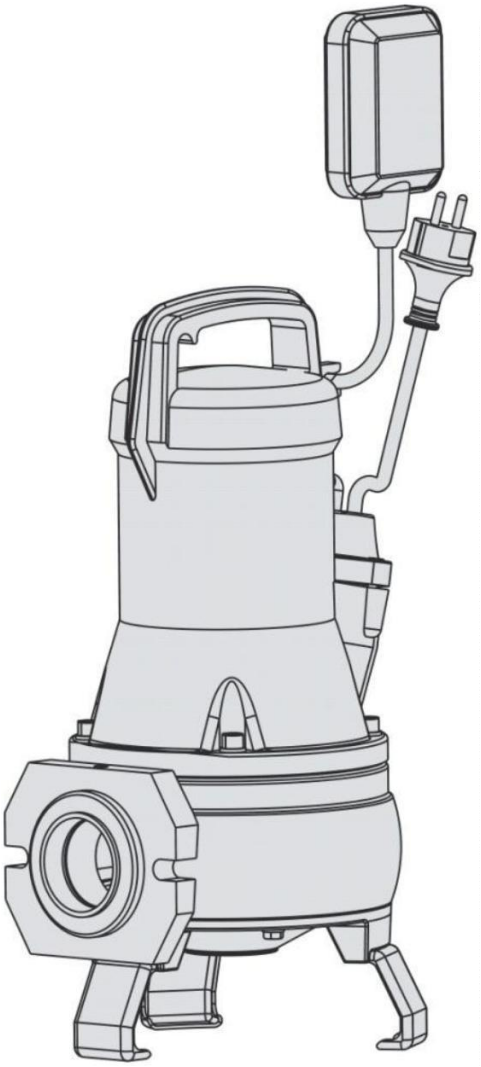
DRAINEX 200/300
DRAINCOR



EN Instruction manual
(Translation from the original Spanish)

EN: EVIDENCE OF CONFORMITY

We declare, under our responsibility, that the products in this manual comply with the following directives and standards:

- Directive 2006/42/EC (Machine Security):
Standard EN 809 and EN 60204-1
- Directive EMC 2014/30/EU (Electromagnetic compatibility):
Standard EN 61000-6-1 y EN 61000-6-3
- Directive 2014/35/EU (Low voltage):
Standard EN 60335-1, EN 60335-2-41
- Directive 2011/65/UE (Restriction of hazardous substances): Standard EN 50581.

UKCA CERTIFICATE OF CONFORMITY

EVIDENCE OF CONFORMITY

We declare, under our responsibility, that the products in this manual comply with the following directives and standards:

- Supply of Machinery (Safety) Regulations 2008: Standard BS 809 and BS 60204-1
- Electromagnetic Compatibility Regulations 2016: Standard BS 61000-6-1 and BS 61000-6-3.
- Electrical Equipment (Safety) Regulations 2016: Standard BS 60335-1 and BS 60335-2-41.
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. Standard BS 50581.

Banyoles, January 13th 2021



Josep Unyó (Technical Manager)
ESPA 2025, SL
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Girona - Spain

Damage prevention and safety instructions (See figure 5)

A	Warning! Observe limitations of use.
B	The name plate voltage must be the same as the mains voltage.
C	Connect the pump to the mains via an omnipolar switch with at least a 3 mm opening between contacts.
D	Install a high-sensitivity differential switch (0.03A) as extra protection against lethal electric shocks.
E	Connect the pump to the ground.
F	Use pump only within performance limits indicated on the name plate.
G	Be careful with hazardous liquids and environments.
H	Do not carry the pump by the power cable.
I	This apparatus may be used by children 8 years or older and persons with reduced physical, sensory or mental capacities, or lacking experience and knowledge, if they are supervised or receive adequate training on the safe use of the apparatus and understand the dangers. Children should not be allowed to play with the apparatus. Children should not perform the ordinary cleaning and maintenance tasks without supervision.
J	The pump should only be dismantled by authorized personnel.
K	Cut out power supply before servicing pump.
L	Caution! Avoid icing.

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Safety precautions

This symbol  together with one of the following words “Danger” or “Warning” indicates the risk level deriving from failure to observe the prescribed safety precautions:



DANGER

risk of electric shock

Warns that failure to observe the pre cautions involves a risk of electric shock.



