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Congratulations for purchasing a product with SCHULZ quality.

An **ISO 9001** quality system and **ISO 14001** environmental management system certified company.

SCHULZ products combine technology and convenience.

If you need any help, please, contact us.



IMPORTANT

This Instruction Manual contains important information about operation, installation, maintenance and safety, and must be always available for the operator. Before operating the equipment or performing any maintenance job, read this instruction manual and be sure of fully understanding all the instructions in order to prevent personal injuries or material damages to your rotary screw compressor.



IMPORTANT

For the maintenance of your rotary screw compressor, always use genuine SCHULZ parts, which are purchased at a SCHULZ AUTHORIZED DEALER.

2. INTRODUCTION



FOR THE CORRECT USE OF THE PRODUCT, WE RECOMMEND THE COMPLETE READING OF THIS MANUAL.

It will help you optimize the performance of the equipment, guarantee its safe operation and guide you through its preventive maintenance. In case you cannot solve a problem with the help of the information contained in this manual, contact the nearest SCHULZ AUTHORIZED DEALER, who will always be willing to help you, or get more information in the website (www.schulzamerica.com).

Warranty Term

Familiarize with the Warranty Term; read carefully the compressor chapter "Warranty" at the end of this manual.

In order to validate the Warranty and for more safety of the equipment, it is essential the use of genuine LUB SCHULZ SYNTHETIC or LUB SCHULZ oil for rotary screw compressor and genuine SCHULZ parts.

The final user is responsible for the installation, inspection, maintenance, operation and specific documentation of the pressure vessel, which should be carried out in accordance with local legislation of each country.

Service Report

Any repair in the compressor should be carried out by SCHULZ AUTHORIZED SERVICE PROVIDER. After the repair or maintenance, fill out the service record supplied with this Manual.

Questions

Whenever you have any questions about you rotary screw compressor, please, mention the model and serial number indicated on the plate fixed in the cabinet.










3. COMPRESSOR INSPECTION

Inspect and check if there were apparent damages caused by transportation. If so, inform the carrier immediately. Be sure that all damaged parts are replaced and that mechanic and electric problems are fixed before operating the air compressor.

4. APPLICATION












Schulz air compressors should only be used for atmospheric air compression up to the maximum pressure indicated in its identification plate.

5. SAFETY INSTRUCTION










-  1. This equipment, if improperly used, can cause physical and material damage. To avoid these damages, follow the instructions below:
- This equipment may not be used by people with physical, sensorial, or mental handicaps. Or without experience or knowledge.
 - People without the proper experience or knowledge may use this equipment only if properly supervised or instructed to its use by someone who is liable for his or her safety.
 - This equipment may not be used by children under any circumstances.
 - Do not use your equipment while tired, under the influence of medication, alcohol or drugs. Lack of attention during operation may result in serious personal injury;
 - Can cause mechanical or electrical interference on nearby sensitive equipments;
 - Must be installed and operated in places that are ventilated and protected against moist presence and water falling.
-  2. The equipment model must be chosen in compliance with the established use. don't exceed maximum capacity, if required, acquire a more suitable product for the application. This will increase the efficiency and safety in the work;
-  3. Always use suitable personal protective equipment (PPE), as each application, such as dust glasses and masks, non-skid safety shoes and ear protection. This reduces the risks against personal injury;
-  4. Not use long wear clothing, or jewelry that may come into contact with the moving part of the compressor during use. If you have long hair, contain it before using the product;
-  5. While in use, this equipment has electrical components and hot moving parts;
-  6. To reduce the risk of electrical shock:
- Do not use the equipment barefoot, in wet or very humid places, do not touch metal surfaces attached to the ground or grounded, such as pipes, motors, gutters, fences, windows, doors, metal gates, etc, this increases the risk of electric shock;
 - The electrical installations of the compressor must be according to the country's current regulation (Electrical installations of low voltage).
 - Before cleaning or performing maintenance, disconnect the machine from the power grid;
 - Do not make splices in the cord. If required, change for a power cord.
 - Do not use your electric equipment in explosive atmospheres (gas, flammable liquid or dust). The motor generate sparks that may cause explosion;
 - Make sure that the disconnect switch is in the "off" position before connecting the equipment to the power grid.
7. Do not modify the settings of the safety valve and pressure switch, once they come preset from the factory, if some adjustment is necessary on the pressure switch, use the service of the nearest SCHULZ AUTHORIZED DEALER.
8. Never exceed the maximum pressure indicated on the compressor's identification plate/sticker.
9. Never operate the safety valve with the compressor under operation or pressure. This may cause injury due to shooting particles and/or burns when the valve is installed on a hot piece;
10. Never perform repairs or welding services on the tank, because they can affect the resistance or mask more serious problems. If there is any leak, crack or corrosive wear, suspend the use of the equipment immediately and find a SCHULZ AUTHORIZED DEALER.
11. Release all pressure in the tank before performing any maintenance;
-  12. The compressed air might contain pollutants that will cause harm to the health of humans, animals, ambient or foods, among others. The compressed air must be treated with adequate filters, according to application and use requirements. Consult the factory or a SCHULZ AUTHORIZED DEALER for more information.
13. Do not allow the compressor to keep in contact with any flammable substances;
14. Remove all adjustment tools before turning your equipment on. A tool or part stuck in moving of the equipment may cause serious injuries;
-  15. Never clean the compressor with solvents or any other flammable substances, use a neutral detergent.
-  16. In presence of any equipment abnormally, suspend its operation immediately and contact the nearest SCHULZ AUTHORIZED DEALER.










6. TECHNICAL FEATURES










(FOR USA COMPRESSORS)










MODEL			SRP 3015 Compact II			SRP 3025 Compact			SRP 3040 Compact		
	Pressure Work	barg/psig		8,6/125			8,6/125			8,6/125	
	Volume Flow	cfm		51			89			150	
		ℓ /min		1444			2510			4247	
	Drive method		Belt			Belt			Belt		
	Power Compressor	hp/kW	15/11			25/18			40/30		
		Voltage (V)	208			208			208		
			230			230			230		
			460			460			460		
		Start mode	YΔ			YΔ			YΔ		
	Electrical Parameters	Fuse NH (A)	Slow blow fuse*			Slow blow fuse*			Slow blow fuse*		
		Command Voltage (V)		24			24			24	
	Temperatura	Ambient temperature permitted (°C)	0-40			0-40			0-40		
	Lubricant oil	Volume (ℓ)	5,2			5,6			17		
		Description	SH - 46 Synthetic (Kluber)			SH - 46 Synthetic (Kluber)			SH - 46 Synthetic (Kluber)		
	Air discharge connection	BSP (or Rp)	3/4"			3/4"			1"		
	Weight Liq.	Kb/lb	195/430			286/630			445/980		
	Noise Level	dB (A)	86			86			91		
	Tank Air	ℓ /gallon	200/53			300/80			450/120		

6. TECHNICAL FEATURES

MODEL			SRP 3005 Compact			SRP 3008 Compact			SRP 3010 II Compact		
	Pressure Work	barg/psig	7,5/109	9/131	11/160	7,5/109	9/131	11/160	7,5/109	9/131	11/160
	Volume Flow	cfm	18,4	16,6	14	28,3	25,5	21	40	35	30
		ℓ /min	521	470	396	801	722	595	1133	991	850
	Drive method		Belt			Belt			Belt		
	Power Compressor	hp/kW	5/3,7			7,5/5,5			10/7,5		
		Voltage (V)	220			220			220/380		
			380			380			380/660		
			440			440			440/760		
		Start mode	Partida direta			Partida direta			Estrela / triângulo		
	Electrical Parameters	Fuse NH (A)	50	35	35	50	35	35	50	25	20
		Command Voltage (V)	220	380	440	220	380	440	220	380	440
	Temperatura	Ambient temperature permitted (°C)	0-40			0-40			0-40		
	Lubricant oil	Volume (ℓ)	2,7			2,7			2,7		
		Volume (gal)	0,7			0,7			0,7		
		Description	Lub Schulz			Lub Schulz			Lub Schulz		
	Air discharge connection	BSP (or Rp)	1/2"			1/2"			1/2"		
	Weight Liq. Kg	With Tank	179			201			221		
		Without Tank	-			-			-		

MODEL			SRP 3010 Compact			SRP 3015 II Compact			SRP 3015 Compact		
	Pressure Work	barg/psig	7,5/109	9/131	11/160	7,5/109	9/131	11/160	7,5/109	9/131	11/160
	Volume Flow	cfm	40	35	30	59	51	45	59	51	45
		ℓ /min	1133	991	850	1671	1444	1274	1671	1444	1274
	Drive method		Belt			Belt			Belt		
	Power Compressor	hp/kW	10/7,5			15/11			15/11		
		Voltage (V)	220/380			220/380			220/380		
			380/660			380/660			380/660		
			440/760			440/760			440/760		
		Start mode	YΔ			YΔ			YΔ		
	Electrical Parameters	Fuse NH (A)	50	25	20	50	35	35	50	35	35
		Command Voltage (V)	220	380	440	220	380	440	220	380	440
	Temperatura	Ambient temperature permitted (°C)	0-40			0-40			0-40		
	Lubricant oil	Volume (ℓ)	5,2			5,2			5,2		
		Volume (gal)	1,4			1,4			1,4		
		Description	Lub Schulz			Lub Schulz			Lub Schulz		
	Air discharge connection	BSP (or Rp)	3/4"			3/4"			3/4"		
	Weight Liq. Kg	With Tank	210			195			220		
		Without Tank	-			-			-		

MODEL			SRP 3020 Compact			SRP 3025 Compact			SRP 3030 Compact		
	Pressure Work	barg/psig	7,5/109	9/131	11/160	7,5/109	9/131	11/160	7,5/109	9/131	11/160
	Volume Flow	cfm	84	74	65	102	89	80	124	108	97
		ℓ /min	2379	2095	1841	2888	2520	2265	3511	3058	2747
	Drive method		Belt			Belt			Belt		
	Power Compressor	hp/kW	20/15			25/18,5			30/22,5		
		Voltage (V)	220/380			220/380			220/380		
			380/660			380/660			380/660		
			440/760			440/760			440/760		
		Start mode	YΔ			YΔ			YΔ		
	Electrical Parameters	Fuse NH (A)	80	50	50	100	63	50	125	63	63
		Command Voltage (V)	220	380	440	220	380	440	220	380	440
	Temperatura	Ambient temperature permitted (°C)	0-40			0-40			0-40		
	Lubricant oil	Volume (ℓ)	9,6			9,6			9,6		
		Volume (gal)	2,5			2,5			2,5		
		Description	Lub Schulz			Lub Schulz			Lub Schulz		
	Air discharge connection	BSP (or Rp)	3/4"			3/4"			1"		
	Weight Liq. Kg	With Tank	258			286			375		
		Without Tank	-			-			249		

