sesino

air - oil coolers

AIR - OIL coolers

RAS

range catalogue

WITH SELF CONTAINED PUMP and ELECTRIC JUNCTION BOX

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and distributor of Sesino SPA

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RAS SERIES AIR-OIL COOLERS
WITH SELF CONTAINED PUMP & ELECTRIC JUNCTION BOX

There are some applications where, because of the presence of high pressure peaks or extremely variable flow rates that can compromise the exchanger efficiency, it is not recommended to use a simple air-oil heat exchanger.

In such cases it is useful to feed the air-oil exchanger with an off-line pump, to make it independent from the primary oleo hydraulic plant. To satisfy this request, we have designed and realized the **self-contained cooling units type RAS.**

These exchangers consist of an air-oil heat exchanger and a double shaft electric motor that sets on an oil gear pump and a cooling fan.
Maximum allowable working pressure: 10 bar.
In order to make the assembling easier, the electric connection is carried though an electric junction box fixed on the frame of the cooling unit.

Upon request, we can supply the unit with an adjustable thermo switch with a thermo switch probe to be placed into the tank to cool.

Always upon request, we can supply an oil filter to connect to the pump in suction.

The efficiency diagrams show the heat quantity each cooling unit is able to dissipate kW according to the difference between the requested oil temperature and the summer room temperature.