DANGER

Warns that failure to observe the pre cautions involves a risk of damage to persons and/or things.



WARNING

Warns that failure to observe the pre cautions involves the risk of damaging the pump and/or the facility.

1. GENERAL INFORMATION

Please observe the following instructions to achieve the best pump performance possible and a trouble free installation.



Read these instructions before installing the pump.

Save them for future reference.

The DRAINEX models are used for the drainage of sewage water with particles in suspension, septic tanks, etc. Passage of particles in the DRAINEX 200 models = 45mm (MAX) and in the DRAINEX 300 models = 60mm (MAX).
The maximum water temperature is 35°C.
All pumps have been manufactured in top quality material, submitted to strict hydraulic and electric controls.



Correct pump operation is assured providing the instructions on electrical connection, installation and use are strictly adhered to.



Failure to adhere to the instructions can result in premature failure of the pump and voiding of the warranty.



The pump cannot be used in a swimming-pool while there are people bathing.



Do not put your hand or any object into the suction or discharge mouth, since the rotating impeller could cause serious injury or damage.

2. HANDLING

The pumps are supplied suitably packaged to prevent damage in transit. Before unpacking, check that the packaging has not been damaged or deformed,



Lift and handle the product with care and with the right tools.

3. INSTALLATION

3.1. Fixing

The pump must always be totally submerged which will provide it with the necessary cooling.
Ensure there is enough space for the free operation of the float switch (fig.3).



The pump must never be supported by the electric cable or the discharge line (fig.3).

3.2. Discharge pipe assembly

In cases in which the discharge run is lengthy or sinuous, we recommend using lines with a larger diameter than the discharge mouth, to avoid head loss due to friction as much as possible and to obtain the best hydraulic performance possible.

Install a check valve to the outlet of the pump and you will prevent pipe from emptying each time pump stops. The check valve must permit the passage of solids.
Ensure that the pipe is not bent and that is correctly secured to the outlet connection because, in addition to preventing the desired flow, proper pump operation will be hindered.

3.3. Electrical connection



The electrical installation must have an effective earth and comply with the national regulations in force.

The protection of the system will be based on a differential switch (Δfn = 30mA) in addition to a multi-pole isolator with a minimum 3 mm contact openings,

Pumps assembled with a starting control box or fitted with a capacitor are supplied ready for operation.

In the case of three-phase pumps the user must provide the protection system.

3.4. Pre-start checks



Ensure the voltage and frequency of the supply corresponds to the values indicated on the electrical data label.

Ensure that the pump is submerged as shown in Fig.3.

THIS PUMP MUST NEVER BE DRY RUN.

4. STARTING

If there is a line valve, open it completely.

Connect the electrical panel plug into a socket. If there is an appropriate level of water, the motor will immediately start up.
Check that the absorbed current is the same as marked on the name plate.
If the motor does not start or no water flows at the end of the line, try to find the anomaly using the troubleshooting guide in point 8.

In the case of three-phase pumps check that the turning direction corresponds to the direction marked by the arrow situated in the suction cone.

Contact with the rotating impeller may cause serious injury.

5. MAINTENANCE

Disconnect the pump from the mains before performing any operation whatsoever.

Under normal conditions these pumps require no special or planned maintenance.

During frosty periods, remember to drain the line.

If the pump is not going to be operated for a long period of time, it is recommended to remove the tank, clean it and store it in a dry, well ventilated place.

To unclog or clean the impeller, it is only necessary to raise the suction cone. To do this, unscrew the screws that fasten the legs. The cover assembly must come off as a whole (fig.4).

On the DRAINCOR, a 0.3 mm gauge must be used when refitting to align the turbine with the suction base (fig.4). For correct alignment of the turbine, refer to the screws “A” marked on that drawing.

ATTENTION: In the event of faults or damage occurring to the pump, repairs should only be carried out by an authorised service agent.

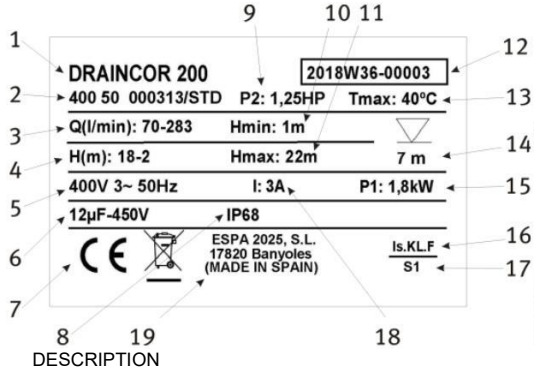
The Official Technical Services list is in www.espa.com.

