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Field of application

Condensate drains of the CDE-T series are designed for removing compressed air condensate not containing aggressive substances at operating pressures up to 350 bar. This means that the liquids produced in the compressed air system will automatically be discharged to an atmospheric pressure level.

Features

In principle, condensate is always produced in a compressed air system. It occurs in the form of quantities of liquid, mainly consisting of water with some amounts of oil, or in the form of concentrated liquids, separated by filtration. The result often is rust formation and corrosion within the compressed air system leading to additional contamination of the condensate. To avoid condensate carryover and thus prevent the compressed air from being contaminated with coarse pollutions, the condensate must be removed immediately and directly from the compressed air system using condensate drains.

Condensate drains of the CDE..T series consist of a pressure-proof and direct controlled solenoid valve, combined with an electronic control unit with 2 variable interval timers. Over the two interval timers the interval time between the drain interval (0.5 to 45 minutes) and drain duration (0.5 to 10 seconds) can be specified separately from each other. As soon as supply voltage is present the valve opens according to the adjusted timing for drain duration. Afterwards the drain valve works according to the adjusted interval and duration times.



The condensate drains comply with the requirements of the Pressure Equipment Directive 2014/68/EU and the EMC Directive 2014/30/EU.



Specifications subject to change without notice

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Basic data

| Model | Min./max. operating pressure | Nominal volume flow*1 | Nominal condensate quantity | Min./max. operating temperature | Min./max. medium temperature |
|-----------------|------------------------------------|-------------------------|-----------------------------------|---------------------------------------|------------------------------------|
| CDE 40T-B15 | 16 bar | 2,500 m ³ /h | 28 litres/h | | |
| CDE 500T-B25 | 16 bar | 30,000 m³/h | 340 litres/h | | |
| CDE 200/50T-B15 | 50 bar | 12,000 m³/h | 155 litres/h | +2°C - +55°C | +2°C - 90°C |
| CDE 80/100T-B08 | 100 bar | 4,800 m³/h | 64 litres/h | | |
| CDE 80/350T-B08 | 350 bar | 4,800 m³/h | 65 litres/h | | |

^{*1 -} refers to 1 bar(a) and 20°C at 7 bar operating pressure, intake air of compressor 25°C at 60% relative humidity, 35°C compressed air discharge temperature of aftercooler

Maintenance rules

| All models | Cleaning if required (depending on the contamination of the condensate) |
|------------|---|

Product specific data

| Specification | | | |
|-------------------------|---|--|--|
| Valve cross section | CDE40T: Ø 1.2 mm (1.1 mm²) CDE500T: Ø 1.2 mm (1.1 mm²) CDE200/50T: Ø 1.0 mm (0.8 mm²) CDE80/100T: Ø 1.0 mm (0.8 mm²) CDE80/350T: Ø 0.5 mm (0.2 mm²) | | |
| Electrical power supply | 230V (±10%) 50/60 Hz, alternative 115V (±10%) 50/60Hz or 24V DC | | |
| Power consumption | 4 VA | | |
| Electrical connection | Plug connector type A - 2+PE (3+PE) DIN EN 175301-803, ISO 440/6952 (ex DIN 43650 A) | | |
| Protection Class | IP 65 (NEMA 4) – insulation class H | | |



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Materials

| Component | | | |
|-------------------|---|--|--|
| Housing | CDE40T, CDE500T und CDE200/50T : brass CDE80/100T und CDE80/350T : stainless steel (304) | | |
| Fittings | brass, stainless steel | | |
| Timer (housing) | ABS (Acrylnitrilbutadienacrylat) | | |
| Sealing materials | CDE40T - CDE80/100T: NBR CDE80/350T : PEEK Teflon | | |

Connections, dimensions and weights

| Model | Connection condensate inlet | Connection condensate outlet | Height (A) | Width (B) | Depth (C) | Weight |
|-----------------|--------------------------------|---------------------------------|------------|-----------|-----------|--------|
| CDE 40T-B15 | G 1/2 | G 1/2 | 75 mm | 118 mm | 83 mm | 0.6 kg |
| CDE 500T-B25 | G 1 | G 1/2 | 87 mm | 118 mm | 83 mm | 0.7 kg |
| CDE 200/50T-B15 | G 1/2 | G 1/4 | 67 mm | 115 mm | 83 mm | 0.4 kg |
| CDE 80/100T-B08 | G 1/4 | G 1/4 | 58 mm | 113 mm | 83 mm | 0.4 kg |
| CDE 80/350T-B08 | G 1/4 | G 1/4 | 59 mm | 113 mm | 83 mm | 0.5 kg |

Classification according to Pressure Equipment Directive 2014/68/EU for group 2 fluids

| Mode | I | Volume | Category |
|--------|-------|---------------|----------|
| All mo | odels | < 0.01 litres | |

Other Directives

| Model | |
|------------|--|
| All models | Directive 2014/30/EU for electromagnetic compatibility (EMC Directive) |



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Models



CDE 40 T - G ½ CDE 500 T - G 1



CDE 200/50 T



CDE 80/100 T



CDE 80/350 T