

## SCREW COMPRESSORS C-SERIES

Over 100,000 compressed air users expect more when it comes to their compressed air supply. **BOGE air provides them with the air to work.** 

Screw compressors custom made by BOGE have for decades been synonymous with efficient and reliable compressed air supply to trade workshops through to industrial companies. The BOGE C-series is a trendsetter in its class: less noise, less pipework, less connections in contrast to more output, more individual configuration possibilities and more efficiency and requiring a minimum of space. We have listened closely to the wishes of our customers – with the C-series we provide the air to work.

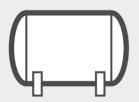
#### **CONTENTS**

OVERVIEW	4
BOGE C-SERIES	
up to 10 hp	6
up to 30 hp	12

# **Compressed air with a method:** Modules of the BOGE C-series.



Screw compressor



**Compressed air receiver** 



**Refrigerant dryer** 



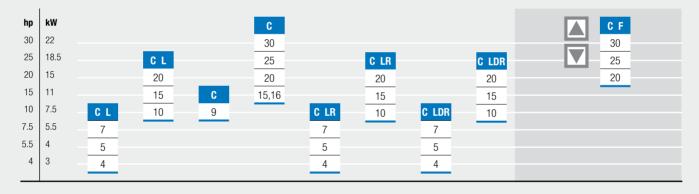
**Frequency control** 

#### **ADVANTAGES OF THE COMPACT MODULAR DESIGN:**

- Flexible combination possibilities
- Unit completely ready for connection
- Minimum flow losses due to compact construction
- High-quality piping protects against leaks

Modular design, compact system: Because of the modular design BOGE screw compressors allow for individual configuration of your compressed air system. Each compact module is pre-assembled and ready for use: for efficient and reliable operation in all types of applications.

#### **PERFORMANCE OVERVIEW OF THE C-SERIES**



frequency controlled



#### **UNIQUE: BOGE GENUINE PARTS FOR THE C-SERIES.**

Only the use of BOGE original parts will enable you to benefit from the technological edge of the C-series in the long run. To this purpose, BOGE offers individually customized replacement parts for the C-series guaranteeing 100 percent quality and 100 percent service life. Only such original parts are compatible with the compressors of the C-series – for maximum safety during the entire service life period.

# The C-series up to 10 hp: Space saving and more energy efficient than ever! Design advantages.

#### THE CM COMPACT MODULE:

All necessary components are integrated into the airend block. Maintenance and wear parts are easily accessible – for maximum comfort and highest operational safety.

#### Integrated oil separating system

Both oil separating cartridge and oil filter cartridge are easily accessible: for maintenance purposes only the cover needs to be opened. The oil sump is located at the lowest point: for effective pre-separation according to the gravity principle.

> Minimum pressure / check valve\*

Multifunctional intake control with integrated solenoid valve for functionally reliable operation without leaks.

### Silenced intake filter with paper filter cartridge

The filter separates 99.9 percent of all particles larger than 3  $\mu$ m: assuring high quality compressed air right at its source.

## BOGE airend with special BOGE profile and HD bearing

The specially designed airend is characterized by its high output and low energy consumption.



\* Minimum pressure / check valve Integrated design eliminates piping – for maximum leakage safety.

#### **Temperature sensor**

#### CNC machined cast iron housing

High quality machining eliminates the risk of leakage. The heavy cast iron housing also serves to reduce noise right at the source.

**Thermo-static oil level regulation** Easily accessible from the outside.

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**Compact & highly efficient!** The monoblock compact design of the airend range up to 10 hp offers distinct advantages. The integrated design minimizes the number of oil pipes by clever internal routing – for a highly efficient and reliable compressor. At the same time the airend requires less space providing the user with a compact, space saving and energy efficient solution from BOGE!



**COMPACT DESIGN** Integration of all essential components eliminates almost all interconnecting pipes. Leaks are virtually eliminated. Internal pressure losses are minimized.



#### **EXTREMELY QUIET**

Because of the sound adsorbing graphite casting the C-series is very quiet in operation and vibration free. No further silencing is required. The enclosed versions C-series and C-series with dryer are therefore super-silent with low sound pressure values.



#### **HIGHEST EFFICIENCY**

The BOGE airend design ensures industry leading specific power ratios (Optimized output volumes at low energy consumption).



