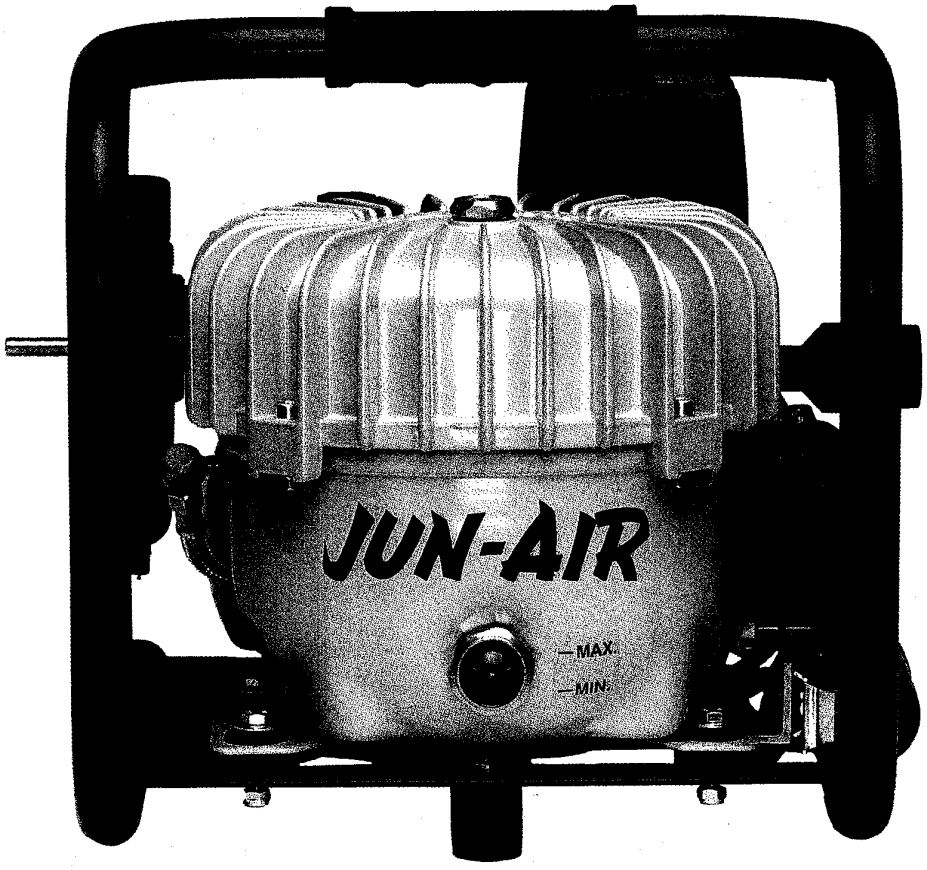
JUN-AIR®

Compressor

Model 3-0.5 / 3-1.5 / 3IMP-0.5



OPERATING MANUAL
BETRIEBSANWEISUNG
MODE D'EMPLOI
MODO DE EMPLEO
GEBRUIKAANWIJZING
BETJENINGSFORSKRIFT

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WARNING

- Unless directions are followed and original spare parts used, physical injury or property damage may result.
- Protect compressor against rain, moisture, frost, and dust.
- Compressor is only suitable for installations with the nominal voltage stated on the motor plate.
- Do not in any way block or prevent the normal functioning of the safety valve on the receiver.
- Only connect pneumatic equipment suitable for the max. pressure indicated.
- Do not operate compressor at ambient temperatures exceeding 35°C/95°F or falling below 0°C/32°F.
- Do not touch compressor motor during operation as there is a risk of burn due to high temperatures.
- Do not direct air flow at head or body.
- When a flammable liquid is sprayed, there may be danger of fire or explosion, especially in closed rooms.
- Always keep the compressor out of reach of children.

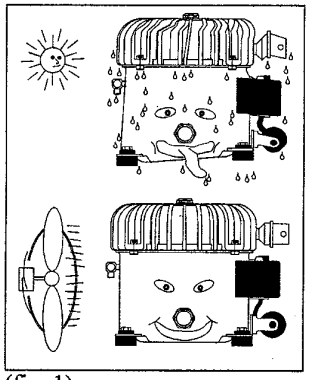
GUARANTEE

Provided that the operational instructions have been carried out, your JUN-AIR compressor is guaranteed against faulty material or workmanship for 2 years.
The air receiver is guaranteed for 5 years.
The guarantee does not cover damage caused by violence, misuse, incorrect repairs or use of wrong oil and unoriginal spare parts.
Costs of transportation of parts/equipment are not covered by the guarantee.
JUN-AIR's Conditions for Sale and Delivery will generally apply.
JUN-AIR International A/S reserves the right to change technical specifications/ constructions.

HOW TO OPERATE THE JUN-AIR COMPRESSOR

Your JUN-AIR compressor is very easy to operate. Observe the following simple instructions and you will get many years' service from your compressor.

1. Visually inspect unit for shipping damage, contact your supplier immediately if you think the unit may have been damaged.
2. Always keep the compressor in a vertical position during use and transportation.
3. Place the compressor in a dustfree, dry and cool, yet frostfree, room. Do not install in a closed cupboard, unless adequate openings for ventilation are available (fig. 1). Ensure that the compressor stands firmly on the floor.
4. Replace the cap on the air intake tube with the intake filter (fig. 2).
5. Connect pneumatic equipment.

