



Oil-free compressor
solutions for railway

 **DÜRR
TECHNIK**
Inspiring With Green Air



Dürer Technik: The oil-free compressor specialist

For the important functions of a train

As a specialist in oil-free piston compressors, Dürer Technik combines its long experience with an innovative spirit to meet the most extreme demands in railway.

We offer a wide range of products and plan the ideal solution for manufacturers and operators of railway vehicles as well as with system suppliers:

- Main Air
- Auxiliary Air
- System Solutions

From auxiliary air to main air, from rising up the pantograph to brake systems, we customize solutions to the train's individual characteristics. All our products are optimized for maximum performance under tough conditions, saving time, effort and maintenance costs with their robust, innovative technology.

Main air

For railway vehicles the compressor is the core of the air supply. As the first oil-free railway main air compressor manufacturer worldwide Dürer Technik fulfills the highest requirements for reliability, precision and durability.

Each train has unique and individual requirements. Our oil-free main air compressors offer multiple options to meet your specific requirements. With a quality design, reliable performance and German Engineering, we offer proven main air compressor models. More than 200 customers from 35 countries worldwide rely on Dürer Technik.

Advantages

Our innovative compressors are economical to own and operate. While our oil-free technology makes them more environmentally friendly too. Consider all these important and relevant factors when deciding on your oil-free compressor choice for rail transport.

Cost-effective & maintenance-free	Reliable & durable	Customized & Eco-friendly
Compact design & low weight	Low noise & vibration levels for more driving comfort	High-efficiency motor & high-quality components



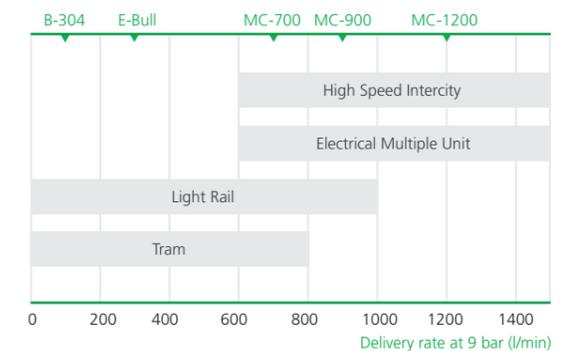
Highest quality standards

Our oil-free compressors are manufactured in Germany and meet all industry certifications and standards:



Dürer Technik ■ Quality
■ Made in
■ Germany

Overview compressors per train type





MC series

Oil-free main air compressors for railway

The MC series is specially developed for the railway sector. It is based on the know-how and experience of over 40 years of oil-free piston compressors. The MC series is particularly compact. With low-vibration it offers an ideal solution for new railway projects that have to withstand extreme conditions.

- Durable and easy to maintain
- Low life cycle costs
- Optimum dust and stone chip protection due to robust housing

Characteristics

- Operating temperature from -40°C to +55°C
- Various installation positions of the units possible
- Closed protective housing with customised sound insulation
- IE3/E1 motors compatible with variable frequency drive

- Low noise emission thanks to special sound insulation
- Reliable start-up even at very low temperatures
- Developed and produced in Germany

Customized compressed air systems

Main air compressors of the MC series are suitable for installation in a wide variety of vehicle types and can be custom-configured according to the installation situation.

Both the dryer and the welding frame can be individually adapted to the respective vehicle type and installation situation.



VFD-capable IE3 or IE1 motors

The main air compressor is operated by a motor with continuous running capability.

The motor has been specifically developed for use in rail vehicles and is designed for operation with a frequency converter.

Withstands high vibrations for a lifetime

The main air compressors of the MC series are equipped with very robust wire rope vibration dampers. They protect the compressor and the vehicle from strong vibrations and ensure trouble-free operation. The vibration dampers are maintenance-free during the entire service life of the compressor. Alternatively, other types of vibration dampers can be used where the situation requires.



Type	Delivery rate at 9 bar (l/min)	Nominal pressure PN (bar)	Noise level at PN (@4,6m) dB (A)	Electrical power P1 (kW)	Weight (kg)	Dimensions LxWxH (mm)
MC-700	720	10	60	7,5	200,0	1000x650x510
MC-900	920	10	67	9,5	200,0	1000x650x510
MC-1200	1220	10	69	15,8	285,0	1120x650x510

Data at 50 Hz, further voltages and frequencies available on request



E-Bull

Oil-free versatile and compact compressor

With the E-Bull, Dürr Technik has expanded its innovative range of oil-free piston compressors, which are specially designed for application in rail and commercial vehicles for use worldwide.