#### CONTROL

The BOGE FOCUS control is the standard compressor control and provides numerous control and monitoring features.



#### **OPTIONAL FREQUENCY CONTROL**

The frequency converter flexibly controls the motor speed and therefore the airend. This ensures the compressor output automatically adjusts to the system demand. Soft starting via the frequency convertor also avoids undue wear and tear and prolongs the service life of the compressor.

## Screw compressor **C 4 L** to **C 7 L** Compressed air system **C 4 LR** to **C 7 LR** Compressed air center **C 4 LDR** to **C 7 LDR**

Effective free air delivery:  $0.340 - 0.85 \text{ m}^3/\text{min}, 11 - 30 \text{ cfm}$ Pressure range: 8 and 10 bar, 125 and 150 psig Motor range: 3.0 - 5.5 kW, 4 - 7.5 hp



## Screw compressor C L

Compact screw compressor, direct coupled



## Compressed air system C LR

Receiver mounted screw compressor, direct coupled





## Compressed air center C LDR

Receiver mounted screw compressor and refrigerant dryer, direct coupled



The machines depiced do not correspond to the most updated version of the receivers.

BOGE Model	Max. pressure		Effective free air delivery* 60 Hz		Motor power		Voltage	Dimensions W x D x H	
	psig	bar	cfm	m³/min	hp	kW		inches	lbs.
C 4 L	150	10	11	0.31	4.0	3.0	208/230/460/3ph	30 x 19 x 19	243
C 5 L	150	10	14	0.40	5.5	4.0	208/230/460/3ph	30 x 19 x 19	276
C 5 L	150	10	14	0.40	5.5	4.0	230/1ph	30 x 19 x 19	276
C 7 L	125	8	30	0.85	7.5	5.5	208/230/460/3ph	30 x 19 x 19	287
C 7 L	125	8	30	0.85	7.5	5.5	230/1ph	30 x 19 x 19	298

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

BOGE	Max. pr	essure	Receiver size		Effective free		power	Voltage	Dimensions	Weight
Model	el			air deli	air delivery* 60 Hz				W x D x H	
	psig	bar	gallons	cfm	m³/min	hp	kW		inches	lbs.
C 4 LR	150	10	80	11	0.31	4.0	3.0	208/230/460/3ph	66 x 28.75 x 45	816
C 5 LR	150	10	80	14	0.40	5.5	4.0	208/230/460/3ph	66 x 28.75 x 45	849
C 5 LR	150	10	80	14	0.40	5.5	4.0	230/1ph	66 x 28.75 x 45	860
C 7 LR	125	8	80	30	0.85	7.5	5.5	208/230/460/3ph	66 x 28.75 x 45	860
C 7 LR	125	8	80	30	0.85	7.5	5.5	230/1ph	66 x 28.75 x 45	871

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

BOGE Model	Max. pr	essure	Receiver size		Effective free air delivery* 60 Hz		power	Voltage	Dimensions W x D x H	Weight
mouor	psig	bar	gallons		m <sup>3</sup> /min	hp	kW		inches	lbs.
C 4 LDR	150	10	80	11	0.31	4.0	3.0	208/230/460/3ph	66 x 28.75 x 45	904
C 5 LDR	150	10	80	14	0.40	5.5	4.0	208/230/460/3ph	66 x 28.75 x 45	937
C 5 LDR	150	10	80	14	0.40	5.5	4.0	230/1ph	66 x 28.75 x 45	948
C 7 LDR	125	8	80	30	0.85	7.5	5.5	208/230/460/3ph	66 x 28.75 x 45	968
C 7 LDR	125	8	80	30	0.85	7.5	5.5	230/1ph	66 x 28.75 x 45	979

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

# Screw compressor C 9



Effective free air delivery: 32 - 45 cfm, 0.90 - 1.27 m<sup>3</sup>/min Pressure range: 115 - 190 psig, 8 - 13 bar Motor range: 10 hp, 7.5 kW





#### **EFFICIENCY**

The specially designed BOGE airend provides high output volumes at low energy consumption – for reliable and efficient compressed air supply.



#### **EXTREMELY QUIET**

All C-series compressors are characterized by very low sound pressure levels due to their super-silenced cabinets.



