Gentilin
UNRIVALED ITALIAN ENGINEERING

USE AND MAINTENANCE MANUAL

OIL-FREE PISTON AIR COMPRESSORS

EK	660/270
EK	1320/500
ESK	480/270
ESK	660/270
ESK	960/500
ESK	1320/500

CLINIC 12/500
CLINIC DRY 12/500 H
CLINIC DRY 12/500 HS
CLINIC 14/500
CLINIC DRY 14/500 H
CLINIC DRY 14/500 HS

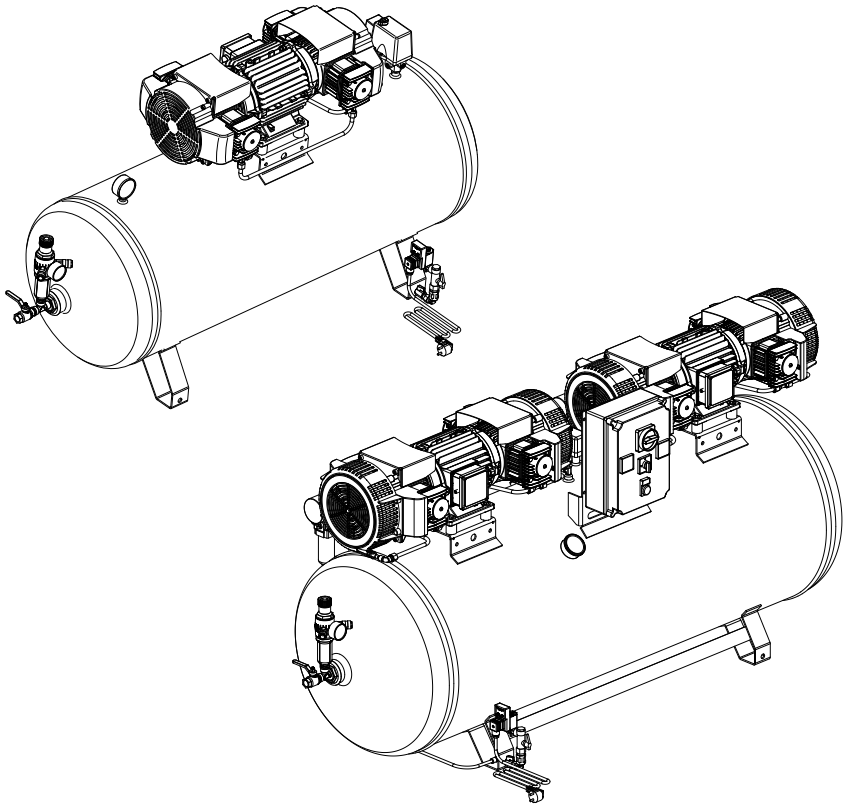

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TABLE OF CONTENTS

INTRODUCTION AND GENERAL WARNINGS 4
IMPORTANT INFORMATION 4
MEANINGS OF SIGNAL WORDS 4
OVERALL DIMENSIONS 5
WEIGHTS 5
MACHINE COMPONENTS DESCRIPTION 6
IDENTIFICATION PLATE OF THE COMPRESSOR 6
CE MARKING AND TECHNICAL DATA 6
SAFETY 7
WARNINGS 9
INSTRUCTIONS FOR CONNECTION TO GROUND 9
EXTENSION CABLE 9
OPERATION AND MAINTENANCE 9
INSTALLATION 10
USE INSTRUCTIONS 10
ELECTRICAL CONNECTION 10
STARTING 11
TANDEM COMPRESSORS WITH TIMED CONTROL UNIT 11
ADJUSTING OPERATING PRESSURE 12
MAINTENANCE 12
WHAT TO DO IF SMALL MALFUNCTIONS OCCUR 13
NOISE LEVEL 14
HINTS FOR EFFICIENT OPERATION 15
STORING THE PACKED AND UNPACKED COMPRESSOR 15
PNEUMATIC CONNECTIONS 15
WIRING DIAGRAM 16
SPARE PARTS 17

INTRODUCTION AND GENERAL WARNINGS

The INSTRUCTION MANUAL is integral part of the compressor.
Use and read the manual with care being careful not to damage any part of it. In case of loss or deterioration of the manual, request a copy to the manufacturer, by giving the document identification data: Code, issue and revision date.
Ensure that any up-dates forwarded by the Manufacturer are actually added to the manual.
If the compressor is sold on at a later date the manual must be given to the new owner.

IMPORTANT INFORMATION
Read and understand all of the operating instructions, safety precautions and warnings in the Instruction Manual before operating or maintaining this compressor.
Most accidents that result from compressor operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures..
Basic safety precautions are outlined in the “SAFETY” section of this Instruction Manual and in the sections which contain the operation and maintenance instructions.
Hazards that must be avoided to prevent bodily injury or machine damage are identified by “WARNINGS” on the compressor and in this Instruction Manual.
Never use this compressor in a manner that has not been specifically recommended by manufacturer, unless you first confirm that the planned use will be safe for you and others.

MEANINGS OF SIGNAL WORDS
WARNING: This points out a potentially hazardous situation, which if ignored, could cause personal injury and machine damage.
NOTE: This enhances crucial information.

WARNING:
Please read understand this manual before operating the compressor.

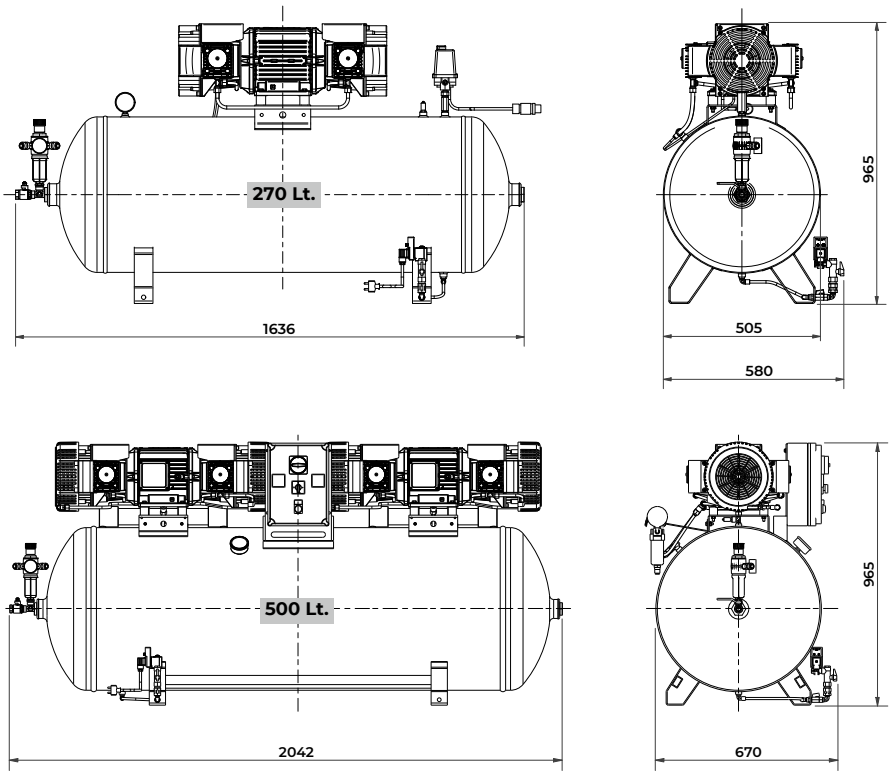
READ THE INSTRUCTION MANUAL:
Read the use and maintenance manual carefully before installing and starting the compressor.

RISK OF ELECTRIC SHOCK:
The electrical power supply of the compressor must be disconnected before doing any jobs on the compressor.

RISK OF HIGH TEMPERATURES:
Be careful when touching the compressor as some parts of it could be very hot.

RISK OF ACCIDENTAL START-UP:
The compressor could start automatically in case of a black-out and subsequent reset.