RAS 1000

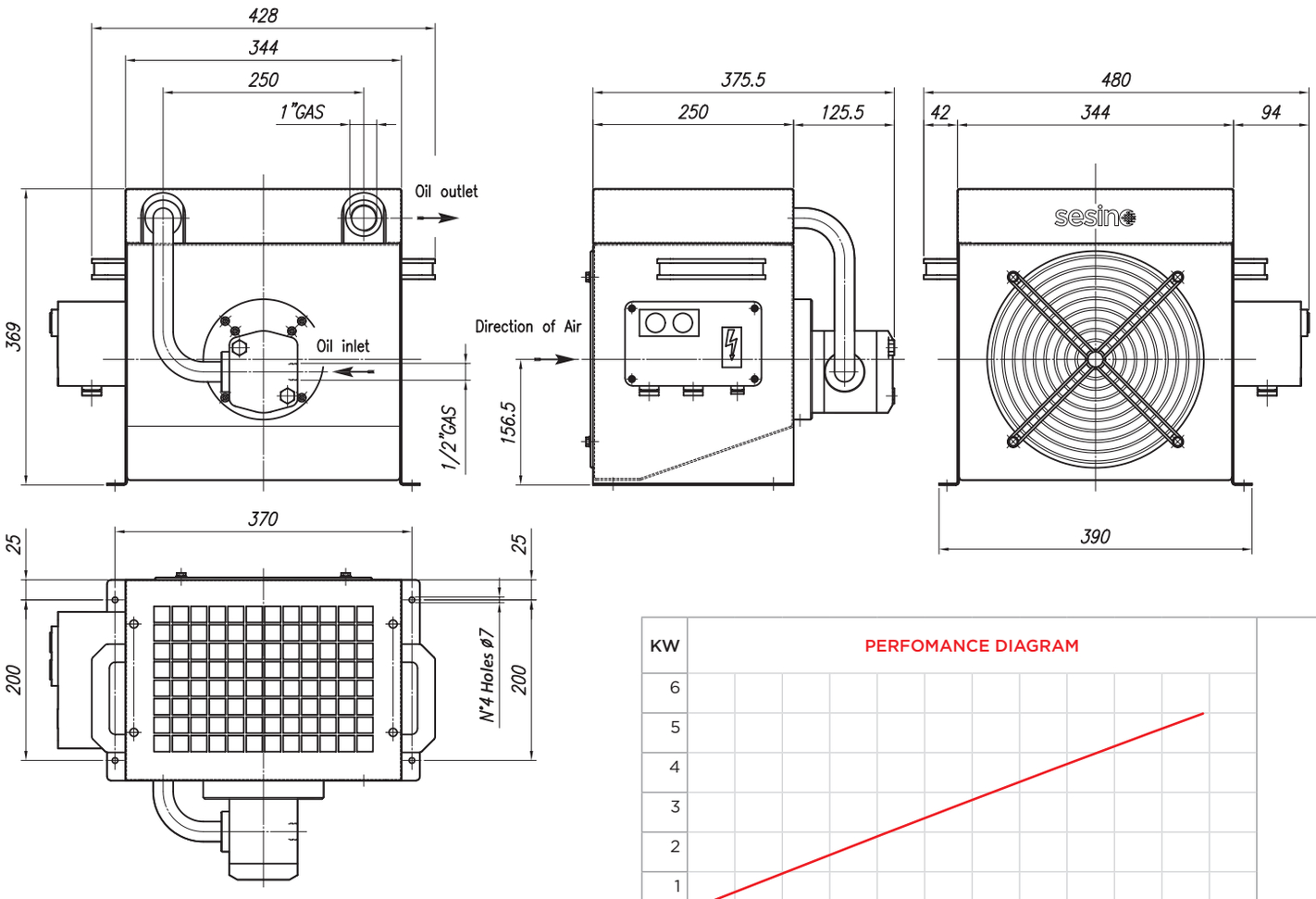
PURCHASE CODES

RAS 1000 without thermo-switch	**3RRAS1000**
RAS 1000 with thermo-switch	**3RRAS1000T**

SPARE PARTS

Electronic thermo-switch	1TRM RAS
2m thermo-switch probe	1SND RAS
4m thermo-switch probe	1SND ROC4M
Oil filter	1FTR MPS50
Electric junction box	1CSSDSAR336
Cooling element	1RO03378
Cooling element protection grill	3TLPRAS1000.1
Housing	3TLRAS1000.1
Fan	1GRAS1000
Fan grill	3RTRAS1000.1
Pump	1PORAS3000
Electric motor	1MRAS3000

- Dimensions and technical characteristics are not binding



OIL FLOW	VOLTAGE		HZ	POWER	CURRENT	ELECTRICAL PROTECTION	AIR FLOW	NOISE LEVEL	WEIGHT
l/min	Δ	Y		W	A	IP	m³/h	dB(A)	kg
13	220-240	380-420	50	550	2,80-1,60	55	850	68	18
13		440-480	60	640	2,80-1,60	55	850	68	18

RAS 3000

PURCHASE CODES

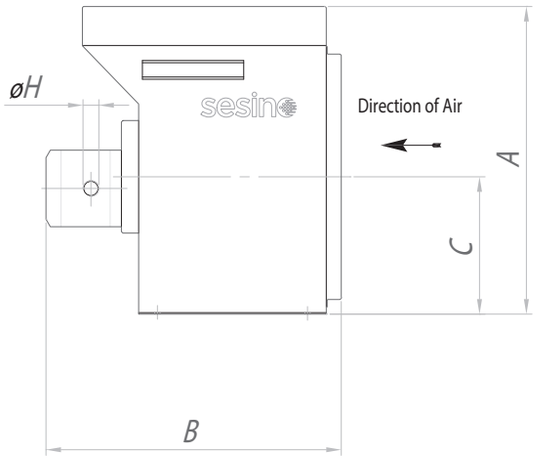
RAS 3000 without thermo-switch	**3RRAS3000**
RAS 3000 with thermo-switch	**3RRAS3000T**