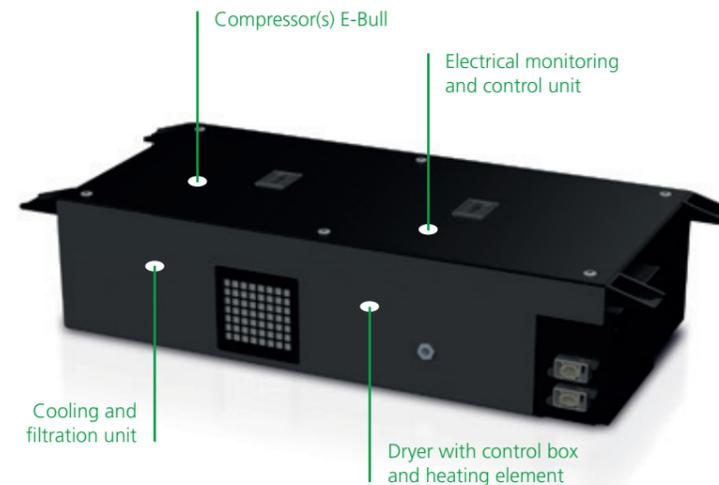
- Oil-free 2-cylinder air compressor aggregate with an AC-motor (IE3) suitable for frequency inverter operation & extended operating temperature range
- Extreme long operational lifetime
- Compact solution with variable mounting positions
- Big filter surface of the suction filter guarantees a long lifetime and an optimal suction behavior

- Well protected against dust and water with degree of protection IP 67
- High flow rate at low weight only 0.1 kg per l/min
- Low energy consumption of just 12.1 watts/l/min
- Extremely quiet

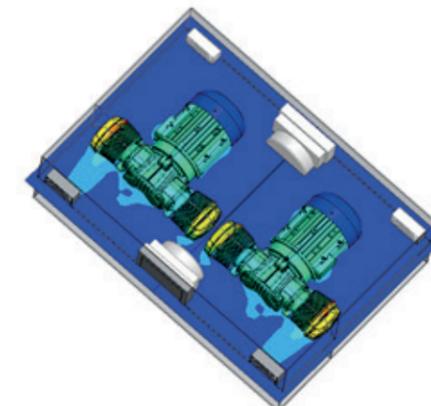
Type	Delivery rate at 10 bar (l/min)	Noise level at PN dB (A)	Motor input P1 (kW)	Current consumption (A)	Voltage (V)	Frequency (Hz)	Protection class (IP)	Weight (kg)	Dimensions LxWxH (mm)
E-Bull	280	71	3,40	6,9	400	50	IP67	47,5	450x530x298
E-Bull	315	75	3,95	6,8	400	60	IP67	47,5	450x530x298
E-Bull	280	75	3,40	12,0	230	50	IP67	47,5	450x530x298
E-Bull	315	76	3,95	11,8	230	60	IP67	47,5	450x530x298

The E-Bull compressor is ideal for integration into modern compressed air generation and treatment systems.

Based on one or more compressors and in combination with cooling units, drying systems and electrical and pneumatic control elements, main air stations can be designed exactly according to customer requirements and flexibly installed depending on vehicle consumption.



- Modular, redundant and silent
- Easily adaptable electrical, mechanical and pneumatic interfaces
- Flexible control and monitoring
- No frequency converter necessary
- Designed and optimized to withstand tough environmental





Auxiliary Air

Trust in Dürr Technik, the first manufacturer of oil-free auxiliary compressors for railway vehicles
Oil-free compressors by Dürr Technik run approximately 300 M kilometers per year on railway vehicles, a distance similar to traveling around the globe 7,500 times. Dürr Technik is the first manufacturer of oil-free auxiliary air compressors for railway traffic.

Our auxiliary air compressors fulfill the highest requirements for reliability, precision and durability. For this reason manufacturers and operators of railway vehicles and system suppliers have, for many years now, relied on our high quality, compact system solutions – from Panama via South Africa to China.

For more than 50 years now Dürr Technik has been a specialist for oil-free piston compressors. For more than 35 years we have been supplying around 150 different compressor versions to numerous leading companies in the rail traffic sector worldwide.

All major rolling stock manufactures trust in Dürr Technik and are using our compressor units.

Great variety of products

No matter for which application you need compressed air, our oil-free compressor aggregates can be configured exactly to your requirements.



Durability



Cost efficient



Certified



Light weight



KK70 Series
D-100

KK40 Series
AG-132

Compressor aggregates

For the design of your compressed air supply, you can choose from a wide range of oil-free compressor units – from the direct current solution to the three-phase solution, from 24V DC up to 400V 3~AC.

