



# CompAir

by Gardner Denver

## Electronic Condensate Drains

For compressed air  
and industrial gases



Energy efficient  
compressed air treatment

## GDZ Series

# Automated condensate drainage for total peace of mind

## Features and Advantages

### Electronic condensate drains of the GDZ Series feature:

- Non-wearing magnetic-core level control for optimised and loss free discharge of condensate.
- Integrated dirt screen between level measurement and drain valve to protect the diaphragm valve with alarm monitoring.
- Diaphragm valve with large cross-section and condensate pilot control for extended service life.
- Potential-free alarm contact (except GDZ120, GDZ400).

### Non-wearing magnetic-core level control

The magnetic-core level control employs fixed switching points to operate the valve. The magnetic core signal transmitter position is detected by non-contact magnetic sensors:

- Independently of the condensate type (water/oil).
- Independently of the working pressure.

The collection tank integrated in the condensate drain is always used at optimum efficiency.

This results in a minimised number of switching cycles and thus, in a maximum service life of the drain valve. No calibration required!

### Integrated dirt screen

The dirt screen which is integrated between the level control and the drain valve:

- Retains any contaminants that could damage the diaphragm valve.
- Triggers an alarm, also if the screen is clogged by dirt.
- Allows the drain to be cleaned easily and rapidly.

### Revolving condensate inlet with additional balance option:

- Condensate line can be connected from top or side.
- Simply rotate the condensate inlet and connect.

The connection for an additional vent line integrated in the top condensate inlet provides completely new connecting options so that condensate can no longer back up into the feed lines.







## Technical data

### GDZ120 - GDZ10000 - Up to 16 bar – normal condensates

Model	Compressor aftercooler m³/h	Refrigeration dryer m³/h	Capacity <sup>1)</sup>		Temperature range °C	Connections
			Filter <sup>2)</sup> m³/h	Max. working pressure bar		
GDZ120	---	---	720	16 bar	1 – 60	G 3/8
GDZ400	240	480	2,400	16 bar	1 – 60	1 x G 1/2, G 1/8
GDZ700	420	840	4,200	16 bar	1 – 60	2 x G 1/2, G 1/8
GDZ3000	1,800	3,600	18,000	16 bar	1 – 60	2 x G 1/2, G 1/8
GDZ10000	6,000	12,000	60,000	16 bar	1 – 60	2 x G 1/2, G 1/8

<sup>1)</sup> Referred to 1 bar(a) and 20°C at 7 bar working pressure, suction air compressor 25°C at 60% RH, air discharge temperature aftercooler 35°C, pressure dew-point refrigeration dryer 3°C.

<sup>2)</sup> Condensate from aftercooler or refrigeration dryer already drained upstream – only for residual oil content or small quantities of condensate.

Standard version with BSP thread (G) for 230V/50 - 60Hz supply voltage (230). Alternatively, versions with NPT thread (N) or 115V/50 - 60Hz (115) or 24V/50 - 60Hz (024) are available. 24V DC on request.

**Notes on power supply with instable voltage:** We recommend that you use 24VDC units with appropriate power supplies in operating environments with heavily fluctuating mains voltages or high frequency interference (short voltage peaks or voltage drops). This will ensure a reliable long-term operation even where unfavourable power conditions prevail.

Working pressure	Ambient/Suction conditions (average summer temperature/relative humidity)									
	Compressor/Aftercooler					Refrigeration dryer				
	15°C 40%	20°C 50%	25°C 60%	30°C 70%	35°C 80%	15°C 40%	20°C 50%	25°C 60%	30°C 70%	35°C 80%
4 bar	16.5	3.4	1.5	0.8	0.5	2.6	1.8	1.3	1.0	0.7
6 bar	4.8	2.1	1.1	0.6	0.4	3.6	2.5	1.8	1.4	1.0
8 bar	3.4	1.7	0.9	0.6	0.4	4.7	3.3	2.4	1.8	1.3
10 bar	2.9	1.5	0.9	0.5	0.3	5.7	4.0	2.9	2.2	1.6
12 bar	2.6	1.4	0.8	0.5	0.3	6.8	4.7	3.4	2.6	1.9
14 bar	2.5	1.3	0.8	0.5	0.3	7.8	5.5	4.0	2.9	2.2
16 bar	2.4	1.3	0.8	0.5	0.3	8.9	6.2	4.5	3.3	2.5
25 bar	2.1	1.2	0.7	0.5	0.3	13.5	9.5	6.9	5.1	3.9
50 bar	1.9	1.1	0.7	0.4	0.3	26.6	18.6	13.5	10.0	7.6

All correction factors refer to the capacity of the drains on the aftercooler; they have been calculated for an aftercooler discharge temperature of +10°C above ambient/suction temperature and 3°C pressure dew-point of the refrigeration dryer.

## Servicing items

The GDZ series has a simple single service kit which covers the whole range.

Preventative maintenance should be carried on an annual basis using service kit GDZK.

# Global experience – truly local service

With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications.

An extensive network of dedicated CompAir sales companies and distributors across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.

As part of the worldwide Gardner Denver operation, CompAir has consistently been at the forefront of compressed air systems development, culminating in some of the most energy efficient and low environmental impact compressors on the market today, helping customers achieve or surpass their sustainability targets.



## CompAir compressed air product range

### Advanced Compressor Technology Lubricated

- Rotary Screw
  - Fixed and Regulated Speed
- Piston
- Portable

### Oil-Free

- Water Injected Screw
  - Fixed and Regulated Speed
- Two Stage Screw
  - Fixed and Regulated Speed
- Piston
- High Speed Centrifugal - Quantima®
- Rotary Scroll

### Complete Air Treatment Range

- Filter
- Refrigerant and Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer
- Nitrogen Generator

### Modern Control Systems

- CompAir DELCOS Controllers
- SmartAir Master Sequencer
- iConn - Smart Flow Management

CompAir policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice. All products are sold subject to the Company's conditions of sale.

### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

- Custom Engineered Solutions
- Local Service Centres
- Genuine CompAir Parts and Lubricants

[www.compair.com](http://www.compair.com) · [sales@compair.com](mailto:sales@compair.com)