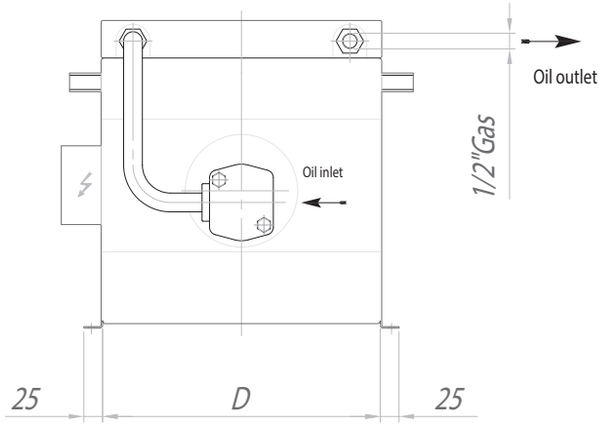
SPARE PARTS

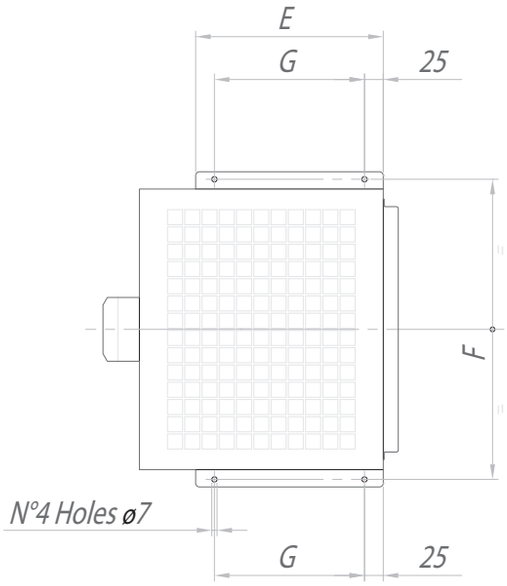
Electronic thermo-switch	1TRM RAS
2m thermo-switch probe	1SND RAS
4m thermo-switch probe	1SND ROC4M
Oil filter	1FTR MPS50
Electric junction box	1CSSDSAR336
Cooling element	1RONO1
Cooling element protection grill	3TLPRAS3000.1
Housing	3TLRAS3000.1
Fan	1GRAS3000
Fan grill	3RTRAS3000.1
Pump	1PORAS3000
Electric motor	1MRAS3000

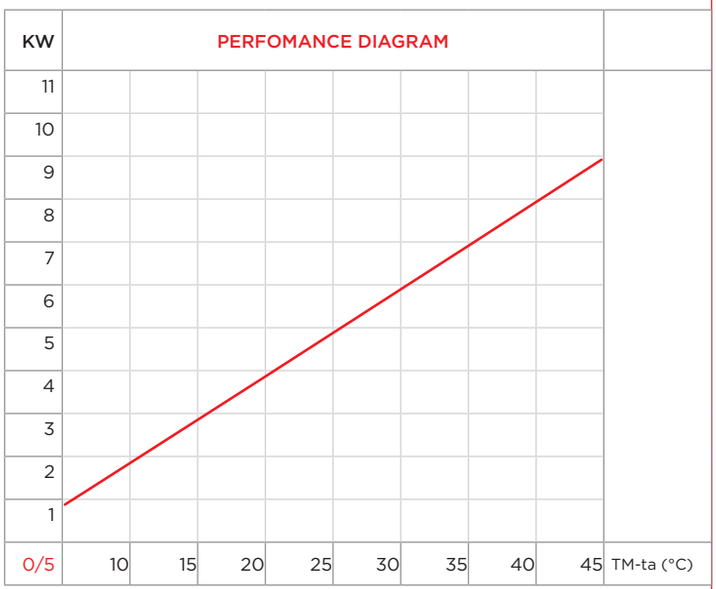
DIMENSIONS							
A	B	C	D	E	F	G	H
410	395	193	370	250	400	200	1/2"Gas

- Dimensions and technical characteristics are not binding









OIL FLOW	VOLTAGE		HZ	POWER	CURRENT	ELECTRICAL PROTECTION	AIR FLOW	NOISE LEVEL	WEIGHT
l/min	Δ	Y		W	A	IP	m³/h	dB(A)	kg
13	220-240	380-420	50	550	2,80-1,60	55	850	68	24
13	254-480	440-480	60	640	2,80-1,60	55	850	68	24

RAS 5000

PURCHASE CODES

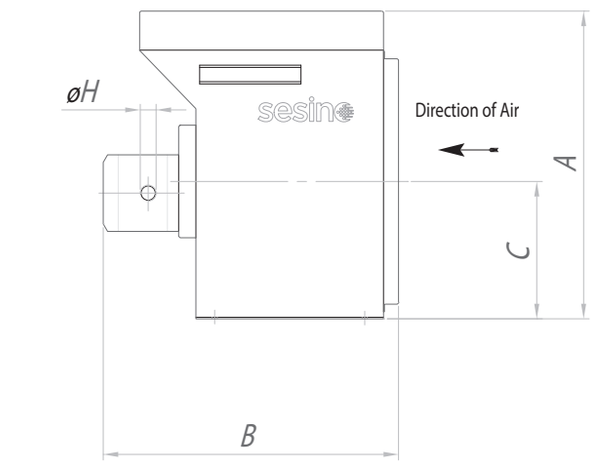
RAS 5000 without thermo-switch	**3RRAS5000**
RAS 5000 with thermo-switch	**3RRAS5000T**