MODEL			SRP 3040 Compact		
	Pressure Work	barg/psig	7,5/109	9/131	11/160
	Volume Flow	cfm	165	150	135
		ℓ /min	4672	4247	3822
	Drive method		Belt		
	Power Compressor	hp/kW	40/30		
		Voltage (V)	220/380		
			380/660		
			440/760		
		Start mode	YΔ		
	Electrical Parameters	Fuse NH (A)	160	80	80
		Command Voltage (V)	220	380	440
	Temperatura	Ambient temperature permitted (°C)	0-40		
	Lubricant oil	Volume (ℓ)	17		
		Volume (gal)	4,5		
		Description	Lub Schulz		
	Air discharge connection	BSP (or Rp)	1"		
	Weight Liq. Kg	With Tank	585		
		Without Tank	319		

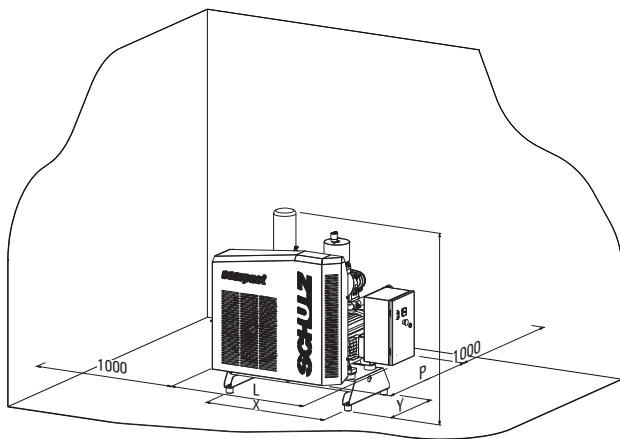


FIGURE 6.1 - MODEL AIR DIRECT

Models	L	A	P	X	Y
SRP 3005 SRP 3008 SRP 3010 II	1360	1060	446	630	373
SRP 3010 SRP 3015 SRP 3015 II	1360	1370	549	630	370
SRP 3020 SRP 3015	1550	1520	660	1000	460
SRP 3030 AD	1210	1125	710	850	450
SRP 3030	1610	1630	690	1000	548
SRP 3040 AD	1296	1322	770	850	450
SRP 3040	1610	1820	770	1000	548

TABLE 6.2 - DIMENSIONS (MM)

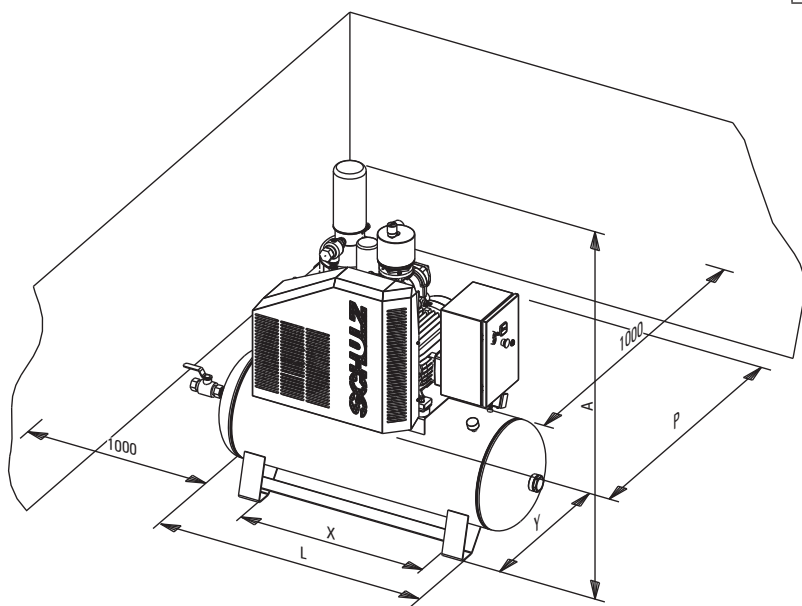


FIGURE 6.2 - MODEL WITH TANK

7. MAIN PARTS



1. Radiator

2. Minimum pressure valve



3. Air/oil tank

4. air filter/admission valve



5. Electric motor

6. Oil filter



7. Air end



8. Start switch

9. Instrument panel

10. Safety valve

11. Air tank

12. Oil filling plug

13. Oil drain valve

14. Air/oil separator element



15. Belt guard

16. Indicator of restriction of the air filter

17. Pressure switch

18. Drain petcock with manual drain

19. Transverse bar for transportation.

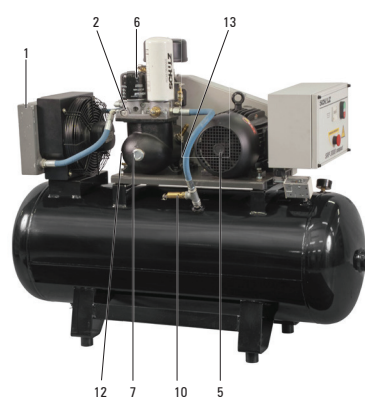
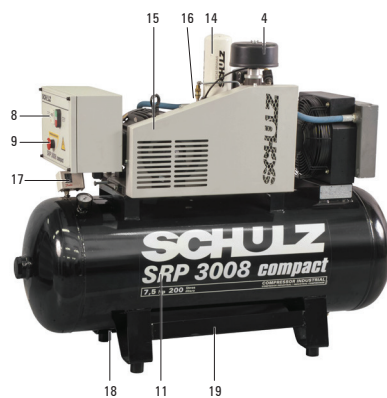


FIGURE 7.1 - SRP 3005 TO SRP 3010 II

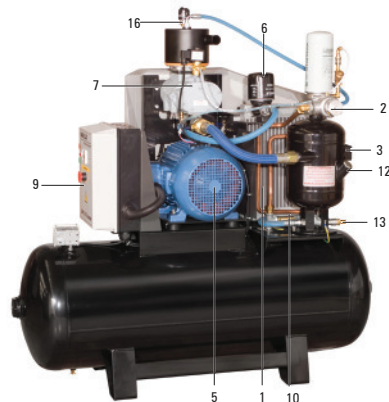
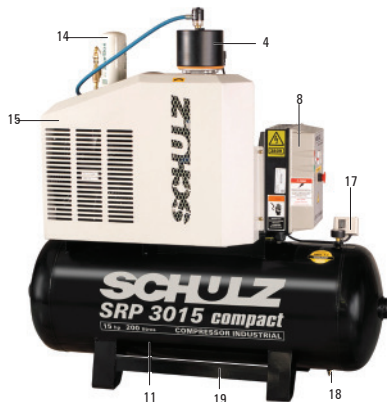


FIGURE 7.2 - SRP 3010 / SRP 3015

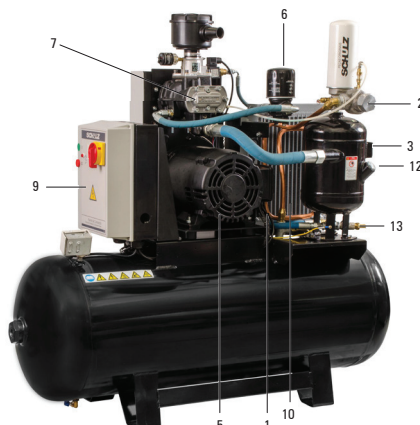
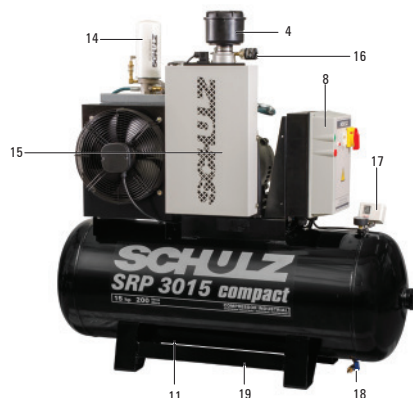