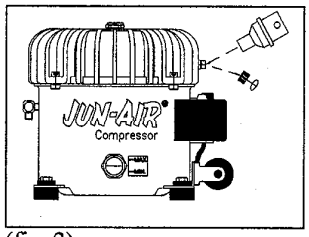


(fig. 1)

Important!

The compressor oil may be aggressive towards certain gasket materials used in pneumatic equipment. We recommend Teflon, Viton, etc. Do not use polycarbonate filter bowls. Contact your local JUN-AIR distributor if you need further information.

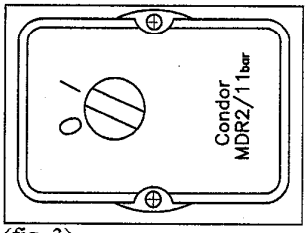
6. Plug the compressor into an outlet switch of nominal voltage and ensure that fusing is adequate (see Technical Details).
7. Start the compressor using the 0/1 switch on the pressure switch (fig. 3). The compressor will automatically switch off at the preset pressure. If the motor does not start it may be due to pressure in the receiver, and the motor will then start automatically when the pressure reduces to approx. 6 bar/87 psi.
8. Always keep the compressor in a vertical position as oil may run out of the intake filter. During transportation, mount the cap on the inlet. Mechanical noise from the compressor in connection with handling does not have any functional importance.



(fig. 2)

Warning!

Never mount the transportation cap on oil-lubricated compressors while there is still pressure in the compressor & pressure vessel, as this may cause a pressure buildup in the motor housing.



(fig. 3)

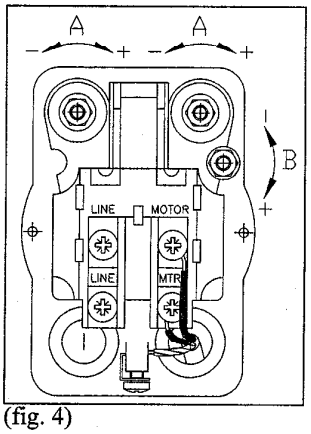
9. Adjustment of pressure (fig. 4):

   A: Max. pressure adjustment (cut-out)
   B: Differential adjustment (cut-in)

   The cut-in pressure (normally 6 bar) is set by adjustment of differential screw B. Turn clockwise to reduce cut-in pressure.

   The cut-out pressure is set by even adjustment of the two screws A. (Cut-in pressure + differential = cut-out pressure). Turn clockwise to increase cut-out pressure.

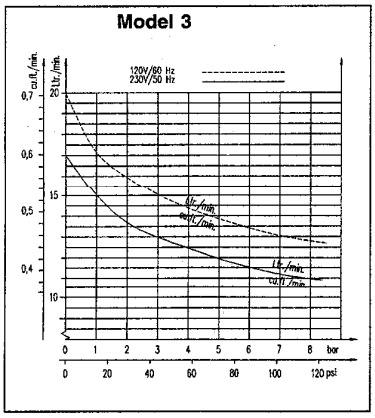
   The switch is normally factory set for operation at 6-8 bar (approx. 90-120 psi).



(fig. 4)

TECHNICAL DETAILS

The max. operation of the compressor is 50% of the operation time, and the max. operation time is 15 min. at 8 bar/120 psi in each cycle. Consequently, 15 min. standstill is required before the next start.



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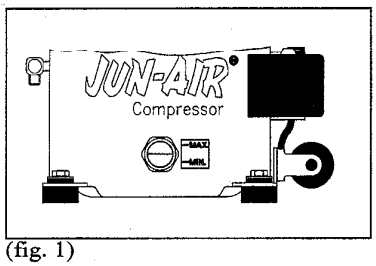
Model		3-0,5		3-1,5		3IMP-0,5	
Voltage	Volt±10%/Hz	230/50	120/60	230/50	120/60	230/50	120/60
Motor	HP	0.18	0.20	0.18	0.20	0.18	0.20
	kW	0.13	0.15	0.13	0.15	0.13	0.15
Displacement	l/min	17	20	17	20	17	20
	CFM	0.60	0.71	0.60	0.71	0.60	0.71
Max. pressure	bar	8 [1]		8 [1]		5.5	
	psi	120 [1]		120 [1]		80	
Power consumption at 8 bar	amp	1.1	2.0	1.1	2.0	1.1	2.0
Tank size	liter	0.5		1.5		0.5	
	US gall.	0.1		0.4		0.1	
Weight	kg	12		14		12	
	lbs	26		31		26	
Dimensions mm - inch	l	220 - 8 5/8		360 - 14 1/8		220 - 8 5/8	
	w	410 - 16 1/8		350 - 13 6/8		390 - 15 3/8	
	h	360 - 14 1/8		310 - 12 2/8		310 - 12 2/8	
Noise level	dB(A)/1m	37		37		37	
Pumping time 0-8 bar (0-120 psi) [2]	sec.	25	20	65	55	10	8

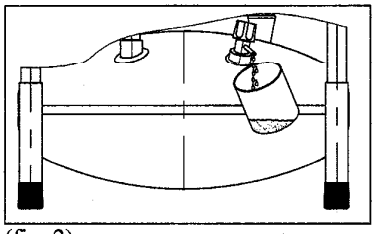
[1] Higher pressure available upon request

