

Use and Maintenance Manual

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Extraction system ROL-TP

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811R26	ROL-TP-2,5-2,5	10.01.2019/EN
811R27	ROL-TP-4-1,5	10.01.2019/EN
811R28	ROL-TP-4-2,5	10.01.2019/EN



1. Introductory Remarks

The purpose of the present Use and Maintenance Manual is to supply User with directions within the range of application, installation, start-up and the use of the **ROL-TP extraction sys tem**.

Installing, start up and operational use are exclusively admissible after getting acquaintted with the contents of the Use and Maintenance Manual.

With regard to continuity of work carried on improvement of our products, we reserve for ourselves the revision possibility of the draft and technological changes improving their functional features and safety.

Construction of the **ROL-TP** extraction system meets the requirements of the current state of technology as well as the safety and health assurances included in:

- 2006/42/EC Machinery Directive of the European Parliament and of the Council of May 17th, 2006 on machinery – amending the 95/16/EC (recast) /*Journal of Laws EC L157 of 09.06.2006, page 24/* Additionally, the appliance meets following harmonized standard:
- EN ISO-12100:2012 "Safety of machinery Basic concepts, general principles for design. Risk assessment and risk reduction"

2. Application

ROL-TP extraction system is efficient in extraction of dust- gaseous impurities from the mobile workplaces. It can be adapted for effective exhaust extraction from vehicles that are not moving. The system can serve vehicles, where their exhaust pipes are directed upright, as well as vehicles with traditional horizontal exhaust pipes.

The extraction system can work with a fan that is installed on a wall bracket or on a roof base. Additionally, it can be connected to a ducting of general extraction system.

3. Reservations of Producer

- A. Manufacturer accepts no liability for any consequences following from the operational use that is in contradiction to the purpose of application.
- **B**. Installing of any additional elements not belonging to the normal device structure (or accessory set) is not acceptable.
- **C**. Do not undertake any structural changes or constructional modifications on the device on one's own.
- **D**. Protect the flexible elements and the suction ducts from mechanical damage.
- E. Prior to installing, check the load carrying capability of the building structure where the system will be mounted. Unsure installing can result in uncontrolled device detachment and hazard to personnel / people in the vicinity.
- **F**. The system cannot be used for conveying the air containing aggressive impurities or substances causing explosion hazard.

4. Technical Data

Table No.1

Diameter Recom-				Range				Weight	Maximum	Types of
Туре	Dn	mended flow	L1	L ₂	L _{max}	H _{max}	H_{min}		torque	extension
	[mm]	[m³/h]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	M [Nm]	arms
ROL-TP-2,5-1,5	160	1000	2460	1700	1160	2200	1900	127	2500	RO-2,5-E-I/Y +
	100	1000	2400	1700	4100	5200	1800	127	3300	RO-1,5-E-L/X
ROL-TP-2,5-2,5	160	1000	2460	2220	1600	2200	1200	122	3800	RO-2,5E-L/Y +
	100	1000	2400	2230	4090	3200	1800	152	3800	RO-2,5-E-L/X
ROL-TP-4-1,5	160	1000	2710	1700	E/10	2200	1000	150	5000	RO-4-E-L/Y +
	100	1000	5/10	1700	3410	3200	1800	130	3000	RO-1,5-E-L/X
ROL-TP-4-2,5	160	1000	2710	2220	E040	2200	1000	162	5710	RO-4-E-L/Y +
	100	1000	5/10	2230	5940	5200	1900	103	5/10	RO-2,5-E-L/X



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Fig. No.2 - ROL-TP - Flow chart

500

0

1000

1500

2000

volume flow [m³/h]



Table No.2 – Nozzles, Hoods

			Dimensions		Weight	
Sort of the nozzle	Туре	Part.No.	D	Н		Remarks
			[mm]	[mm]	[kg]	
nozzle ERGO H	SE-L-160	819581	160	635	2,6	aluminium, the hose is fastened by means of a quick- connector
suction hood	SO-L-500	819582	500	540	2,0	aluminium, the hose is fastened by means of a quick- connector
Nozzle for exhaust pipes	SW-L-200	819583	200	190	3,0	metal, the hose is fastened by means of a quick- connector

5. Structure and Function

ROL-TP extraction system consists of subsequent assemblies:

- a set of two extension arms
- vertical telescopic duct
- nozzle / hood

The extension arm consists of a bearing swivel and a square section vertical steel sheet duct. Motion resistances are minimalised, therefore it is easy to move arm horizontally. Two extension arms are mounted in a "broken" version, i.e. one extension arm is suspended at the end of the other arm, whereas the telescopic duct is fastened at the end of the terminal extension arm. The segmented vertical telescopic duct gives a possibility of setting the nozzle / hood in a requested height and, additionally, it can be locked by means of an adjustment rope. The nozzle / suction hood is fastened (by means of a quick-connector) to the telescopic duct. For choice are three sorts of nozzles:

- ERGO nozzle for welding fumes extraction,
- suction hood for welding fumes extraction and for vertical exhaust pipes
- nozzle for horizontal exhaust pipes.

