve tolerance according to ISO 9906.

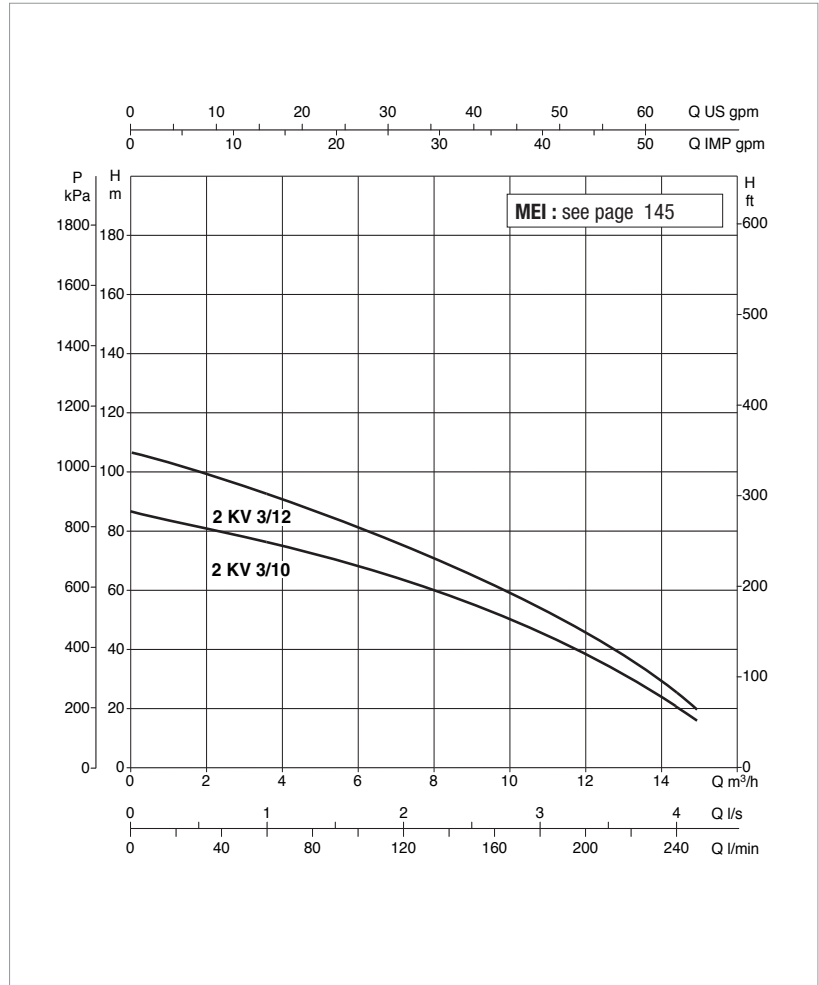
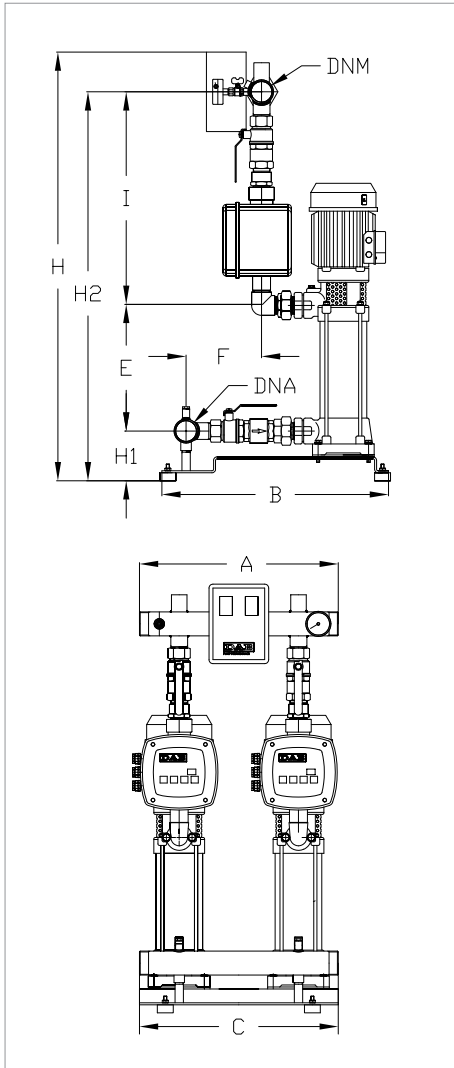
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
<b>1 KV A.D. 10/6 M</b>	1x230	1,85	2,5	9,5	A.D. M/T 2,2	13,8	5,7	4,5