#### CONTROL

The BOGE FOCUS control is the standard compressor control and provides numerous control and monitoring features.

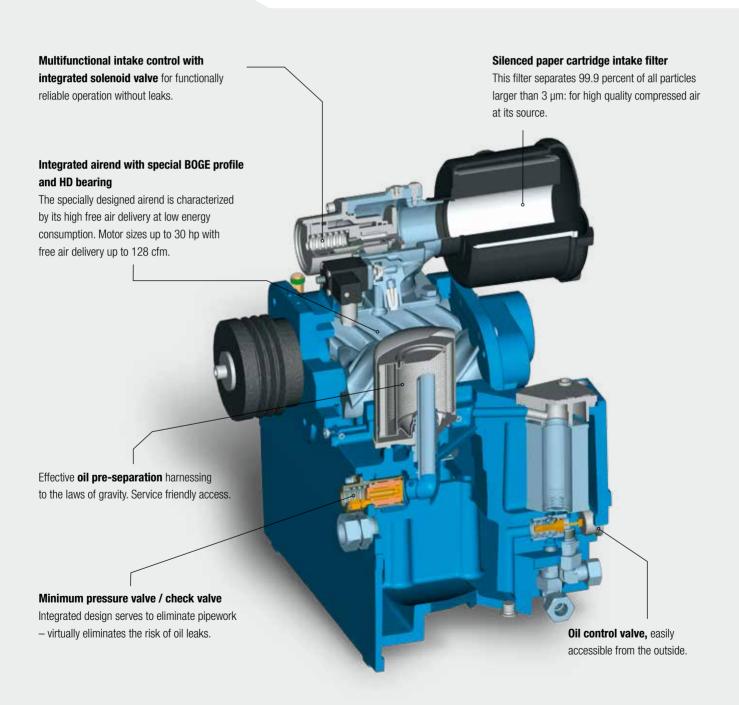
**Compact, efficient, very quiet:** The space saving C-series screw compressors are designed for long-term performance. A refrigerant dryer mounted on a horizontal receiver is available as an option. Even at full load operation the compressor operates reliably and safely at optimum efficiency providing a long service life.

BOGE Model	Max. pressure**		Effective free air delivery*		Motor power		Dimensions W x D x H	
	psig	bar	cfm	m³/min	hp	kW	inches	lbs.
С9	115	7	45	1.27	10.0	7.5	19 x 27.7 / 35.7 x 37.6	474
C 9	115/125	8/8.6	42	1.20	10.0	7.5	19 x 27.7 / 35.7 x 37.6	474
C 9	150	10	39	1.10	10.0	7.5	19 x 27.7 / 35.7 x 37.6	474
С9	190	13	32	0.90	10.0	7.5	19 x 27.7 / 35.7 x 37.6	474

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 59 dB(A) according to DIN EN ISO 2151:2009

\*\* Max. pressure of the compressor

# The C-series up to 30 hp: This is the way compressors are made today! Design advantages.



The state-of-the-art compressor: Extremely quiet, compact & efficient – the "large" BOGE C-series has set industry standard in specific power and sound pressure values. The BOGE compact module enables short distances and less pipelines – for a highly efficient and reliable compressor solution. Depending on your requirements, the C-series up to 30 hp can be equipped frequency control or heat recovery: This is the way compressors are made today!



#### **INTEGRATED DESIGN**

The integration of all essential components in the compact module serves to eliminate pipework and to reduce flow losses: for maximum operating dependability and efficiency!



#### **COMPACT EFFICIENCY**

The BOGE C-series is engineered to generate high free air deliveries in continuous operation and in a incomparably efficient manner. Due to its compact design space requirements are kept to a minimum.



#### **CONTROL**

FOCUS control with LC display and pressure sensor technology is fitted standard and includes an integrated energy efficiency display as well as additional monitoring and control options. FOCUS software now includes the ability to control up to three other compressors, freeze protection and leak monitoring.



#### **MAXIMUM EFFICIENCY**

The BOGE C-series up to 30 hp is characterized by its industry leading specific power ratios – for efficient compressed air supply.



#### **OPTIONAL HEAT RECOVERY**

A heat recovery system can be added as an option. Up to 94 percent of the input electrical energy is dissipated through the cooling medium (air or water) and can be recovered for space heating or pre-heating domestic water.



