

## Air-Main Charging Systems DHS Series

Connection up to DN 300



# Assured performance

## Why do we need an air-main charging system?

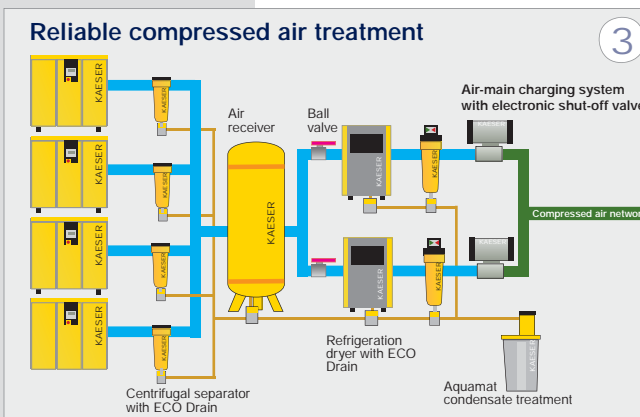
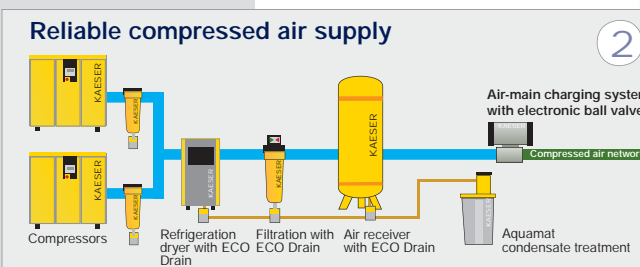
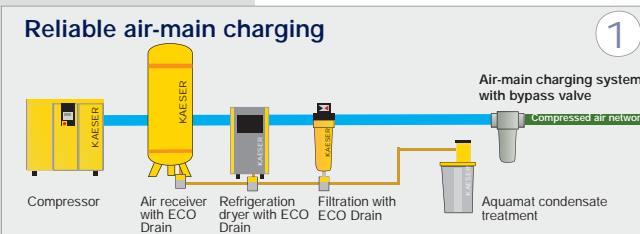
Compressed air treatment systems are designed for a certain rate of air flow which, when the system is operating at full load, pushes against the pressurised air in the air distribution network.

However, should this resistance not be present, for example during periods of low load or downtime, it is possible that dryers and filters may be overwhelmed by the sudden surge in airflow that occurs when the system re-starts. Air-main charging systems prevent this from occurring. They not only ensure consistent compressed air quality, but also enhance system reliability and significantly extend the service life of air treatment equipment.

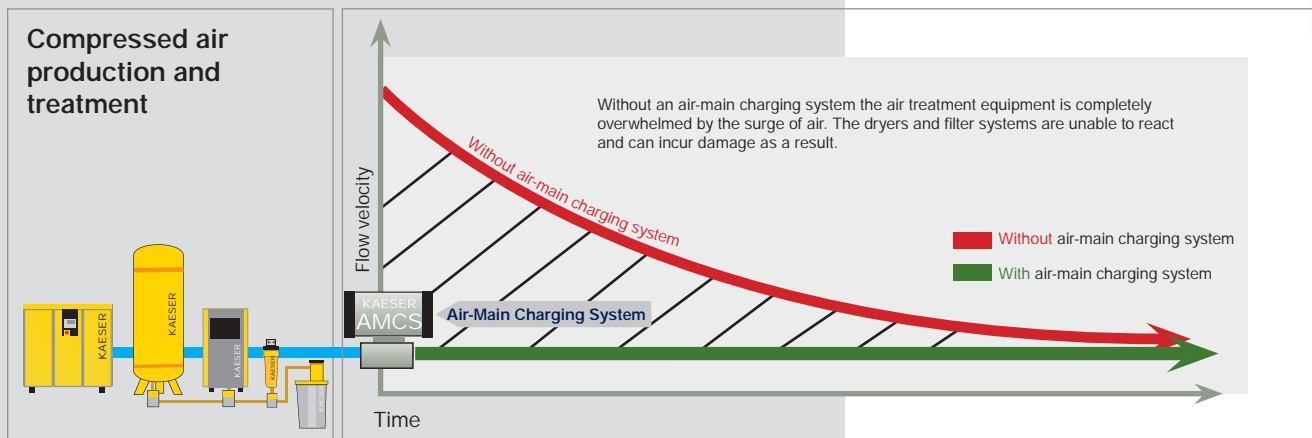
KAESER KOMPRESSOREN can provide a suitable air-main charging system for virtually every compressed air application and network.