FIGURE 7.3 - SRP 3015 II

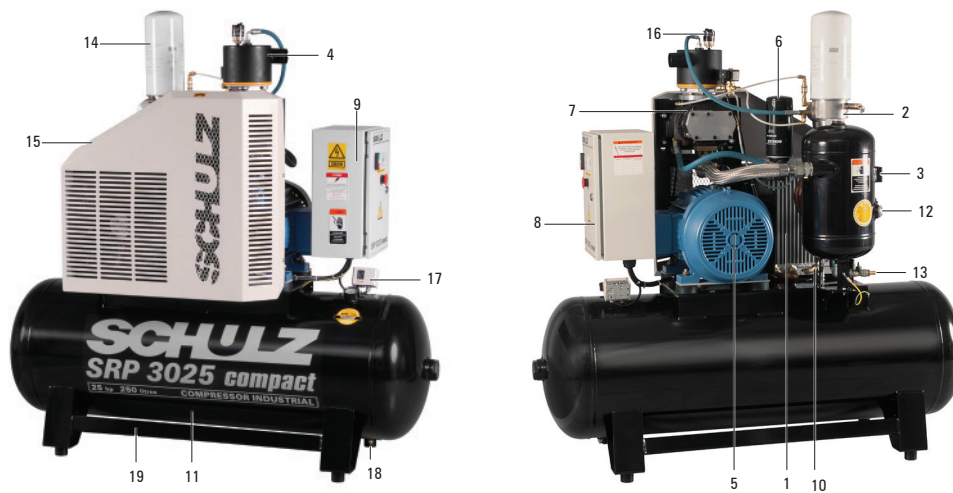


FIGURE 7.4 - SRP 3020 / SRP 3025

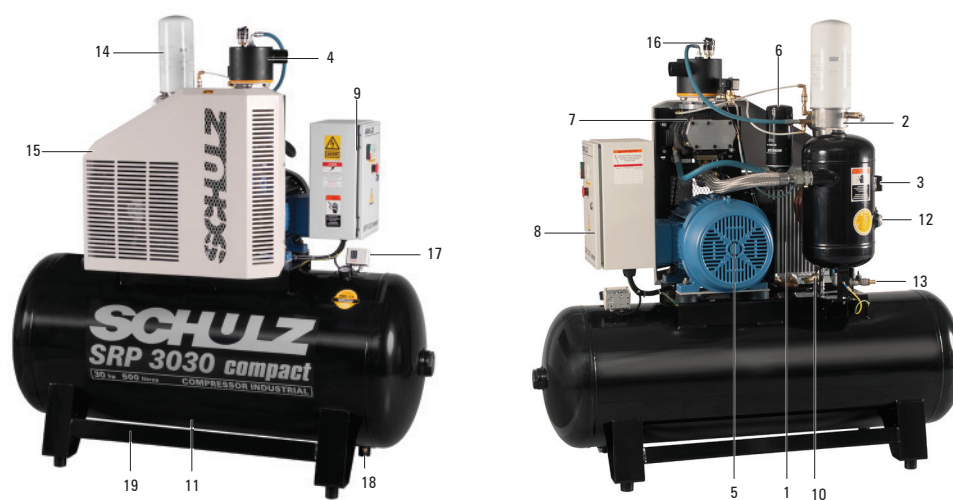


FIGURE 7.5 - SRP 3030 / SRP 3040

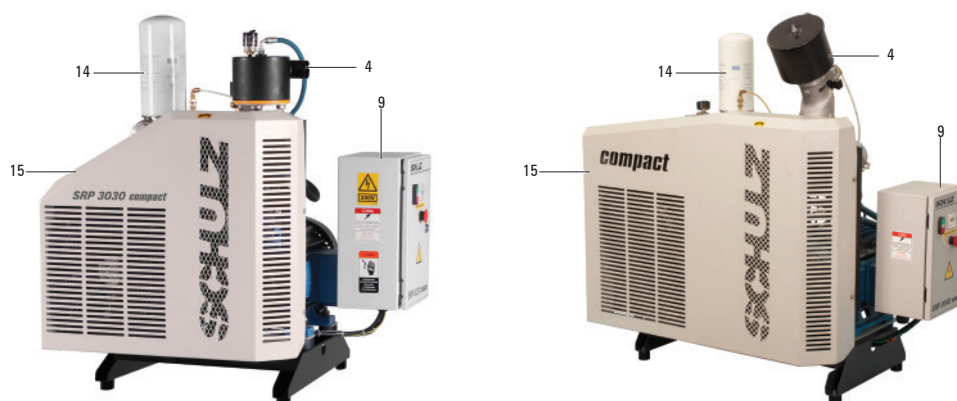


FIGURE 7.6 - SRP 3030 AD / SRP 3040 AD

8. INSTALLATION

1. Location

Install the compressor in a covered area, well ventilated and free of dust, gases, toxic gases, chemical products humidity or any other kind of pollution.

The noise level of the compressor, measured in an open space, may rise considerably if the installation place is surrounded by walls that reflect sound. This equipment must not be installed where inadvertent people may have access to. Observe this aspect when choosing the best place for installation.

The maximum ambient temperature recommended for operation is 40°C. If the ambient temperature is higher, exhaust fans or other means to lower the temperature must be provided. The lower the ambient temperature is better for compressor working conditions. The presence of contaminants (dust, fibers, chemical products, etc.) suspended in the air, can cause premature saturation of the air filter and radiator honeycomb core (See Preventive Maintenance section).

It is important to emphasize that chemical products can be absorbed by the air filter, contaminating the oil and causing lubrication problems, compromising the quality of compressed air, as well as damaging the external and/or peripheral components of the compressor, be they mechanical, electrical or electronic.

In order to reduce the noise level of the compressor, an acoustic project should be adopted.



ATTENTION

Do not install the compressor in chemically contaminated areas.

2. Positioning and Dimensions

Observe a minimum clearance, as indicated in Figures 6.1 and 6.2, from any obstacle in order to facilitate maintenance jobs.

It is recommended the installation of a guard around the compressor so as to set the free space and reduce people's contact with the equipment. The products feature transverse bars at the air tank feet for transportation of the product by forklift. (See figures 7.1 to 7.5)

3. Foundation / Package

Install the compressor removing the accessory for transportation (base) and place it on a leveled concrete floor. It is necessary to install vibration dampers in the compressor SRP3005 up to SRP3040 and the other compressors, it is recommended. Do not fasten the compressor on the floor.

4. Electrical installation

Refer to a specialized technician to evaluate the general conditions of the power line and select the proper power supply and protection devices.

The recommendations local Standards for Low Voltage Electric Installation must be observed.

The power supply cables should be dimensioned, taking into account the capacity of the start switch of the compressor and the distance from the power source (See Table 8.1).



ATTENTION

Check the capacity of the transformer to stand the installed power rating of the compressor. If you do not have your own transformer, you must evaluate if the main and principal circuit breakers hold the increase of load. The power line must not present voltage variation over 10%. The voltage drop generated by the start peak must not be over 10%.

The power line must not present voltage variation over $\pm 10\%$.

The voltage drop generated by the start peak must not be over 10%.

The electric panel of the compressor has a terminal block for adaptation of remote activation (see the electric diagram).

The start switch features an overload relay for protection of the motor of the compressor and of the fan.

For your safety, the frame of the compressor must be properly connected to the ground wire.

The electric power supply should be protected with NH-type or Diazed (delayed) fuses, installed close to the compressor (see Table 6.1).

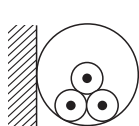
In figure 8.1 and 8.2 you will find the directions and diagram (A) for the installation of the capacitor bank.

Terminal block - Power supply: powers the compressor according to the rating voltage, indicated in the start switch housing (refer to the electric diagram).

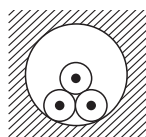
Terminal block - Command power supply: the power supply of the command must be separate from the drive power supply (refer to the electric diagram).

Maximum Distances for Voltage Drop of 5% (meters)																											
A	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	120	140	160	180	200	220	240
mm²																											
1,0	76	38																									
1,5	110	55	37																								
2,5	183	92	61	46																							
4,0	293	147	98	73	59																						
6,0	431	216	144	108	86	72	62																				
10	733	367	244	183	147	122	105	92	81	73																	
16	1122	561	374	281	224	187	160	140	125	112	102	94	86														
25	1719	859	573	430	344	286	246	215	191	172	156	143	132	123	115	107	101	95									
35	2292	1146	764	573	458	382	327	286	255	229	208	191	176	164	153	143	135	127	121	115							
50	3014	1507	1005	753	603	502	431	377	335	301	274	251	232	215	201	188	177	167	159	151	126						
70	4074	2037	1358	1019	815	679	582	509	453	407	370	340	313	291	272	255	240	226	214	204	170	146	127				
95	5238	2619	1528	1310	1048	873	748	655	582	524	476	437	403	374	349	327	308	291	276	218	187	164	146	131			
120	6286	3143	2095	1571	1257	1048	898	786	698	629	571	524	484	449	419	392	370	349	331	314	262	224	196	175	157	143	131

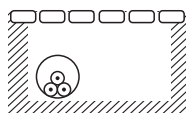
Ways to Install



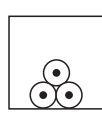
BUILT-IN



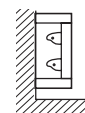
BURIED



GUTTER



BUILT-IN



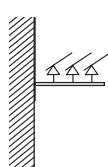
GUTTER

Distance in meters, for 220V, Noflan Cable BWF,
750V, Three phase system, cosj – 0.8.
For 380V multiply by 1.727
For other voltages contact an electrician

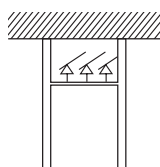
Maximum Distances for Voltage Drop of 5% (meters)																											
A	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	150	200	250	300	350	400	450
mm²																											
6	411	206	137	103	82	69	59	51																			
10	661	330	220	165	132	110	94	83	73	66	60																
16	991	495	330	248	198	165	142	124	110	99	90	83	76	71	66												
25	1447	724	482	362	289	241	207	181	161	145	132	121	111	103	96	90	85	80	76	72							
35	1864	932	621	466	373	311	266	233	207	186	169	155	143	133	124	117	110	104	98	93							
50	2316	1158	772	579	463	386	331	289	257	232	211	193	178	165	154	145	136	129	122	116	77						
70	2973	1486	991	743	595	495	425	372	330	297	270	248	229	212	198	186	175	165	156	149	99	74					
95	3548	1774	1183	887	710	591	507	444	394	355	323	296	273	253	237	222	209	197	187	177	118	89					
120	4074	2037	1358	1019	815	679	582	509	453	407	370	340	313	291	272	255	240	226	214	204	136	102	81				
150	4683	2292	1528	1146	917	764	655	573	509	458	417	382	353	327	306	286	270	255	241	229	153	115	92	76			
185	5000	2500	1667	1250	1000	833	714	625	556	500	455	417	385	357	333	313	294	278	263	250	167	125	100	83	71		
240	5641	2821	1880	1410	1128	940	806	705	627	564	513	470	434	403	376	353	332	313	297	282	188	141	113	94	81	71	
300	6286	3143	2095	1571	1257	1048	898	786	698	629	571	524	484	449	419	393	370	349	331	314	210	157	126	105	90	79	70

E.g.: Motor with current 35A (220V) – cable section 35 mm² and maximum distance found 266 meters

Ways to install



WALLS



POLES

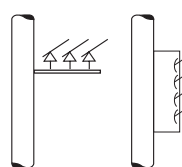


TABLE 8.1 - GUIDING TABLE FOR COPPER CABLES

INSTALLATION OF CAPACITOR BANK

Power factor correction

An economical and sensible way to obtain the reactive power necessary for the proper operation of your compressor is the installation of capacitors close to it.

The installation of capacitors, however, must come after operational measures that lead to the decrease of need of reactive power, such as the turning off of motors or other idle or oversized inductive loads.

Where the significant advantage of the correction of the power factor is the improvement of the voltage.

CARES IN THE INSTALLATION OF CAPACITORS

Local of installation

- Avoid the exposure to sunrays or closeness to equipment with high temperatures;
- Do not block the air inlet and outlet in the cabinets;
- The places should be protected against solid and liquid material in suspension (dust, oils);
- Avoid installation of capacitors near the roof (heat);
- Take care when installing the capacitors near non-linear loads.

PROTECTION AGAINST SHORT CIRCUIT

Fuses: Dimension the fuses according to the equation: $I_n \times 1.65$

- Note - " I_n " informed in the capacitor plate.
- Use commercial value of delayed-type fuse immediately above.

Conductors: Use conductors oversized in 1.43 times the rating current of the capacitor and take into account other criteria, such as: way to install, ambient temperature, etc.