#### **OPTIONAL FREQUENCY CONTROL**

The frequency controlled option ensures a continuous volume flow between 25 and 100 percent. This ensures adaptation to the momentary demand of the compressed air system. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.

## Screw compressor **C 10 L** to **C 20 L** Compressed air system **C 10 LR** to **C 20 LR** Compressed air center **C 10 LDR** to **C 20 LDR**

Effective free air delivery:  $1.03 - 2.17 \text{ m}^3/\text{min}, 37 - 77 \text{ cfm}$ Pressure range: 8 and 10 bar, 115 and 150 psig Motor range: 7.5 - 15 kW, 10 - 20 hp



## Screw compressor C L

Compact screw compressor, directly coupled



## Compressed air system C LR

Receiver mounted screw compressor, direct coupled





## Compressed air center C LDR

Receiver mounted screw compressor and refrigerant dryer, direct coupled



A class of its own: The directly coupled screw compressors of the C-series are space saving and extremely efficient at the same time. They are available with horizontal receiver and/or top mounted refrigeration dryer and can flexibly be adapted to suit particular application requirements.

BOGE Model	Max. pressure		Effective free air delivery* 60 Hz				Motor p	ower	Power supply	Dimensions W x D x H	Weight
	psig	bar	cfm	m³/min	hp	kW		inches	lbs.		
C 10 L	150	10	37	1.03	10.0	7.5	3-phase	52.5 x 24 x 25.5	573		
C 15 L	125	8	69	2.18	15.0	11.0	3-phase	52.5 x 24 x 25.5	660		
C 20 L	150	10	77	2.17	20.0	15.0	3-phase	52.5 x 24 x 25.5	661		

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

#### 67 x 35 x 53

BOGE Model	Max. pressure		Receiver size		Effective free air delivery* 60 Hz				power	Power supply	Dimensions W x D x H	Weight
	psig	bar	gallons	cfm	m³/min	hp	kW		inches	lbs.		
C 10 LR	150	10	120	37	1.03	10.0	7.5	3-phase	67 x 35 x 53	998		
C 15 LR	125	8	120	69	2.18	15.0	11.0	3-phase	67 x 35 x 53	1086		
C 20 LR	150	10	120	77	2.17	20.0	15.0	3-phase	67 x 35 x 53	1086		

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

BOGE Model	Max. pressure		Receiver size	Effective free air delivery* 60 Hz		Motor	power	Power supply	Dimensions W x D x H	•
	psig	bar	gallons	cfm	m³/min	hp	kW		inches	lbs.
C 10 LDR	150	10	120	37	1.03	10.0	7.5	3-phase	67 x 35 x 53	1130
C 15 LDR	125	8	120	69	2.18	15.0	11.0	3-phase	67 x 35 x 53	1218
C 20 LDR	150	10	120	77	2.17	20.0	15.0	3-phase	67 x 35 x 53	1218

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

# Screw compressor **C 15** to **C 30** Compressed air station **C 20 F** to **C 30 F**



Effective free air delivery:  $1.33 - 3.82 \text{ m}^3/\text{min}, 46 - 135 \text{ cfm}$ Pressure range: 8 to 13 bar, 115 to 190 psig Motor range: 11 - 22 kW, 15 - 30 hp







#### **MAXIMUM EFFICIENCY**

The BOGE C-series up to 30 hp is characterized by its industry leading specific power ratios. You rarely come across such compact screw compressor efficiency.



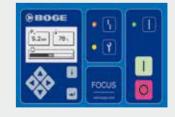
#### **EXTREMELY QUIET**

All C-series compressors feature very low sound pressure levels.



#### **FREQUENCY CONTROL**

The optional frequency converter ensures a continuous volume flow between 25 and 100 percent. This allows adaptation to the momentary demand of the compressed air system. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.



#### CONTROL

The compressor is controlled by the FOCUS control system which includes an integrated efficiency display as well as additional monitoring and control options. FOCUS is programmed as a master controller and can control up to three machines.

**Real winners:** The belt driven C-series models up to 30 hp are highly efficient and extremely quiet in operation requiring only a minimum footprint. With frequency controlled units you can realize significant energy savings and prolonged compressor life. An integrated design means short distances and extremely low pressure losses. As well as generating industry leading outputs, the C-series is also very energy efficient.

