



STULZ the natural choice

Compact DX

Close Control Air Conditioning for High-end Applications



Modern Close Control Air Conditioning – Highly Efficient, Space-Saving and Cost Effective

If you have to remove high heat loads and are looking for a high-quality solution that is also kind to your budget, then you have found the right solution with Compact DX. The units are easy to install and, because they are accessible from the front, can be maintained without problems. Thanks to the compact form, Compact DX fits in every technology room. And: depending on the performance you need, a STULZ air conditioning system can be flexibly expanded to up to 20 units of varying sizes.

STULZ Quality for Maximum Reliability and Precision

Just like all close control air conditioning units from STULZ, the Compact DX series is manufactured using high-quality materials, components and state-of-the-art production technologies. This means that you achieve a long service life with maximum precision and operational reliability.



The advantages at a glance

- C7000 Controller
- Temperature and moisture sensor
- Link to BMS
- Units as downflow and upflow versions
- Filter class EU4



Picture: IBM Deutschland GmbH - Cover picture: Sun Microsystems

Technical specifications

| Technical specifications | | | | | | | | | | | | | | | | |
|--|-------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Type CSD/CSU xxx A/G | | 171 | 201 | 271 | 301 | 351 | 352 | 431 | 442 | 521 | 542 | 602 | 652 | 702 | 852 | 1052 |
| Cooling capacity, total ¹⁾ | kW | 17.4 | 19.5 | 27.3 | 31.5 | 35.0 | 36.1 | 45.0 | 46.3 | 53.2 | 54.5 | 63.3 | 69.6 | 72.0 | 87.3 | 104.3 |
| Cooling capacity, sensible ¹⁾ | kW | 17.4 | 19.5 | 27.3 | 29.9 | 33.2 | 36.1 | 45.0 | 42.9 | 49.5 | 51.3 | 59.3 | 61.2 | 65.1 | 76.7 | 88.7 |
| Airflow | m ³ /h | 5,500 | 6,500 | 8,300 | 8,500 | 10,000 | 10,000 | 12,800 | 11,900 | 14,000 | 14,500 | 17,300 | 18,000 | 18,500 | 21,000 | 24,000 |
| Compressor absorbed power | kW | 3.6 | 4.2 | 5.3 | 6.4 | 7.2 | 7.2 | 9.2 | 9.6 | 11.0 | 11.2 | 12.8 | 14.4 | 14.4 | 18.4 | 22.0 |
| Downflow | | | | | | | | | | | | | | | | |
| Max. av. ESP | Pa | 450 | 450 | 250 | 220 | 170 | 290 | 170 | 110 | 220 | 160 | 170 | 190 | 200 | 220 | 200 |
| Fan absorbed power | kW | 1.5 | 2.4 | 1.9 | 2.0 | 3.3 | 1.8 | 3.7 | 3.0 | 4.8 | 5.3 | 6.9 | 7.8 | 4.3 | 6.2 | 9.2 |
| Upflow | | | | | | | | | | | | | | | | |
| Max. av. ESP | Pa | 300 | 300 | 280 | 250 | 210 | 280 | 160 | 260 | 200 | 300 | 150 | 100 | 300 | 150 | 120 |
| Fan absorbed power | kW | 1.4 | 2.3 | 1.9 | 2.0 | 3.2 | 2.0 | 4.0 | 3.3 | 5.2 | 5.8 | 7.4 | 9.0 | 5.1 | 7.3 | 10.8 |
| Max. no. of heating steps | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Heating capacity Step 1 | kW | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 |
| Heating capacity Step 2 | kW | 4 | 4 | 4 | 4 | 4 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 | 4/9 |
| Heating capacity Step 3 | kW | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4/9 | 4/9 | 4/9 |
| Max. total heating capacity | kW | 12 | 12 | 12 | 12 | 12 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 27 | 27 | 27 |
| Humidifier capacity (max.) | kg/h | 5 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 15 | 15 | 15 |
| Approx. weight A | kg | 365 | 370 | 380 | 390 | 395 | 540 | 560 | 550 | 580 | 570 | 790 | 800 | 825 | 840 | 870 |
| Approx. weight G | kg | 385 | 390 | 410 | 420 | 430 | 580 | 605 | 600 | 615 | 620 | 835 | 845 | 885 | 900 | 930 |
| Width | mm | 1,000 | 1,000 | 1,400 | 1,400 | 1,400 | 1,750 | 1,750 | 1,750 | 1,750 | 1,750 | 2,150 | 2,150 | 2,725 | 2,725 | 2,725 |
| Height | mm | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 | 1,980 |
| Depth | mm | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 | 890 |

