



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.

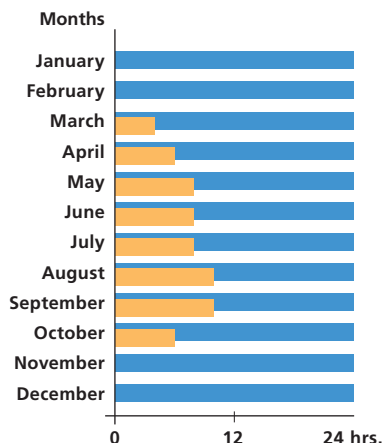


CCU 251 A with optional C7000 Advanced terminal

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%

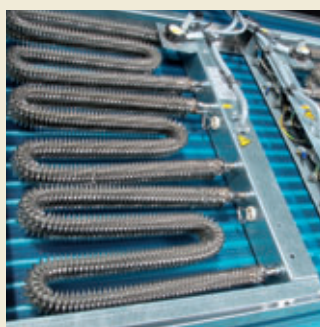
³⁾ Noise level at 1 m clear distance under free-field conditions

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.