BOGE	Max. pr	ressure	Effecti	ve free	Мо	tor	Dimensions	Compressed	Weight
Model			air del	ivery*	pov	ver	W x D x H	air outlet	
	bar	psig	m³/min	cfm	kW	hp	inches		lbs.
C 15	7	100	1.74	62	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1035
C 15	8	115/125	1.74	62	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1035
C 15	10	150	1.53	54	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1035
C 15	13	190	1.33	47	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1035
C 16	7	100	1.98	70	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1060
C 16	8	115/125	1.89	66	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1060
C 16	10	150	1.63	57	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1060
C 16	13	190	1.35	47	11.0	15	30.4 x 41.6 x 68.3	NPT 1"	1060
C 20	7	100	2.69	95	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20	8	115/125	2.55	90	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20	10	150	2.25	79	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20	13	190	1.89	66	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 25	7	100	3.28	116	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25	8	115/125	3.10	109	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25	10	150	2.71	95	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25	13	190	2.32	81	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 30	7	100	3.82	135	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30	8	115/125	3.62	127	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30	10	150	3.21	113	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30	13	190	2.71	95	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1193

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix C, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 63 dB(A) according to DIN EN ISO 2151:2009

BOGE	Max. pi	ressure	Effecti	ve free	Мо	tor	Dimensions	Compressed	Weight
Model			air del	ivery*	pov	ver	W x D x H	air outlet	
	bar	psig	m³/min	cfm	kW	hp	inches		lbs.
C 20 F	8	115	0.49-2.55	23-90	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	988
C 20 F	10	150	0.45-2.25	20-79	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	988
C 20 F	13	190	0.54-1.89	17-66	15.0	20	30.4 x 41.6 x 68.3	NPT 1"	988
C 25 F	8	115	0.65-3.10	27-109	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1122
C 25 F	10	150	0.61-2.71	24-95	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1122
C 25 F	13	190	0.45-2.32	20-81	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1122
C 30 F	8	115	0.80-3.62	32-127	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1038
C 30 F	10	150	0.69-3.21	28-113	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1038
C 30 F	13	190	0.55-2.71	24-95	22.0	30	30.4 x 41.6 x 68.3	NPT 1"	1038

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 63 dB(A) according to DIN EN ISO 2151:2009).

#### New type designation C / CL series

.DR 
.R .DR 
.DR .R
.R
.R
.R
DD
אט
.R
.DR
.R
.DR
.F
.FR
.FDR

Up to now	New
CL 10	C 10 L
CL 10-	C 10 LR
CLD 10-	C 10 LDR
CL 15	C 15 L
CL 15-	C 15 LR
CLD 15-	C 15 LDR

C 20 L

C 20 LR

C 20 LDR

CL 20

CL 20-

CLD 20-

Up to now	New
C 4	C 4
CD 4	C 4 D
C 5	C 5
CD 5	C 5 D
C 7	C 7
CD 7	C 7 D
C 9	C 9
CD 9	C 9 D

Up to now	New
New	C 15
New	C 15 D
C 15	C 16
CD 15	C 16 D
C 20	C 20
CD 20	C 20 D
CF 20	C 20 F
CDF 20	C 20 FD
C 25	C 25
CD 25	C 25 D
CF 25	C 25 F
CDF 25	C 25 FD
C 30	C 30
CD 30	C 30 D
CF 30	C 30 F
CDF 30	C 30 FD

**C** = C series

L = direkt drive

**F** = frequency controller

D = dryer

R = receiver

For four generations, customers from mechanical engineering, industry and trade have relied on BOGE know-how when it comes to planning, developing and manufacturing compressed air systems. They are fully aware of the fact that BOGE AIR is more than just ordinary compressed air: utmost safety, outstanding efficiency, excellent quality, maximized flexibility along with dependable service are the ingredients to transform BOGE AIR into air to work with – in Germany, in Europe and in more than 120 countries around the world.

#### Our ranges of services include the following:

- Energy efficient systems development
- Plant design and engineering
- · System control and visualization
- Oil injected screw compressors
- Compressed air treatment
- Compressed air distribution and storage
- Compressed air accessories
- Compressed air service
- Oil free piston compressors
- Piston booster compressors
- Oil free rotary screw compressors



