ISTRUZIONI PER L'INSTALLAZIONE E LA MANUTENZIONE (IT)
INSTRUCTIONS DE MISE EN SERVICE ET D'ENTRETIEN (FR)
INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE (GB)
INSTALLATIONSANWEISUNG UND WARTUNG (DE)
INSTRUCTIES VOOR INGEBRUIKNAME EN ONDERHOUD (NL)
INSTRUCCIONES PARA LA INSTALACION Y EL MANTENIMIENTO (ES)
INSTALLATIONS - OCH UNDERHÅLLSANVISNING (SE)
KULLANIM VE BAKIM TALİMATLARI (TR)
ИНСТРУКЦИИ ПО МОНТАЖУ И ТЕХНИЧЕСКОМУ ОБСЛУЖИВАНИЮ (RU)
MONTAVIMO IR PRIEŽIŪROS INSTRUKCIJA (LT)
INSTRUCTIUNI PENTRU INSTALARE SI INTRETINERE (RO)
INSTRUÇÕES PARA A INSTALAÇÃO E A MANUTENÇÃO (PT)
ΟΔΗΓΙΕΣ ΓΙΑ ΤΗΝ ΕΓΚΑΤΑΣΤΑΣΗ ΚΑΙ ΣΥΝΤΗΡΗΣΗ (GR)
安装和维护说明
إرشادات للتركيب والعناية.
NÁVOD NA POUŽITÍ A ÚDRŽBU (CZ)
ASENNUS- JA HUOLTO-OHJEET (FI)
INSTRUKCJA MONTAŻU I KONSERWACJI (PL)
UPUTSTVO ZA RUKOVANJE (RS)
INSTALLÁCIÓS ÉS KARBANTARTÁSI UTASÍTÁS (HU)
ИНСТРУКЦИЯ ЗА ТЕХНИЧЕСКА ЕКСПЛОАТАЦИЯ (BG)
POKYNY K INŠTALÁCII A ÚDRŽBE (SK)
دفترچه راهنمای نصب و نگهداری پمپ ایزی باکس مینی
НСТРУКЦІЇ З МОНТАЖУ ТА ТЕХНІЧНОГО ОБСЛУГОВУВАННЯ (UA)