MODEL	A	B	C	D	E	F	G	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
														L/A	L/B	H		
<b>1 KV A.D. 10/6 M</b>	215	412	155	195	284	130	127	984	60	824	480	1"¼	1"¼	850	610	895	0,5	41

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

## 2 KV AD 3 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 14.4 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.** The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

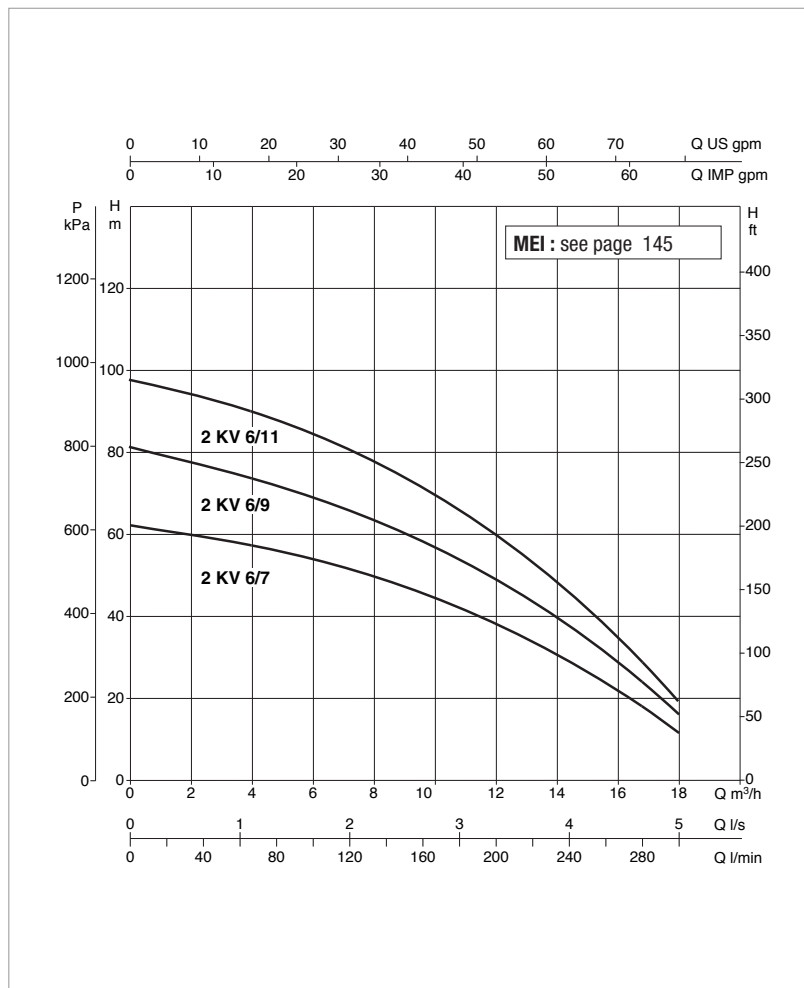
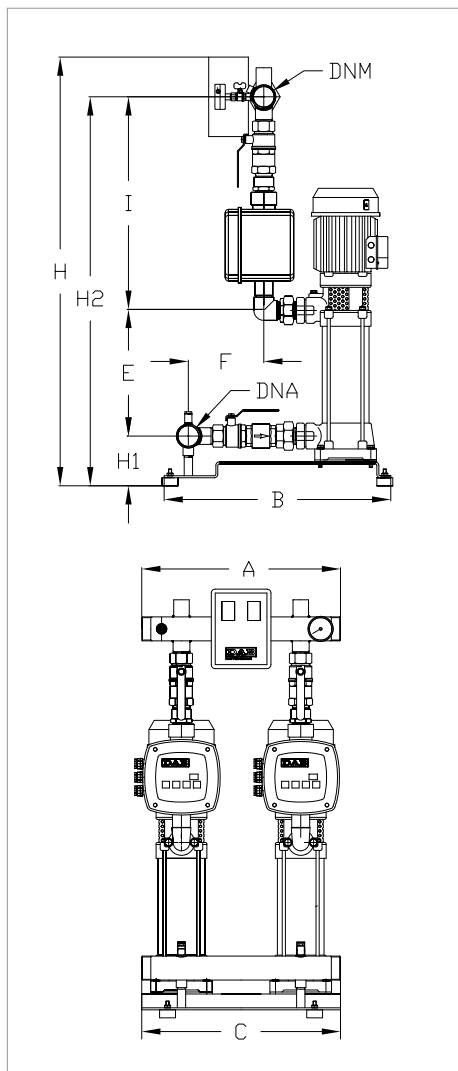
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m³/h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
2 KV A.D. 3/10 T / N	3x400+N	2x1,1	2x1,5	2x7,3	A.D. MT 2,2	14,4	8,8	6,5
2 KV A.D. 3/12 T / N	3x400+N	2x1,5	2x2	2x8,3	A.D. MT 2,2	14,4	10,5	8,5

MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
												L/A	L/B	H		
2 KV A.D. 3/10 T / N	500	570	500	412	190	967	125	947	535	2"	2"	1000	610	1280	0,8	78
2 KV A.D. 3/12 T / N	500	570	500	476	190	1031	125	1011	535	2"	2"	1000	610	1280	0,8	86,5

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

## 2 KV AD 6 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 17 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>.  
Curve tolerance according to ISO 9906. **Overall performance taking into account TWO pumps working at the same time.**  
The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

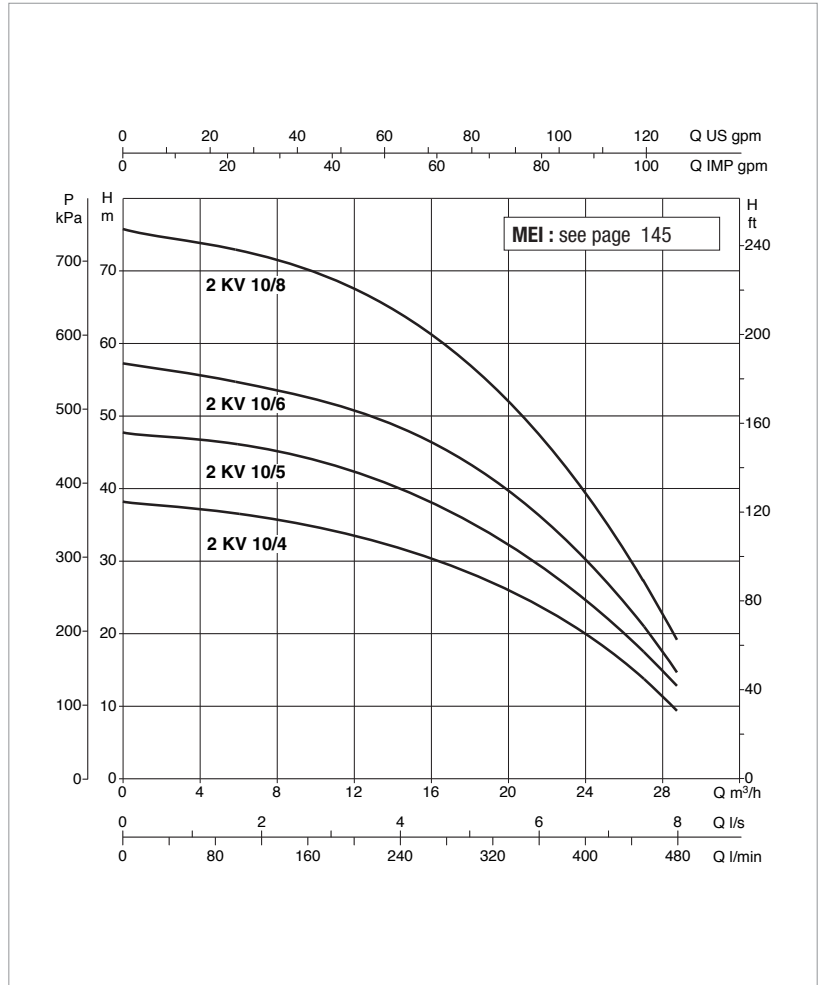
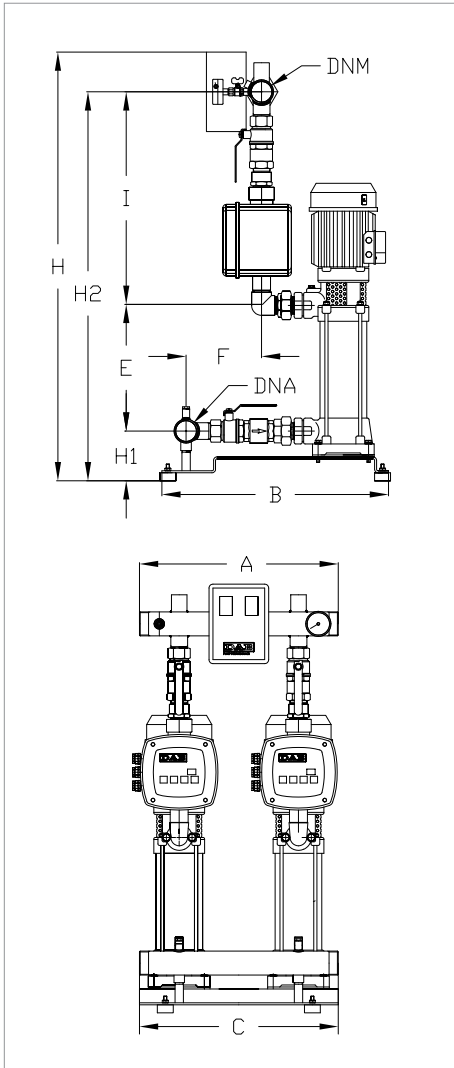
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
2 KV A.D. 6/7 T / N	3x400+N	2x1,1	2x1,5	2x7,3	A.D. MT 2,2	17	6,2	4
2 KV A.D. 6/9 T / N	3x400+N	2x1,5	2x2	2x8,3	A.D. MT 2,2	17	8	6
2 KV A.D. 6/11 T / N	3x400+N	2x1,85	2x2,5	2x9,5	A.D. MT 2,2	17	9,8	7

MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
												L/A	L/B	H		
2 KV A.D. 6/7 T / N	500	570	500	316	190	871	125	851	535	2"	2"	1000	610	1280	0,8	86,5
2 KV A.D. 6/9 T / N	500	570	500	380	190	935	125	915	535	2"	2"	1000	610	1280	0,8	87
2 KV A.D. 6/11 T / N	500	570	500	444	190	999	125	979	535	2"	2"	1000	610	1280	0,8	86,5

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

## 2 KV AD 10 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 27 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906. **Overall performance taking into account TWO pumps working at the same time.** The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