Note: For the connection $Y\Delta$ start and direct start, regulate the new current that will pass through the relay.

Note: The installation of capacitors for power factor correction should always be performed by a qualified professional.

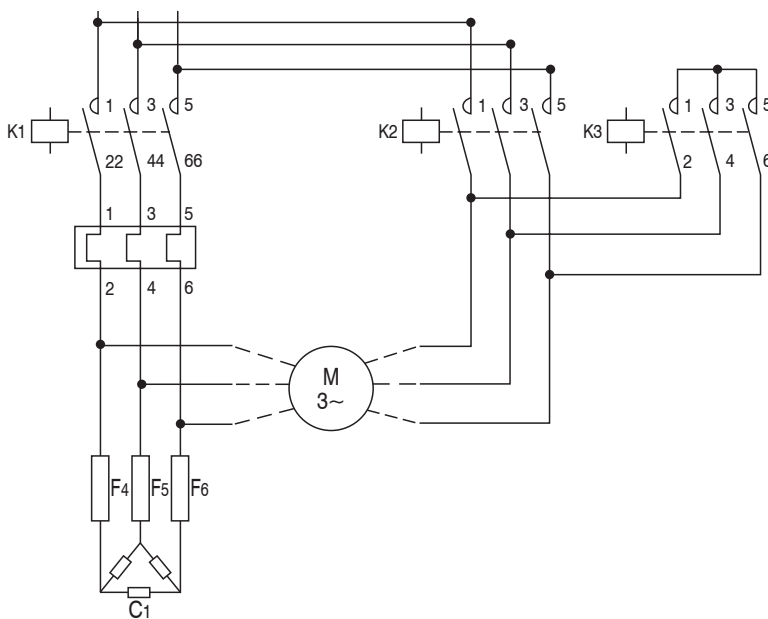


Diagram A - Activation $Y\Delta$
FIGURE 8.1 - $Y\Delta$ START

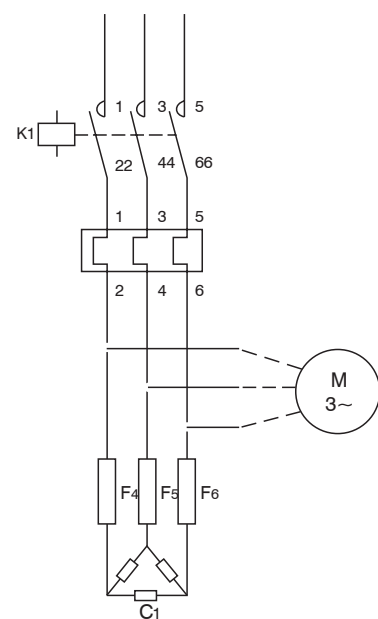


FIGURE 8.2 - DIRECT START

Air distribution

The compressors is supplied from factory with service valve in the air outlet (according to the table of technical features).

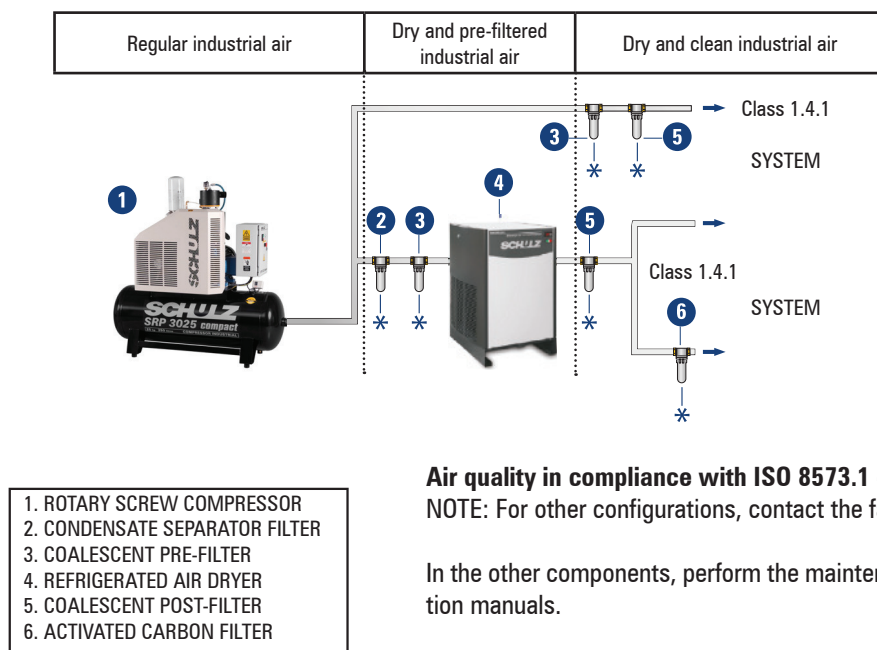
Do not use connection with reduction in the outlet of the compressor and do not install undersized line filter(s), so as not to cause load loss near the source of air production. Whenever possible, install "Y" instead of "T" and long-radius curves.

We recommend installing, in the air outlet, a service line with hose and air blow gun for cleaning the radiator and other jobs that require local compressed air.



IMPORTANT

In order not to jeopardize the quality of the compressed air, place the rotary screw compressor in such a way that the outlet of hot air is not blown over the tank, filters and dryer (Figure 8.3).



Air quality in compliance with ISO 8573.1 - Class 1.4.1

NOTE: For other configurations, contact the factory.

In the other components, perform the maintenance according to their instruction manuals.

Note: The installation expenses and accessories are paid by the customer.

FIGURE 8.3 - TYPICAL INSTALLATION OF THE COMPRESSOR WITH PERIPHERALS FOR COMPRESSED AIR TREATMENT

9. PRINCIPLE OF OPERATION

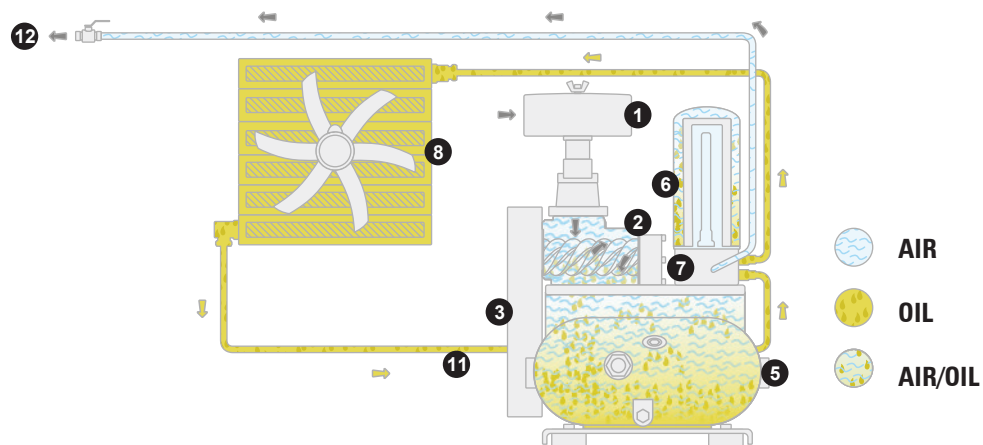


FIGURE 9.1 - AIR/OIL FLOW SRP 3005 TO SRP 3010II

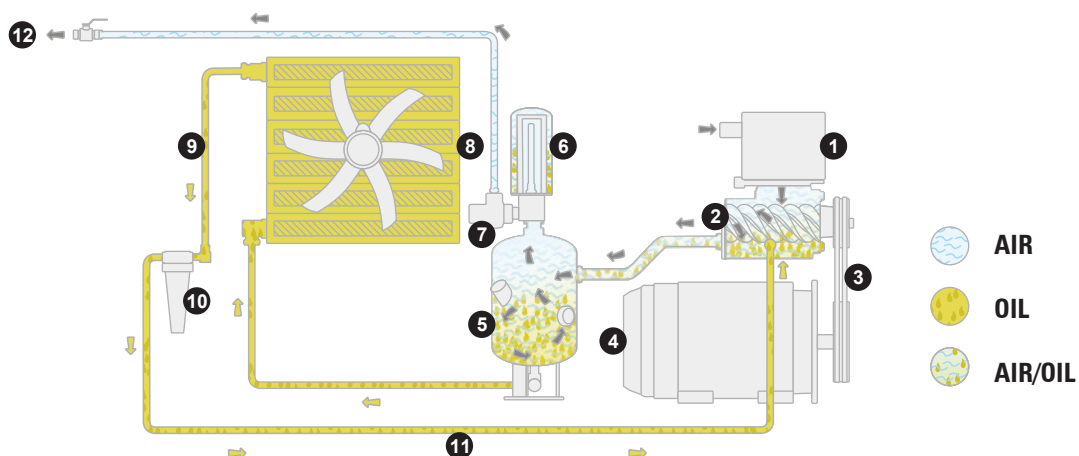


FIGURE 9.2 - AIR/OIL FLOW SRP 3010 ATÉ SRP 3025

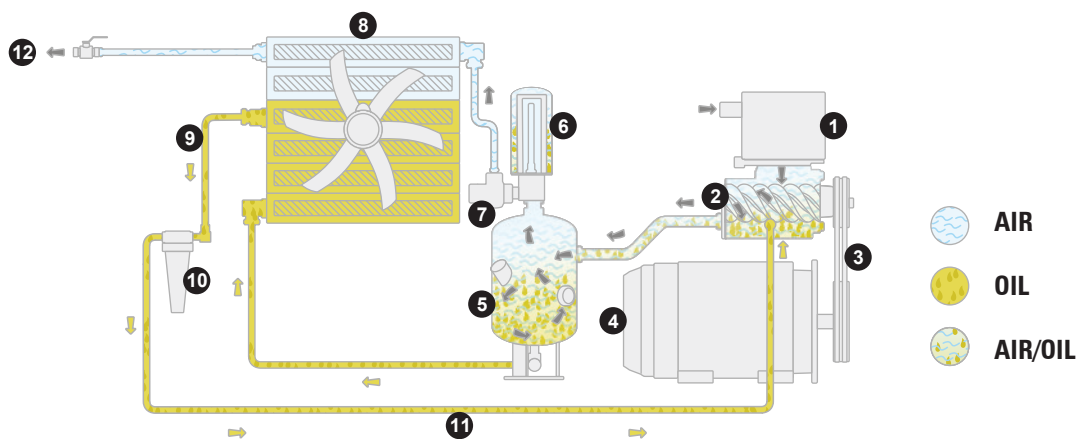


FIGURE 9.3 - AIR/OIL FLOW SRP 3030 ATÉ SRP 3040

Air circuit

- ① Inlet valve
- ② Air end
- ③ Belt
- ④ Electric motor
- ⑤ Air/oil tank
- ⑥ Air/oil separator element
- ⑦ Minimum pressure valve

Oil circuit

- ⑧ Air/oil radiator and aftercooler
- ⑨ Oil return line
- ⑩ Oil filter
- ⑪ Line of injection of oil into the unit
- ⑫ Outlet of air

10. COMMAND SYSTEM

Compressor command at full load

1. When the pressure goes up reaching the value set on the pressure switch **P1**, it will deenergize the solenoid valve **VS1** closing the command way that kept the admission valve totally open.