OVERALL DIMENSIONS

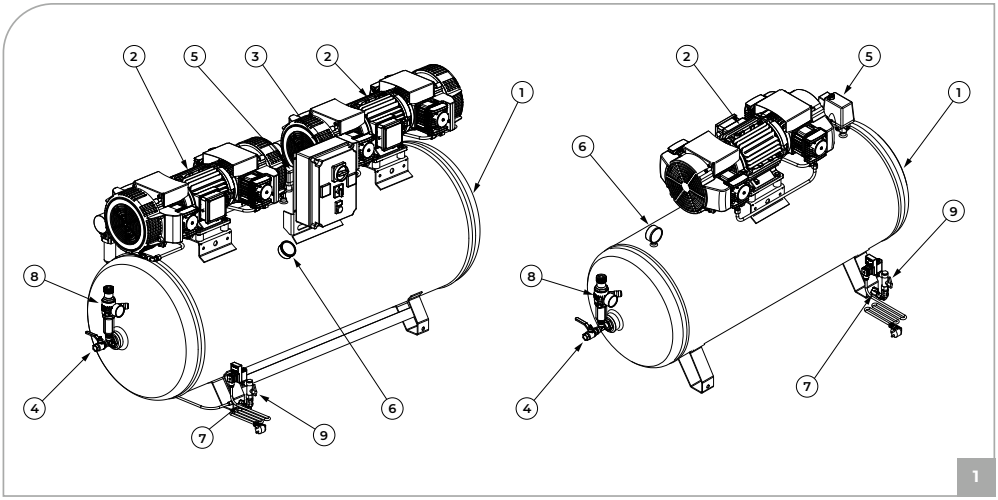


WEIGHTS

MODEL	Kg
Clinic 12/500 - Clinic Dry 12/500H - Clinic Dry 12/500 HS Clinic 14/500 - Clinic Dry 14/500H - Clinic Dry 14/500 HS	258
ESK 480/270	122
ESK 660/270 - EK 660/270	124
ESK 960/500	252
ESK 1320/500 - EK 1320/500	252

WARNING:
The appliance weight is more than 30 kg and therefore, it cannot be moved by a single person alone.

MACHINE COMPONENTS DESCRIPTION



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1	Tank	**4**	Direct compressed air outlet	**7**	Condensate drain tap
2	Pumping element	**5**	Pressure switch	**8**	Pressure reducer (optional)
3	Control unit	**6**	Pressure gauge	**9**	Condensate drain kit (optional)

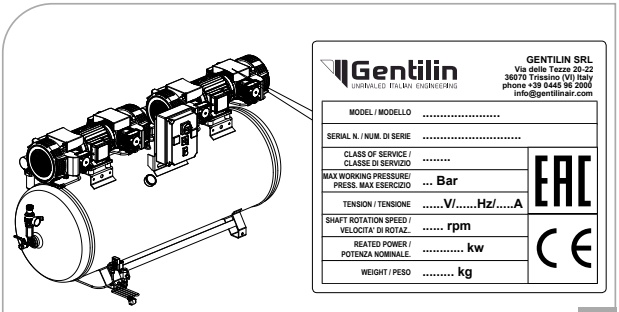
IDENTIFICATION PLATE OF THE COMPRESSOR

CE MARKING AND TECHNICAL DATA

The CE marking of the machine indicates compliance with the essential occupational health and safety rules set forth by the European Directives listed in the Declaration of CE Conformity..

The label is applied externally on one side of the machine indicated in **Fig. 2** states the following data, in a legible manner:

- LOGO, NAME AND ADDRESS OF MANUFACTURER
- CE MARKING
- DESIGNATION OF THE MACHINE (type / model)
- YEAR OF MANUFACTURE
- SERIAL NUMBER
- S1 VALUE
- MAX. WORKING PRESSURE (bar)
- VOLTAGE (V / Hz / A)
- SHAFT ROTATION SPEED (rpm)
- RATED POWER (kW)
- WEIGHT (kg)



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SAFETY

THIS SECTION CONTAINS IMPORTANT SAFETY INSTRUCTIONS FOR USE OF THE COMPRESSOR.

WARNING:
DEATH OR SERIOUS BODILY INJURY COULD RESULT FROM IMPROPER OR UNSAFE USE OF COMPRESSOR. TO AVOID THESE RISKS, FOLLOW THESE BASIC SAFETY INSTRUCTIONS.

1. **NEVER TOUCH MOVING PARTS**
   Never put your hands, fingers or other parts of the body near moving parts of the compressor.
2. **NEVER USE THE COMPRESSOR WITHOUT THE SAFETY GUARDS FITTED**
   Never use the compressor without all the safety guards fitted perfectly in their correct place (i.e. panelling, belt guard, safety valve). If these parts are to be removed for maintenance or servicing purposes, ensure that they are put back in their original place perfectly before using the compressor again.
   ► **It is strictly forbidden to disable any of the safety devices installed on the compressor.**
3. **ALWAYS WEAR SAFETY GOGGLES**
   Always wear goggles or equivalent eye protection means. Never direct compressed air towards any part of your body or that of others.
4. **PROTECT YOURSELF AGAINST ELECTRIC SHOCK**
   Avoid accidentally touching the metal parts of the compressor with your body, such as pipes, the tank or metal parts connected to ground. Never use the compressor where there is water or in damp rooms.
5. **DISCONNECT THE COMPRESSOR**
   Disconnect the compressor from the electric power supply and completely discharge the pressure from the tank before carrying out any service, inspection, maintenance, cleaning, replacing or inspection jobs of each part.
6. **ACCIDENTAL START-UP**
   Never move the compressor while it is connected to the electrical power supply or when the tank is pressurised. Ensure that the main switch is turned OFF before connecting the compressor to the electrical power supply.
7. **STORE THE COMPRESSOR APPROPRIATELY**
   When the compressor is not in use, it must be stored in a dry room away from atmospheric agents. Keep it out of children's reach.
8. **OPERATIONAL AREA**
   Keep the work area clean and remove any tools that are not required. Keep the work area sufficiently ventilated. Never use the compressor in the presence of flammable liquids or gas. The compressor may produce sparks while running. Do not use the compressor where there may be paints, gasoline, chemical compounds, glues and any other flammable or explosive material.
9. **KEEP THE COMPRESSOR OUT OF CHILDREN'S REACH**
   Prevent children or anyone else from touching the power supply cable of the compressor. All outsiders must be kept at a safe distance from the operational area.
10. **WORK CLOTHES**
    Do not wear unsuitable clothing, ties or jewellery as these may get caught up in moving parts. Wear caps to cover your hair if necessary.
11. **PRECAUTIONS FOR THE POWER SUPPLY CABLE**
    Do not disconnect the power supply plug by pulling on the cable. Keep the cable away from heat, oil and sharp edges. Do not stand on the electrical cable or squash it under heavy weights.
12. **LOOK AFTER THE COMPRESSOR WITH CARE**
    Follow the maintenance instructions. Inspect the power supply cable on a periodic basis and if damaged it must be repaired or replaced by an authorised service centre. Visually check the outside appearance of the compressor, ensuring that there are no visual anomalies. Contact your nearest service centre if necessary.
13. **ELECTRICAL EXTENSIONS FOR OUTDOOR USE**
    When the compressor is used outdoors, use only electrical extensions manufactured for outdoor use and marked as such.
14. **WARNING**
    Pay attention to everything you do. Use your common sense. Do not use the compressor if you are tired. The compressor must never be used if you are under the effect of alcohol, drugs or medicines, which could make you tired.

15. CHECK FAULTY PARTS OR AIR LEAKS
Before using the compressor again, if a safety guard or other parts are damaged, they must be checked carefully to evaluate whether they may operate as established in complete safety.
Check the alignment of moving parts, hoses, gauges, pressure reducers, pneumatic connections and every other part that may be crucial for the normal operational efficiency of the compressor. All damaged parts must be properly repaired or replaced by an authorised service centre or replaced following the instructions provided in instruction manual.
► **DO NOT USE COMPRESSOR IF PRESSURE SWITCH IS FAULTY.**

16. USE THE COMPRESSOR EXCLUSIVELY FOR THE APPLICATIONS SPECIFIED IN THIS INSTRUCTION MANUAL
The compressor is a machine that produces compressed air. Never use the compressor for purposes other than those specified in the instruction manual.

17. USE THE COMPRESSOR CORRECTLY
Operate the compressor in compliance with the instructions provided in this manual. Do not allow children to use the compressor or those who are not familiar with it.

18. ENSURE THAT EACH SCREW, BOLT AND GUARD IS FIRMLY SECURED IN PLACE
Keep all screws, bolts, and plates tightly mounted. Check their condtions periodically.

19. KEEP THE IN-TAKE GRIDS CLEAN
Keep the motor ventilation grid clean. Regularly clean this grid if the work area is particularly dirty. Do not insert objects or parts of the body into the protection grids to avoid physical damage and damage to the compressor too.

20. OPERATE THE COMPRESSOR AT THE RATED VOLTAGE
Operate the compressor at the voltage indicated on the electric data nameplate. If the compressor is used at a higher voltage than that rated, the motor will run faster, thus it could be damaged or could burn-out.

21. NEVER USE THE COMPRESSOR IF IT IS FAULTY
If the compressor is noisy or vibrates excessively when running or it seems to be faulty, stop it immediately and check its efficiency or contact your nearest authorised service centre.

22. DO NOT CLEAN PLASTIC PARTS USING SOLVENTS
Solvents such as gasoline, thinners, gas oil or other compounds that contain hydrocarbons may damage the plastic parts. Clean them with a soft cloth and soapy water or other suitable liquids.