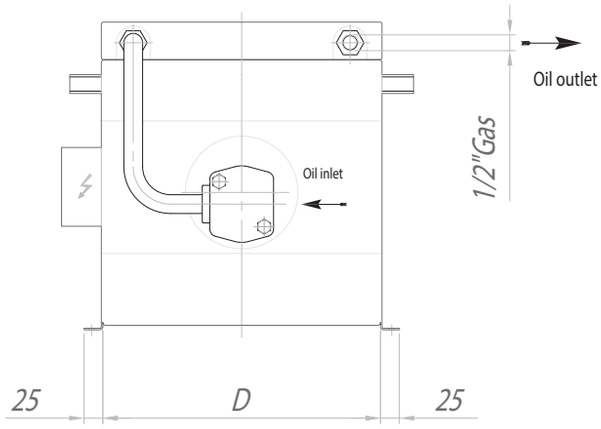
SPARE PARTS

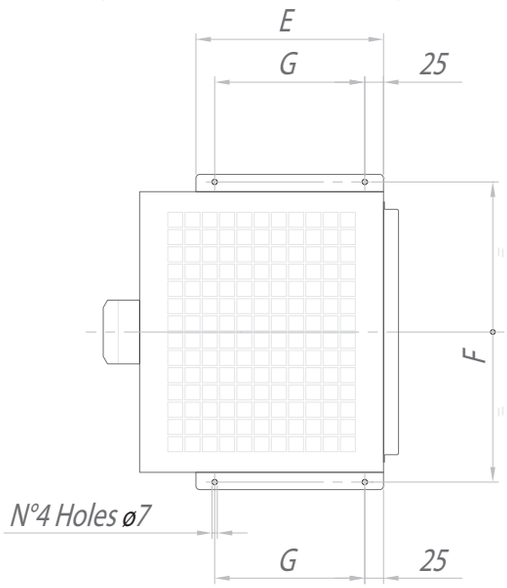
Electronic thermo-switch	1TRM RAS
2m thermo-switch probe	1SND RAS
4m thermo-switch probe	1SND ROC4M
Oil filter	1FTR MPS50
Electric junction box	1CSSDSAR336
Cooling element	1RONO3
Cooling element protection grill	3TLPRAS5000.1
Housing	3TLRAS5000.1
Fan	1GRAS5000
Fan grill	3RTRAS5000.1
Pump	1PORAS5000
Electric motor	1MRAS5000

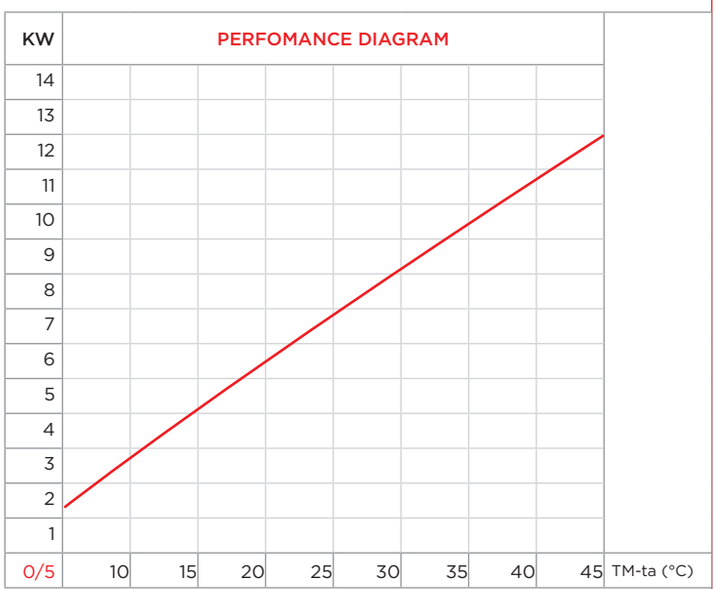
DIMENSIONS							
A	B	C	D	E	F	G	H
450	405	203	470	250	500	200	3/4"Gas