Compressor control in relief

1. If consumption is lower than the production of the compressor, the pressure of the system will increase until the value set on the pressure switch **P1**, when solenoid valve **VS1** will deenergize and close, which in turn will close the admission valve, allowing the release of compressed air.

2. With the admission valve closed, the depressurization of the tank **3** will begin until the volume aspired by the by-pass holes is equal to the volume released by the relief, equalizing the pressure of the tank between 3.1 to 4.1 barg (45 to 60 psig) required in order to guarantee the lubrication of the system, reducing the power around 60% while in this regime.

3. If a pressure drop occurs due to an increase in consumption, the solenoid valve **VS1** will be deenergized by the pressure switch **P1**, returning the compressor to full load operation.

Command Mode

The compressor operates in continuous mode and goes into relief at maximum operating pressure and only turns off if there is no air consumption that causes a pressure drop in the system of 1.03 to 1.4 (15 to 20 psig) during the time set in the timer of the electric panel. This relief time can be set for a period of 5 to 30 minutes.

Note: It is not convenient that the motor start more than 10 (ten) times an hour.

11. INSTRUMENT PANEL

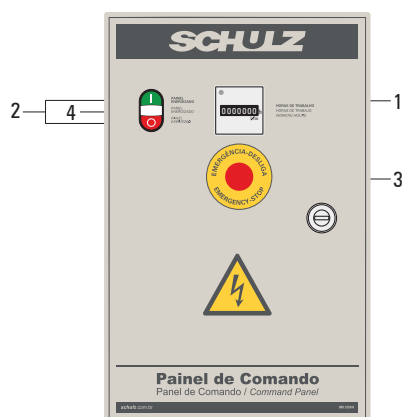


FIGURE 11.1 - INSTRUMENT PAINEL
MODEL I

1. Hour Meter - indicates the total of hours of operation of the compressor
2. On (green) / off (red) button
3. Emergency stop button
4. Light that indicates the powering up of the compressor

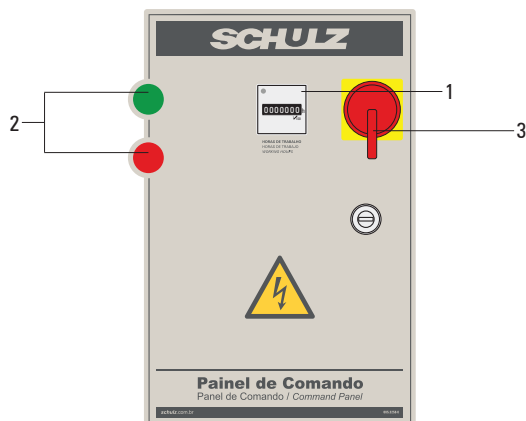


FIGURE 11.2 - INSTRUMENT PAINEL
MODEL II

1. Hour Meter - indicates the total of hours of operation of the compressor
2. On (green) / off (red) button
3. Emergency stop button

12. START PROCEDURE

The compressors of the Line Compact are supplied from factory already tested and filled with mineral lubricant oil LUB SCHULZ or synthetic lubricant oil SH-46 SYNTHETIC (Kluber).



IMPORTANT

The Compressors are supplied from factory already tested and filled with synthetic lubricant oil LUB SCHULZ. Before the initial start of the compressor, check: the retightening of the hoses of the hydraulic circuit and of the electric contacts; turn on the dryer five minutes before the start of the compressor (when installed).

1. INITIAL START PROCEDURE

- A.** Check the oil level: the oil level sight must be covered;
- B.** Power up the compressor (light 4 on the instrument panel must turn on);
- C.** Close the valve of the service line;
- D.** If light 4 is on, press the on (green) button to start the machine and, right after that, the off (red button), observing if the rotation direction of the assembly is the same as of the arrow located on the air end, and if the rotation direction of the fan is correct (the correct air flow is towards the radiator);

Note: In case the direction is wrong, disconnect the compressor from the power supply and invert the wires in the input of the contactor K1 or in the output of the protection fuses and repeat the procedure D. For the fan, invert only the two (2) cables in contactor K5.

E. After making sure the rotation direction is correct, close the side door and press the ON (green) button to put the compressor into operation, with the valve closed until the compressor reaches the maximum pressure. It will go into relief; open the valve slowly and your rotary screw compressor will be ready to supply compressed air to the compressed air system.



IMPORTANT

- Do not allow, at the first start, the motor to run for over 3 (three) seconds with the rotation inverted. The operation of the item D is quick and easy to see. If there are difficulties in the start, refer to the chapter

Troubleshooting.

- In normal situations, use the OFF (red) key in the instrument panel, which will produce a timed relief before the complete turning off of the compressor.
- The emergency button must only be used when a fast deactivation of the compressor is desired. Its use in normal conditions will cause failure of the equipment which is not covered by the Warranty.

13. PREVENTIVE MAINTENANCE

1. PROCEDURES BEFORE BEGINNING MAINTENANCE



ATTENTION

There are hot surfaces inside the compressor cabinet after its stop. The use of Schulz genuine lubricant oil and parts extends the useful life of your compressor, preventing, thus, the loss of the Warranty of you compressor.

- A.** Stop the compressor and make sure the tank has no pressure (wait for five minutes).
- B.** Disconnect the compressor from the power supply (disconnecting switch) and make sure the compressor cannot be inadvertently turned on.
For compressors with remote load/relief control and used in group, you must put up a sign "In Service", on the start switch.
- C.** Close the valve between the compressed air system and the compressor.

2. PROCEDURES AFTER MAINTENANCE

- A.** Close the valve between the compressed air system and the compressor.
- B.** Connect the compressor to the power supply (disconnecting switch) and make sure the compressor can be turned on without causing any accidents.
- C.** Start the compressor.

3. PROCEDURE TO ADJUST THE TENSION OF THE BELT

The tension of the belt that conveys the motor movement to the air end must be checked weekly.

In case the tension is not within the specification of Table 13.1, the procedure below must be carried out in order to adjust the tension of the compressor belt properly:

- Loose the bolts **5** (4 units).
- Loose the lock nuts **7** of the bolts **6** (2 units).
- Tighten the bolts **6** alternately so as to keep the air end leveled until the belt presents the proper tension as per table 13.1.
- If the tension of the belt is correct, tighten bolts **5** and the lock nuts **7**; otherwise, repeat the previous steps.

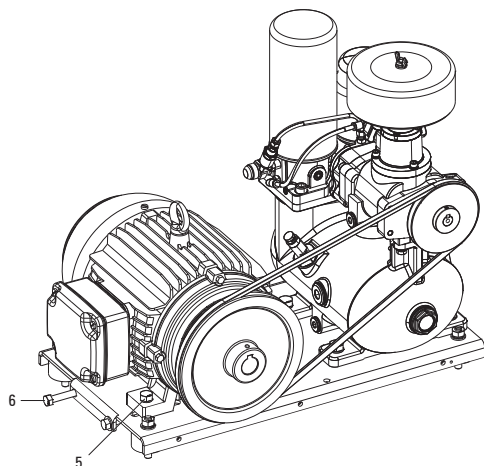


FIGURE 13.1

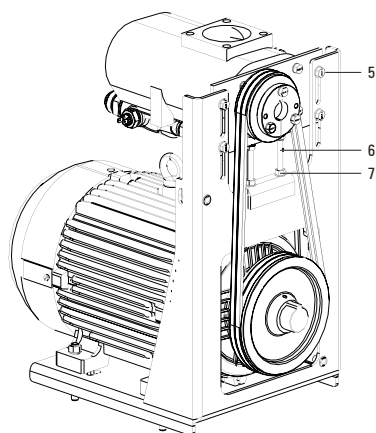


FIGURE 13.2

Model	Force				X (cm)
	(Kgf)		N (Newton)		
	Min.	Max.	Min.	Max.	
SRP 3005 SRP 3008	3,0	4,5	29,4	44,1	0,5
SRP 3010 / SRP 3010 II SRP 3015 / SRP 3015 II	3,0	4,0	29,4	40	0,5
SRP 3020 SRP 3025 SRP 3030	2,5	3,5	24,5	34,3	0,6
SRP 3040	10,6	11,4	104	112	0,65

TABLE 13.1 - TENSION OF BELT(S)

Table de torque			
Model	Diameter	Torque (N.m)	Grade
3010II	M6 x 1,00 x 35mm	10,0 \pm 1,0	Classe 8.8
3010 / 3015 / 3015 II	M8 x 1,25 x 35mm	30,0 \pm 3,0	Classe 8.8
3020 / 3025	M8 x 1,25 x 35mm	36,0 \pm 3,0	Classe 8.8
3030	M8 x 1,25 x 35mm	36,0 \pm 3,0	Classe 8.8
3040	M8 x 1,25 x 45mm	30,0 \pm 3,0	Classe 8.8

TABLE 13.2

Notes:

- With the compressor operating at maximum pressure, if the belt describes an arc on the driven pulley as if it tried to get out of the grooves, the tension is incorrect.
- At the ideal tension, the belt touches all the traction arc of the driven pulley (right side).
- To measure the force use a tensiometer, which must be purchased at a SCHULZ AUTHORIZED DEALER.
- When the tension of the pulley is not correct, there is overheating and typical noise indicating the belt is slipping.
- Another way to monitor the tension is to monitor the rotation of the air end observing its variation.

4. PROCEDURE FOR REPLACING THE AIR FILTER

Wait for the compressor to cool down before beginning the work. The element of the filter cannot be reused or cleaned.

The air filter is the component responsible for the purity of the air that will be compressed by the air end. The period for changing the air filter is indicated in Table 13.3. In order to change the air filter of your compressor, follow the procedure below.

