



STULZ the natural choice

Telecom Line Split-Air Series



STULZ Split-Air precision air conditioner

The **Split-Air** is the space and energy-saving version for the reliable cooling of telecommunications containers. This special air-conditioning set with free cooling function consists of an evaporator and a compressor-condenser unit.

Because the indoor unit can be installed either on the ceiling or wall, the Split-Air is also suitable for use when space is at a premium. And the low noise level of the outdoor unit means it can be used without problem in residential areas, too.

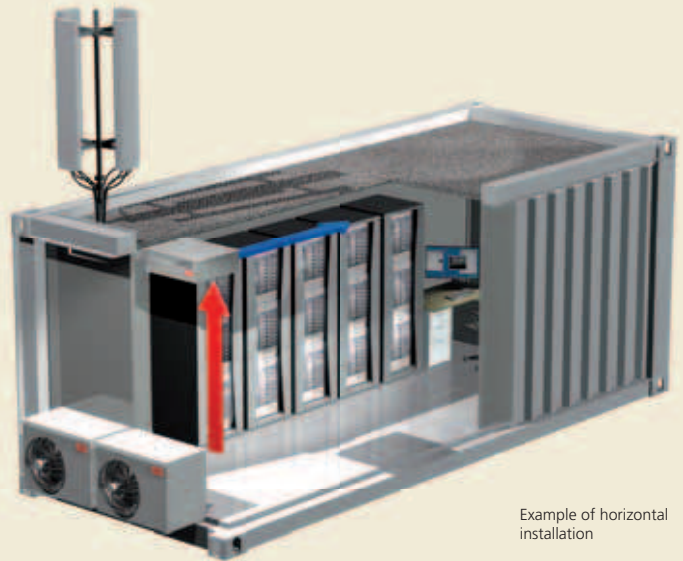
Technical features

- Proportional free cooling facility with mixed mode
- C2020 microprocessor control
- Quiet operation
- Speed-controlled condenser and evaporator fan
- Automatic restart after power failure
- Backup ventilation via 48V DC emergency power supply
- Outside air conditions -20/+45°C winter/summer
- EU4 air filter
- Refrigerant R407C
- Filter monitor

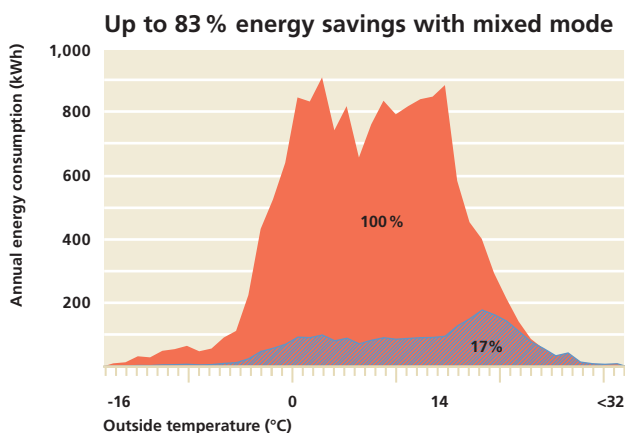
Options

- High-temperature operation up to 55°C with R134a
- Compressor soft start
- Electric heating
- Condenser with anti-corrosive finish
- Serial interface RS485 for connection to BMS systems
- Installation kit for outdoor unit
- Air intake and blow-out grilles
- Air duct section for indoor unit

With its Telecom Line, STULZ offers a range of professional air-conditioning solutions for the telecommunications infrastructure and for switch cabinets. All units are designed for 24/7 operation, 365 days a year, and offer maximum reliability and availability. Service is guaranteed through a worldwide network of specialist partners and branches.



Example of horizontal installation



- Energy consumption with the use of free cooling and mixed mode
- Energy consumption without free cooling, using the example of a CSL 60, based on the temperature profile of the city of Hamburg



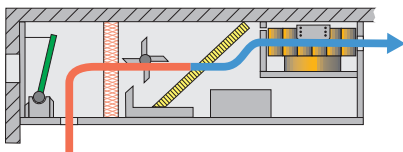
Indoor unit
Evaporator unit

C2020 microprocessor

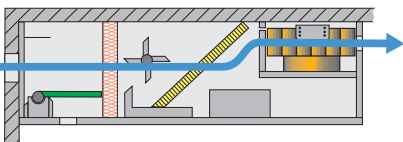
- Sequencing incl. alarm switching
- Quiet-running night mode
- Automatic high-pressure alarm reset
- Serial interface for RS485 connection to BMS systems (optional), compatible with all Stulz MIB & WIB gateways
- Separate operator terminal with LCD
- SMS alarm forwarding (optional)



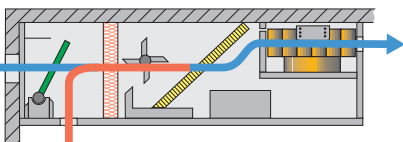
Outdoor unit
Compressor-condenser unit



Compressor operation



Free cooling



Mixed mode

Free cooling

At low outside temperatures, cooling is direct with outside air. The outside air is conveyed into the container when the air flap is open. Therefore, when outside temperatures are low, energy-intensive compressor cooling is not necessary.

Mixed mode

Once the outside temperature exceeds a given threshold, free cooling alone is no longer sufficient. Then, in mixed mode, the runtimes of the compressor are kept to a minimum by the simultaneous use of free cooling and compressor cooling. In this way, depending on the local temperature profile, the annual energy costs can be cut by a further 10 %. The partial load mode of the air conditioner produces further potential savings.

Split-Air		CSL40	CSL60	CSL80	CSL90	CSLA2
Unit type						
Total/sensible cooling capacity (230/1/50) ¹⁾	kW	3.4/3.4	5.2/4.8	6.5/6.4	9.2/9.0	11.1/10.9
Total/sensible cooling capacity (400/3/50) ¹⁾	kW	3.8/3.8	5.2/4.8	6.5/6.4	9.2/9.0	11.1/10.9
Air flow (compressor operation/free cooling)	m ³ /h	1,000/900	1,200/1,100	1,700/1,500	2,300/2,100	3,000/2,700
Heating ²⁾	kW	1.5	1.5	4.5	4.5	4.5
Noise level (internal/external) ³⁾	dB (A)	60/43	62/43	59/43	62/46	64/51
Height/width/depth (indoor unit)	mm	310/856/1,050	310/856/1,050	375/956/1,300	375/956/1,300	375/956/1,300
Height/width/depth (outdoor unit)	mm	578/806/400	641/1,052/454	641/1,052/454	1386/1,052/454	1386/1,052/454
Weight (indoor unit)	kg	70	70	90	100	100
Weight (outdoor unit)	kg	60	80	80	130	130
Supply voltage ⁴⁾	V/Ph/Hz	400V/3Ph/N/50Hz + 48V DC				

¹⁾ Operating conditions: Inside temperature 25 °C / rel. humidity 40 % / outside temperature 35 °C

²⁾ Optional

³⁾ 2 m distance, free-field

⁴⁾ Other voltages on request

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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.