23. USE ORIGINAL SPARE PARTS ONLY
The use of non-original spare parts involves the annulment of the guarantee and the abnormal running conditions of the compressor. Original spare parts are available c/o the authorised dealers.

24. DO NOT MODIFY THE COMPRESSOR
Do not modify the compressor. Contact an authorised service centre for all repairs required. An unauthorised modification may impair the efficiency of the compressor and may also cause serious accidents for those who do not have the technical skill required to make such modifications.

25. TURN THE PRESSURE SWITCH OFF WHEN THE COMPRESSOR IS NOT IN USE
When the compressor is not in use turn the ON/OFF switch of the pressure switch off (position “0”). Disconnect the compressor from the power source and open the drain tap to discharge the compressed air from the air tank.

26. DO NOT TOUCH HOT PARTS OF THE COMPRESSOR
To avoid scolding do not touch pipes, the motor or any other hot part.

27. DO NOT DIRECT THE JET OF AIR DIRECTLY TOWARDS THE BODY
To avoid all risks never direct the jet of air towards people or animals.

28. DRAIN TANK
Drain tank daily or after 4 hours of use. Open drain fitting and tilt compressor to empty accumulated water.

29. DO NOT STOP THE COMPRESSOR BY PULLING ON THE POWER SUPPLY CABLE
Always use the “0/I” (ON/OFF) switch of the pressure switch to stop the compressor.

30. PNEUMATIC CIRCUIT
Use recommended pneumatic hoses and tools that can withstand the same or a higher pressure than the maximum running pressure of the compressor.

WARNINGS

INSTRUCTIONS FOR CONNECTION TO GROUND

This compressor must be connected to ground while in use in order to safeguard the operator against electrical shocks.
The single-phase compressor is equipped with a two-poles connector + ground.
The three-phase compressor is equipped with electric cable without plug. This compressor must be installed by a specialised technician.
It is advisable never to dismantle the compressor or even to make any other connections to the pressure switch. All repairs must be carried out exclusively by authorised service centres or other qualified centres. Never forget that the ground wire is green or yellow/green. Never connect this green wire to a live terminal.
Before replacing the plug of the power supply cable ensure that the ground wire is connected.
When any doubts arise, contact a qualified electrical technician and have the ground connection checked, in compliance with current standards in force in the country of installation.

EXTENSION CABLE

Use only extension cables with plug and connection to ground. Never use damaged or squashed extension cables. Ensure that the extension cable is in a good state of wear. When using an extension cable, ensure that the cross section of the cable is sufficient to convey the current absorbed by the product to be connected.
If the extension cable is too thin there could be drops in voltage and therefore loss in power and overheating of the equipment.
The extension cable of the single-phase compressors must have a cross section in proportion with its length (see **table 1**):

TAB. 1
CORRECT CROSS SECTION FOR THE MAXIMIM LENGTH OF 20 MT SINGLE-PHASE

CV	kW	220/230V (mm^2)	110/120V (mm^2)
0.75 - 1	0.65 - 0.7	1.5	2.5
1.5	1.1	2.5	4
2	1.5	2.5	4 - 6
2.5 - 3	1.8 - 2.2	4	-

The extension cable of the three-phase compressors must have a cross section in proportion with its length (see **table 2**):

TAB. 2
CORRECT CROSS SECTION FOR THE MAXIMIM LENGTH OF 20 MT THREE-PHASE

CV	kW	220/230V (mm^2)	380/400V (mm^2)
2 - 3 - 4	1.5 - 2.2 - 3	2.5	1.5
5.5	4	4	2
7.5	5.5	6	2.5
10	7.5	10	4

AVOID ALL RISKS OF ELECTRICAL SHOCKS

Never use the compressor with damaged electrical cables or extension cables. Regularly check the electrical cables.
Never use the compressor in or near water or near a hazardous area where electrical shocks may be encountered.

OPERATION AND MAINTENANCE

NOTE
The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the compressor.
Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own compressor.

INSTALLATION

Remove the compressor from its packing (**fig. 3**) makes sure it is in perfect condition, checking if it was damaged during transport, and carry out the following operations.
Position the compressor on a flat surface or with a maximum permissible inclination of 10° (**fig. 4**), in a well ventilated place, protected against atmospheric agents and not in a place subject to explosion hazard.
If the surface is inclined and smooth, check if the compressor moves while in operation – if it does secure with two wedges.
If the surface is a bracket or a shelf top, make sure it cannot fall, securing it in a suitable way.
To ensure good ventilation and efficient cooling, the compressor's belt guard must be at least 100 cm from any wall (**fig. 5**).
Compressors fitted on the tank, with fixed feet, should not be rigidly secured to the soil. In this case, we advise you to fit 4 anti-vibration supports.


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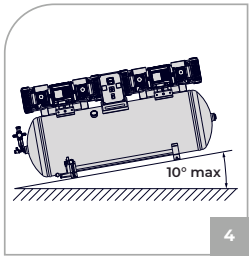

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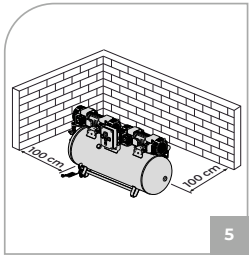

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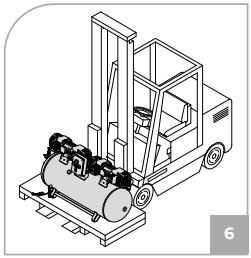
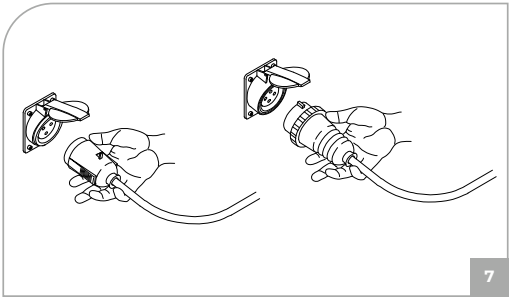
USE INSTRUCTIONS

Take care to transport the compressor correctly, do not overturn it or lift it with hooks or ropes (**fig. 6**).


6

ELECTRICAL CONNECTION

Three-phase compressors (L1+L2+L3+PE) must be installed by a specialised technician. Three-phase compressors are supplied without a plug. Connect a plug to the power cable, with screw-on grommet and securing collar (**fig. 7**), to the cable, consulting the table on page 9.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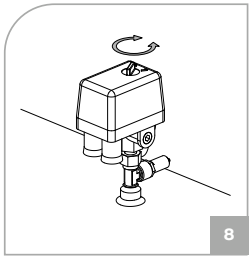
NOTE
Compressors installed on the 500 lt tank, mod. TANDEM (no. 2 pumping elements on the same tank), are supplied with a timed control unit for staggered starting of the two pumping elements.
Any damage caused by incorrect connections of the power line to the mains, automatically excludes warranty of electrical parts.
To avoid connection errors, we advise you to contact a specialised technician.

IMPORTANT
Never use the ground socket instead of the neutral wire. The ground connection must be made to meet safety standards (EN 60204). The plug of the power cable must not be used as a switch, but must be fitted in a power socket controlled by a suitable differential switch (thermal-breaker).

STARTING

Check that the mains power matches that indicated on the electrical data-plate (**fig. 2**), the permissible tolerance range is ± 5%.
Fit the plug in the power socket (**fig. 7**) and start the compressor, turning the pressure switch knob into position (**fig. 8 - Mod. 270**).
The compressor is fully automatic, and is controlled by the pressure switch which stops it when tank pressure reaches maximum value and restarts it when it falls to minimum value. The pressure difference between maximum and minimum values is usually about 2 bar (29 psi).
E.g.: the compressor stops when it reaches 8 bar (116 psi) (maximum operating pressure) and restarts automatically when the pressure inside the tank drops to 6 bar (87 psi).
After connecting the compressor to the power line, load it to maximum pressure and check exactly how the machine is operating.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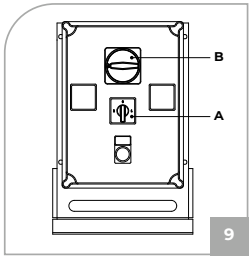
TANDEM COMPRESSORS WITH TIMED CONTROL UNIT (fig. 9)

Fit the plug in the power socket (**fig. 7**) and turn the pressure switch to position "I" (ON). Turn the main power switch "A" on the control unit to position 1, turn switch "B" to start the compressor (**fig. 9**).
Pos. 1 pumping element no. 1 only is operating
Pos. 2 pumping element no. 2 only is operating
Pos. 3 both pumping elements are operating simultaneously, at staggered starting times.

The compressor is fully automatic, and is controlled by the pressure switch which stops it when tank pressure reaches maximum value and restarts it when it falls to minimum value.