- See the procedures 1 before beginning maintenance.
- Remove the fastening nut 1 and the filter 2.
- Remove the restriction indicator of the air filter 4.
- Clean the filter enclosure 3.
- Install the new filter 2 and fastening nut 1.
- Install the restriction indicator of the air filter 4, removed from the old filter.
- Update the information of number of hours for the next change of air filter on the electronic interface of the compressor. The number to be set is indicated in the parameter table attached to the information folder of your compressor. (Procedure necessary for electronic compressors only).
- Make sure the sealing of the air filter is well seated on the fastening support 3.

Note: Check the restriction of the air filter weekly. If indicator 4 is red, change the filter following the procedure above, even if the number of hours has not been reached.

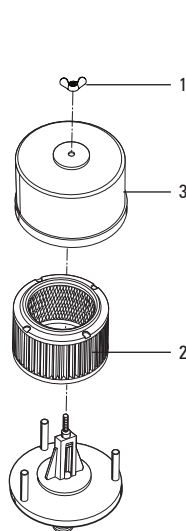


FIGURE 13.3 - SRP 3005 TO SRP 3010II

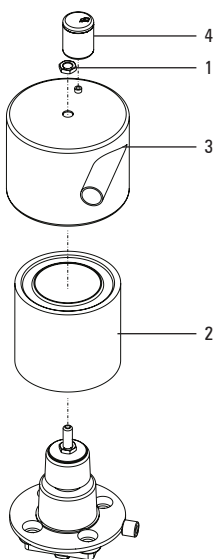


FIGURE 13.4 - SRP 3010 TO SRP 3030

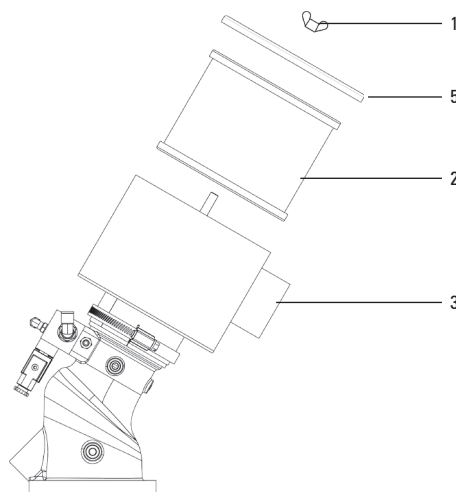


FIGURE 13.5 - SRP 3040

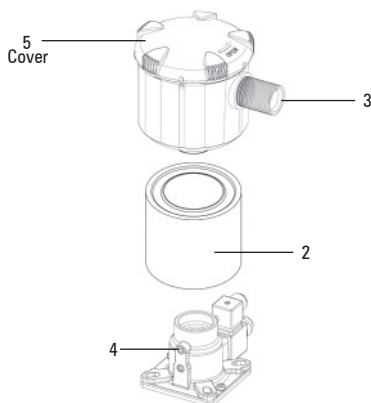


FIGURE 13.6 - SRP 3015 II
PLASTIC CARCASS FILTER

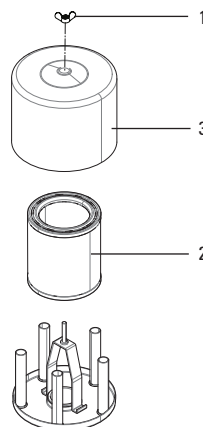


FIGURE 13.7 - SRP 3015 II
METALIC CARCASS FILTER

5. PROCEDURE FOR DRAINING THE CONDENSATE (WATER) FROM THE AIR/OIL TANK

The draining of the condensate of the air/oil tank must be performed daily. In order to drain the condensate of the air/oil tank, follow the procedures below and check Figures 13.10 and 13.11.

- See item 1 - Procedures before beginning maintenance.
- Turn the compressor off and wait for 1 (one) hour for the condensate to settle on the bottom of the tank.
- Open the drain valve 4 and collect the condensate in a container. Close the drain valve as soon as oil starts coming out of the tank.

6. PROCEDURE FOR REPLACEMENT OF THE OIL FILTER

Wait for the compressor to cool down before beginning the work. The oil filter cannot be reused and must be disposed according to the local regulations.

In order to change the oil filter, follow the procedures below and check Figures 13.8 and 13.9. The period for changing the oil filter is indicated in Table 13.3

- See item 1 - Procedures before beginning maintenance.
- Remove the element used 1.
- Install the new element 1.
- Update the information of number of hours for the next change of oil filter on the electronic interface of the compressor. The number to be set is indicated in the parameter table attached to the information folder of your compressor. (Procedure necessary for electronic compressors only).
- Make sure the sealing of the air filter is well seated on the fastening head.

Note: The first change must be performed with 300 hours.

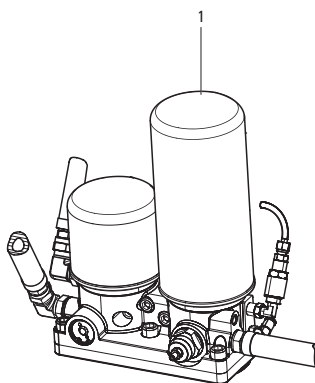


FIGURA 13.8 - SRP 3005 TO SRP 3010II

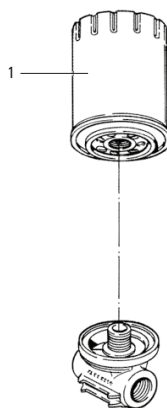


FIGURA 13.9 - FROM SRP 3010

7. PROCEDURE FOR CHANGING THE LUBRICANT OIL

Use LUB SCHULZ or LUB SCHULZ SYNTHETIC oil for rotary screw air compressor only. Do not mix different kinds of oil. The oil is still hot when the compressor is just turned off. Do not open the filling plug if the tank is pressurized. Dispose the oil according to the local regulations.

In order to change the oil, follow the procedures below and check Figures 13.10 and 13.11. The period for changing the oil is indicated in Table 13.3

- See item 1 - Procedures before beginning maintenance.
- Turn off the compressor and wait for at least 5 (five) minutes for the elimination of the pressure from the system. The air/oil tank has a pressure gauge. Check if the tank is completely depressurized before performing the next step.
- Open valve 4 and collect the used oil in a container. Close the valve at the end of the draining.
- Open the filling plug 2 and fill with LUB SCHULZ or SYNTHETIC LUB SCHULZ oil until the oil level reaches the lower part of the filling plug.
- Close the filling plug after the filling. It is not necessary a strong fastening, since the plug is self-sealing.

Note:

- In the air/oil tank is a tag that indicates the LUB SCHULZ oil for rotary screw air compressor which comes in your compressor from factory. You find this oil in SCHULZ AUTHORIZED DEALER. This compressor may operate with mineral oil* and atoxic synthetic oil*.
- We recommend using the same oil. Changing the kind of oil can cause contamination because of chemical incompatibility, reducing the useful life of the oil and producing lubrication problems.

8. REPLACEMENT OF THE AIR/OIL SEPARATOR ELEMENT

Dispose the used separator element according to the local regulations. Wait for the compressor to cool down before beginning the maintenance work.

In order to change the separator element, follow the procedures indicated in Table 13.3.

- See item 1 - Procedures before beginning maintenance.
- Turn off the compressor and wait for at least 5 (five) minutes for the elimination of the pressure from the system. The air/oil tank has a pressure gauge. Check if the tank is completely depressurized before performing the next step.
- Remove the bolts that fasten the cover of the air/oil tank.
- Remove the cover of the tank.
- Clean the sealing surfaces of the tank and of the cover and replace the gaskets.
- Clean the tank if necessary.
- Install the new separator element and make sure it is well coupled. Take care not to contaminate the element; hold it by the metal ends.
- Assemble the upper cover of the air/oil tank, taking care for the upper gasket to be properly coupled.
- Tighten the bolts alternately with a torque wrench [pre-torque of 15 to 25Nm / final torque of 70 to 80Nm].
- Update the information of number of hours for the next change of the separator element on the electronic interface of the compressor. The number to be set is indicated in the parameter table attached to the information folder of your compressor. (Procedure necessary for electronic compressors only).

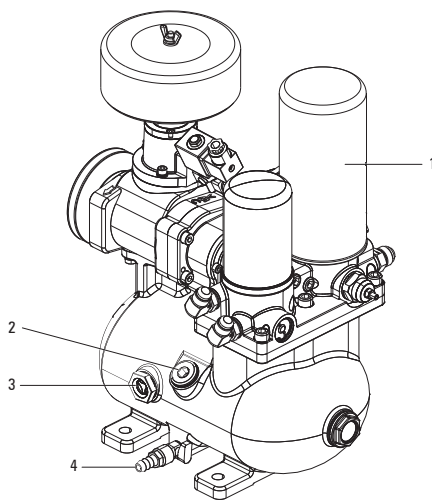


FIGURE 13.10

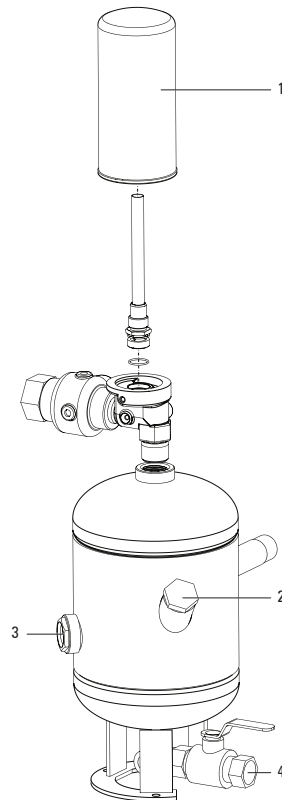


FIGURE 13.11

9. MAIN ELECTRIC MOTOR BEARING

In order to perform the maintenance of the main electric motor bearings, follow the procedures indicated in item 1. Grease the electric motor bearings as indicated in its plate. For further information, refer to the instruction manual of the motor.

10. RETIGHTENING OF ELECTRICAL WIRING

Before beginning the retightening of the wiring connections, proceed as indicated in item 1. Then retighten the wiring connections of the start switch (connectors of relays, contactors, power cables, etc).

11. CLEANING OF THE RADIATOR

A clogged radiator increases the temperature of the compressor until turning it off for overtemperature.

Before beginning the cleaning of the radiator, proceed as indicated in item 1. To clean the radiator (Figure 13.12) externally, use compressed air from outside to inside. To better clean the radiator, brush the internal lower surface.

Performs external cleaning of the radiator weekly.

Note: Do not use metal brushes to clean the radiator.