Selection of our oil-free compressor aggregates

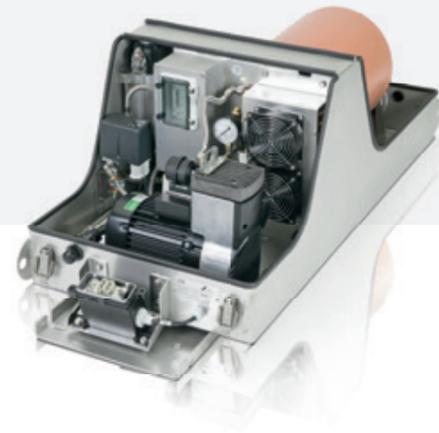
Type	Delivery rate at 0 bar	Nominal pressure PN	Noise level at PN	Motor ratings			Frequency (Hz)	Protection class (IP)	Dimensions LxWxH (mm)	Weight (kg)
	(l/min)	(bar)	dB (A)	Motor input P1 (kW)	Rated current (A)	Nominal voltage (V)				
with DC motor										
D-030	30	7	61	0,12	6,4	24	-	IP00	209x108x156	4,4
D-040	40	7	61	0,19	9,0	24	-	IP00	242x121x175	5,9
D-061	60	7	69	0,50	21,0	24	-	IP54	247x132x188	6,9
D-061	60	7	69	0,40	3,7	110	-	IP54	247x132x188	6,9
D-100	105	8	68	0,63	26,0	24	-	IP54	368x176x292	20,5
D-100	105	8	68	0,62	8,8	72	-	IP54	368x176x292	20,5
D-100	105	8	68	0,72	6,5	110	-	IP54	368x176x292	20,5
D-120	119	8	78	0,64	6	110	-	IP54	363x153x214	12,5
DG-160	160	7	72	0,91	38	24	-	IP56	366x276x190	17,0
with 3-motor										
B-038	38	7	57	0,41	1,6 / 0,9	230/400	50	IP54	249x156x180	6,5
B-061	60	7	66	0,5	0,9	230/400	50	IP54	225x165x180	6,1
B-062	78	8,5	60	0,47	0,9	380-415	50	IP20	286x125x175	9,1
B-100	105	8	66	1,00	3,1	230/400	50	IP44	330x200x283	20,3
BG-132	130	7	71	0,89	2,0	230/400	50	IP54	322x276x190	18,0
B-160	160	7	72	1,40	3,1	400	50	IP54	425x355x295	25,9
B-304WR	290	10	64	2,50	4,4	400	50	IP67	604x351x278	58,5

Customized compressor aggregates

As special aggregates our products can for example be equipped with EMC filters, special paints, special electronics, plugs etc.



D-061
pantograph solution



System Solutions

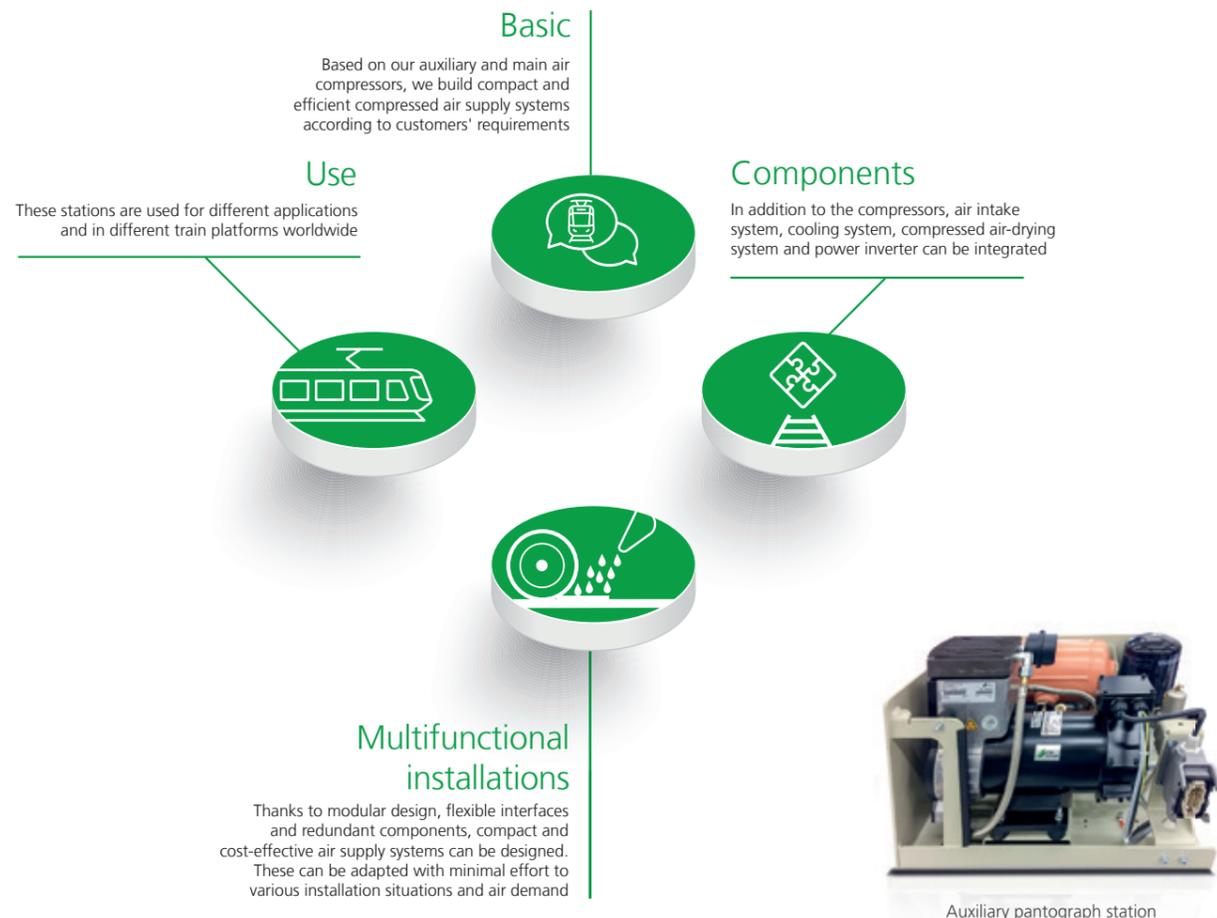
You can rely on our unique competence in the development and manufacturing of complete compressed air systems and installations as an individual system solution in accordance with your specifications.