[2] Plus/minus 10%. Average at 20°C/68°F motor start temperature

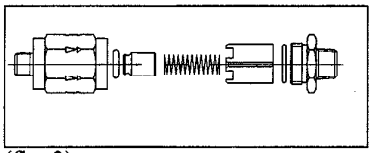
Technical modifications reserved



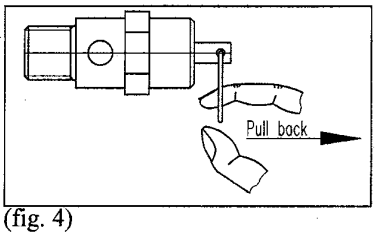
(fig. 1)



(fig. 2)



(fig. 3)



(fig. 4)

PREVENTIVE COMPRESSOR MAINTENANCE

	Weekly	Monthly	Annually
Check oil level. During standstill the correct level is between the maximum and the minimum indications. Use only genuine SJ-27 synthetic oil. Do not overfill (fig. 1).	●		
Drain condensate from air receiver (at a pressure of max. 2 bar/30 psi) (fig. 2). If fitted with auto drain, this will take place automatically, however, drain bottle has to be emptied.	●		
If compressor is fitted with outlet filter, check and empty for water by pressing the black button in the bottom. If fitted with auto drain, this will take place automatically.	●		
Check compressor, air tubes and equipment for leaks, and check the pumping time.		●	
Inspect and replace intake filter, if necessary.		●	
Clean the compressor with a soft, damp cloth. Dust and dirt prevent cooling.		●	
Check the O-ring in the non-return valve and replace if necessary (fig. 3). **Note! Empty receiver of air before dismounting.**			●
Check filter and filter elements for optimum efficiency.			●
Test the safety valve by gently pulling the ring with pressure in the receiver (fig. 4).			●

Oil change

In connection with repair of model 3 motors, e.g. change of valve plate or other internal motor parts or in case the compressor is installed in a very dusty environment, oil change may be necessary. Proceed as follows:

1. Remove the ribbed cover by loosening the 4 screws (fig. 1).
2. Tilt the motor towards side with outlet and at the same time hold the internal motor parts in place with hand. Pour all oil out of housing (fig. 1). In case of dirt particles at the bottom of the motor housing, clean with a rag.

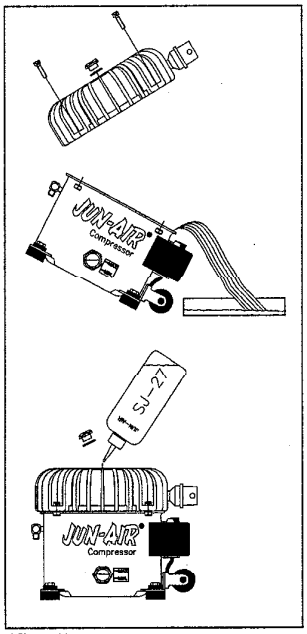
Note!

Waste oil is to be handled according to the environmental rules in force in the country.

3. Tilt the motor back and fill with SJ-27 oil (approx. 0.55l) (fig. 1).
4. Clean the edge of casing and cover. Check the O-ring of the ribbed cover.
5. Replace the ribbed cover and check during operation that the O-ring is placed correctly to ensure a 100% tight closing between housing and cover.

Important!

Always use SJ-27 oil as other types of oil may cause serious mechanical damage to the compressor. Consequently, the warranty only applies if SJ-27 oil is used.



(fig. 1)

Check the pumping time

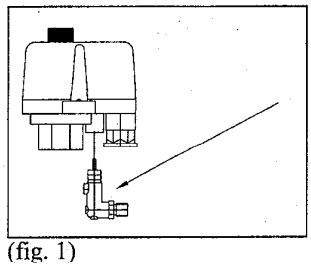
The pumping time indicates the condition of the compressor provided that there are no leaks in the system where the compressed air may leak. Test the compressor as follows:

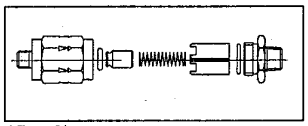
1. Empty the air receiver of compressed air (the pressure gauge shows 0 bar).
2. Close the outlet on the air receiver and check that the drain cock is closed.
3. Start the compressor and note how long it takes until it switches off. Make sure that the pressure in the air receiver is 8 bar/120 psi as deviations may indicate the wrong results (see Technical Details).

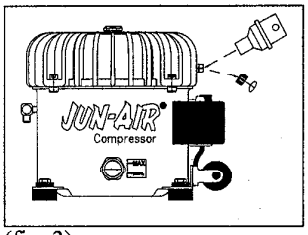
Important!

Always test the compressor when cold as the time indicated refers to the pumping time of a cold compressor. The pumping time of a warm compressor is much longer and consequently, the result would be misleading.

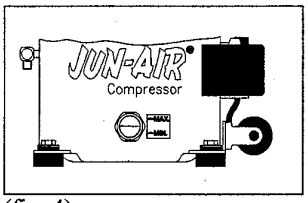
FAULT FINDING AND REPAIR


(fig. 1)

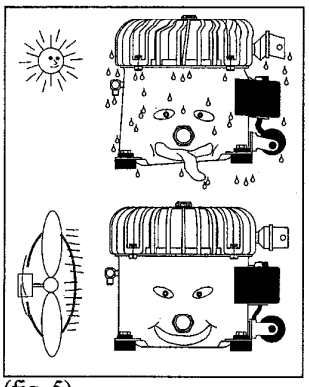

(fig. 2)

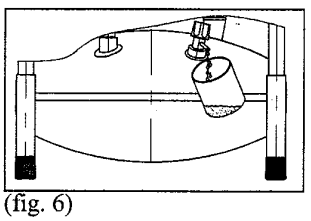


(fig. 3)



(fig. 4)


(fig. 5)


(fig. 6)

Important!