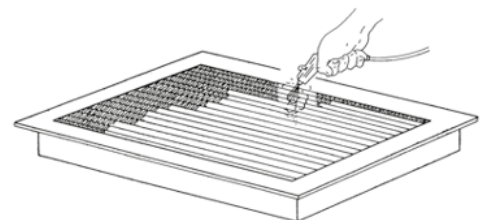


FIGURE 13.12

12. GAUGING

Perform the gauging of the safety valve(s) and pressure gauges at an accredited reputable lab. This operation must be carried out with the device not assembled on the tank.

Procedure		Daily	Weekly	1000h	2000h	4000h	8000h	Annually	When Required
Check oil level			* (1)						
Change lubricant oil	mineral 1000			* (8)					*
	mineral 4000					* (8)			
	synthetic 8000						* (8)		
Replace the conventional air filter element				*					*
Replace the vehicular air filter element						*			*
Check the air filter element restriction level			* (5)						
Replace the oil filter	compressors up to 40hp with mineral oil			* (2) (9)					
	compressors up to 40hp with synthetic oil				* (2)				
Replace air/oil separator element	in compressors up to 15hp					* (6)			
	in compressors up to 15hp with mineral oil					* (6) (9)			*
	in compressors up to 15hp with synthetic oil						* (6)		*
Check the air/oil separator element restriction level			* (5)						
Clean the radiator and the condenser externally									* (4)
Check for oil leaks			*						
Inspect the safety valve								*	
Check the condition and tightness of hoses						*			*
Tighten screws									* (4)
Check electrical, switch and motor connections.			*	*					*
Clean the filter air inlet on the compressor			*						
Compressor cleaning				*					*
Clean the air filters of the electrical box			*						*
Check voltage and tcondition of the belt(s)			*						
Lubricate the motor bearings (according to motor nameplate)									*
Check the coalescing pre-filter restriction level			*						
Replace coalescing pre-filter element								* (7)	*
Check operation of the automatic air purge (when applicable)			*						
Replace nylon tubes							* (11)	*	

TABLE 13.3 - PREVENTIVE MAINTENANCE PLAN



ATTENTION

If the compressor remains stopped for a period equal to or exceeding six months, it will be required and the customer's responsibility to replace the filters and oil.



IMPORTANT

(1) Check the oil level when the compressor is off (wait until the air and oil are separated and the bubbles (foam) are eliminated, since this may mask the oil level).

(2) The first time with 300 hours.

(4) On a quarterly basis or when required.

(5) Replace the filter if the indicator (if any) presents a restriction.

(6) The useful life of the separator element is up to 8,000 hours of service provided that all the following requirements are met:

- installation conditions according to items 1 and 2 in the Installation Chapter;
- Preventive maintenance performed correctly (according to its chapter);
- Infrequent machine operating regime (cycle load / relief).

Replacement period for the separator element must always be evaluated by the Technical Assistance that attends your screw compressor (recommendations valid for factory supplied mineral oil as well as synthetic oil).

(7) Perform replacement of elements regularly to obtain maximum efficiency and quality of Schulz air filters, thus maintaining low operating costs. The filter elements must be changed at least once a year or when the pressure drop exceeds the recommended maximum of 0.6 bar.

(8) Operating conditions such as ambient temperature, air/oil radiator obstruction by contamination, machinery room air renewal, cleaning of air, oil and separator element filters, can cause the unit's discharge temperature at levels that alter the useful life of the oil.

When operating conditions regularly cause the compressor unit's discharge temperature below 90°C, the oil change period must meet the following:

- If mineral oil – every 1,000 hours;
- If semi-synthetic oil – every 4,000 hours;
- If synthetic oil – every 8,000 hours.

When operating conditions regularly cause the compressor unit's discharge temperature above 90°C, the oil change period must meet the following:

- If mineral oil 1,000 – every 500 hours;
- If mineral oil 4,000 – every 2,000 hours;

(9) Included in mineral oils: Lub Schulz mineral 1,000 and Lub Schulz mineral 4,000.

(11) Operating conditions such as: ambient temperature, air/oil radiator obstruction by contamination, machinery room air renewal, cleaning of air, oil and separator element filters can promote/accelerate wear of nylon tubing.

14. MAINTENANCE PARTS

For your SCHULZ rotary screw air compressor to have a guaranteed useful life and operate properly, it needs periodical maintenance as mentioned in the chapter Preventive Maintenance. Table 14.1 indicates the code of the components and of the lubricant oil, which are purchased at a SCHULZ AUTHORIZED DEALER.

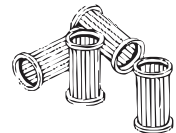
Description	SRP 3005 SRP 3008 SRP 3010 II	SRP 3010	SRP 3015 II	SRP 3015	SRP 3020	SRP 3025	SRP 3030	SRP 3040
SH-46 SYNTHETIC (Kluber). lubricant oil (20-l drum)	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT	101.0239-0/AT
LUB SCHULZ SYNTHETIC lubricant oil (20-l drum)	101.0173-0	101.0173-0	101.0173-0	101.0173-0	101.0173-0	101.0173-0	101.0173-0	101.0173-0
LUB SCHULZ MINERAL lubricant oil (20-l drum)	830.1257-0	007.0184-0/AT	Metalic carcass 60318005/AT	007.0184-0/AT	007.0184-0/AT	007.0184-0/AT	007.0184-0/AT	007.0136-0/AT
Air filter			Plastic carcass 007.0512-0/AT					
Oil filter	007.0177-0/AT	007.0177-0/AT	007.0177-0/AT	007.0177-0/AT	007.0023-1/AT	007.0023-1/AT	007.0023-1/AT	007.0023-0/AT
Air/ oil separator element	007.0233-0/AT	007.0233-0/AT	007.0233-0/AT	007.0233-0/AT	007.0413-0/AT	007.0413-0/AT	007.0413-0/AT	007.0413-0/AT
Tensiometer with 1 rod	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT	021.0097-0/AT

TABLE 14.1

15. REMOVING MAINTENANCE PARTS - DISPOSAL

When service is over, the compressor oil, oil filter element and oil separator element must be disposed according to the local regulations.

See further directions in "Environmental Orientations and Recommendations".



16. CORRECTIVE MAINTENANCE



ATTENTION

To guarantee the SAFETY and RELIABILITY of the product, the repairs, maintenance and adjustments must be performed through the nearest SCHULZ AUTHORIZED DEALER, which always uses genuine parts.

17. FAILURE DIAGNOSTICS

The list we present below simulates most possible problems and causes that may result in a halt or incorrect operation of the compressor. Some procedures to solve the problems are simple, which allows the user, through the reading of the Electronic Interface display, to solve them without the need of specialized Technical Assistance.

However, if the problem remains after the corrective actions described below, contact the nearest SCHULZ AUTHORIZED DEALER.

OCCASIONAL DEFECTS	PROBABLE CAUSES	SOLUTION
Compressor will not start. Note: The compressor may be powered down for the action of the pressure switch and will automatically start (if that is the cause, the pressure is high and the pressure switch prevents the restart)	Phase or electric power missing.	Check the wiring and protection fuses.
	Voltage missing in the control.	Check the protection fuse and circuit breaker of the command. With voltage on the command, the light (if it is ok) must turn on.
	Motor overload relay of the air end or fan tripped.	Reengaged it and check the cause by restarting the compressor.
	Overtemperature.	Wait for some minutes until going back to the ideal operating temperature. Wait for some minutes until the voltage returns to the command and light 8 turn on (Figure 11.1).
	Thermal protector went off.	
	Coil of the contactors burnout.	Check the coils of the contactors.
	Other causes: Wires with loose or broken contacts. ON button defective.	Check this component by following the wiring scheme; find where the interruption that prevents the start of the compressor is located.
	Emergency stop button activated.	Unlock the button by turning it.
The compressor starts and immediately turns off.	Overload relay tripped,	Identify the cause, eliminate it and check the adjustment range of the relay.
	Installation not in compliance with the related standard	Check the current and discrepancies between phases. Check the cause and resize the cables if necessary.
	Phase missing (installation fuse burnout)	Check if proper fuses are used. Check the cause for the fuse burnout.
	Power supply cables of motor loose in the input or output of the contactors.	Check the conditions of the cables and insulations and retighten them if necessary.
	Overload relay with defect or contact of contactors worn out.	Check the contacts of the contactors K1, K2, K3. If they are good, observe the overload relay.
Overheating of the compressor.	Oil filter clogged.	Replace it
	Air filter clogged	Replace it
	Oil level low.	Check the cause and change the oil, using LUB SCHULZ/LUB SCHULZ SYNTHETIC.
	Compressor inlet filter clogged.	Replace it
	Radiator clogged.	Clean it.
	Thermostatic valve not working.	Request the presence of the Technical Assistance.
Intermittent noise at the start. The contactors seem not to activate.	Voltage drop in the power supply. Installation not in compliance with the related standard.	Recheck the dimensioning of the power supply cables, observing the distance from the power supply (transformer).
		Verify how much the voltage drops in the control at the moment of start.
		Check discrepancy between the phases.
		Check if there are no command wires loose.
	Fan burnout.	Check the cause and eliminate it. If the problem persists, request the presence of the Technical Assistance.
	Contactors of the fan defective.	