Note: All data valid for 400 V/3 ph/50 Hz with 20 Pa ESP (external static pressure) at downflow units and 50 Pa ESP at upflow units

¹⁾ Cooling capacity at Return Air: 24 °C, 50% r. H.; Condensing temperature: 45 °C

Many Options for Individual Adaptation



Optional steam humidifier



Filter class F5 (EU5)



C7000 Advanced

Every task makes its own specific demands. The close control air conditioning units meet most of them. Even in the standard version in the case of the Compact DX. Furthermore, the following options are available:



Mechanical and general options

- Special paint finishes
- Raised floor stand
- Dampers
- Flexible duct connection
- Fresh air connection
- High efficiency filter EU5
- Discharge plenum
- Intake plenums for upflow units
- Sound attenuators
- Double skin panels and doors
- Condensate pump



Humidifier options

- Electrode Boiler Humidifier
- Control of remote STULZ BNB humidifier



Heating options

- Electric heating, 1 to 3 stages or proportional
- Hot gas reheat
- Hot water reheat



Cooling options

- Capacity control with electronic suction valve
- Microprocessor controlled 2 or 3-way valve head pressure control



Control options

- Fire detector
- Smoke detector
- Emergency fire shut-down
- Water detector
- Manual override
- Automatic control of Dampers
- Phase monitoring
- Remote on/off control
- Special voltages

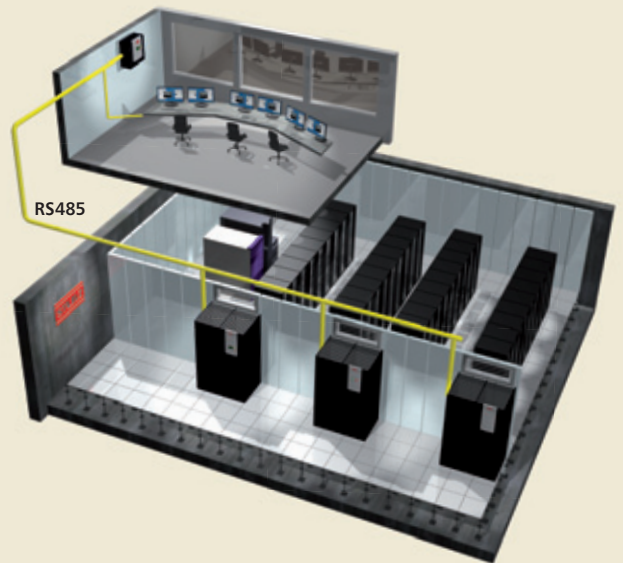


Options for condensators (air cooled)

- Variable fan speed control
- Winter operation down to minus 45 °C
- Coil corrosion protection

Convenient Handling thanks to Intelligent Control Technology

Irrespective of how many computer rooms you operate, whether you want to control and monitor the air conditioning directly at the unit or centrally, with the control systems from STULZ you are equipped for any eventuality. Interfaces for all known BMS systems mean that every unit can be connected to the central building management.



• C7000

Has all the control and monitoring functions but has no visual display and is tamperproof. All control and service parameters can be read and adjusted from a separate display or laptop.

• C7000 Advanced

Convenient and comprehensive communication for up to 20 units. Operational control, management and monitoring via large LCD graphical display. Connection to all BMS systems possible. Modbus and other selected data protocols have already been implemented.

| BMS suppliers | Data protocol | | | | | | |
|-----------------------|---------------|----------------------|------------|----------------------|----------------------|----------------------|----------------|
| Controller | | C7000 IOC with E-bus | C7000 IOC | C7000 IOC with E-bus | C7000 IOC with E-bus | C7000 IOC with E-bus | C7000 IOC |
| Gateway | | | + Advanced | + MIB | + WIB | + MIB + LIB | + CompTrol SMS |
| Various manufacturers | Modbus | ● | ● | ● | | | |
| STULZ, TeleCompTrol | SDC | | | ● | | | |
| Kieback & Peter | P90 | | ● | ● | | | |
| Saia | S-Bus | | ● | | | | |
| Various manufacturers | BACnet | ● | ● ● | | | | |
| LonWorks® | LonTalk® | ● | ● | | | ● | |
| Various manufacturers | SNMP | | | | ● | | |
| Various manufacturers | HTTP | | | | ● | | |
| Various manufacturers | GSM | | | | | | ● |

Cross-reference table: gateway – data protocol

- Full functionality
- A customised gateway solution with protocol converter is available for high transmission rates in larger bus systems

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Close to you all over the world.

... With specialist, competent partners in our subsidiaries and exclusive sales and service partners around the world. Our five production sites are in Europe, North America and Asia.