Switch off and isolate from electrical supply before removing any parts from the compressor.

Empty air receiver of air before dismantling any parts of compressor units pressure system.

1. Compressor does not start:

a) No power from mains. Check fuses and plug.
b) Breakage or loose joints in electrical connections.
c) The starting relay is defective. Contact your JUN-AIR distributor.
d) The pressure switch is defective and does not switch on the compressor.
e) The thermal protection has switched off the compressor due to overheating. When cooled the compressor will automatically turn on at a suitable operation temperature. Go through the points in section 4.
f) Pressure in the air receiver is too high for activation of the pressure switch. The pressure switch makes circuit only when pressure has dropped to preset start pressure. Empty the receiver.
g) The compressor has not been unloaded and there is back pressure on the piston. Dismount and check unloader valve (fig. 1). The back pressure may be due to a leaking non-return valve causing the compressed air in the receiver to leak back into the compressor motor. Dismount the non-return valve and clean or change O-ring (fig. 2).
h) Capacitor defective.

2. Compressor operates, but pressure does not increase in tank (or increases too slowly):

a) The cap on the intake tube has not been removed and replaced by the intake filter (fig. 3).
b) Intake filter is clogged. Replace.
c) Leaks in fittings, tubes or pneumatic equipment. Check with soapy water or by letting unit stay overnight with disconnected mains. Pressure drop is not to exceed 1 bar.
d) Clogged non-return valve or pressure pipe. Clean or replace the parts (fig. 2).
e) Air leaks from the unloader valve when the compressor is operating. Check or replace the unloader valve (fig. 1).
f) Defective valve plate. Contact your JUN-AIR distributor.

3. Loud noise from compressor:

a) Most likely broken suspension spring(s). Replace the spring and ensure that motor position is horizontal.
b) The internal pressure pipe touches the rib cover or the cylinder block. Dismount the rib cover and bend the pressure pipe away.

4. Compressor gets very hot and/or uses a lot of oil:

a) Incorrect oil level. The level must appear in the oil level glass (fig. 4).
b) Wrong oil has been filled in the compressor. Use only SJ-27 synthetic lubricant which has the correct viscosity.
c) Leaks. See point 2c.
d) Clogged intake filter. See point 2b.
e) Too high ambient temperature. Do not install the compressor in a cabinet unless adequately ventilated (fig. 5).
f) The compressor is overloaded (i.e. it is operating more than 50% of the operation time). Contact your JUN-AIR distributor.

5. Compressor starts when no air is being used:

a) Leaks. See point 2c.

6. Compressor starts and stops more frequently than usual:

a) Condensate in the air receiver. Empty the receiver by means of the drain cock (fig. 6).
b) Leaks. See point 2c.

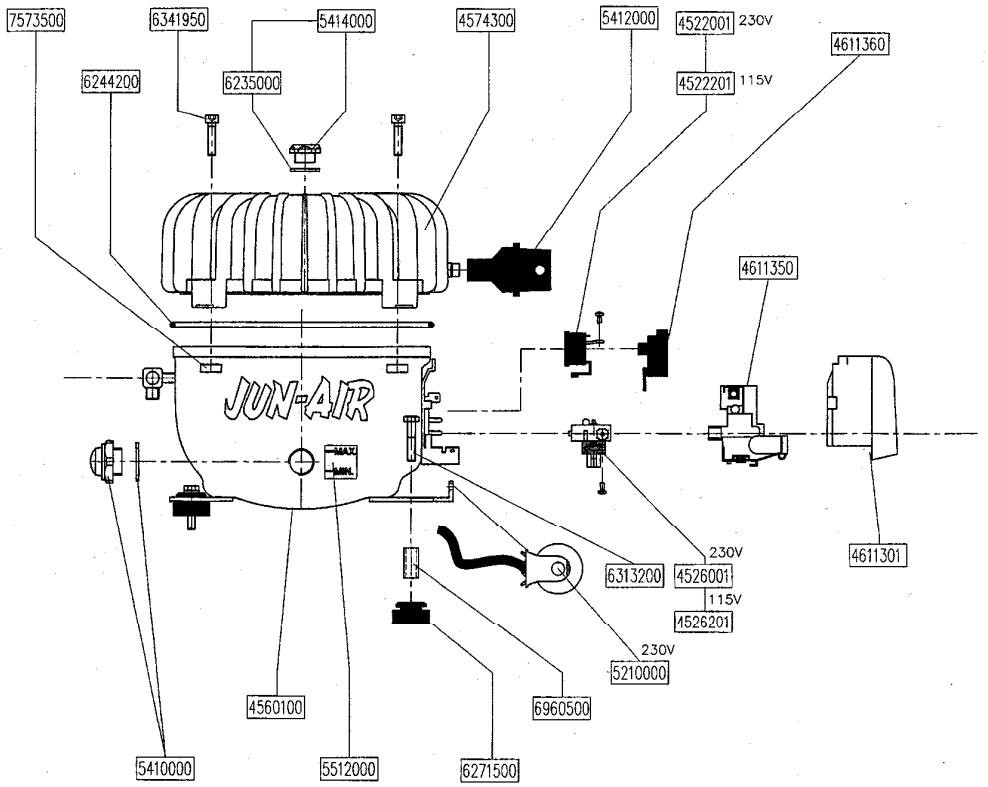
SPARE PARTS

(Please refer to the back for drawings)

