



IT Cooling Solutions

MiniSpace EC

Reliability for small and medium-sized IT rooms



Reliably protecting equipment and data with precision air conditioning

IT systems and other installations in equipment rooms need constant climatic conditions in order to work reliably. Fluctuating temperatures, moisture and dust jeopardise both function and data stocks. If you'd rather be on the safe side, you can rely on precision air-conditioning units from STULZ.

MiniSpace EC: A/C units for the low to medium output range

Unlike comfort air-conditioning units, which are not designed for permanent operation, MiniSpace with its microprocessor control ensures a precisely defined climate within narrow tolerances around the clock, 365 days a year.

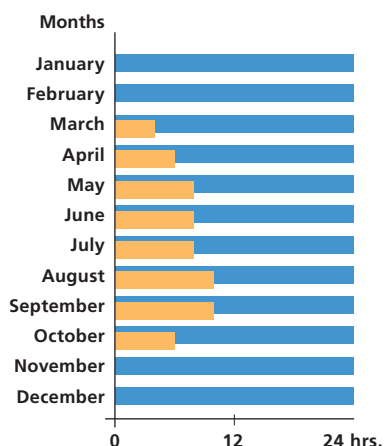


CCU 251 A with optional C7000 Advanced terminal

CCD 131 A with optional C7000 Advanced terminal

The advantages at a glance

- Maximum cooling performance with minimum floor space
- Air-cooled, water/glycol-cooled and chilled water versions available
- Units as downflow and upflow versions
- Simple installation and maintenance through doors on the front
- Air filtering with filter class EU 4
- Steplessly adjustable EC fan
- C7000 IO controller for controlling and monitoring the air-conditioning system
- Automatic switchover to redundant standby units in the event of problems
- Modbus preinstalled
- Continual recording of measured values
- Options
 - C7000 Advanced user interface with LCD graphic display, RS485 interface and other preinstalled data protocols for linking to building services management systems
 - Communication via SNMP/HTTP IP protocols
 - Humidifier/heating
 - R134a high-temperature refrigerant



■ Comfort air conditioning (1,200 hrs/year)
 ■ Precision air conditioning (8,760 hrs/year)

High operational reliability with 24/7 permanent load
 To a greater extent than comfort air conditioning, precision air conditioning is designed for high operational reliability – around the clock, 365 days a year