JET 151 – 251 – 200 – 300

DP – AQUADP

EURO – EUROINOX – EUROCOM – EUROCOM SP

GARDEN-INOX

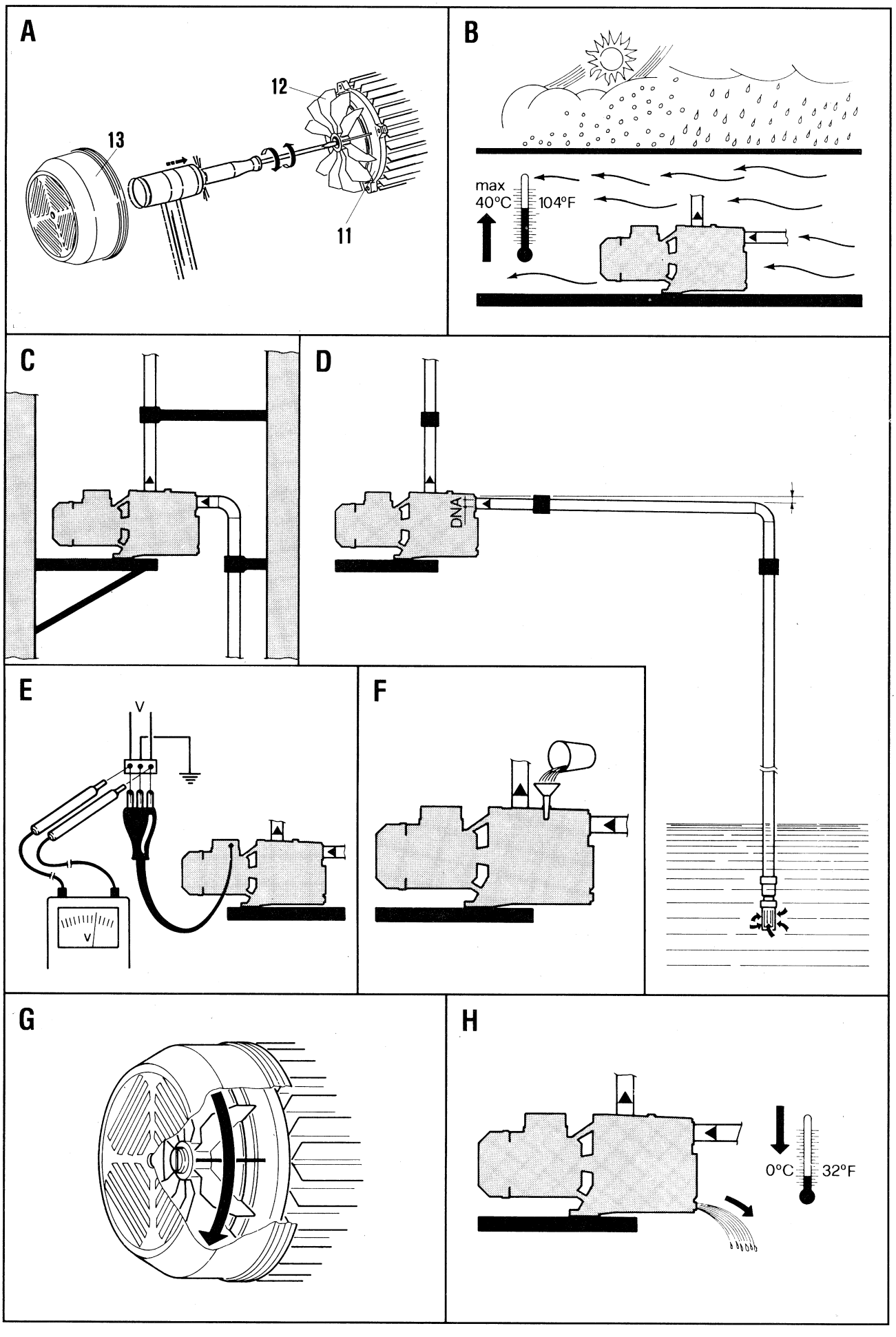
K

KP 60/6 – 60/12

KPA 40/20

CE

DAB WATER•TECHNOLOGY


A
12
13
11
B
max
40°C
104°F
C
D
DNA
E
V
V
F
G
H
0°C
32°F

JET 151 - JET 251
JET 200 - JET 300

DP 81 - DP 100
DP 82 - DP 102
DP 151 - DP 251

AQUADP 82/20 - AQUADP 102/20
AQUADP 151/40 - AQUADP 251/40

EURO 15/30 - EURO 20/50 - EURO 25/30 - EURO 30/30 - EURO 40/30
EURO 25/306 - EURO 30/306 - EURO 40/306

EUROINOX 15/30 - EUROINOX 20/50 - EUROINOX 25/30 - EUROINOX 30/30 EUROINOX 40/30
EUROINOX 25/306 - EUROINOX 30/306 EUROINOX 40/306

EUROCOM 25/30 - EUROCOM 30/30
EUROCOM 25/306 - EUROCOM 30/306

EURO 30/50 - EURO 40/50 - EURO 50/50
EURO 30/506 - EURO 40/506 - EURO 50/506

EUROINOX 30/50 - EUROINOX 40/50 - EUROINOX 50/50
EUROINOX 30/506 – EUROINOX 40/506 – EUROINOX 50/506

EUROCOM 30/50 - EUROCOM 40/50
EUROCOM 30/506 - EUROCOM 40/506

EURO 25/80 - EURO 30/80 - EURO 40/80
EURO 25/806 - EURO 30/806 - EURO 40/806

EUROINOX 25/80 - EUROINOX 30/80 - EUROINOX 40/80
EUROINOX 25/806 - EUROINOX 30/806 - EUROINOX 40/806

EUROCOM 25/80 - EUROCOM 30/80
EUROCOM 25/806 - EUROCOM 30/806

EUROCOM SP 30/50 - EUROCOM SP 40/50
EUROCOM SP 30/506 - EUROCOM SP 40/506

GARDEN-INOX 30/30 - GARDEN-INOX 40/50

K 20/41 - K 30/70 - K 30/100 - K 36/100
K 12/200 - K 14/400
K 35/40 - K 45/50 - K 55/50
KE 35/40 - KE 45/50 - KE - 55/50
K 35/100 - K 40/100