3001000	Tank 1.5l, no IP
4070500	Act. carbon filter DH AC-0003G
4071000	Filter 5u man. F07-220-M1MG
4071020	Regulator R07-280-RNMG
4071030	Filter reg 5u man B07-280-M1MG
4071055	Filter 0.01u man F39-220-M0MG
4071080	Lubricator L07-220-MPMG
4081800	Throttle valve
4110000	Rapid coupler 1/4"
4120000	Nipple 1/4"
4130000	Hose tail nipple 1/4"
4310000	Blow gun black
4311000	Blow gun black
4380000	Ball inflator
4381000	Bicycle inflator
4382000	Car tyre inflator
4383000	Hose clamp 8-12 mm
4410000	PVC air hose 1/4"
4430000	Recoil air hose 1/4" 7.5 m
4512001	Int. motor parts M3 230V new
4513001	Int. motor parts M3 120V new
4522001	Overload protector M3 230V new
4522201	Overload protector M3 120V new
4526001	Starting relay M3 230V new
4526201	Starting relay M3 120V new
4560100	Casing bottom M3 silver new
4574300	Rib cover M3/M4 silver
4582000	Casing bottom M3
4610201	Cylinder head M3 new
4610501	Spring w/bushing M3 new
4610601	Top bearing M3 new
4611301	Cover f/terminal board M3 new
4611350	Bracket f/terminal box M3 new
4611360	Bracket f/klixon M3 new
4628000	Bolt f/top bearing M3
4629000	Top bearing M3
4629200	Lock ring M3
4629400	Fiber bearing M3
4645000	Cover M3
4646000	Gasket f/cover (=4548000)
4649500	Bolt f/press. control valve M3
4651200	Suspension spring M3 new
4656000	Bolt f/cylinder head M3
4750000	Control lamp 230V
4750200	Control lamp 120V
5030000	Pressure switch MDR 2/11
5035000	Pressure switch MDR2/11 compl.
5075100	Pressure switch UL
5130000	Gauge Ø40 - 0-16 bar 1/8" down
5210000	Capacitor start 70uF
5310000	Handle f/3-0.5 and 3-IMP
5319500	Handle f/3-1.5
5410000	Oil level glass compl.
5412000	Intake filter compl.
5412100	Intake filter 3-0.5/0.7
5414000	Oil inlet screw w/gasket
5414500	Non-return valve
5416000	Safety valve 10bar/145psi
5418000	Drain cock 1/4" 4l
5420000	Drain cock 1/4" 25l
5424500	Outlet cock 1/4" straight
5425000	Distributor f/non-return valve
5425500	Safety valve TÜV 10 bar
5427000	Swivel w/connecting piece
5429000	Adaptor 5-way compl.
5429100	Adaptor 4-way compl.
5429500	Adaptor 2-way compl.
5470251	Kit repl. valve plate M3 new
5512000	Label "Min-Max"
5825000	Spring f/press. control valve
6214000	Copper washer Ø10xØ6x1mm
6221000	Gasket for press. control vlv
6235000	Gasket f/oil filling
6244200	O-ring f/rib cover M3/M4
6252000	Socket
6252900	Rubber foot f/3-IMP Ø20x30
6253000	Base f/handle Ø25x30 M8x8
6264500	Nylon tube Ø4xØ2,5mm black
6271500	Rubber grommet f/motor M4
6290300	Grip for handle
6291000	Plastic handle black Ø25mm
6312100	Bolt M6x8
6313200	Bolt M6x30
6320200	Counter nut M8 flat FZB
6338000	Screw UNF 10-32 3/4"
6340000	Bolt 1/4"x12
6341950	Bolt M6x25
6356600	Washer 3/16"x30 mm M4
6372600	Lock nut M6
6372700	Lock nut M8 FZB
6420000	Flex pipe 1/8" 20 (22) cm
6426000	Flex pipe 1/8" 26 (28) cm
6960500	Distance tube 17 mm
6961500	Distance tube M4
6973080	Unloader valve w/16.4mm needle
6975000	Silencer SE-M5
6991800	Gasket 12x22x7 mm
7012000	Piston f/safety valve
7023000	Hose tail nipple 1/4"
7024000	Double nipple 1/4" L = 26 mm
7071000	T-piece 1/8"
7074500	Coupling 1/4"
7110000	Screw f/pressure control valve
7140000	Housing f/press. control valve
7156100	Extension piece f/cock (84cm)
7157000	Extension piece
7160000	Cross connector 1/4"
7164200	Cross connector
7167000	Oil fill screw
7180000	Elbow 1/4"
7190000	Elbow 1/8"
7562000	Nipple f/press. control valve
7565000	Bushing 1/4" x 1/8"
7566000	Bushing 1/4" x 1/4"
7573500	Nut f/rib cover M3

