

## OPERATING DATA

ROBOX		OPERATION													
		MAX PRESSURE DATA							MAX VACUUM DATA						
		Pressure		Capacity		Motor		Noise	Pressure		Capacity		Motor		Noise
ROBOX Size	Blower Size	mbar (g)	PSI	m³/h	CFM	kW	BHP	dB (A)	mbar (a)	IN. HG.	m³/h	CFM	kW	BHP	dB (A)
1	ES 15	900	13	240	140	11	15	<70	500	15	235	140	11	15	<70
	ES 25	700	10	320	190			70	500	15	300	180			<70
2	ES 35	1000	15	480	285	22	30	73	500	15	480	285	18,5	25	70
	ES 45	1000	15	690	410			76	500	15	690	410			73
	ES 46	700	10	1080	640	30	40	75	500	15	1050	620	30	40	72
	ES 55	1000	15	1010	595			76	500	15	1010	595			73
	ES 65	1000	15	1070	630	45	60	77	500	15	1350	795	45	60	74
	ES 65	1000	15	1370	810			78	*	*	*	*			*
ES 66	700	10	1950	1150	55	75	79	500	15	1850	1090	45	60	73	
3	ES 75	1000	15	1600	940	75	100	76	500	15	1590	935	75	100	76
	ES 85	1000	15	2850	1680			77	500	15	2330	1370			74
	ES 86	700	10	2360	1390	75	100	77	500	15	3000	1765	75	100	78
	ES 95	1000	15	2590	1525			78	500	15	2590	1525			75

4 Capacity up to 5.500 m³/h - 3240 CFM - Robox evolution will be ready soon. Currently the size Robox S is available.

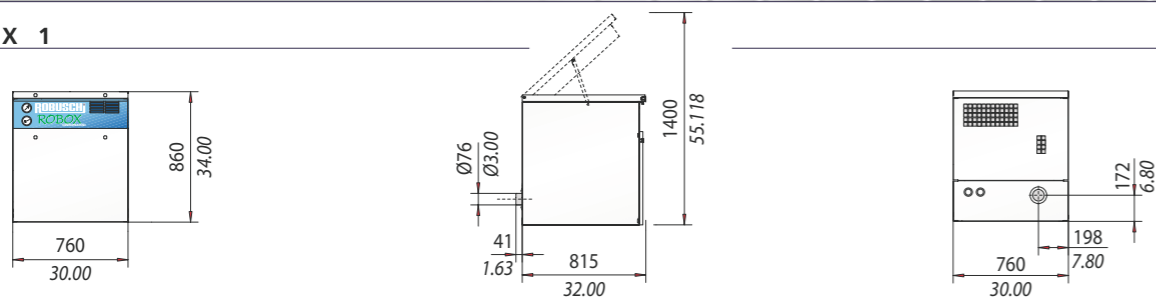
5 Capacity up to 10.500 m³/h - 6180 CFM - Robox evolution will be ready soon. Currently the size Robox S is available.

\* Not expected.

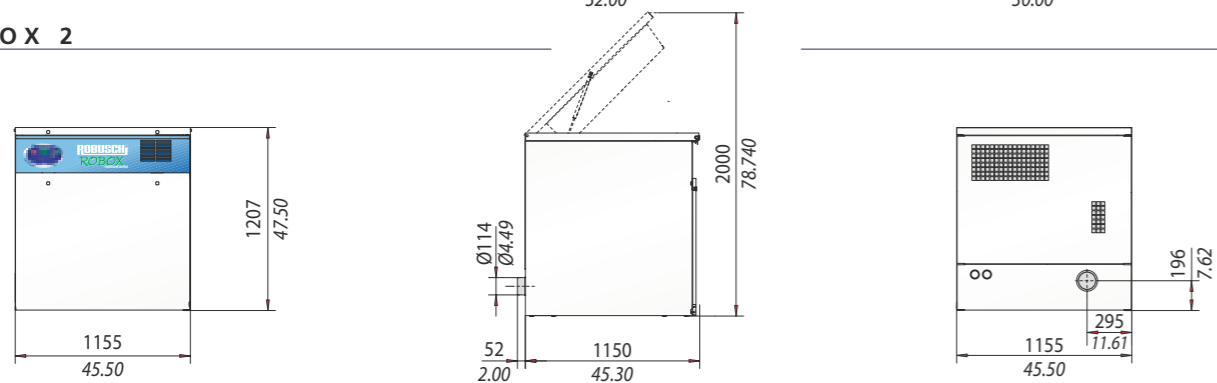
Available **ROBOX evolution** in **ATEX** version on request, certificate n. 8000310709 TÜV NORD.