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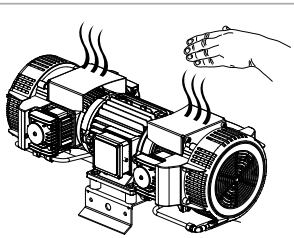
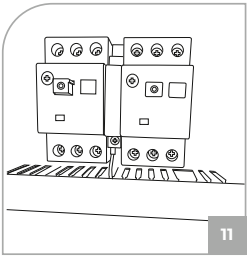
NOTE
The head/cylinder/delivery tube unit can reach high temperatures. Take care when working near these parts, and do not touch them to avoid possible burns (**fig. 10**).


10

IMPORTANT
The compressors must be connected to a power socket protected by a suitable differential switch (thermal-breaker).
The motors of the V. 400/50 conn. Dual Start compressors are supplied with a manually resetting amperometric thermal-breaker (**figg. 11-12**).
When the thermal-breaker is tripped, open the electrical control boxes and reset the tripped thermal-breaker.
BEFORE OPENING THE PANEL, MAKE SURE YOU HAVE DISCONNECTED POWER SUPPLY TO THE COMPRESSOR.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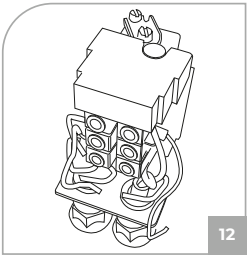
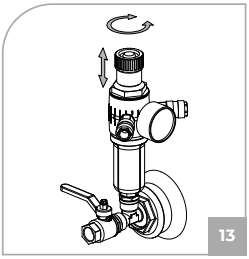

12

ADJUSTING OPERATING PRESSURE (fig. 13) PRESSURE REDUCER KIT (OPTIONAL)

You do not have to use the maximum operating pressure at all times. On the contrary, the pneumatic tool being used often requires less pressure.
On compressors supplied with a pressure reducer, operating pressure must be correctly adjusted.
Release the pressure reducer knob by pulling it up, adjust pressure to the required value by turning the knob clockwise to increase pressure and anti-clockwise to reduce it, When you have obtained optimum pressure, lock the knob by pressing it downward (**fig. 13**).

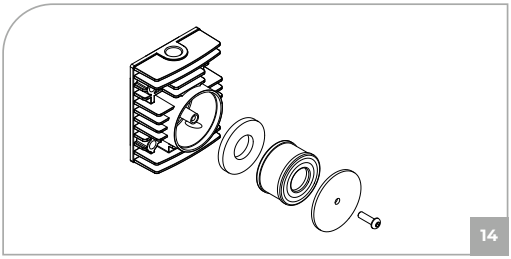

13

IMPORTANT
Some pressure regulators do not have “push to lock” device, therefore simply turn the knob to adjust the pressure.

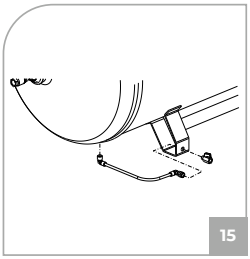
MAINTENANCE

Before attempting any maintenance jobs on the compressor, make sure of the following:
– Main power switch in position “0”.
– Pressure switch and the control unit switches all off (in “0” position).
– No pressure in the air tank.

Every 50 hours of duty: we advise you to dismantle the suction filter and clean the filtering element by blowing compressed air on it (**fig. 14**).
You are recommended to replace the filter element at least once if the compressor operates in a clean environment, but more frequently if in a dusty environment.

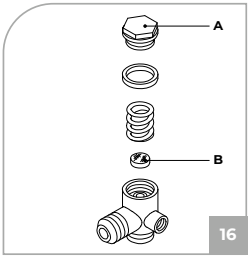

14

The condensate in the tank must be drained at least once a week, by opening the drain tap (**fig. 15**) under the tank.
Take care if there is compressed air inside the cylinder, and water could flow out with considerable force.
Recommended pressure in the air tank: 2 ÷ 3 bar max.


15

WHAT TO DO IF SMALL MALFUNCTIONS OCCUR

Loss of air in valve under pressure switch
This trouble depends on poor tightness of the check valve – take the following action (**fig. 16**):
- Discharge thoroughly pressure from the tank
- Unscrew the hexagon-head of the valve "A"
- Carefully clean both the rubber disk "B" and its seat
- Refit all parts accurately.



16

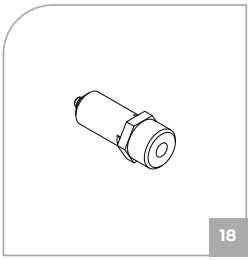
Air losses
These can be caused by poor tightness of a union – check all unions, wetting them with soapy water.

Compressor turns but does not load
This may be due to failure of the valves or of a seal (**fig. 17**): replace the damaged part.


17

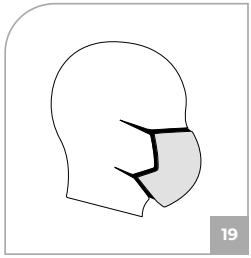
Compressor does not start
If the compressor has trouble starting, check the following:
- Does mains power match that of the data-plate (**fig. 2**)?
- Are power cable extensions of adequate diameter or length?
- Is the work environment too cold (under 0°C)?
- For Mod. ESK 960/500: was the thermal-breaker tripped (**fig. 11**)?
  In case of intervention of motor thermal-breakers, open the electrical box and press the reset button. Warning: before this operation, disconnect the power supply.
- For Mod. ESK 480/270: if the motor thermal-breaker is tripped (**fig. 12**), the compressor stops automatically. Wait for 5/10 minutes and restart the compressor by the ON-OFF switch (**fig. 9**).
- Is power supplied to the electrical line (sockets well connected, thermal-breaker, fuses in good condition)?

Compressor does not stop
If the compressor does not stop when maximum pressure is reached, the tank safety valve comes into operation (**fig. 18**). To repair the appliance, contact your nearest service centre.


18

IMPORTANT

- Do not unscrew any connection while the tank is pressurised – always check if the tank is pressure free.
- Do not drill holes, weld or purposely deform the compressed air tank.
- Do not do any jobs on the compressor unless you have disconnected the power plug.
- Temperature in operating ambient 0°C +45°C.
- Do not aim jets of water or inflammable liquids on the compressor.
- Do not place inflammable objects near the compressor.
- During down-times, turn the pressure switch to position “0” (OFF).
- Never aim the air jet at people or animals.
- Do not transport the compressor while the tank is pressurised.
- Be careful with regard to some parts of the compressor such as the head and delivery tubes, as they can reach high temperatures. Do not touch these parts to avoid burns (**fig. 10**).
- Transport the compressor, lifting it by means of a fork-elevator or a transpallet (**fig. 6**).
- Keep children and animals well away from the machine operating area.
- If using the compressor for painting:
  a) Do not work in closed environments or near to naked flames
  b) Make sure there is adequate exchange of air at the place of work
  c) Protect your nose and mouth with an appropriate mask (**fig. 19**).
- If the electrical cable or plug are damaged, do not use the compressor and contact an authorised service centre to replace the faulty element with an original spare part.
- If the compressor is located on a shelf or on a top above floor height, it must be secured to prevent it falling while in operation.
- Do not put objects or your hands inside the protective grids to avoid injury to yourself or damaging the compressor.
- Do not use the compressor as a blunt object toward things or animals, to avoid serious damage.
- When you have finished using the compressor, always remove the plug from the power socket.


19

COMPRESSOR MODELS ESK 480/270 - ESK 660/270 - EK 660/270
Maximum working pressure 10 bar
Maximum operating pressure 10 bar

COMPRESSOR MODELS ESK 960/500 - ESK 1320/500 - EK 1320/500
Maximum working pressure 10 bar
Maximum operating pressure 10 bar

COMPRESSOR MODELS CLINIC 12/500 - CLINIC DRY 12/500 H - CLINIC DRY 12/500 HS
Maximum working pressure 10 bar
Maximum operating pressure 10 bar

COMPRESSOR MODELS CLINIC 14/500 - CLINIC DRY 14/500 H - CLINIC DRY 14/500 HS
Maximum working pressure 10 bar
Maximum operating pressure 10 bar

NOTA
For the European market, the compressor tanks are manufactured to meet Directive CE87/404.
For the European market, the compressors are manufactured to meet Directive CE98/37.

NOISE LEVEL

Acoustic pressure measured free-field at a distance of 1m: ±3dB(A) at maximum operating pressure (**table 3**).

TAB. 3
NOISE LEVEL

MODEL	dB(A)	Max. Pressure
EK 660/270	76	8-10
EK 1320/500	78	
ESK 480/270 **ESK 660/270**	75	
ESK 960/500 **ESK 1320/500** **CLINIC 12/500 - CLINIC DRY 12/500 H - CLINIC DRY 12/500 HS** **CLINIC 14/500 - CLINIC DRY 14/500 H - CLINIC DRY 14/500 HS**	77	

NOTE
The level of acoustic pressure can increase from 1 to 10 dB(A) according to the place in which the compressor is installed.