- Dimensions and technical characteristics are not binding









OIL FLOW	VOLTAGE		HZ	POWER	CURRENT	ELECTRICAL PROTECTION	AIR FLOW	NOISE LEVEL	WEIGHT
l/min	Δ	Y		W	A	IP	m³/h	dB(A)	kg
22	230-240	380-420	50	750	3,5-2,0	55	1.500	70	36
22	254-280	440-480	60	750	3,5-2,0	55	1.500	70	36

RAS 7000

PURCHASE CODES

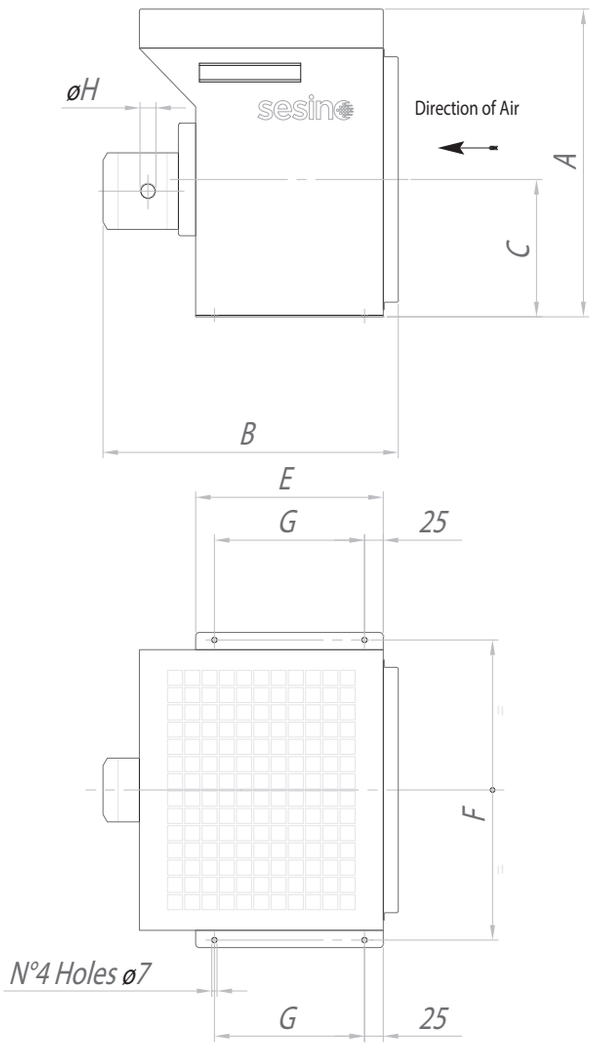
RAS 3000 without thermo-switch	**3RRAS7000**
RAS 3000 with thermo-switch	**3RRAS7000T**