KP 60/6 - KP 60/12 - KPA 40/20

1. PUMPED FLUIDS

The machine has been designed and built for pumping water, free from explosive substances and solid particles or fibres, with a density of 1000 kg/m³ and a kinematic viscosity of 1 mm²/s, and chemically non-aggressive liquids.

2. TECHNICAL DATA AND RANGE OF USE

- **Supply voltage:** 220 - 240V 50Hz / 110V 50Hz
115V 60Hz / 230V 60Hz / 230 V3 – 400 V3 50/60Hz
115-127 V 60 Hz / 220-230V 60Hz / 220-277/380-480V 60Hz — see electrical data plate
- **Absorbed power:** see electrical data plate
- **Delivery:** from 0,06 to 37 m³/h
- **Head up – Hmax (m):** pag. 74
- **Pumped liquid:** clean, free from solid bodies or abrasive substances, non-aggressive.
- **Degree of motor protection:** IP44 (For IP55 see plate on package)
- **Degree of terminal board protection:** IP55
- **Protection class:** F
- **Cable clamp:** PG 11 and/or PG 13.5, depending on models
- **Storage temperature:** -10°C to 40°C — **Relative humidity of the air:** MAX. 95%
- **Liquid temperature range:** pag. 75 — **Maximun operating pressure:** pag. 75
- **Noise level:**
  - For pumps intended for outdoor use: noise emission according to Directive 2000/14/CE.
  - For other pumps: noise emission according to Directive EC 89/392/CEE and subsequent amendments.
- **Motor construction:** in conformity with standards CEI 2-3 - CEI 61-69 (EN 60335-2-41).
- **The leads of the supply cables must have a rated section no smaller than that illustrated in the following table:**

Rated current of the appliance A			Rated section mm²
		≤ 0,2	Flat twin tinsel cord [a]
> 0,2	and	≤ 3	0,5 [a]
> 3	and	≤ 6	0,75
> 6	and	≤ 10	1,0 (0,75) [b]
> 10	and	≤ 16	1,5 (1,0) [b]
> 16	and	≤ 25	2,5
> 25	and	≤ 32	4
> 32	and	≤ 40	6
> 40	and	≤ 63	10

a These cables may be used only if their length does not exceed 2 m between the point in which the cable or its sheath enters the appliance and its entry in the plug.

b The cables with the sections indicated in brackets may be used for **mobile appliances** if their length does not exceed 2 m.

3. MANAGEMENT

3.1 Storage

All the pumps must be stored indoors, in a dry, vibration-free and dust-free environment, possibly with constant air humidity.
They are supplied in their original packaging and must remain there until the time of installation. If this is not possible, the intake and delivery aperture must be accurately closed.

3.2 Transport

Avoid subjecting the products to needless jolts or collisions.
To lift and transport the unit, use lifting equipment and the pallet supplied standard (if applicable).

3.3 Weights

The adhesive label on the package indicates the total weight of the electropump.

3.4 Checking motor shaft rotation

Before installing the pump you must check that the rotating parts turn freely. For this purpose remove the fan cover from its seat in the motor end cover. Insert a screwdriver in the notch on the motor shaft from the ventilation side. If there is a blockage, turn the screwdriver, tapping it gently with a hammer. **FIG. A**

4. INSTALLATION

The pumps may contain small quantities of residual water from testing.
We advise flushing them briefly with clean water before their final installation.