HINTS FOR EFFICIENT OPERATION

For efficient operation of the machine at full continuing load and at maximum operating pressure, make sure the temperature of the work environment indoors does not exceed +25°C.
We advise you to use the compressor at 70% maximum duty per hour at full load as this ensures efficient operation of the product long-term.

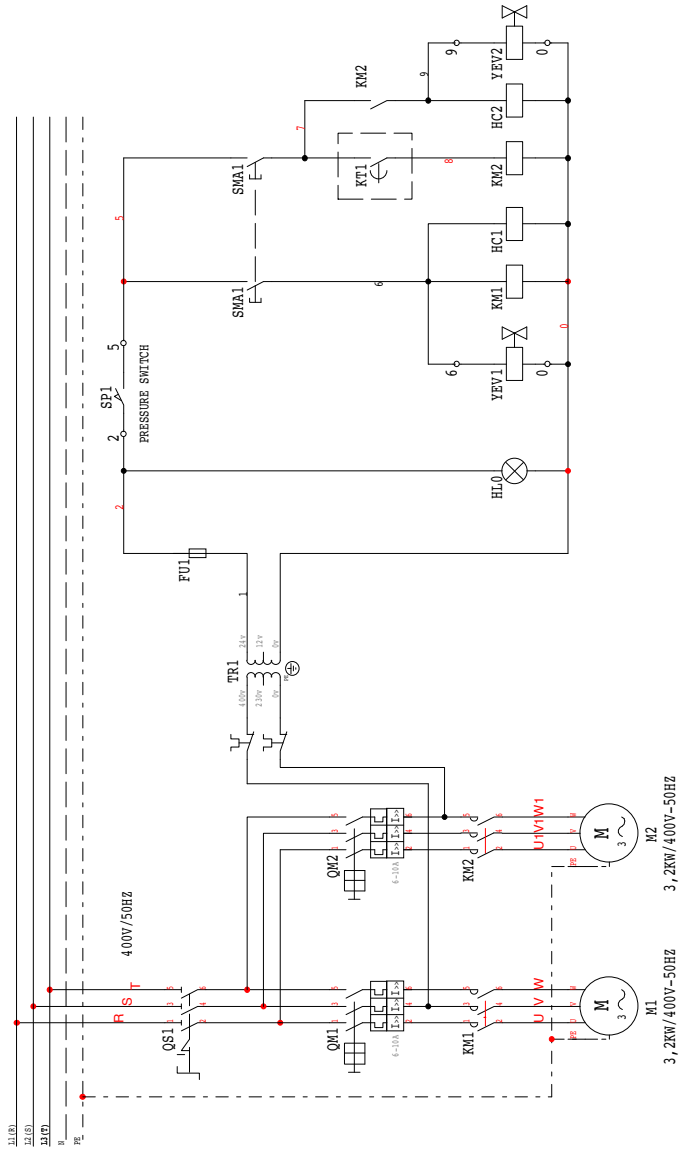
STORING THE PACKED AND UNPACKED COMPRESSOR

For the whole time that the compressor is not used before unpacking it, store it in a dry place at a temperature between +5°C and +45°C and sheltered away from weather.
For the whole time that the compressor is not used after unpacking it, while waiting to start it up or due to production stoppages, place sheets over it to protect it from dust, which may settle on the components.

PNEUMATIC CONNECTIONS

Make sure you always use pneumatic tubes for compressed air with maximum pressure characteristics that are adequate for the compressor. Do not attempt to repair tubes if faulty.

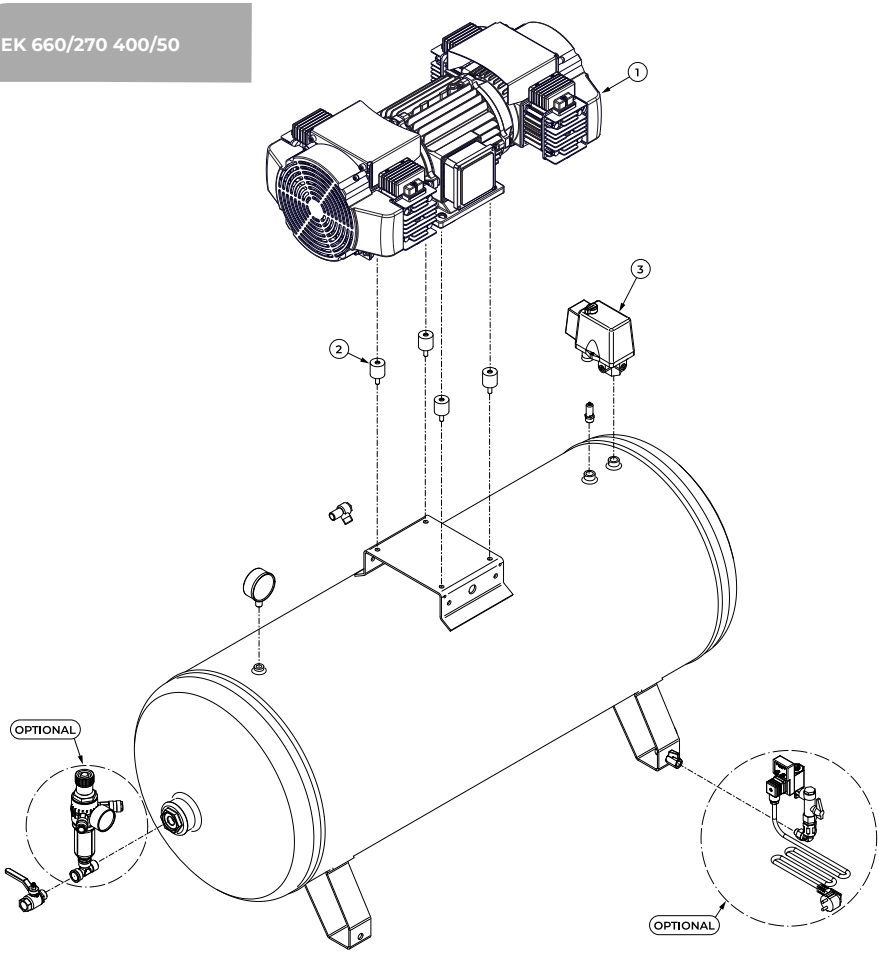
WIRING DIAGRAM



SPARE PARTS

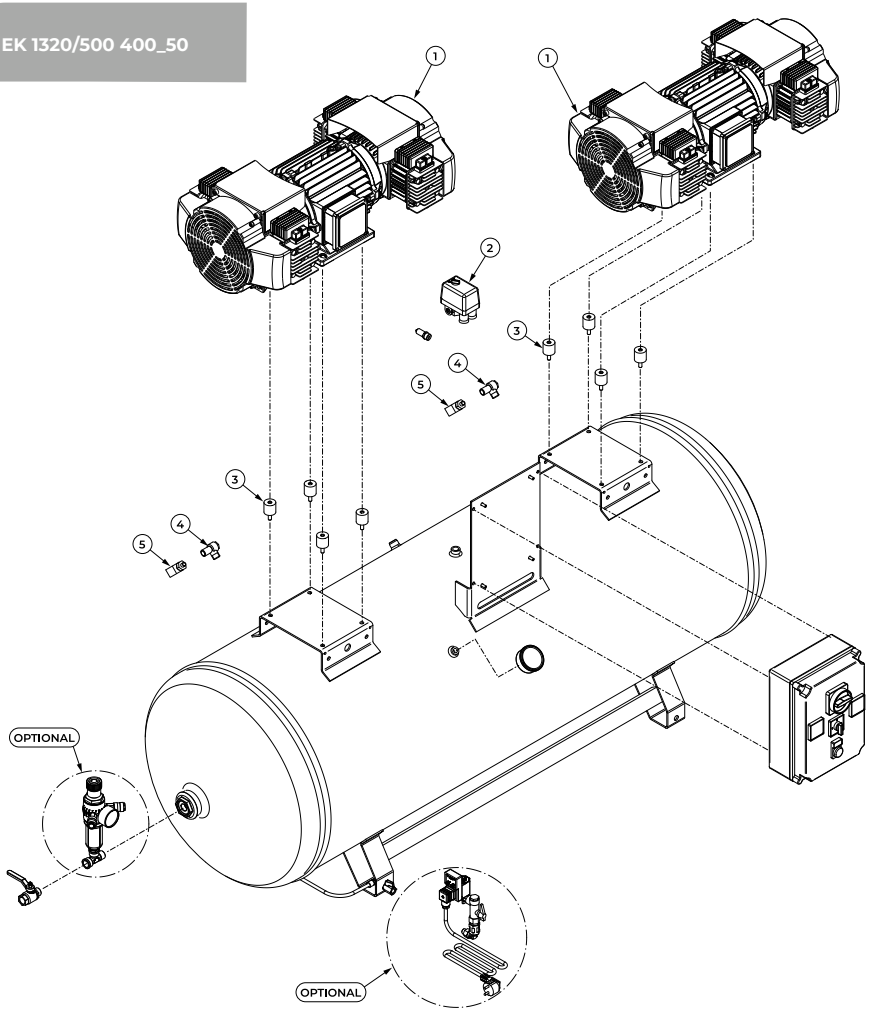
For repairs on the compressors, use only genuine replacement parts, identical to the replaced parts.
Repairs should be carried out only by authorized service center.