DRAWINGS

MOTOR SPARE PARTS MODEL 3-0,5/3-1,5/3IMP-0,5



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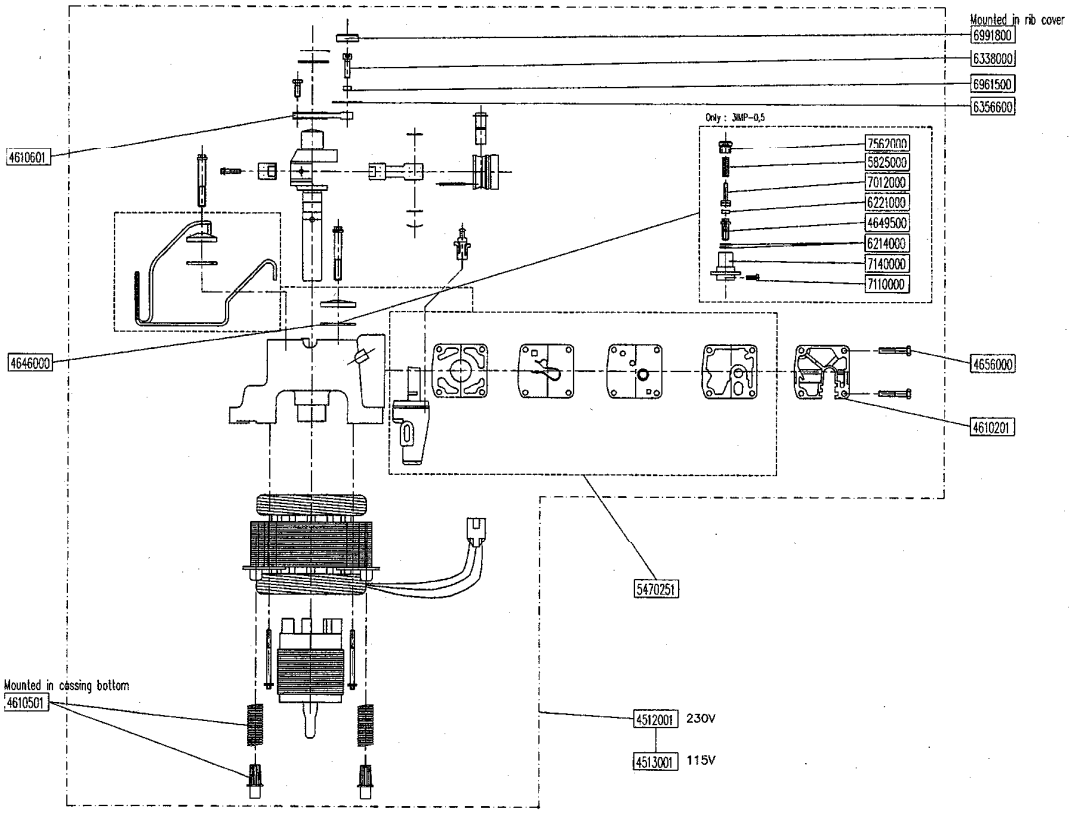

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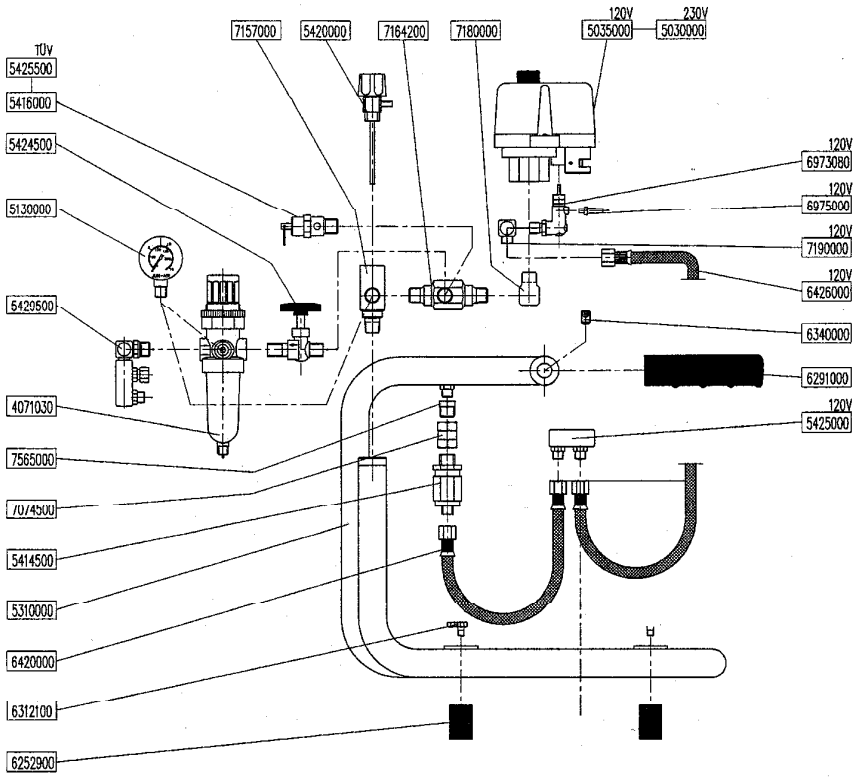
SPARE PARTS MODEL 3-0,5/3-1,5