4.1 The electropump must be fitted in a well ventilated place, protected from unfavourable weather conditions and with an environment temperature not exceeding 40°C. **Fig.B**

4.2 A firm anchoring of the pump to the bearing surface favours the absorption of any vibrations caused by pump operation. **Fig. C**

4.3 Ensure that the metal pipes do not exert undue strain on the apertures, thus preventing deformations or breakages. **Fig. C**

4.4 The lifting and carrying handle **must always be present and well fixed to the support** on all pumps produced in the portable version.

4.5 Pumps that are to be used in fountains for outdoor use, in garden ponds and similar places, must be fed by means of a circuit equipped with a differential current device, the rated operating differential current of which is not higher than 30 mA.

5. ELECTRICAL CONNECTION

Caution! always follow the safety regulations.

Scrupulously follow the wiring diagrams inside the terminal board box.

5.1 In fixed installations, International Safety Standards require the use of isolating switches with a fuse-carrier base.

5.2 Single-phase motors are provided with built-in thermal overload protection and may be connected directly to the mains. Three-phase motors must be protected with an automatic switch (e.g. overload protection) set at the values on the electropump data plate.

5.3 In the power mains there must be a device that ensures complete disconnection in overvoltage category III conditions.

6. STARTING UP

6.1

Do not start the pump unless it has been completely filled with fluid.

Before starting up, check that the pump is properly primed; fill it completely with clean water by means of the hole provided after having removed the filler cap on the pump body **(Fig. F). Dry operation causes irreparable damage to the mechanical seal.** The filling cap must then be screwed back on carefully.

6.2 Switch on the power and check, on the three-phase version, that the motor is turning in the correct direction; this should be in a clockwise direction, looking at the motor from the impeller side. **Fig. G** If it is turning in the wrong direction, invert the connections of any two wires on the terminal board, after having disconnected the pump from the power mains.

7. PRECAUTIONS

7.1 The electropump should not be started more than 20 times in one hour so as not to subject the motor to excessive thermal shock.

7.2 When starting after long periods of inactivity, the starting-up operations listed above must be repeated.

7.3 It is always good practice to place the pump as close as possible to the liquid to be pumped (Fig.I - Pag.74)

8. MAINTENANCE AND CLEANING

The electropump must not be dismantled unless by skilled personnel in possession of the qualifications required by the regulations in force. In any case, all repairs and maintenance jobs must be carried out only after having disconnected the pump from the power mains.

9. MODIFICATIONS AND SPARE PARTS

Any modification not authorized beforehand relieves the manufacturer of all responsibility.

In the event of damage to the power cable of this appliance, the repair must be carried out by skilled personnel, in order to prevent all risks.

9.1 Removal and replacement of the supply cable

Before starting, ensure that the electropump is not connected to the power network.

For versions without a pressure switch: Remove the condenser cover, unscrewing the four screws on it. Unscrew the three terminals L - N - ⏚ and disconnect the brown lead, the blue lead and the yellow-green lead, coming from the supply cable, after having slackened the grommet.

Version with a TELEMECANIQUE / SQUARE D – TELEMECANIQUE / ITALTECNICA pressure switch:

- **Section of cable with plug from the pressure switch:** unscrew the screw from the cover of the pressure switch using a screwdriver and remove the cover, releasing it from the base of the pressure switch. Slip out the yellow-green lead, unscrewing the earth screw on the left side. Still on the same side, slip the blue lead and the brown lead off their terminals, slackening the screws on the terminals. Slacken the cable clamping nut of the pressure switch on the left side and slip off the cable which is now disconnected.
- **Section of cable from the pressure switch to the terminal board:** unscrew the nut on the cover of the pressure switch using a screwdriver and remove the cover, releasing it from the base of the pressure switch. Slip out the yellow-green lead, unscrewing the earth screw on the right side. Still on the same side, slip the blue lead and the brown lead off their terminals, slackening the screws on the terminals. Slacken the cable clamping nut of the pressure switch on the right side and slip off the cable which is now disconnected. Remove the terminal board

cover, unscrewing the four screws on it. Unscrew the three terminals L - N - ⏚ and disconnect the brown lead, the blue lead and the yellow-green lead, coming from the supply pressure switch, after having slackened the grommet.