EK 660/270 400/50



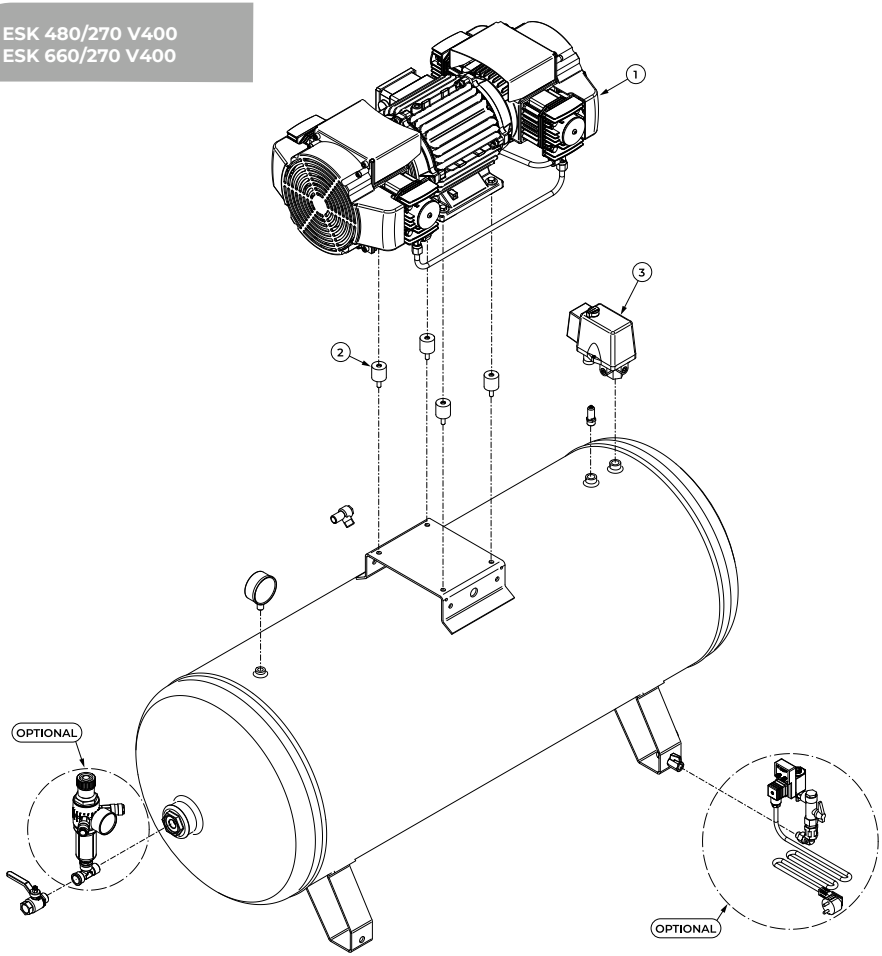
Pos.	Description	Code
1	MOTOR EK 660_400_50	EK660#C4
2	BUMPER 30x30 M-F	84059
3	PRESSURE SWITCH CONDOR MDR3 400-50_HOUR-COUNTER	206682

EK 1320/500 400_50



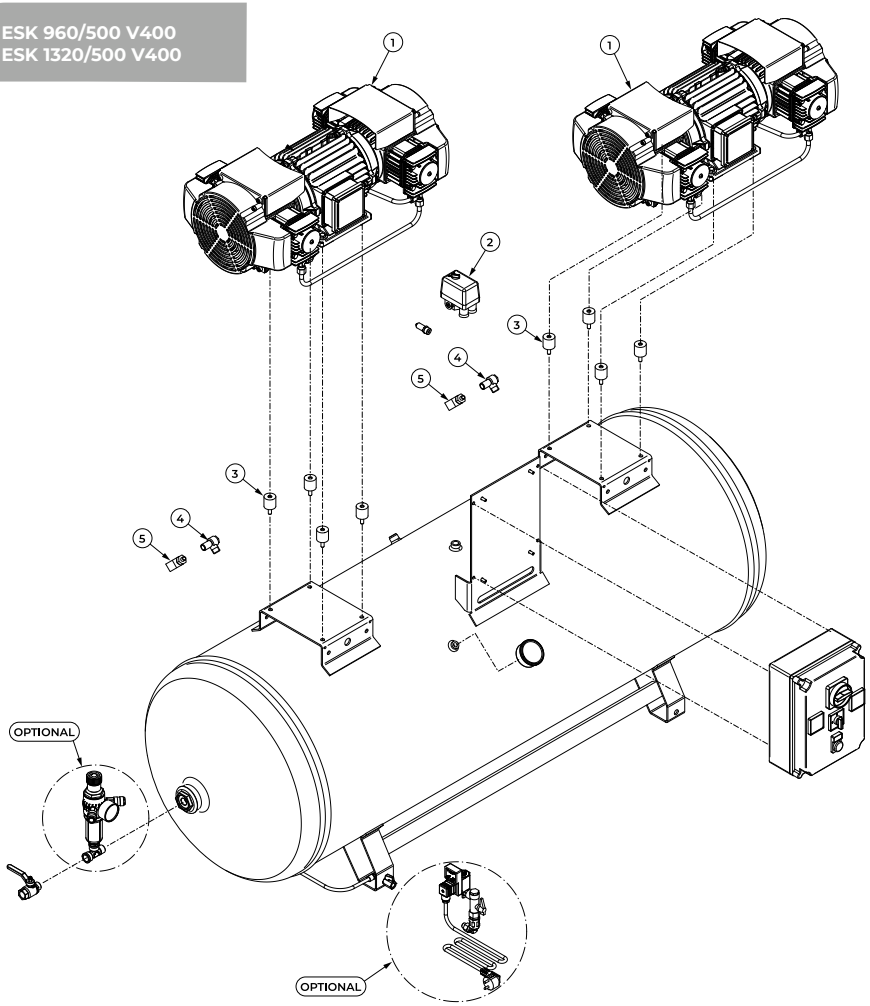
Pos.	Description	Code
1	MOTOR EK 660_400_50	EK660#C4
2	PRESSURE SWITCH MDR1 250V-20A-50-60Hz	213635
3	BUMPER 30x30 M-F	84059
4	SOLENOID-VALVE MM18 230 - 50/60	83026/1
5	CHECK VALVE 3.8 d.10	84037

ESK 480/270 V400
ESK 660/270 V400



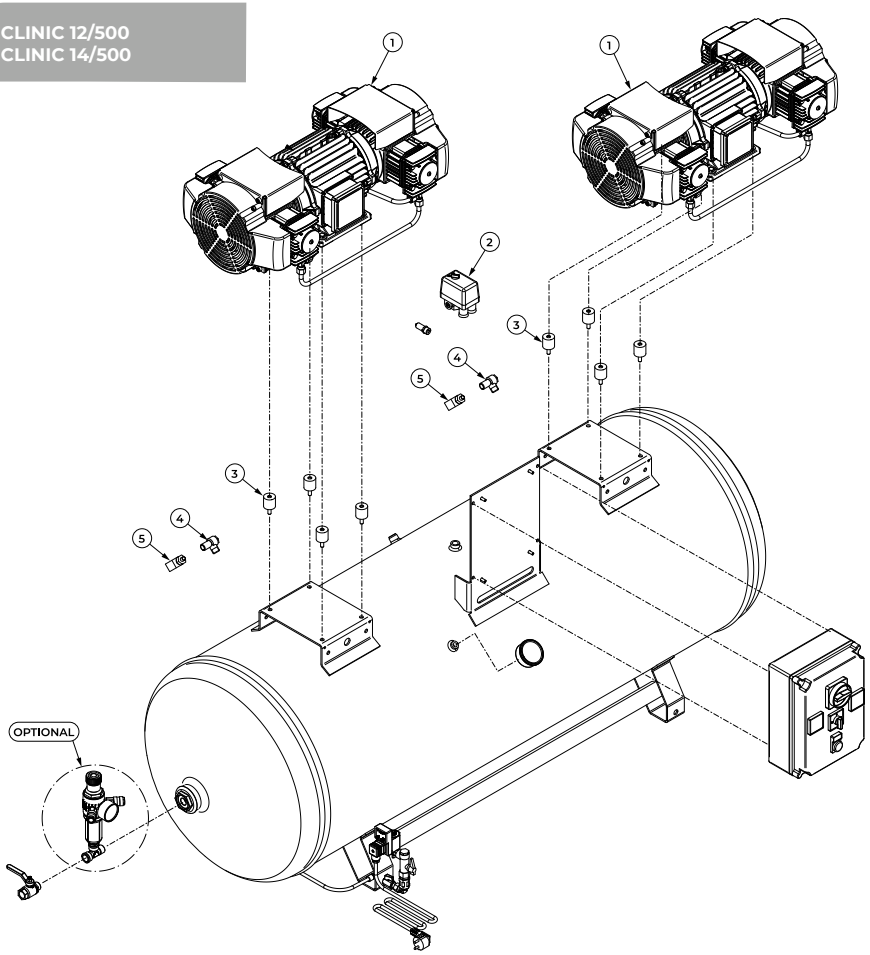
Pos.	Description	Code
1	MOTOR ESK 480_400_50 /ESK 660_400_90	ESK480#C4 / ESK660#C4
2	BUMPER 30x30 M-F	84059
3	PRESSURE SWITCH CONDOR MDR3 400-50_HOUR-COUNTER	206682