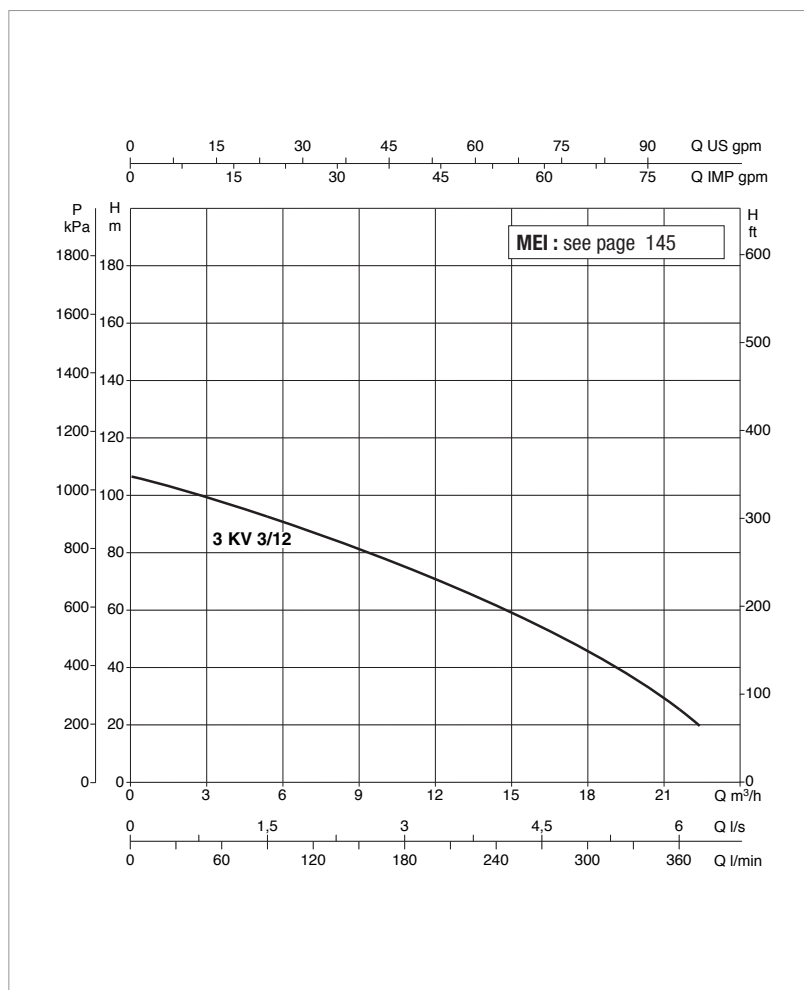
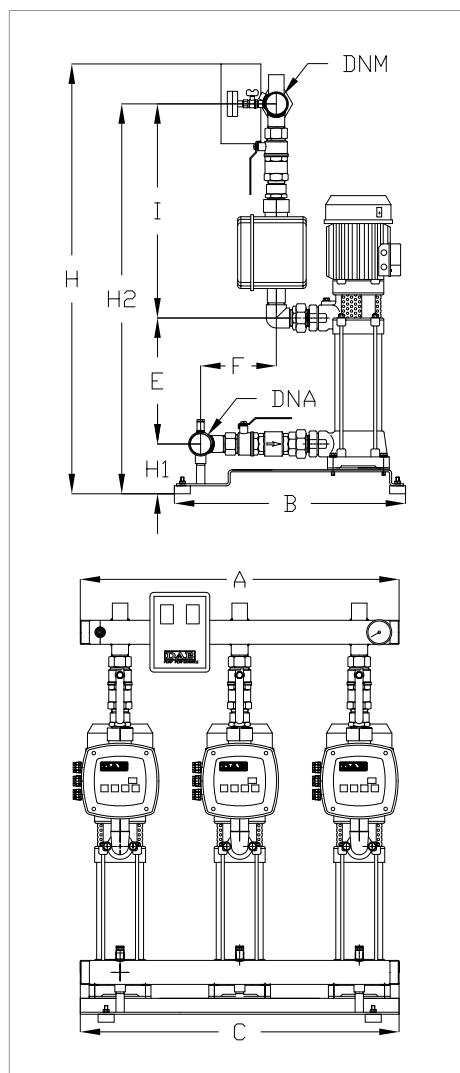
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		KW	HP					
2 KV A.D. 10/4 T / N	3x400+N	2x1,1	2x1,5	2x7,3	A.D. M/T 2,2	27	3,8	3
2 KV A.D. 10/5 T / N	3x400+N	2x1,5	2x2	2x8,3	A.D. M/T 2,2	27	4,8	4
2 KV A.D. 10/6 T / N	3x400+N	2x1,85	2x2,5	2x9,5	A.D. M/T 2,2	27	5,7	4,5
2 KV A.D. 10/8 T	3x400	2x2,2	2x3	2x8,8	A.D. T/T 3,0	27	7,6	6

MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
												L/A	L/B	H		
2 KV A.D. 10/4 T / N	500	570	500	220	190	775	125	755	535	2"	2"	1000	610	1280	0,8	87
2 KV A.D. 10/5 T / N	500	570	500	252	190	807	125	787	535	2"	2"	1000	610	1280	0,8	90
2 KV A.D. 10/6 T / N	500	570	500	284	190	839	125	819	535	2"	2"	1000	610	1280	0,8	93
2 KV A.D. 10/8 T	500	570	500	348	190	903	125	883	535	2"	2"	1000	610	1280	0,8	101

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

### 3 KV AD 3 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 21.5 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906. **Overall performance taking into account THREE pumps working at the same time.** The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
<b>3 KV A.D. 3/12 T / N</b>	3x400+N	3x1,5	3x2	3x8,3	A.D. M/T 2,2	21,5	7,2	6

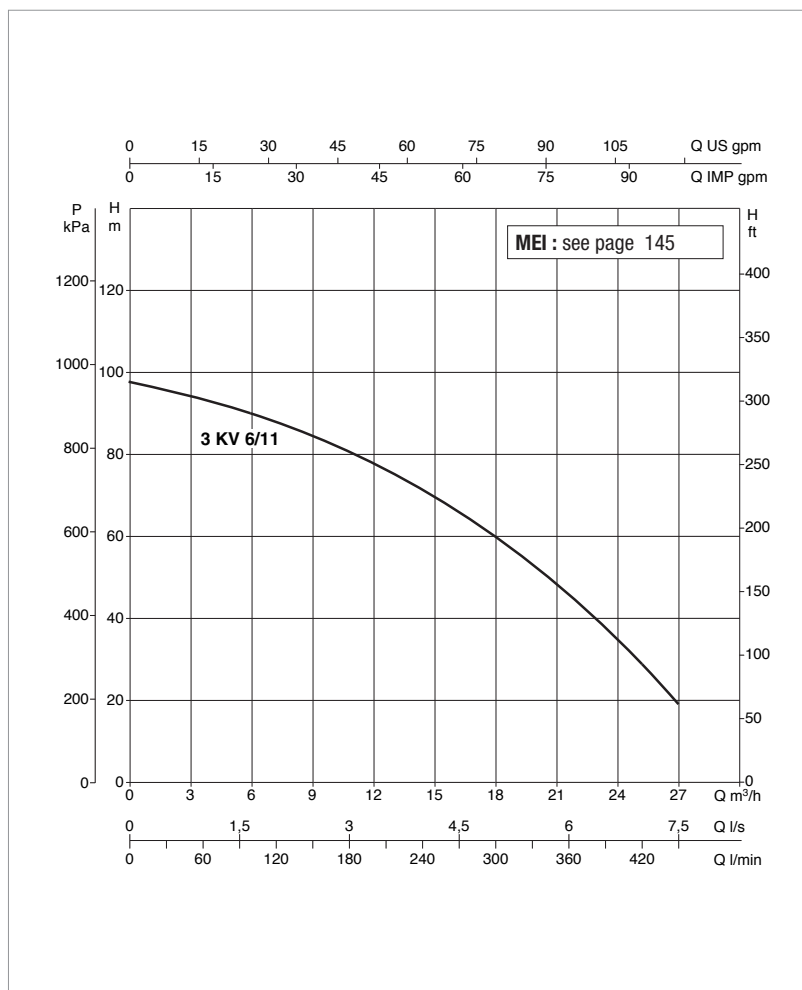
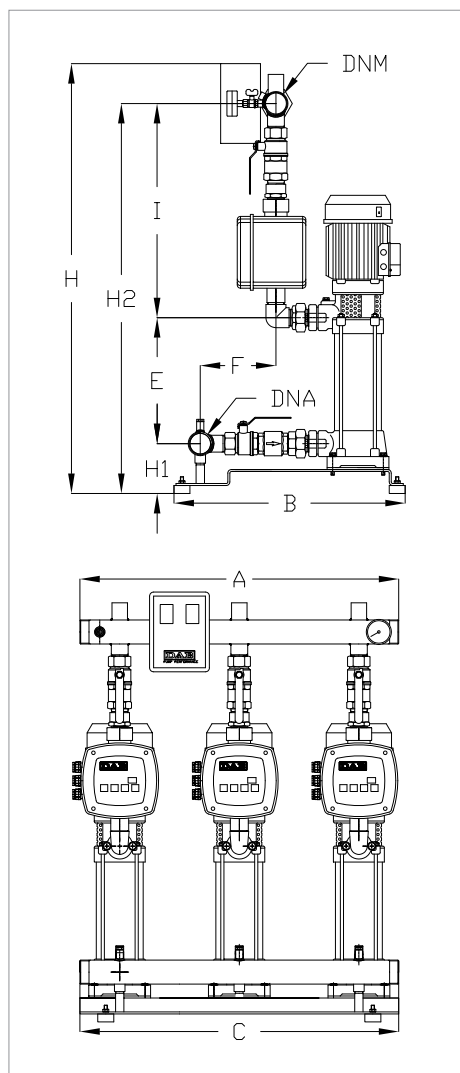
MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
												L/A	L/B	H		
<b>3 KV A.D. 3/12 T / N</b>	800	570	800	476	205	1056	130	1026	550	80	80	1150	888	1300	1,35	172