When replacing the power cable, a cable of the same type must be used (e.g. H05 RN-F or H07 RN-F depending on the installation) and with the same terminals, proceeding as for disassembly in inverse order.

ATTENTION: depending on the installation and if the pumps have no cable, fit supply cables type H05 RN-F for indoor use and type H07 RN-F for outdoor use, complete with plug (EN 60335-2-41). For power cables without a plug, provide a device for cutting off the mains (e.g. magnetothermal device) with separating contacts of at least 3 mm for each pole.

10. TROUBLESHOOTING

FAUL	CHECKS (possible cause)	REMEDY
1. The motor does not start and makes no noise.	A. Check the electric connections. B. Check that the motor is live. C. Check the protection fuses.	C. If they are burnt-out, change them. **N.B.** If the fault is repeated immediately this means that the motor is short circuiting.
2. The motor does not start but makes noise.	A. Ensure that the mains voltage is the same as the value on the plate. B. Ensure that the connections have been made correctly. C. Check that all the phases are present on the terminal board. (3~) D. Look for possible blockages in the pump or motor. E. Check the condition of the capacitor.	B. Correct any errors. C. If not, restore the missing phase. D. Remove the blockage. E. Replace the capacitor.
3. The motor turns with difficulty.	A. Check the voltage which may be insufficient. B. Check whether any moving parts are scraping against fixed parts.	B. Eliminate the cause of the scraping.
4. The pump does not deliver.	A. The pump has not been primed correctly. B. On three-phase motors, check that the direction of rotation is correct. C. The diameter of the intake pipe is insufficient. D. Blocked foot valve.	B. If necessary, invert the connection of two supply wires C. Replace the pipe with one with a larger diameter. D. Clean the foot valve.
5. The pump does not prime.	A. The intake pipe or the foot valve is taking in air. B. The downward slope of the intake pipe favours the formation of air pockets.	A. Eliminate the phenomenon and prime again. B. Correct the inclination of the intake pipe.
6. The pump supplies insufficient flow.	A. Blocked foot valve. B. The impeller is worn or blocked. C. The diameter of the intake pipe is insufficient. D. On three-phase motors, check that the direction of rotation is correct.	A. Clean the foot valve. B. Remove the obstructions or replace the worn parts. C. Replace the pipe with one with a larger diameter. D. If necessary, invert the connection of two supply wires.
7. The pump vibrates and operates noisily.	A. Check that the pump and the pipes are firmly anchored. B. There is cavitation in the pump, that is the demand for water is higher than it is able to pump. C. The pump is running above its plate characteristics.	A. Fix the loose parts more carefully. B. Reduce the intake height or check for load losses. C. It may be useful to limit the flow at delivery.