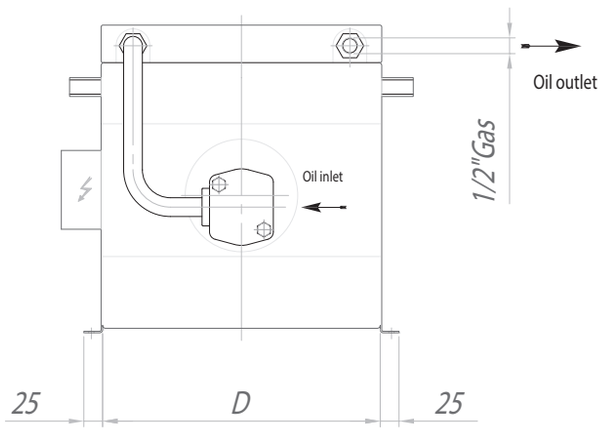
SPARE PARTS

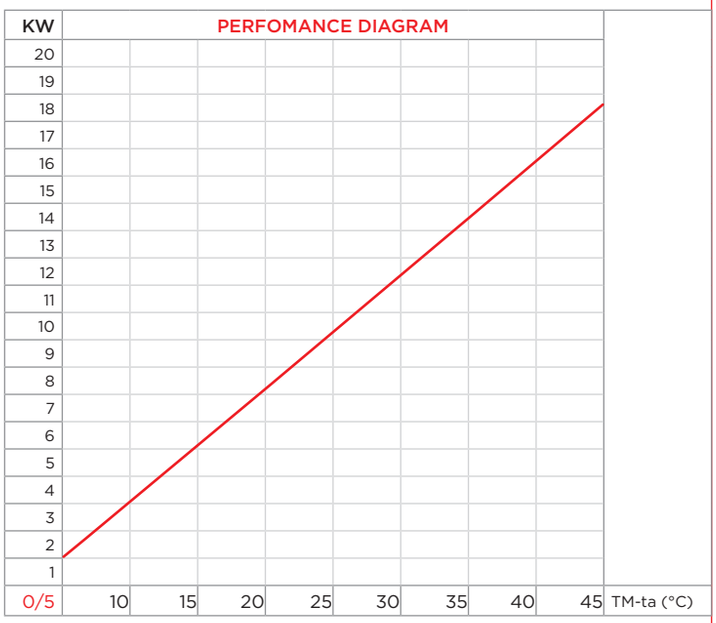
Electronic thermo-switch	1TRM RAS
2m thermo-switch probe	1SND RAS
4m thermo-switch probe	1SND ROC4M
Oil filter	1FTR MPS50
Electric junction box	1CSSDSAR336
Cooling element	1RONO4
Cooling element protection grill	3TLPRAS7000.1
Housing	3TLRAS7000.1
Fan	1GRAS7000
Fan grill	3RTRAS7000.1
Pump	1PORAS7000
Electric motor	1MRAS7000

DIMENSIONS							
A	B	C	D	E	F	G	H
495	455	225	520	290	550	240	3/4"Gas

- Dimensions and technical characteristics are not binding







OIL FLOW	VOLTAGE		HZ	POWER	CURRENT	ELECTRICAL PROTECTION	AIR FLOW	NOISE LEVEL	WEIGHT
l/min	Δ	Y		W	A	IP	m³/h	dB(A)	kg
34	230	400	50	1100	4,5-2,6	55	2.000	75	58
34	254	440	60	1300	4,6-2,7	55	2.000	75	58

ASSEMBLING AND MAINTENANCE INSTRUCTIONS OF THE SELF CONTAINED COOLING UNITS

Assembling

The exchanger must be assembled so that the airflow is not obstructed. To obtain a better efficiency it is important to avoid any recycling of warm air between outlet and inlet.
It is important to have enough air-recycle into the area where the unit is installed, in order to avoid that the air itself became warm, compromising this way the functioning of the exchanger.
The air flow have to be guided to avoid bothering the operator.
The self-contained cooling unit has to be connected with flexible tubes to the tank to cool. It is indispensable that the suction tube has the same or a bigger diameter that the one of the fitting existing on the unit. Otherwise, it is possible to encounter cavitation phenomena that could cause high noise or could break the pump.
For the same reason, the suction tube do not have to offer extreme pressure drops and it is better to avoid winding way, diameter reductions, etc.
Avoid outlet obstructions of the pump to avoid, consequently, putting the cooling element, that has a max. working pressure of 2 bar, under high pressures.
If the unit has to be placed higher that the oil level, using a self-priming gear pump allows positioning the unit to a max. height of 2 meters between the pump and the oil level, on exceeding heights the pump could cavitate.

Operating

As first check that the tension correspond to the one on the heat exchanger nameplate. Before operating, it is necessary to check that the fan rotate to the direction shown by the arrow, in this way also the pump will rotate to the right direction.

MAINTENANCE

Oil side cleaning

For this kind of cleaning, the unit must be disassembled from the machine and the cooling element from the exchanger.
In order to remove the dirt, let a detergent circulate from 10 to 30 minutes, then proceed removing the detergent with compressed air.
During the circulation of the detergent pay attention that its pressure does not exceed the maximum allowed pressure of the exchanger.

Air side cleaning

It can be carried with compressed air or water. The direction of the stream must be parallel to the fins to avoid damaging them. It could be more efficient to use a detergent.
If the dirt consists of oil or grease, it is possible to use a stream of steam or hot water, paying attention always to the stream direction.
During the cleaning the electric motor has to be adequately protected.