Spare parts model 3-0,5



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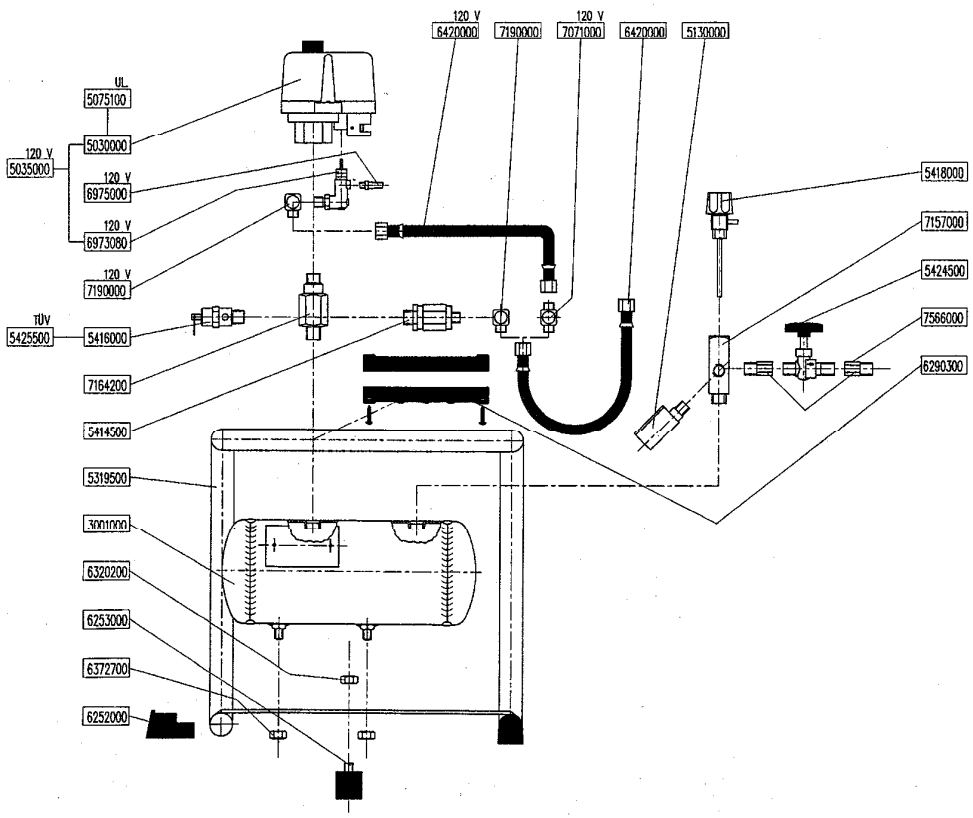
Spare parts model 3-1,5



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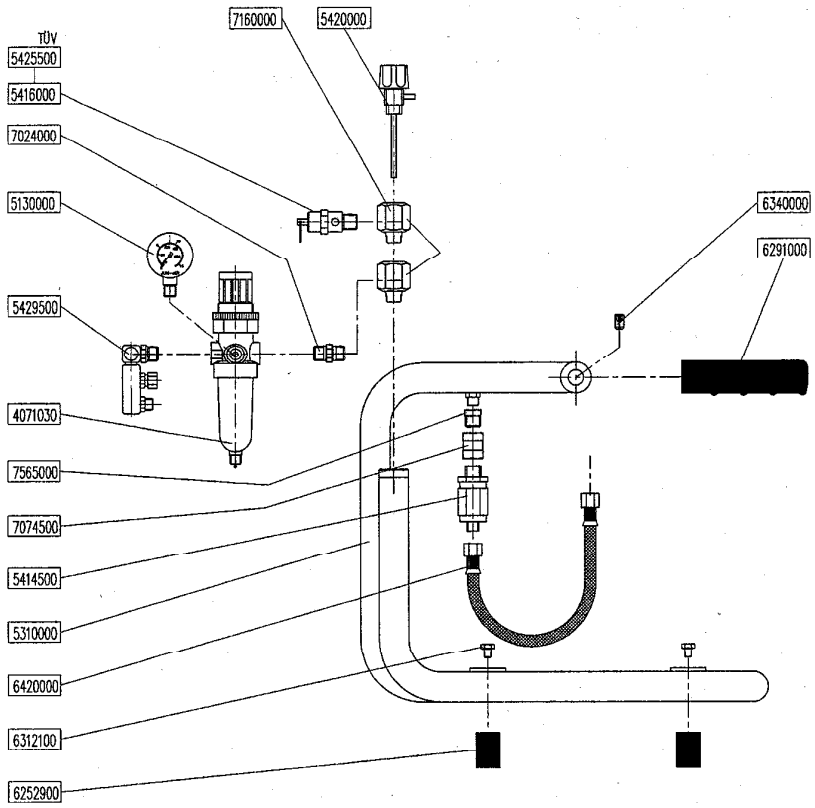