6. DISPOSING OF THE PRODUCT

When the pump is eventually disposed of, please note that it contains no toxic or polluting material. All main components are material identified to allow selective disposal.

This product or parts of it must be disposed of in an environmentally sound way, use the waste collection service. If this is not possible, contact the nearest ESPA service workshop.

7. PLATE SHOWING CHARACTERISTICS



	DESCRIPTION
1	Item reference
2	Voltage + frequency + item specifications
3	Flow
4	Pressure
5	Nominal voltage, no. stages, alternate current symbol and frequency
6	Capacitor (Single-phase model)
7	EC mark
8	Humidity protection level
9	Motor max. nominal output (P2)
10	Minimum working pressure
11	Maximum pressure
12	Year and week of manufacture + Pump serial number
13	Max. liquid temperature
14	Max. immersed depth
15	Electric pump unit absorbed power (P1)
16	Designated motor insulation
17	Continuous operation symbol
18	Maximum nominal intensity at nominal voltage
19	Name and address of vendor responsible for the product

8. POSSIBLE FAULTS, CAUSES AND SOLUTIONS

1) The pump does not start.
2) Pump runs but there is no flow.
3) Pump stops automatically.
4) Pump does not deliver rated capacity.

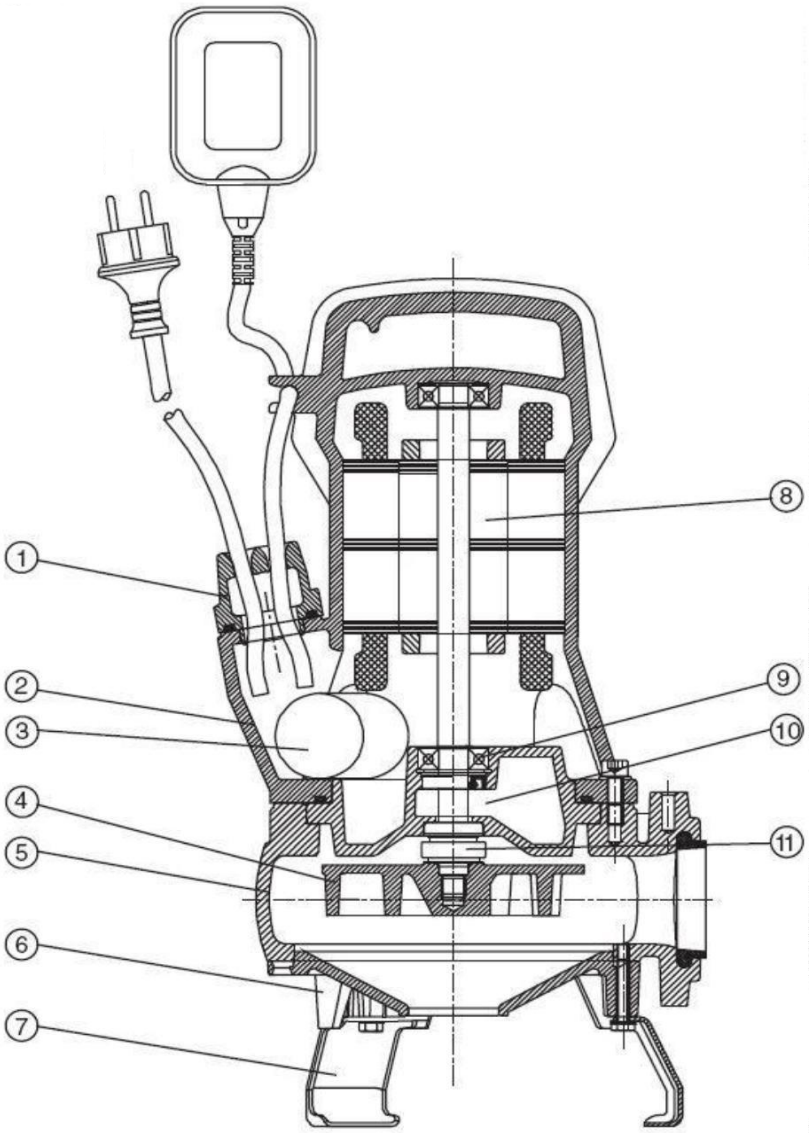
1	2	3	4	POSSIBLE PROBLEM	SOLUTIONS
X				Lack of electricity	Replace fuses or switch RCCB (30mA)
X		X		Improper thermal protection	Switch thermal protector or check that voltage is correct
X				Float switch disconnected	Wait for water level to be back to adequate level
X		X		Wet end blocked	Call Service Engineer
X				Blocked float switch	Check the free operation of the float switch
	X			Disconnected discharge pipe	Connect it and fix the discharge pipe correctly
	X			Air trapped at the pump body	Move the pump laterally to empty the air
	X			Check valve assembled way round	Assemble the valve correctly
	X			Pump partially covered of water	Submerge the pump or wait to have the suitable level
	X		X	Inlet filter obstructed	Clean the suction filter
			X	Total manometric head higher than expected	Check the geometric head and loss of head
			X	Impeller worn	Contact a Service Engineer
			X	Deteriorated discharge pipe	Replace it by a new one