## EXTERNAL DIMENSIONS (mm - inches)

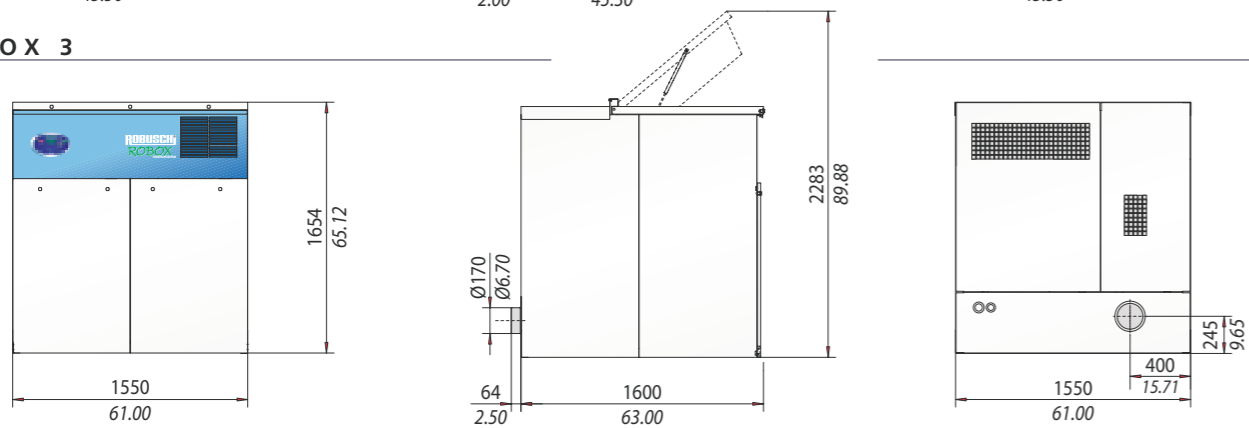
### ROBOX 1



### ROBOX 2



### ROBOX 3



It is policy of Robuschi to always improve its products and the right is reserved to alter specifications at any time without prior notice.

S20-2004-D  
Q1A 2000-08/04

**evolution:**  
The blower package  
new generation



**ROBUSCHI®**  
**ROBOX**  
evolution

**ROBUSCHI®**

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**ROBOX evolution** is the result of non-stop research and development by ROBUSCHI on its blower units for low pressure operation.

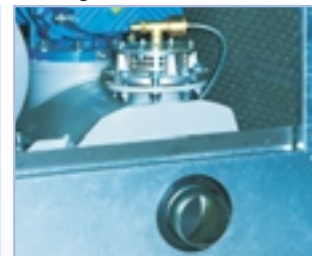
The development was carried out on the elements of the blower unit as well as every other aspect of use of the unit: this made it possible to obtain highly innovative features that make **ROBOX evolution** quieter, more compact, safer and more reliable.

The new characteristics make it possible to reduce: **system costs** thanks to **optimization of the space**; **operating costs** thanks to its **low energy consumption** and **elimination of all risks of unit breakdown** ensured by the innovative **electronic SENTINEL monitoring system**; **maintenance costs** thanks to the **facilitated accessibility** of every part for routine servicing.

Inlet silencer



Discharge silencer



Noise enclosure



## SILENT OPERATION

**ROBOX evolution** is the best in terms of noiseless operation in the field of low pressure compression units, **with a noise rating of 6 dB(A) lower than the previous series under all types of working conditions.**

This result has been achieved thanks to a combination of innovative components and new design:

- **Robuschi RBS blower:** blower with three lobe rotors in operation integrated with a special device to reduce the pulsations induced by the basic operating frequency;
- **SPF inlet silencer:** innovative silencer consisting of a patented interference device that reduces the noise emissions of the unit;
- **Discharge silencer:** patented and extremely advanced silencer, consisting of the combination of diffusion chambers placed in line and of resonating chambers characterized by the absence of soundproofing material on the inside;
- **Noise enclosure:** new patented enclosure, in which channeling of the exhaust and ventilation air has been optimized to reduce the noise emissions through the air input and outlet grids.



Simple filter replacement



Immediate view of oil level



Easy oil change



## SIMPLE INSPECTION

**ROBOX evolution**, thanks to its design and the careful arrangement of its elements, makes it possible to perform maintenance even more easily thanks to:

- **simplified access:** all operations of maintenance are performed from the front, by removing the front panel and/or opening the top panel supported by gas springs;
- **simple filter replacement:** by simply opening the top panel on the roof;
- **immediate view of oil level:** the presence of two inspection bubbles makes it possible to check directly from the front panel;
- **easy oil change:** two pipes on the wall of the booth, accessible through the front panel, permit both draining of the exhaust lubricant and filling;
- **automatic belt tightening:** a swinging suspension device on the motor automatically maintains correct tension of the belts at all times, thereby reducing wear on the bearings and thus reducing overall maintenance costs;
- **simple belt replacement:** can be done from the front of the assembly, simply by removing the panel thanks to the automatic belt tightening device, without using any other tools.

## MONITORED OPERATION

**ROBOX evolution** is designed for installation of the new electronic monitoring system **SENTINEL**, which provides effective safeguards for the blower package and the entire investment.

### SENTINEL:

- **prevents any damage:** in case any malfunction occurs it activates a pre-alarm signal and, if the normal values are not restored, it provides a trip signal to ensure that no damage is caused to the blower;
- **facilitates maintenance operations:** by constantly monitoring the oil level and belt wearing;
- **reduces system downtime to a minimum:** makes it possible to identify and promptly eliminate the causes of possible malfunction by signaling any values outside of the normal operation.

### Operating parameters that are monitored:

- Direction of rotation of blower;
- Blower speed;
- Inlet pressure;
- Delivery pressure;
- Inlet temperature;
- Delivery temperature;
- Oil Temperature in casing on motor side;
- Oil Temperature in casing on gearbox side;
- Temperature inside sound enclosure;
- Oil Level in casing on motor side;
- Oil Level in casing on gearbox side.

Electronic monitoring system



## COMPACT CONSTRUCTION

**ROBOX evolution**, thanks to the careful arrangement of all its internal elements, **has a compact design, thus ensuring that the required space is kept to a minimum.**

All maintenance operations are carried out from the front or top. So it is possible to assemble several **ROBOX evolution** units side by side thereby reducing the amount of space dedicated to them so therefore reducing the overall dimensions of the compressor room; this results in lower system build costs.