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



## 3 KV AD 6 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 25 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906. **Overall performance taking into account THREE pumps working at the same time.** The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

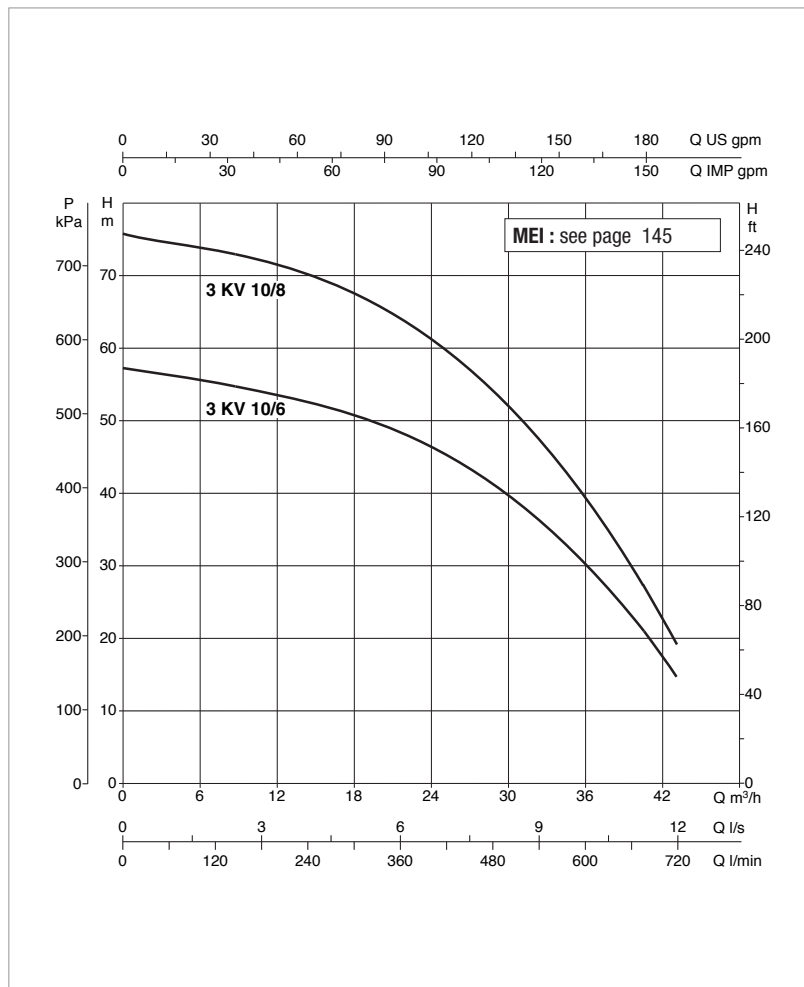
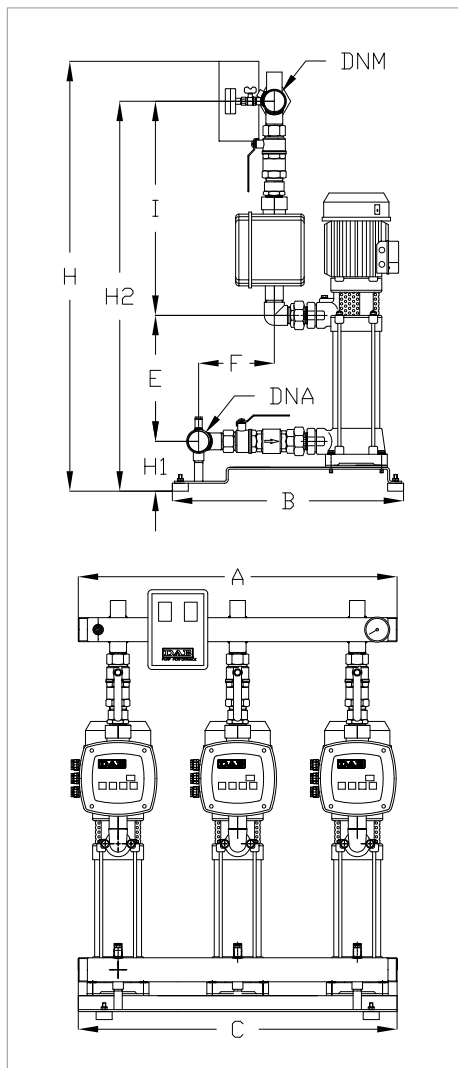
MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
3 KV A.D. 6/11 T / N	3x400+N	3x1,85	3x2,5	3x9,5	A.D. M/T 2,2	25	8,4	7,5

MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
												L/A	L/B	H		
3 KV A.D. 6/11 T / N	800	570	800	444	205	1024	130	994	550	80	80	1150	888	1300	1,35	173

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

### 3 KV AD 10 - DOMESTIC PRESSURE BOOSTER SETS

Pumped liquid temperature range: from 0 °C to +40 °C - Maximum ambient temperature: +40 °C - Max flow rate: 41 m<sup>3</sup>/h



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>.  
Curve tolerance according to ISO 9906. **Overall performance taking into account THREE pumps working at the same time.**  
The performance results of sets with smaller pumps are obtained through simple calibration of the Active Driver module.

MODEL	POWER INPUT 50 Hz	P2 NOMINAL		In A	INVERTER MODEL	MAX FLOW RATE m <sup>3</sup> /h	MAX OBTAINABLE PRESSURE	STANDARD PRESSURE
		kW	HP					
<b>3 KV A.D. 10/6 T / N</b>	3x400+N	3x1,85	3x2,5	3x9,5	A.D. M/T 2,2	41	5,7	4,5
<b>3KV A.D. 10/8 T</b>	3x400	3x2,2	3x3	3x8,8	A.D. T/T 3,0	41	7,6	6

MODEL	A	B	C	E	F	H	H1	H2	I	DNA	DNM	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
												L/A	L/B	H		
<b>3 KV A.D. 10/6 T / N</b>	800	570	800	284	205	864	130	834	550	80	80	1150	888	1300	1,35	178
<b>3KV A.D. 10/8 T</b>	800	570	800	348	205	928	130	898	550	80	80	1150	888	1300	1,35	194

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