Modello / Modèle / Model Modell / Model /Modelo / Modell Model / Модель / Μοντέλο نموذج /Malli / Model / Model / Modell / مدل	Prevalenza / Hauteur d'élévation / Head up Förderhöhe / Overwicht / Prevalencia Maximal pumphöjd / Manometrik yükseklik / Напор Μανομετρικό / التفوق / Nostokorkeus / Wysokość ciśnienia / Napor / Emelési magasság / ارتفاع پمپاژ	
	Hmax (m.) 2 poles 50 Hz	*Hmax (m.) 2 poles 60 Hz*
JET 200	46.5	42.3
JET 300	51	52
JET 151	61	62
JET 251	62	63
EURO 15/30	24.3	
EURO 20/50	28.5	
EURO 25/30 – 25/306	34.4	35.9
EURO 30/30 – 30/306	46	48.2
EURO 40/30 – 40/306	57	58.8
EURO 30/50 – 30/506	42.2	38.8
EURO 40/50 – 40/506	57.7	55
EURO 50/50 – 50/506	72	66.1
EURO 25/80 – 25/806	34	35.8
EURO 30/80 – 30/806	47.3	49.5
EURO 40/80 – 40/806	59	62
EUROINOX 15/30	24.3	
EUROINOX 20/50	28.5	
EUROINOX 25/30 – 25/306	35	35.9
EUROINOX 30/30 – 30/306	46	49
EUROINOX 40/30 – 40/306	57	58.8
EUROINOX 30/50 – 30/506	42.2	38.8
EUROINOX 40/50 – 40/506	58	54
EUROINOX 50/50 – 50/506	72	66
EUROINOX 25/80 – 25/806	34	37
EUROINOX 30/80 – 30/806	47.3	52
EUROINOX 40/80 – 40/806	59	60
EUROCOM 25/30 – 25/306	34.4	35.9
EUROCOM 30/30 – 30/306	46	48
EUROCOM 30/50 – 30/506	42.2	38.8
EUROCOM 40/50 – 40/506	57.7	54
EUROCOM 25/80 – 25/806	34	35.8
EUROCOM 30/80 – 30/806	47.3	49.2
EUROCOM SP 30/50 – 30/506	42.2	38.8
EUROCOM SP 40/50 – 40/506	57.7	53.8
GARDEN-INOX 30/30	46	
GARDEN-INOX 40/50	57.7	
K 20/41	22	24.1
K 30/70	32.5	33
K 30/100	29.2	30.8
K 36/100	34.9	36.4
K 12/200	18.4	19.2
K 14/400	19	18.5
K 35/40	44	44.4
K 45/50	51	53.5
K 55/50	62	60

Modello / Modèle / Model Modell / Model /Modelo / Modell Model / Модель / Μοντέλο / Malli / Model / Model / Modell / مدل	Prevalenza / Hauteur d'élévation / Head up Förderhöhe / Overwicht / Prevalencia Maximal pumphöjd / Manometrik yükseklik / Напор Μανομετρικό / Nostokorkeus / Wysokość ciśnienia / Napor / Emelési magasság / ارتفاع پمپاژ	
	Hmax (m.) 2 poles 50 Hz	*Hmax (m.) 2 poles 60 Hz*
K 35/100	38.5	37.5
K 40/100	44	46.2
KP 60/6	87	82
KP 60/12	107	103
KPA 40/20	56	
KE 35/40	44	44.4
KE 45/50	51	53.5
KE 55/50	62	60

Maximun operating pressure:	6 bar (600 kPa):	DP 81, DP 82, DP 100, DP 102, AQUADP 82/20, AQUADP 102/20 EURO, EUROINOX, EUROCOM, EUROCOM SP, GARDEN-INOX K 35/40, K 35/100, K 40/100, K 20/41, K 30/70, K 30/100, K 36/100, K 12/200, K 14/400, KE 35/40
	7,5 bar (750 kPa):	JET 151, JET 251, JET 200, JET 300 DP 151, DP 251, AQUADP 151/40, AQUADP 251/40
	8 bar (800 kPa):	K 45/50, K 55/50, KE 45/50, KE 55/50
	10 bar (1000 kPa):	KP 60/6, KP 60/12 KPA 40/20
Liquid temperature range:	0 ÷ +35°C:	For all homologated pumps EN 60335-2-41 (for domestic uses)
	0 ÷ +40°C:	JET 151, JET 251, JET 200, JET 300 DP 81, DP 82, DP 100, DP 102, DP 151, DP 251 AQUADP 82/20, AQUADP 102/20, AQUADP 151/40, AQUADP 251/40
	-10 ÷ +50°C:	K 20/41, K 30/70, K 30/100, K 36/100, K 12/200, K 35/40, K 45/50, K 35/100, K 40/100 KE 35/40, KE 45/50
	-10 ÷ +80°C:	KP 60/6, KP 60/12 KPA 40/20
	-15 ÷ +110°C:	K 14/400, K 55/50, KE 55/50

FIG. I