OCCASIONAL DEFECTS	PROBABLE CAUSES	SOLUTION
Current of the motor above the rating operating current.	Rotation reversed.	Check the rotation direction.
	Voltage below the specification.	Recheck the dimensioning of the cables.
	Compressing assembly stuck.	Request the presence of the Technical Assistance.
Electric motor rotation decreases during start.	Commutation time of the star/delta switch too long (analog compressor).	Set the time for 4 or 5 seconds by adjusting the second timer.
	Admission valve open.	Check the cause.
	Voltage drop in the power supply.	Check the installation.
	Second timer or coil of contactors K2 and K3 defective.	Check if the timer is inverting the contact on the established time. Check if the coils of the contactors K2 and K3 are perfect and receiving power.
O compressor desliga e não volta a ligar mesmo com a pressão na rede baixa.	Overload relay tripped.	Check the current and setting of the overload relay.
	High temperature. Thermal protector went off.	Check the oil level and refill it if necessary. Use LUB SCHULZ/LUB SCHULZ SYNTHETIC oil for rotary screw air compressor.
		Check if the fan is not broken (blades).
		Replace the oil filter. The first change must be done after 300 hours of operation.
		Check if there is air flow on the radiator. (Clean it if clogged).
The compressor starts and immediately turns off.	Lack of oil. The temperature rises quickly.	Check if there is oil leak and fix it.
Compressor turns off and won't start even with the system pressure low	Air/oil separator element clogged.	Check the oil level and refill it (Refer to chapter Preventive Maintenance), using LUB SCHULZ/LUB SCHULZ SYNTHETIC oil for rotary screw air compressor.
	Phase missing on the command.	Look for the cause as per the electrical scheme.
	Coil of the contactors burnout.	
	Coil of the relay of seconds KT2 or of the contactor K1 burnout.	
Compressor won't turn off after the time adjusted on "KT3", or turns off immediately when button 2 is pressed (SRP 3010/3015/3015 II/3020/3025/3030 compact)	Pressure switch unadjusted.	
	Timer defective.	Request the presence of the Technical Assistance.
The compressor suddenly lost performance. Pressure is too low in the air system. Note: Before any actions, read the notes at the end of the troubleshooting and on the display of the Electronic Interface.	Belts loose or worn out.	Adjust the tension or replace the belts.
	Air filter clogged.	Check the restriction indicator and the conditions of the air filter, replacing it if necessary.
	Hose that depressurizes the tank is disconnected from the admission valve or broken. (Observe typical leak noise).	Connect the hose or replace it.
	Relief valve stuck open. Compressor will not compress the full air flow to the air system. Admission valve won't open.	Request the presence of the Technical Assistance.
	Coil of solenoid valve burnout or with hole clogged.	
	Pipe that feeds the solenoid valve broken or disconnected.	
	Pressure switch unadjusted (SRP 3010/3015/3015 II/3020/3025/3030 Compact).	
	Air leak in some pipe of the compressor.	
Compressor with load/relief cycles too fast.	Air consumption too lower than the production of the compressor.	Turn off some compressor in parallel or install a larger tank.
	Outlet valve closed. (In this case, pressure is too low in the air system).	Open the valve slowly.
	Great load loss close to the compressor.	Eliminate load loss.
	Pressure switch with range too small (SRP 3010/3015/3015 II/3025 Compact)	Request the presence of the Technical Assistance.

OCCASIONAL DEFECTS	PROBABLE CAUSES	SOLUTION
Oil dragged to the air system.	Oil level too high.	Remove oil excess.
	Compressor oil foaming.	Fast load and relief cycle. (Turn off some compressor in parallel or install a larger tank).
Excessive oil consumption, requiring refilling. (Too much oil in the air system).	Leak in the system.	Identify and correct.
	Operating pressure of the compressor below 3.4 barg (50 psi) for a long time.	Check the cause of the excessive demand of compressed air.
	Separator element damaged. (In this case, the pressure gauge that indicates restriction will virtually not indicate any restriction).	Change the air/oil separator and the LUB SCHULZ/LUB SCHULZ SYNTHETIC oil for rotary screw air compressor.
	Return line of the air/oil separator element clogged.	Request the presence of the Technical Assistance.
	Long time of operation of the compressor in relief.	Optimize the time by changing the command mode or adjusting the relay.
Excessive vibration or noise.	Electric motor or unit bearing damaged.	Identify where the noise is and request the presence of the Technical Assistance.
	Fan blade broken.	Request the presence of the Technical Assistance.
	Belts loose or worn out.	Adjust the tension or replace the belts.
Safety valve opens repeatedly. Attention: See item 13 - Chapter Safety Instructions	Air/oil separator element clogged.	Check the pressure gauge of restriction and replace the separator element.
	Admission valve stuck.	Request the presence of the Technical Assistance.
	Safety valve damaged.	
	Solenoid valve(s) defective.	
	Minimum pressure valve stuck.	
Water excess in the air/oil tank.	Compressor operating too much above the capacity of the pneumatic tools.	Check the behavior of consumption of your air system. In case it does not solve the problem, request the presence of the Technical Assistance.

NOTES

When there is a pressure drop in the air system, observe the following details:

- If the operating pressure indicated on the pressure gauge of the compressors SRP 3005 TO 3040 compact is high and at the factory too low, the problem is significant load loss in the air system.
- If the pressure in the compressor is low and in the air system too, it is possible that the consumption increased due to recent installation of equipment. In this case, the required air demand is higher than the production.
- Before any actions, trying to find the causes in the compressor, close the discharge valve slowly until the pressure rises close to the maximum operating pressure and check the motor current.
- If the compressor is aspirating air at full load and the current is close to the rating current, it is likely the problem is not the compressor.

18. ENVIRONMENTAL GUIDELINES AND RECOMMENDATIONS

1. Wastewater Disposal

The presence of liquid effluents or non-treated condensate from the tank or condensate separator in rivers, lakes or in other water receiving bodies may adversely affect the aquatic life and the water quality.

The condensed daily withdrawn from the tank or condensate separator, according to Chapter Preventive Maintenance, must be kept in a container and/or in an appropriate collecting network for further treatment.

Schulz S.A. recommends that the liquid effluent produced inside the compressor tank or condensate separator be properly treated through processes that aim at the protection of the environment and a healthy life quality of the population, complying with the local legal regulations and requirements in effect.

Among the treatment methods available, you may choose from the physical-chemical, chemical, and biological ones.

The treatment may be carried out by the company itself or by a third party company.

2. Draining of the Lubricant Oil from the Pump or Air/Oil Separator Tank

The disposal of lubricant oil from oil changes in the tank of the rotary screw compressor must comply with the requirements of the related local regulations.

3. Disposal of Solid Waste (large parts and product packaging)

The creation of solid waste is one aspect that must be considered by the user in the use and the maintenance of the equipment. The impacts on the environment may cause significant changes in the quality of the soil, in surface and underground water, and in the population's health due to improper disposal of the discarded residues (on streets, water springs, landfills, etc).

Schulz S.A. recommends that the waste resulting from the product, from its generation, use, transportation, and treatment to its final disposal, be handled with care.

A suitable management should consider the following stages: quantification, qualification, classification, reduction at source, pick-up and selective pick-up, recycling, storage, transportation, treatment and final destination.

Waste disposal should be done in compliance with the requirements of local legislation in effect.

19. WARRANTY

The "Manufacturer" warrants this equipment to the original purchaser against manufacturing defects of the compressor/dryer for a period of one year and two years (including the Legal Warranty – first 90 (ninety) days) for the air end and the heat exchanger of the dryer, from the date of the issue of the invoice, conditioned on the technical start (when applied) carried out by SCHULZ AUTHORIZED DEALER, subject to the purchase period of the invoice.

The warranty will be granted to the compressor unit provided that:

- A. Periodicity is observed for the exchange of lubricating oil (Air end), and given installation conditions as instructed in this manual.
- B. The lubricant oil used is oil for rotary screw air compressor recommended in this Manual (Air End), and the spare parts used are genuine SCHULZ parts.
- C. The compressor will not operate without the filters or being damaged/clogged to the point of losing its filtering normal capacity.

WARRANTY GENERAL CONDITIONS

- A. The warranty period elapses from the purchase date of the product.
- B. Possible shutdown of the equipment, regardless of the reason, will not generate the right to compensation, repair, refund or return of any nature.
- C. Warranty reception will only be held by SCHULZ AUTHORIZED DEALER in view of presentation of the original invoice, preferably on behalf of the customer, containing Tax ID.
- D. It is not included in the warranty: parts that naturally wear out with regular use and that are influenced by installation and way of use of the product, such as: air filter, oil filter, valves, hoses, bearings, pressure gauges, fan of the frequency inverter, rotary shaft seal, oil level sight, ball valve, contactors, electronic sensors, electronic interface, air/oil separator element and lubricant oil.
- E. Warranty will not include installation and cleaning services, bearing relubrication, adjustments requested by the customer, change of lubricant oil and filters, damages to the external part of the product as well as damages that may result from improper use, neglect, modifications, external agents, bad weather, use of improper accessories, bad dimensioning for the applications it is intended to, falls, perforations, operation different from the directions of the Instruction Manual, power connections to improper voltages or to power lines subject to excessive variations, overloads or fuel use (portable compressors) of poor quality.
- F. The warranty of the motor (electric and diesel) and of the component parts of the electric panel (electric switch) is subject to surety and issue of a technical report provided by their manufacturer which informs defects in material and workmanship.
- G. The power voltage of the command must operate within the variation of $\pm 10\%$ (Electronic Interface).
- H. Any repairs or compensation for damages caused during transportation are not covered by the warranty.
- I. The warranty will not include modifications in the parameters of the Electronic Interface, unless directed by SCHULZ AUTHORIZED DEALER. SCHULZ S.A. will not be liable for failures in the compressor, halts or damages due to the not following of this recommendations/conditions listed in this manual.

WARRANTY EXTINCTION

This warranty will have no effect when:

- A. As of the standard course of its expiration date, counted from the issue date of the invoice.
- B. The product is sent for repair or moved (except portable) to another place by people/companies not authorized by SCHULZ S.A., and presents signs of violation of its original characteristics or assembling out of the factory standards.
- C. Allow the air dryer to operate without the coalescing pre-filter, according to ISO 8573.1, class 1.4.1, or damaged to the point of losing its normal filtering capacity, or even when its service term is expired.

NOTES

- A. The lubrication of the compressor is essential, which, to have a correct operation and long useful life, also needs oil change and elements of the preventive maintenance at regular intervals as indicated in this manual.
- B. No SCHULZ retailer, representative or SCHULZ AUTHORIZED DEALER is authorized to change, add, delete, modify this Warranty or take liabilities on behalf of Schulz S.A.
- C. Compressors that may be without running (off, dead, with missing parts, etc.) during the period exceeding 6 (six) months should receive preventive maintenance before operating. The expenses from this maintenance are the customer's responsibility.
- D. The drawings, dimensions and photos contained in this manual are for illustrative purposes.

Note: 1. Schulz S.A. reserves the right of making changes in this Instruction Manual without any previous notice.

2. The product lines Compact, Portable and Dryers do not include technical start.

20. SERVICE REPORT

The objective of this record is to register all the services and maintenances performed in your compressor.

The records will help you follow the routine procedures and services performed.

Please, always have at hand the following information when requesting a service. Keep this record together with the compressor and fill it out carefully.

Compressor Model	Unit Model	Cabinet Serial Number	Unit
Dealer		Invoice No.	Date
Date of first start		Oil type	
Optional Equipment			

Notes

[illegible]

[illegible]

S E R V I Ç O S E
A T E N D I M E N T O
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SCHULZ

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0800 474141

de segunda a sexta-feira, das 8h às 18h

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