### Maximum reliability

Depending on requirement, KAESER air-main charging systems can be designed to provide reliable compressed air supply or treatment.



### Compressed air production and treatment



Up to 1 inch

Bypass valves can be used as air-main charging systems for start-up of smaller compressed air systems that have an air distribution piping diameter up to 1 inch.



Up to 3 inches

To prevent unwanted pressure losses during system shutdown periods, electro-pneumatic ball valves are used in KAESER air-main charging systems for air installations with a distribution pipe diameter between 1/2 inch and 3 inches.



Up to DN 300

Versions with electro-pneumatically operated insertion type butterfly valves are used for systems with air distribution pipe diameters from DN 40 to DN 300.

### Tailored reliability

- ① **Reliable air-main charging ...**  
... with the KAESER bypass valve. Suitable for basic compressed air systems with one compressor and air distribution piping up to 1 inch in diameter.
- ② **Reliable compressed air supply and system start-up ...**  
... with KAESER's proven air-main charging systems. Ideal for compressed air installations with several compressors and a single air treatment package.
- ③ **Reliable compressed air supply and system start-up ...**  
... for compressed air installations with several air treatment packages is achieved by equipping each with a KAESER air-main charging system. This ensures consistent compressed air quality even when only one air treatment package in operation.

# Technical specifications

## Bypass valves

Connection diameter	Pressure setting range	Max. working pressure	Max. working temperature	Dimensions (10 bar version) W x D x H mm	Weight (10 bar version)
	bar	bar	°C		kg
G 1/2	4-10	16	80	65 x 90 x 185	1
G 3/4	4-10	16	80	75 x 90 x 185	1.1
G 1	4-10	16	80	90 x 90 x 185	1.5

## Pre-installed air-main charging systems

Connection diameter	Max. working pressure			Max. working temperature °C	Reliable compressed air treatment	Reliable compressed air supply	Dimensions W x D x H approx. mm	Weight kg
	10 bar	16 bar	40 bar					
<b>Versions with ball valve</b>								
G 1/2	○	○	○	100	●	□	220 x 230 x 400	3.9
G 3/4	○	○	○	100	●	□	220 x 230 x 410	4.0
G 1	○	○	○	100	●	□	230 x 230 x 430	4.3
G 1 1/4	○	○	○	100	●	□	240 x 240 x 450	4.7
G 1 1/2	○	○	○	100	●	□	240 x 240 x 460	5.7
G 2	○	○	○	100	●	□	250 x 240 x 480	6.8
G 2 1/2	○	○	○	100	●	□	260 x 240 x 490	10
G 3	○	○	○	100	●	□	270 x 240 x 500	12
<b>Versions with butterfly valve</b>								
DN 40	○	○	–	50	●	□	220 x 220 x 560	6
DN 50	○	○	–	50	●	□	270 x 230 x 580	9
DN 65	○	○	–	50	●	□	270 x 250 x 620	11
DN 80	○	○	–	50	●	□	270 x 260 x 670	13
DN 100	○	○	–	50	●	□	315 x 260 x 700	18
DN 125	○	○	–	50	●	□	345 x 260 x 750	22
DN 150	○	○	–	50	●	□	410 x 280 x 800	33
DN 200	○	○	–	50	●	□	440 x 330 x 880	47
DN 250	○	○	–	50	●	□	490 x 400 x 970	64
DN 300	○	○	–	50	●	□	550 x 470 x 1070	90

Electric power supply 230 V, AC, 50 Hz

- Please state max. working pressure when ordering
- Set at factory
- Adjustable on-site

**Delivery for pre-installed air-main charging systems:**  
Reliable compressed air quality, on-site modification possible.



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