9. TECHNICAL DATA

Liquid temperature… ..... 4ºC - 35ºC
Ambient temperature: ..... 0ºC - 40ºC
Storage temperature:..... -10ºC - 50ºC

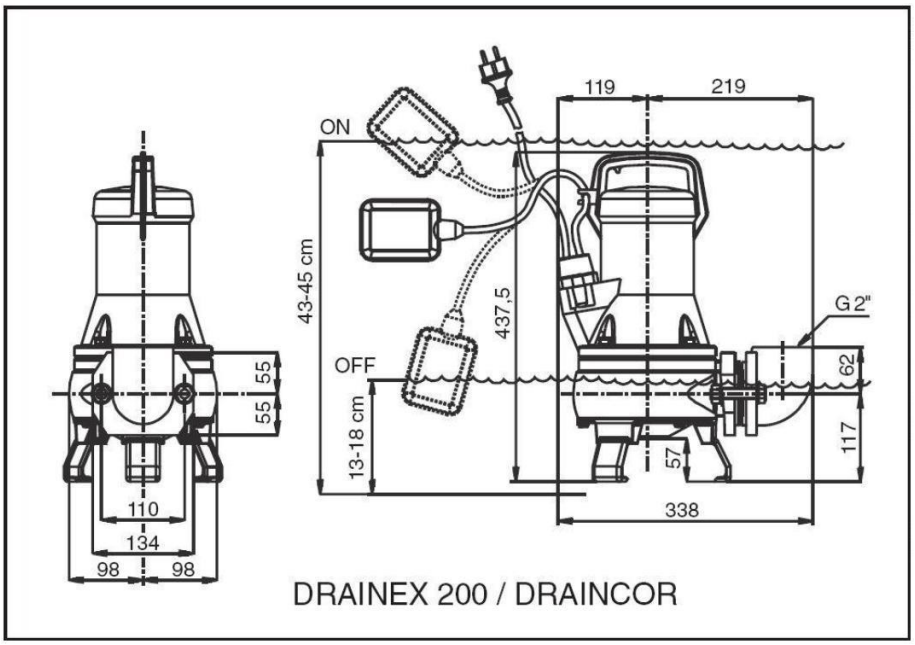
Ambient relative humidity, max.: 95%
Motor class I.
Other data see Figure 1.