ESK 960/500 V400
ESK 1320/500 V400



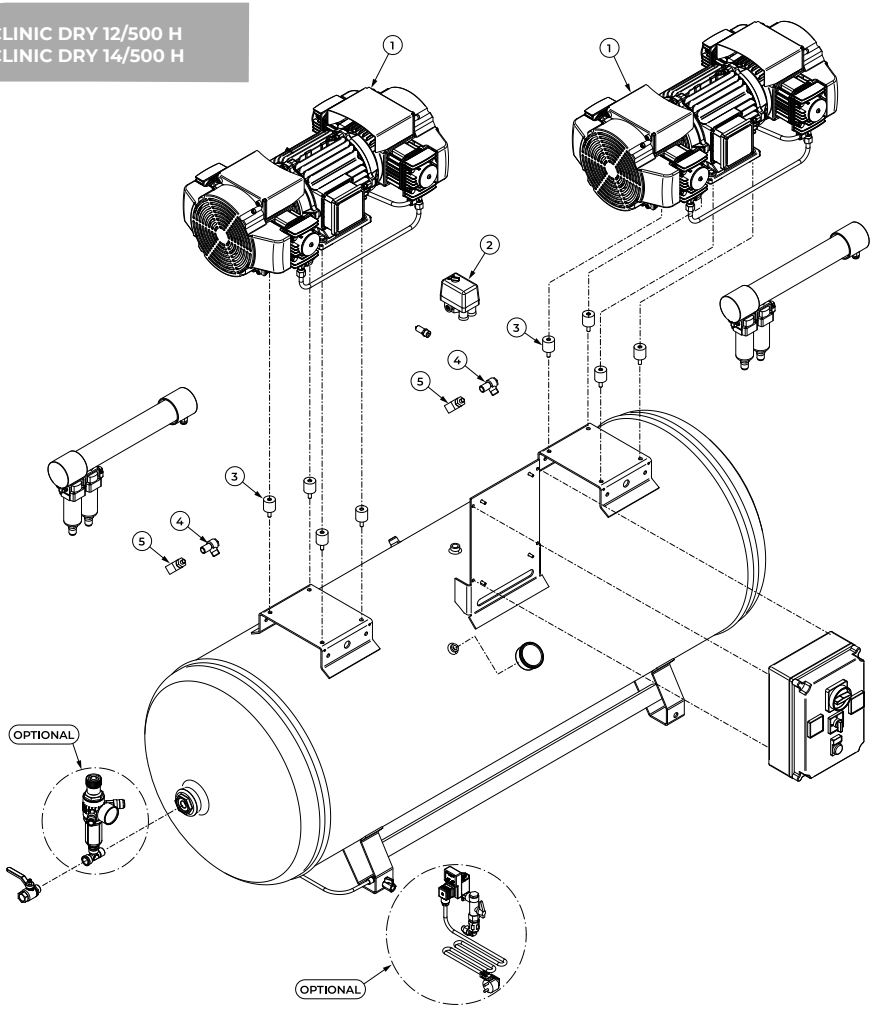
Pos.	Description	Code
1	MOTOR ESK 480_400_50 / ESK 660_400_50	ESK480#C4 / ESK660#C4
2	PRESSURE SWITCH MDR1 250V-20A-50-60Hz	213635
3	BUMPER 30x30 M-F	84059
4	SOLENOID-VALVE MM18 230 - 50/60	83026/1
5	CHECK VALVE 3.8 d.10	84037

CLINIC 12/500
CLINIC 14/500



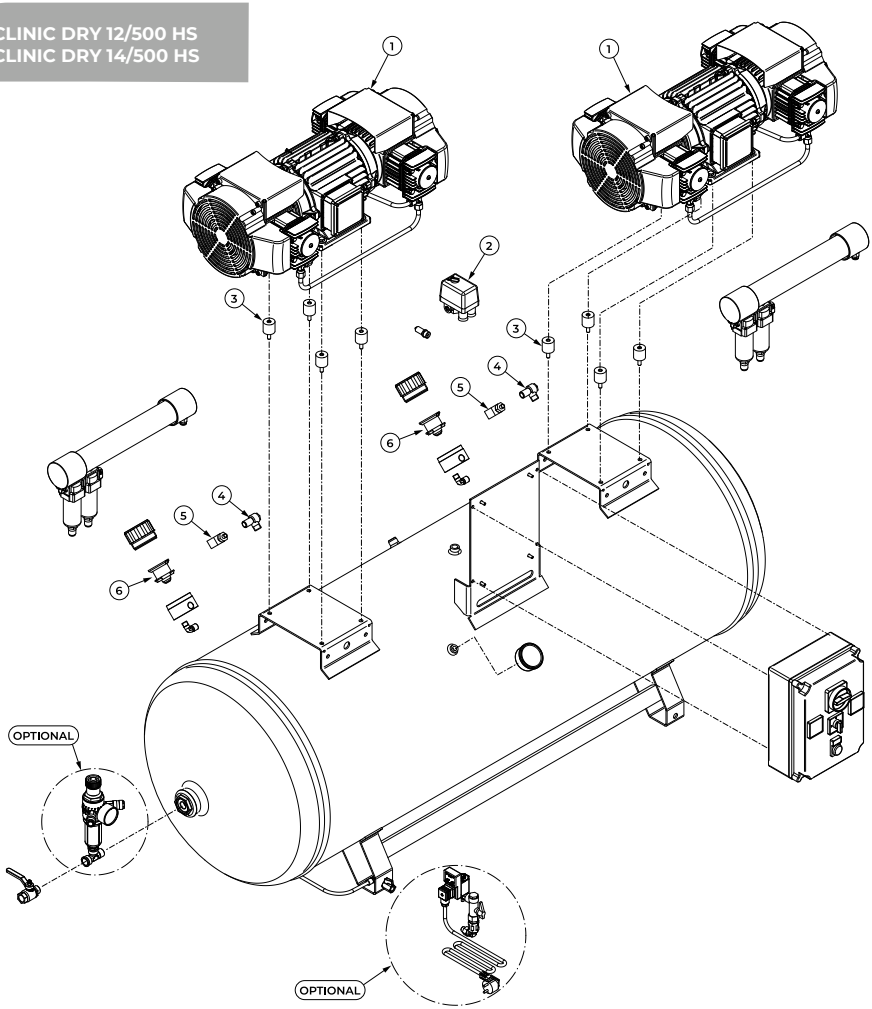
Pos.	Description	Code
1	MOTOR ESK 480_400_50 / ESK 660_400_50	ESK480#C4 / ESK660#C4
2	PRESSURE SWITCH MDR1 250V-20A-50-60Hz	213635
3	BUMPER 30x30 M-F	84059
4	SOLENOID-VALVE MM18 230 - 50/60	83026/1
5	CHECK VALVE 3.8 d.10	84037