At the end of the telescopic duct is introduced a shut-off damper. Its lever gives possibility of adjustment of the volume of the extracted air.

6. Assembly and Start-up

Prior to installing (of the extraction system) check the load carrying capacity of the wall or other building structure, if this is able to overtake the torque M as given in Table No.1.

Before choosing the sort of extraction, select and fasten through a quick-connector the suitable nozzle / hood. Subsequently, adjust the extensions arms appropriately and, by means of the adjustment rope, set the nozzle / hood at convenient height.



Before welding or exhaust gas extraction, it is important to switch on the ventilation system (or the extraction fan).

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7. Operational Use

Low motion resistances and easy manoeuvring with the extraction system provides convenient operational use. After the work is completed, slide the internal duct segment into the external segment. Additionally, set the arms in such position that does not cause barrier for personnel / people in the vicinity.

8. Troubleshooting Guide

Table No.3

	Problem	Possible reason	Corrective action
1.	the extension arm sets automatically always in the same position	the swivel mounting is not levelled in vertical position	Adjust the swivel by levelling the mounting plate of the whole extraction system
2.	the extension arm is tur- ning with too high or too low rotation resistance	improperly adjusted swivel	tighten or release the adjustment nuts
3.	reduced extraction volume efficiency, along with incre- eased noise of the extrac-	incorrect impeller rotation sense of the extraction fan	change the phase sequence of the power supply for the three- -phase motor
	tion system (with the suc- tion arm)	the holes of the hood inlet grid are clogged	clean the hood inlet grid with steel wire brush

9. Maintenance

Maintenance consists in following steps:

- Periodically clean the surface of the nozzle / hood and its inlet grid, from the deposited impurities, dusts, to obtain full extraction efficiency. Additionally, in case of welding fumes extraction, sprinkle them with anti-spattering preparation.
- Evert three months lubricate the swivel with solid grease (the lubrication nipple is located in the swivel flange).
- After one year of use, or after the part replacement or repair of an element (when its wear has been noticed) – undertake technical supervision.
- Clean the internal surface of the duct segments from the deposited impurities. Frequency of these activities depends on the intensity of use. Every three months, it is recommended to examine the cleanness of the segments and remove the impurities when necessary.

10. Occupational Health and Safety

ROL-TP extraction system will not cause any hazard under the condition that they are firmly and correctly installed to the wall or other constructional element of the building. Unsure mounting could result in uncontrolled detachment of the system and cause hazard to people in the vicinity. After the completed work, leave the device in ultimately used position, in such a configuration that would not cause barrier to the operator / personnel.

Before the installing check the load carrying capacity of the building structure. During the operational use necessarily observe the regulations of Occupational Health and Safety.



11. Transport and Storage

The system is transported in assemblies separately:

- RO-E-L/Y extension arm,
- RO-E-L/X extension arm
- telescopic duct with a nozzle / hood.

The unit ought to be stored in dry rooms and in areas of efficient ventilation.

During the transport / reloading protect the device from mechanical damage, scratching, indents, package damage and pay attention that the surface markings do not get detached / obliterated.

12. Terms of warranty

The period of warranty for the purchased device is indicated in the "Card of Warranty". The warranty does not comprise:

- device failures caused during the use which is in contradiction with the purpose of application and with the present Use and Maintenance Manual,
- mechanical damages and malfunctions caused by User,
- changes / modifications introduced by User on one's own,
- malfunction resulting from normal operational wear.

Infringement of the Clause G Section 3 "Reservations of Producer" of the present Use and Maintenance Manual and especially modifications undertaken by User on one's own or use in contradiction with the purpose of application – shall result in the loss of warranty validity.

13. Sample of the Declaration of Conformity

Declaration of conformity EC No.

Manufacturer (eventually the authorized representative / importer): name: KLIMAWENT S.A. address: 81-571 Gdynia, Chwaszczyńska 194

A person, authorized for issuing the technical documentation: Teodor Świrbutowicz, KLIMAWENT S.A. hereby declares that the appliance:

name: extraction system type/model: ROL-TP

serial number:

meets the requirements of the subsequent European Directives:

2006/42/EC Machinery Directive of the European Parliament and of the Council of May 17th, 2006 on machinery – amending the 95/16/EC (recast) *Journal of Laws EC L157 of 09.06.2006, page 24/*

The appliance meets following harmonized standard:

•	EN ISO-12100:2012	- "Safety of machinery – Basic concepts, general principles
		for design. Risk assessment and risk reduction"

place, date

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District Court Gdańsk-Północ in Gdańsk, VII Wydział Gospodarczy of the National Register of Court KRS 0000308902 company stock 13.779.200 zł paid in total name, surname, function of the signatory NIP: 958 159 21 35 REGON: 220631262 Bank Account: **Santander Bank Polska S.A.** 56 1500 1025 1210 2007 8845 0000



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