EN List of main components

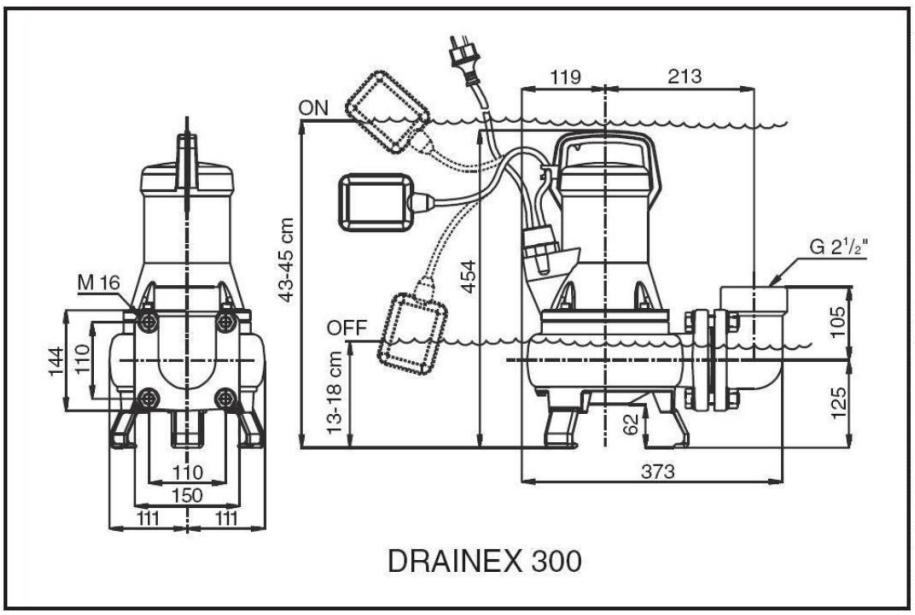


	EN
1	Cable
2	Motor casing
3	Capacitor
4	Impeller
5	Pump casing
6	Suction cover
7	Foot
8	Motor shaft
9	Bearing
10	Interstage casing
11	Mechanical seal

Fig.1



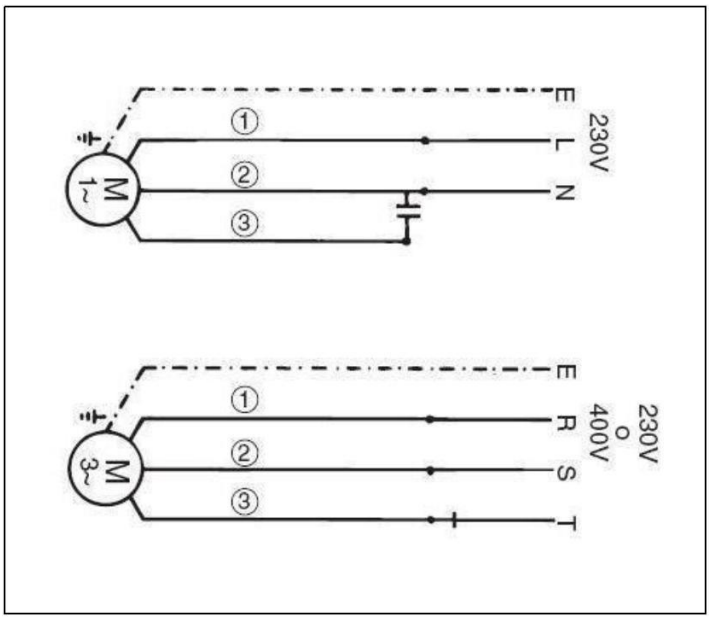
DRAINEX 200 / DRAINCOR



DRAINEX 300

	230 V 50 Hz	230/400 V	Q max. [l/min]	H max. [m]	A 1~ 230V	A 3~ 400V	C µF	P1 [kW]	IP	η(%)	Ø	⚖ [kg]
DRAINEX 200	√	√	400	12	5,2	2,3	16	1,1	68	35	2"	29
DRAINEX 201	√	√	450	14	6,2	2,6	16	1,4	68	36	2"	29
DRAINEX 202	√	√	516	16	7,4	2,8	16	1,6	68	37	2"	29
DRAINEX 300	√	√	570	8	5,5	2,4	16	1,2	68	25	2 1/2"	33,5
DRAINEX 301	√	√	640	10	6,8	2,7	16	1,5	68	28	2 1/2"	33,5
DRAINEX 302	√	√	700	12	7,8	3	16	1,8	68	32	2 1/2"	33,5
DRAINCOR 180	√	√	190	21	7,6	2,7	16	1,6	68	25	1 1/2"	30
DRAINXOR 200	-	√	290	22	-	3	-	1,8	68	30	1 1/2"	30