CLINIC DRY 12/500 H
CLINIC DRY 14/500 H



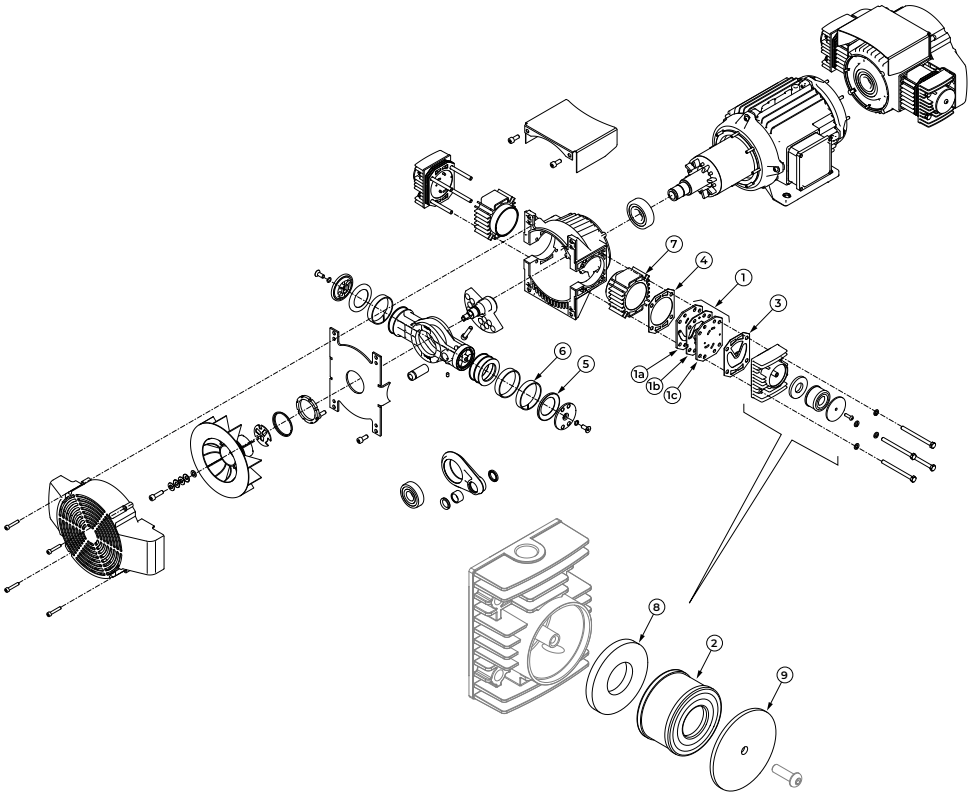
Pos.	Description	Code
1	MOTOR ESK 480_400_50 / ESK 660_400_50	ESK480#C4 / ESK660#C4
2	PRESSURE SWITCH MDR1 250V-20A-50-60Hz	213635
3	BUMPER 30x30 M-F	84059
4	SOLENOID-VALVE MM18 230 - 50/60	83026/1
5	CHECK VALVE 3.8 d.10	84037

CLINIC DRY 12/500 HS
CLINIC DRY 14/500 HS



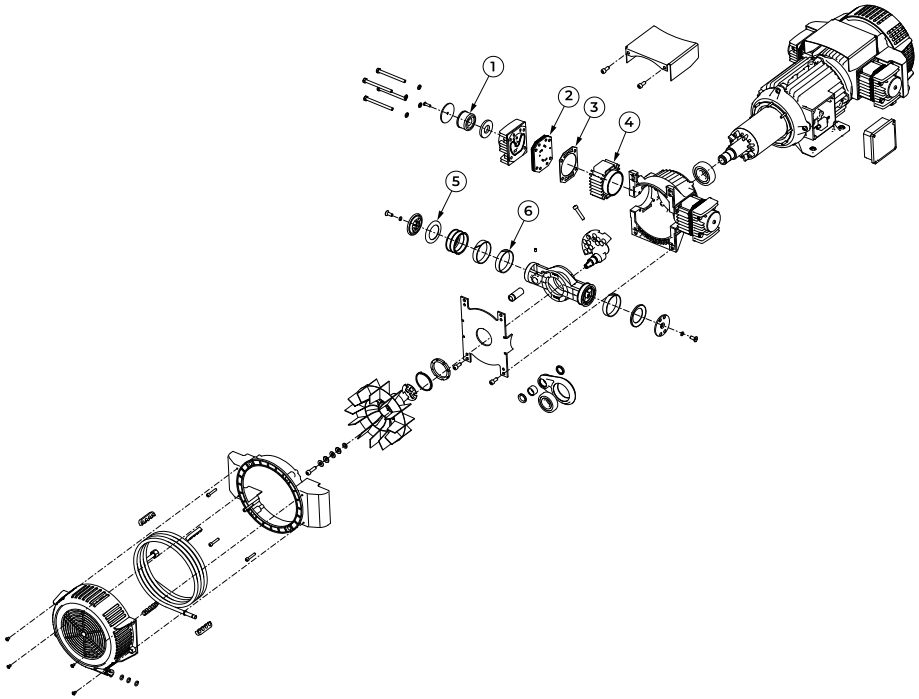
Pos.	Description	Code
1	MOTOR ESK 480_400_50 / ESK 660_400_50	ESK480#C4 / ESK660#C4
2	PRESSURE SWITCH MDR1 250V-20A-50-60Hz	213635
3	BUMPER 30x30 M-F	84059
4	SOLENOID-VALVE MM18 230 - 50/60	84037
5	CHECK VALVE 3.8 d.10	83026/1
6	BACTERIAL FILTER EDT 5635ST	84023

ESK 480_400_50
ESK 660_400_50



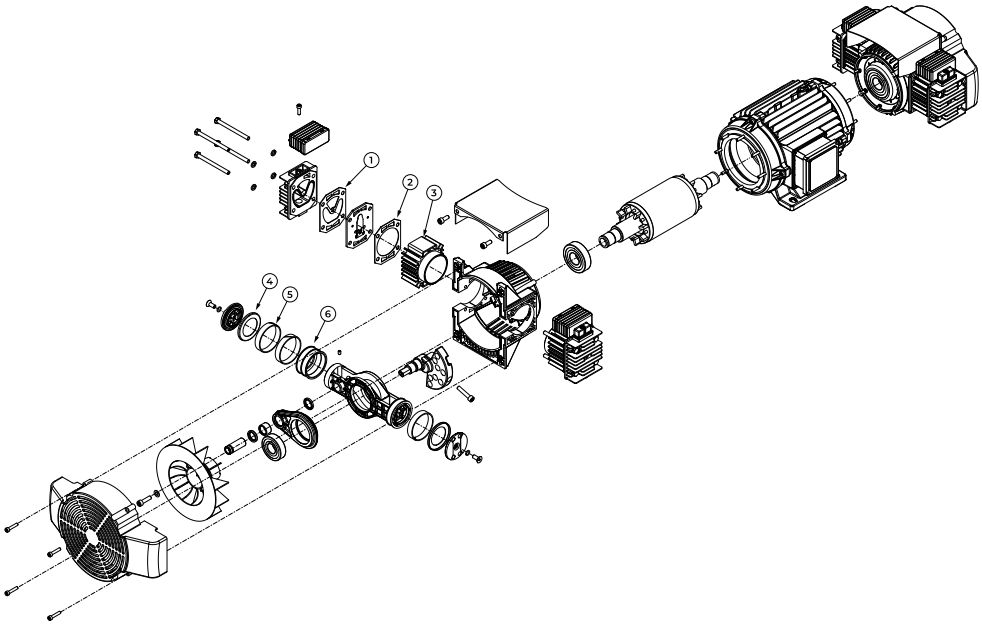
Pos.	Description	Code	Pos.	Description	Code
1	VALVE PLATE KIT	84302	**4**	CYLINDER GASKET	250601003
1a	DENTAL VALVE PLATE	84009	**5**	SEAL GASKET	151506040
1b	GASKET SERIES CS/ES	84005/1	**6**	GUIDE RING H14	1515501010
1c	DENTAL VALVE PLATE	84009	**7**	CYLINDER ESK480	1515501016
2	FILTER CARTRIDGE	83045/1	**8**	FILTER GASKET	201239
3	CYLINDER HEAD GASKET - VALVE PLATE	83015/1	**9**	FILTER CLOSING	201518/24

ESKI 480_400_50
ESKI 660_400_50



Pos.	Description	Code
1	FILTER CARTRIDGE	83045/1
2	VALVE PLATE KIT	84302
3	CYLINDER GASKET	83016
4	CYLINDER ESK480	M0144/1
5	SEAL GASKET	PAX01226
6	GUIDE RING H14	83129

EK 660



Pos.	Description	Code
1	CYLINDER HEAD GASKET - SLS C - (C 240/330)	83015/1
2	CYLINDER GASKET -SESALIT-PLUS-G SP.1 (C 240/330)	83016
3	SEAL GASKET	PAX01226
4	GUIDE RING H.14	83129
5	CYLINDER C330/CK330/ EK660	M0196
6	CAP	M0194

Gentilin
UNRIVALED ITALIAN ENGINEERING

VIA DELLE TEZZE, 20/22
36070 TRISSINO (VI) - ITALY
phone +39 0445 96 20 00
info@gentilinair.com
www.gentilinair.com

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