Receivers, dryers or control units can be integrated during installation depending on the spatial conditions. To ensure an optimal compressed air supply, we plan your system solution down to the tiniest detail, using the latest technologies, tools, methods and expertise.

Customized main air supply units

Dürr Technik main air compressors can be individually adapted to customer requirements and supplemented, for example, with an adsorption dryer, vibration dampers or a welded frame according to railway standards.

Our main air supply units are also perfectly suited for installation under frame, in the machinery room or on the roof, as they are compact, light and low in vibration. Depending on the air demand, an MC series or an E-Bull compressor is used.



Auxiliary pantograph station

Customized auxiliary air stations

Dürr Technik also provides auxiliary air supply units. These systems are running in all kind of environmental conditions – from Scandinavia to the Middle East.

They are supplying dry air for the different applications like sanding, lubrication, driver seat etc.



Customized auxiliary air station



Completely carefree with Durr Technik

Service

Further information can be found online on our website



Germany

Durr Technik GmbH & Co. KG
Pleidelsheimer Straße 30
74321 Bietigheim-Bissingen
Tel. +49 7142-90 22-0
Fax +49 7142-90 22-99
office@duerr-technik.de
www.duerr-technik.com

Eastern Europe

Durr Technik GmbH & Co. KG
Tel. +48 789 185 246
neuwerth.p@duerr-technik.com

Southern Europe

Durr Technik GmbH & Co. KG
Tel. +40 725 527 000
draghici.g@duerr-technik.com

France

Durr Technik GmbH & Co. KG
Tel. +49 7142-90 22-798
triki.s@duerr-technik.de

Great Britain

Durr Technik UK Ltd.
Unit 13 The Industrial Quarter
Bath Business Park, Foxcote Avenue
Peasedown St. John
UK-Bath BA2 8SF
Tel. +44 (0) 1761-42 29 44
Fax +44 (0) 1761-42 08 95
office@durrtechnik.co.uk
www.durrtechnik.co.uk

North America

Durr Technik USA, Inc.
1295 Walt Whitman Road
USA-NY 11747-3062 Melville
Tel. +1 516 214 56 59
Fax +1 516 433 76 84
office@durrtechnikusa.com
www.durrtechnikusa.com

South America

Durr Technik
Office Latin America
Zeballos 1504 - Beccar
CP 1643 Buenos Aires, Argentina
Tel. +54 11 5263 2320
salesla@duerrtechnik.com

SEA & Australia

Durr Technik GmbH & Co. KG
Tel. +6 012-744 7861
singh.p@duerr-technik.com

CIS

Durr Technik GmbH & Co. KG
Tel. +7 (916) 934-05-09
latskevich.i@duerr-technik.de

China

Durr Technik (Shanghai) Co., Ltd.
Room 3B, 3rd floor, No. 405, Tuoqing Rd
201700 Qingpu District, Shanghai, China
Tel. +86 (0) 21 6921 8321
Fax +86 (0) 21 6921 8322
office@durrtechnik.com.cn
www.durrtechnik.com.cn



Inspiring With Green Air

Durr Technik GmbH & Co. KG
Pleidelsheimer Straße 30
74321 Bietigheim-Bissingen
Germany

Tel. +49 7142 90 22-0
Fax +49 7142 90 22-99
office@duerr-technik.de

www.duerr-technik.com