Fig.2



1. BLACK 2. BLUE 3. BROWN

Fig.3

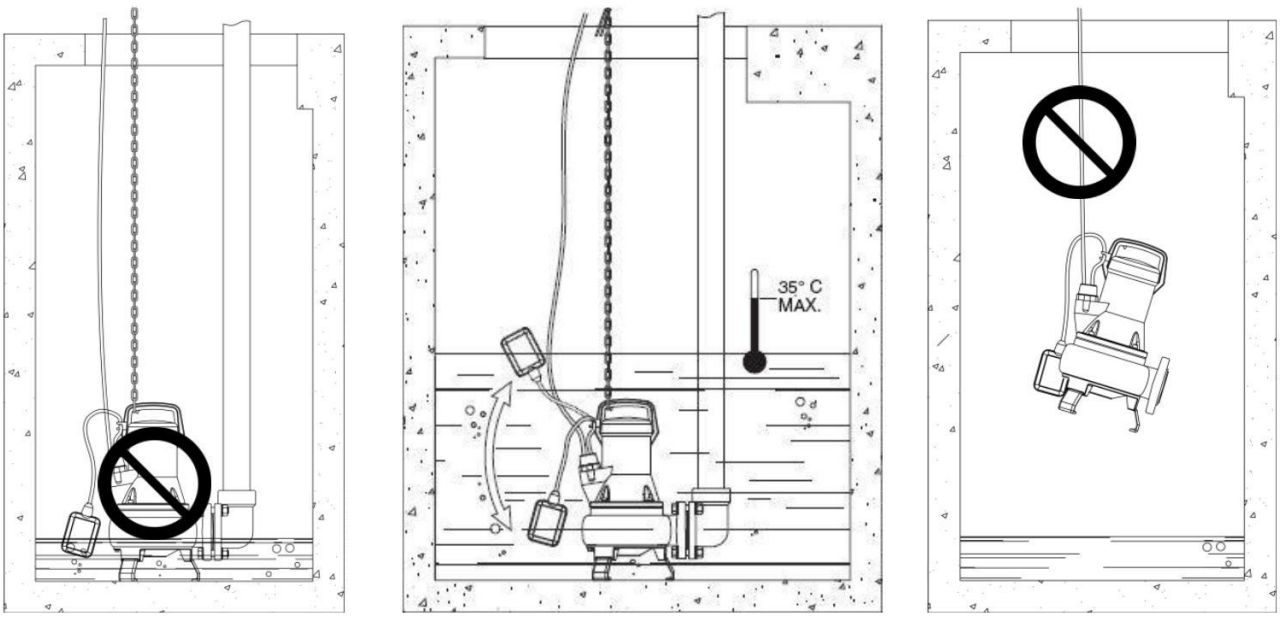


Fig.4

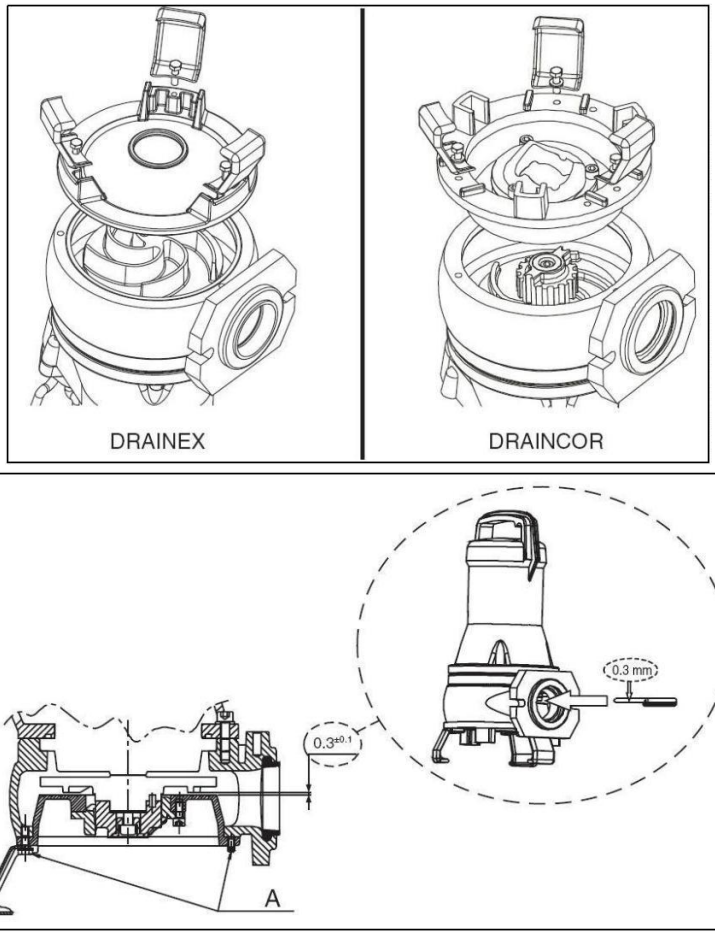
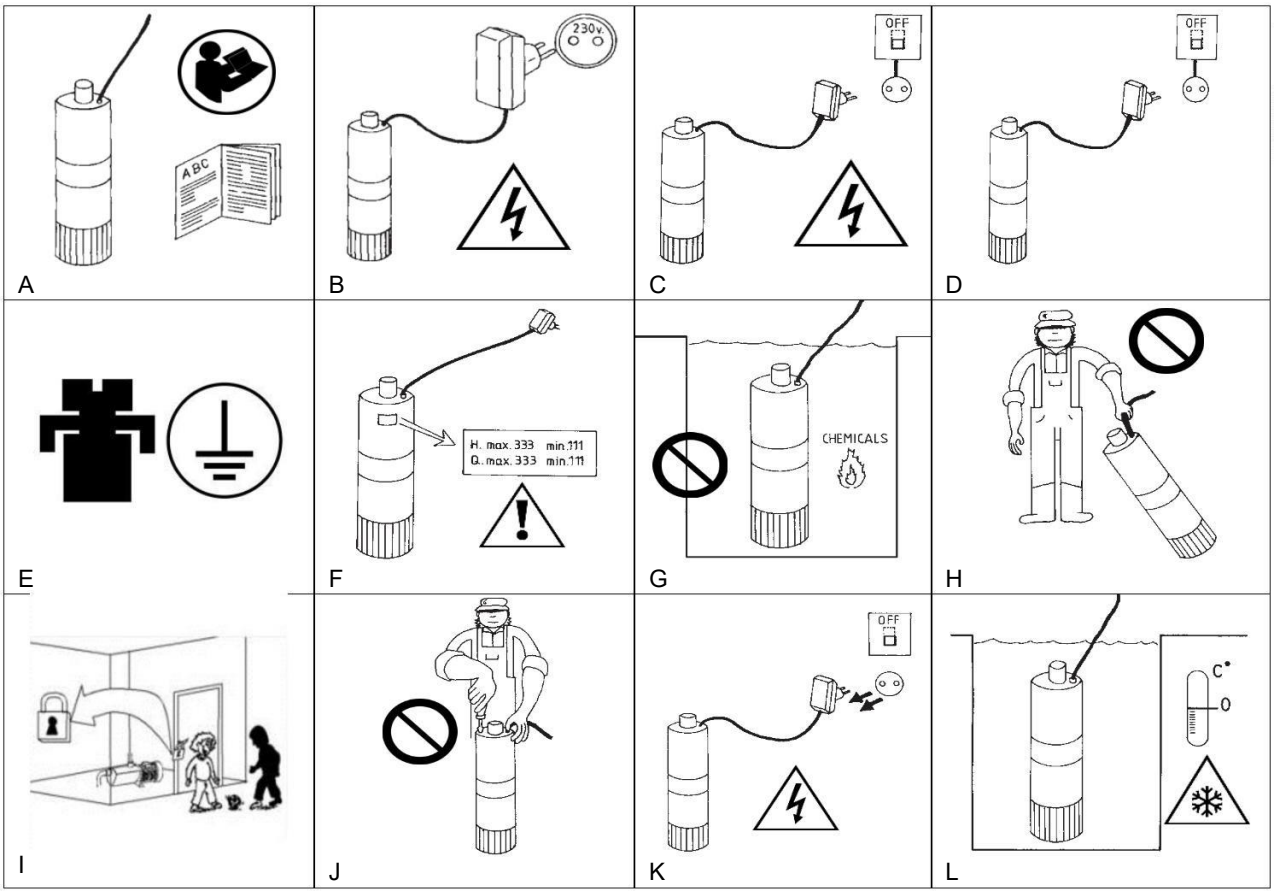

DRAINEX
DRAINCOR
0.3±0.1
0.3 mm
A

Fig. 5


A
B
230v
C
OFF
D
OFF
E
F
H. max. 333 min.111
Q. max. 333 min.111
G
CHEMICALS
H
I
J
K
OFF
L
C°
0

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