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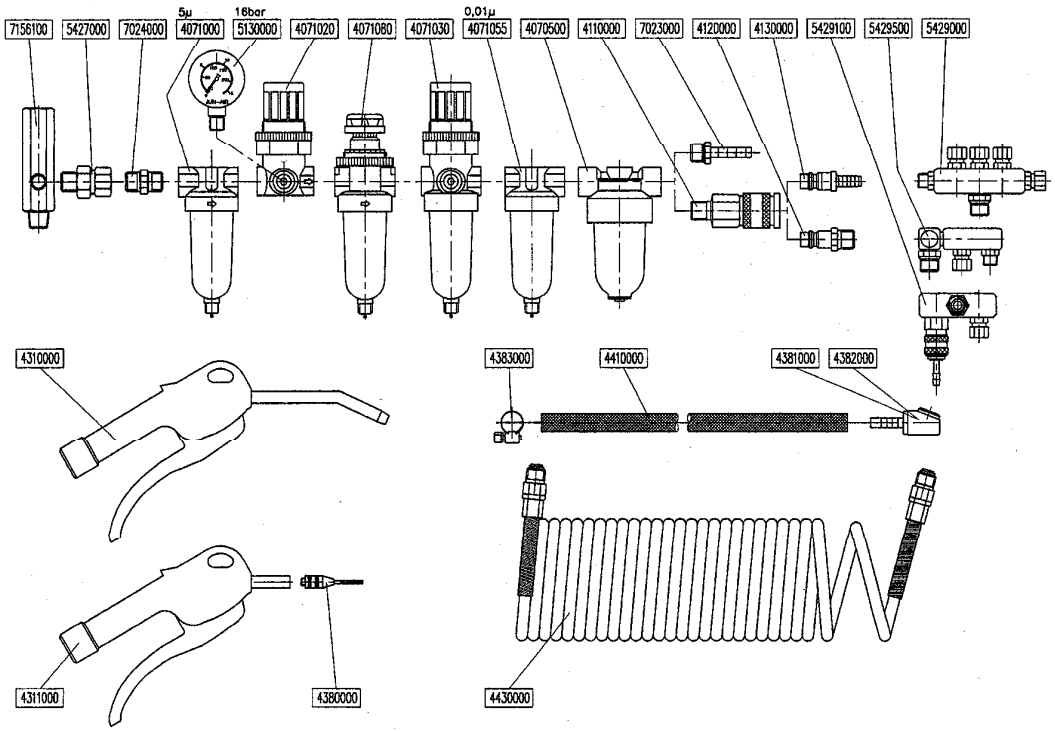
ACCESSORIES



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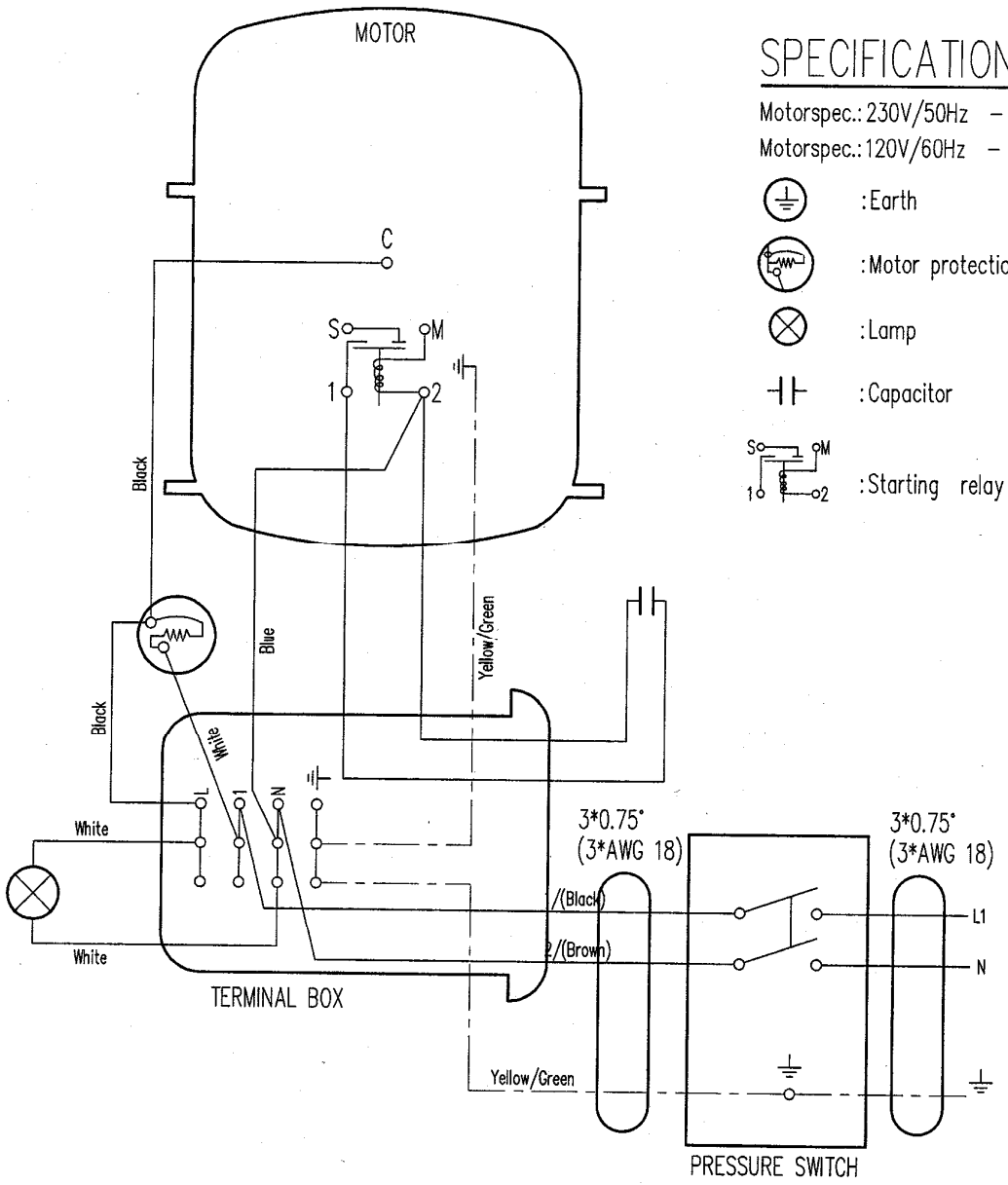
ELECTRICAL DIAGRAM



SPECIFICATION

Motorspec.: 230V/50Hz – 1.1A

Motorspec.: 120V/60Hz – 2.0A

:Earth

:Motor protection

:Lamp

:Capacitor

:Starting relay

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