

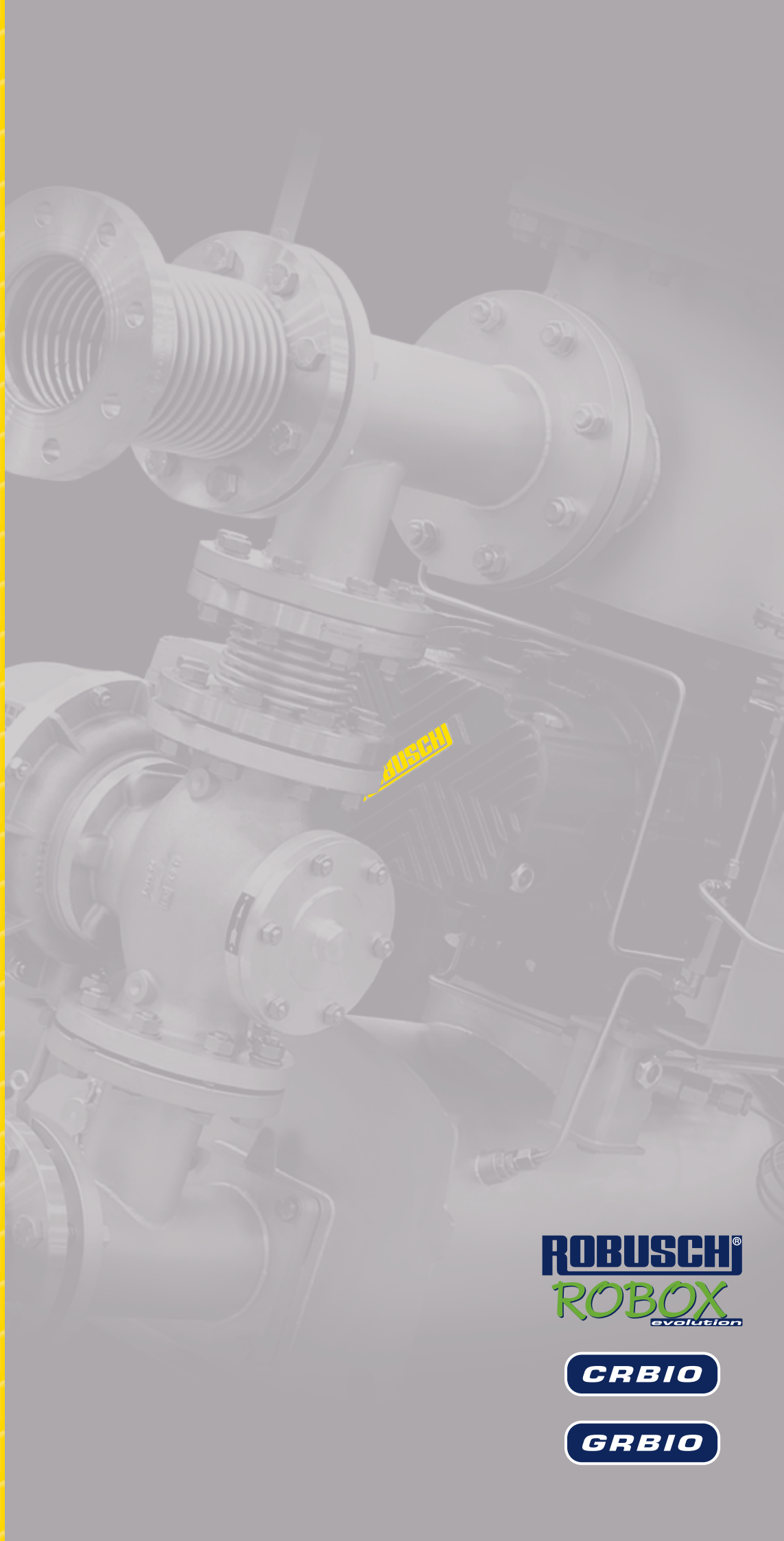
Blower Packages

BIOGAS

Applications

ROBUSCH®

by Gardner Denver



ROBUSCH®
ROBOX
evolution

CRBIO

GRBIO

Blower Packages - Biogas Applications

Robuschi is pleased to introduce the new solutions for BIOGAS applications, especially developed, for the **conveying and compression of biogas, as well as natural and landfill gases in waste water treatment and power generation plants.**

The Blower Biogas Packages have been certified, according to the most important and recent **EC guideline 94/9/EC (ATEX) - group II in category 2**, in order to guarantee the best safety usage in this range of application.

ROBOX evolution BIOGAS

Blower package units, with capacity **up to 2850 m³/h** and differential pressure **up to 1000 mbar**.

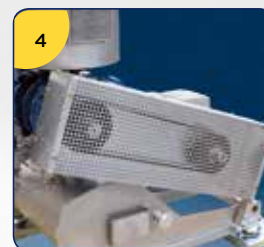
The innovative characteristics of the ROBOX evolution: silence, compactness and easy maintenance, remain the hallmarks of this new blower BIOGAS group.