Precision at a glance

| Unit type | | CCD/U 51 A/G | CCD/U 71 A/G | CCD/U 91 A/G | CCD/U 131 A/G | CCD/U 151 A/G | CCD/U 181 A/G | CCD/U 221 A/G | CCD/U 251 A/G | CCD/U 100 CW | CCD/U 150 CW | CCD/U 190 CW | CCD/U 250 CW |
|--|-------|-------------------|-----------------|-----------------|------------------|-------------------|---------------------|------------------|------------------|-------------------|-----------------|---------------------|-----------------|
| Air flow | m³/h | 2,500 | 2,500 | 2,500 | 3,500 | 3,600 | 7,000 | 7,000 | 8,000 | 2,000 | 3,600 | 5,500 | 7,500 |
| DX cooling capacity (total) R407C ¹⁾ | kW | 6.4 | 7.5 | 9.6 | 12.1 | 13.8 | 18.1 | 21.9 | 25.3 | - | - | - | - |
| DX cooling capacity (sensible) R407C ¹⁾ | kW | 6.4 | 7.5 | 8.3 | 11.1 | 11.9 | 18.1 | 21.9 | 23.8 | - | - | - | - |
| Compressor power input R407C | kW | 1.3 | 1.7 | 2.4 | 2.9 | 3.6 | 3.7 | 4.7 | 5.6 | - | - | - | - |
| Cooling capacity (total) R134a ¹⁾ | kW | 6.8 | 7.5 | 8.4 | 12.4 | 13.6 | 17.5 | 19.2 | 21.4 | - | - | - | - |
| Cooling capacity (sensible) R134a ¹⁾ | kW | 6.8 | 7.5 | 7.9 | 11.2 | 11.9 | 17.5 | 19.2 | 21.4 | - | - | - | - |
| Compressor power input R134a | kW | 1.4 | 1.7 | 2.1 | 2.9 | 3.3 | 3.3 | 3.9 | 4.3 | - | - | - | - |
| CW cooling capacity (total) ²⁾ | kW | - | - | - | - | - | - | - | - | 10.0 | 15.0 | 23.4 | 31.8 |
| CW cooling capacity (sensible) ²⁾ | kW | - | - | - | - | - | - | - | - | 8.3 | 13.6 | 21.1 | 28.7 |
| Flow rate of medium | m³/h | - | - | - | - | - | - | - | - | 1.7 | 2.6 | 4.0 | 5.5 |
| Downflow | | | | | | | | | | | | | |
| Max. available ESP | | 300 | 300 | 300 | 110 | 60 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Noise level ³⁾ | dB(A) | 49.3 | 49.3 | 49.3 | 57.1 | 57.7 | 57.7 | 57.7 | 60.2 | 44.1 | 61.1 | 48.3 | 55.9 |
| Fan power consumption ⁴⁾ | kW | 0.3 | 0.3 | 0.3 | 0.8 | 0.9 | 1.1 | 1.1 | 1.6 | 0.1 | 0.8 | 0.6 | 1.4 |
| Upflow | | | | | | | | | | | | | |
| Max. available ESP | | 300 | 300 | 300 | 110 | 60 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Noise level ³⁾ | dB(A) | 52.0 | 52.0 | 52.0 | 59.5 | 60.1 | 59.4 | 59.4 | 62.5 | 47.6 | 63.6 | 50.9 | 58.3 |
| Fan power consumption ⁴⁾ | kW | 0.3 | 0.3 | 0.3 | 0.9 | 0.9 | 1.6 | 1.6 | 2.4 | 0.2 | 0.8 | 0.6 | 1.5 |
| Dimensions (HxWxD) | mm | 1,850 x 600 x 600 | | | | | 1,850 x 1,000 x 810 | | | 1,850 x 600 x 600 | | 1,850 x 1,000 x 810 | |
| Weight A/G (max. per size) | kg | 141 | 141 | 141 | 161 | 172 | 279 | 307 | 310 | 142 | 142 | 255 | 255 |
| Humidifier and heating capacity | | | | | | | | | | | | | |
| Max. humidifier heating | kg/h | 3 | | | | | 3 | | | 3 | | 3 | |
| Max. possible heating steps | | 2 | | | | | 2 | | | 2 | | 2 | |
| Max. overall heating capacity | kW | 4 | | | | | 12 | | | 4 | | 12 | |
| Condenser | | | | | | | | | | | | | |
| Condenser type ⁵⁾ | | KSV 008A11 | KSV 008A11 | KSV 012A11 | KSV 016A11 | KSV 021A21 | KSV 021A21 | KSV 029A21 | KSV 037A21 | - | - | - | - |
| Dimensions (HxWxD) | mm | 910 x 910 x 670 | | 910 x 970 x 770 | | 870 x 1,880 x 770 | | | | | | | |
| Weight | kg | 32 | 32 | 40 | 40 | 72 | 72 | 81 | 81 | - | - | - | - |

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

¹⁾ DX cooling capacity for A and G units; return air conditions: 24°C, 50% r. h.; condensing temperature 45°C

²⁾ CW cooling capacity for CW units; return air conditions: 24°C, 50% r. h.; water temperature: 7°C/12°C; glycol proportion: 0%

³⁾ Noise level at 1 m clear distance under free-field conditions

⁴⁾ The electric power input of the fans must be added to the room load

⁵⁾ Condenser for type A units with R407C, ambient temperature: 32°C



C7000 Advanced user interface



Option: Electric heating, 1 or 2 stages



Maintenance-free EC fan

High energy efficiency thanks to EC technology

Most of the electricity consumed in equipment rooms vanishes unused. MiniSpace EC fans are powered by energy-saving EC DC motors as standard. The electronically controlled EC fans react steplessly to changing output requirements, run in especially energy-saving partial load mode and are insensitive to fluctuations in voltage. EC fans consume up to 30% less energy than conventional 3-phase AC fans!

- High levels of efficiency up to 92%, reaping obvious savings in running costs
- Use of CW standby management
- Adjustment to the given conditions with pinpoint precision
- Flexibility for changed air conduction
- Quiet running, long life, maintenance-free

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IT Cooling Solutions

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.