- 1 • RBS blower stage:** with gastight sealing of the driving shaft.
It is available, optionally, the blower with a special anticorrosion coating protecting all the blower's components in contact with the gas. The blower is explosion-proof tested and certified up to 12 bar.
- 2 • Suction silencer:** 1.3 bar overpressure PED certificated special design silencer, fabricated in hot galvanized steel with drainage and 12 bar explosion-proof tested. It is also available in the stainless steel version as optional.
- 3 • Baseframe with discharge silencer:** 1.3 bar overpressure PED certificated baseplate and special design discharge silencer, fabricated in hot galvanized steel with drainage device and 12 bar explosion-proof tested. It is also available in the stainless steel version as optional.
- 4 • Spark safe belt guard in ATEX version.**
- 5 • Instruments panel:**
 - **Inlet and outlet pressure gauge indicators:** diaphragm manometer complete of stainless steel accessories (tap and pipes) in ATEX version.
 - **Temperature protection switch in ATEX version**
 - **Pressure protection switches** (optional)
- 6 • Pressure regulator with bypass** for keeping outlet pressure constant (optional). The standard version is equipped with a safety relief valve and a non return WR valve in ATEX version.

Axial compensators in suction and discharge side in stainless steel.

- The following components are available in addition to the standard version:
 - *Sound enclosure*
 - *Stainless steel gas humidity drainage system with tank.*

Other special designs are available upon request.



PERFORMANCES

	ROBOX evolution BIOGAS 1	ROBOX evolution BIOGAS 2	ROBOX evolution BIOGAS 3
RBS RANGE	15-25-35	35-45-46-55-65	65-66-75-85-86
Pressure min/max (mbar)	1 / 1000	1 / 1000	1 / 1000
Capacity min/max (m ³ /h)	240 / 400	400 / 1080	1370 / 2850

CRBIO - GRBIO

Blower package groups, assembled on a skid, with capacity **up to 3280 m³/h** and differential pressure **up to 400 mbar**. It is available with pulley - belt transmission (GRBIO) and directly coupled (CRBIO).

- 7 • RBS blower stage:** with the same features of the ROBOX evolution version.
 - 8 • Steel base** with anti-vibration mounts
 - 9 • Non return valve**
 - 10 • Galvanized and / or painted piping**
 - 11 • By-pass safety relief valve**
 - 12 • Coupling guards in ATEX version**
- The following components are available in addition to the standard version:
 - Pressure regulator with bypass for keeping outlet pressure constant
 - Inlet and outlet pressure gauge indicators in ATEX version
 - Temperature protection switch in ATEX version

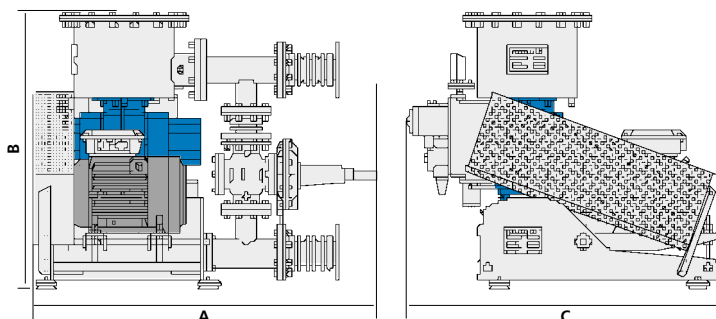


PERFORMANCES

	CRBIO/GRBIO 1	CRBIO/GRBIO 2	CRBIO/GRBIO 3
RBS RANGE	15-25	35-45-46-55-65	75-85-86
Pressure min/max (mbar)	1 / 400	1 / 400	1 / 400
Capacity min/max (m ³ /h)	40 / 350	100 / 2040	570 / 3280

DIMENSIONS AND WEIGHT

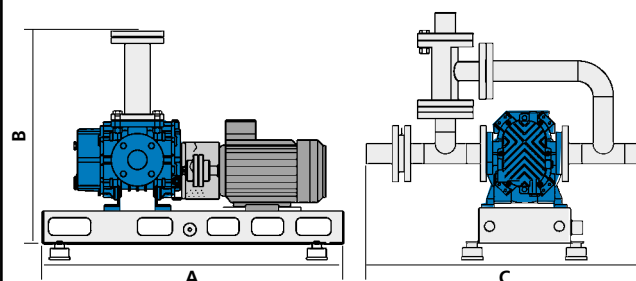
ROBOX evolution BIOGAS



EL	15/1	25/1	35/1	35/2	45/2	46/2	55/2	65/2	65/3	66/3	75/3	85/3	86/3
A	844	862	862	1161	1161	1211	1196	1235	1630	1630	1630	1630	1670
B	745	745	745	1070	1070	1070	1122	1122	1595	1435	1515	1515	1515
C	912	912	985	1265	1265	1265	1265	1265	1695	1695	1695	1695	1695
Kg*	75	80	235	245	245	260	295	310	435	465	495	535	605

* Without motor

CRBIO Directly coupled



EL	15/1	25/1	35/2	45/2	46/2	55/2	65/2	66/2	75/3	85/3	86/3
A	950	950	950	950	1100	1800	1800	1800	1800	1800	1900
B	630	630	670	670	670	1035	1035	1155	1065	1185	1185
C	726	726	822	822	822	815	815	815	1410	1410	1410

GRBIO Pulley - belt transmission

Many configurations are available.



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