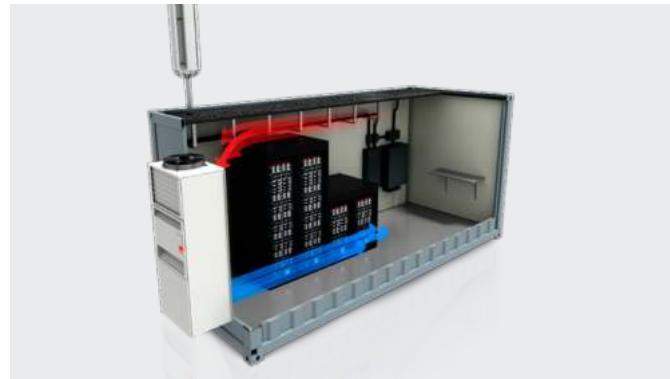


# STULZ

CLIMATE. CUSTOMIZED.



# STULZ Shelter Cooling

Ideal cooling solutions for modular buildings,  
edge and telecommunications applications

# The complete range of air conditioning technology – from one source.

**For over 40 years, the STULZ family-run company has been synonymous with precision air conditioning at the highest level.**

**Our solutions for the air conditioning of business-critical applications and sensitive systems have made us a leading company in our industry.**

Whether for data centers, industry or communication technology, the STULZ portfolio has a tailor-made cooling solution to suit your requirements.

We guarantee adherence to our uncompromisingly high requirements and quality standards both at our factory in Hamburg and all our production sites around the globe. Moreover, we work hard not only to satisfy our customers' individual wishes, but also to make sure our air conditioning solutions offer maximum energy efficiency and a minimal CO<sub>2</sub> footprint.

Our portfolio extends from traditional room cooling and High Density Cooling to chillers, air handling units and container modules, all the way to micro data centers, service, and our self-developed monitoring software. An all-embracing quality assurance system monitors all the details in development, production, implementation, and service.

Today, STULZ has a presence in more than 140 countries. STULZ GmbH has 21 subsidiaries and eleven production sites in Europe, India, China, and North and South America. We also have partner agreements with numerous sales and service partners on every continent. Our network of highly qualified specialists is a reliable guarantee of the highest standards.

The combined wealth of our experience, values, performance and service is what defines us and is especially valued by our customers. Air conditioning solutions – custom tailored and from one source:

**ONE STULZ. ONE SOURCE.**

## ONE STULZ.

## ONE SOURCE.



# STULZ Shelter Cooling – for autonomous use and maximum potential savings



**Sturdy precision air conditioning units with integrated Free Cooling for self-sufficient use in modular buildings, containers, switch cabinets and air conditioning receiver and transmitter base stations**

STULZ supplies four different systems, custom tailored to your individual requirements, which come with the option of Free Cooling, saving on the cost of energy for your air conditioning.

Compact, sturdy and economical to run, these systems ensure reliable cooling around the clock for many years. The units are plug & play and therefore immediately ready for connection and use. They enable very long maintenance intervals and also remote monitoring.

Thanks to the vast range of options available, they can be configured precisely to customers' specific needs and requirements.

## **+ All advantages at a glance**

- Reliable and efficient operation all year round
- Free Cooling cuts energy consumption by over 90 %
- Fast and simple start-up
- Low CO<sub>2</sub> emissions
- Long maintenance intervals
- Customized adaptations and special solutions for every application
- Connectivity: Monitoring and remote access available for all units via a web interface
- Backup operation (Free Cooling and backup cooling) on failure of the main power supply
- Automatic restart after power failure
- Worldwide service



# The right solution for your application – wherever you need us

Whether your business-critical system is working in temperatures of up to 55 °C, in ambient air contaminated by particles, in temperatures as low as -40 °C, or in a permanently humid environment – you can always rely on systems from STULZ.

## Advantages of plug & play

- All products in the Shelter Cooling series are factory tested, filled with refrigerant and ready for connection and operation right from the start
- Reduced installation time and costs
- Speedier start-up

STULZ Shelter Cooling	DX mode	Mixed mode	Free Cooling	48 V DC backup operation	Max. kW
Indoor installation		●	●	●	16
				●	15
		●	●	●	16
Outdoor installation		●	●	●	16
				●	6
		●		●	2

# Free Cooling – always giving you the best advantage

In many base stations and small data centers, comfort air conditioning units without Free Cooling mode are still used for air conditioning today, with high energy consumption as the result. Units from STULZ's Shelter Cooling series exploit the potential of Free Cooling, dramatically lowering your energy costs.

## Free Cooling

At low outside temperatures, outside air is used directly for cooling. The outside air is conveyed into the interior when the air damper is open. Energy-intensive compressor cooling is not needed when outside temperatures are low. This way, Free Cooling brings you huge potential savings.

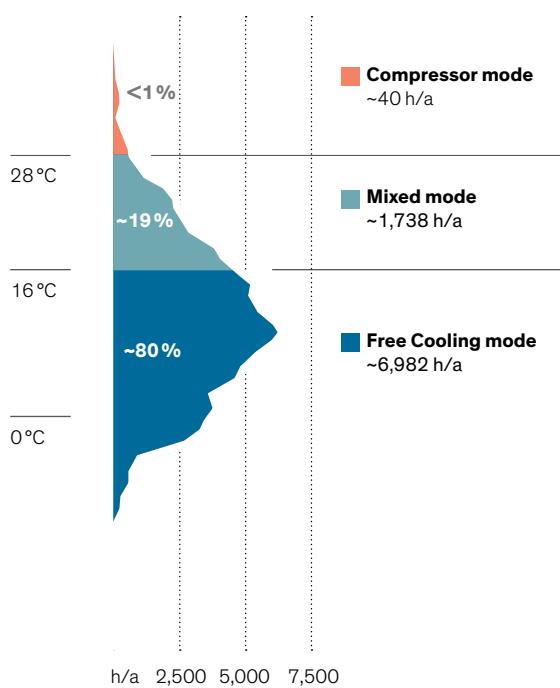
## Mixed mode

If Free Cooling is not sufficiently available due to the outside temperature, the unit can still use the outside air to some extent. The result is a combination of compressor cooling and Free Cooling.

## Compressor mode (DX)

If outside temperatures are so high that the outside air would no longer help to cool the inside, all cooling is generated using the compressor. Even in this mode, the perfectly harmonized components we use keep STULZ air conditioning units working reliably and efficiently.

## Savings with Free Cooling



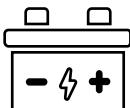
TelAir	With Free Cooling	Without Free Cooling
Energy consumption	<b>5,950 kWh</b>	<b>45,797 kWh</b>
Energy costs	<b>€ 893.00</b>	<b>€ 6,869.00</b>
<b>Savings per year</b>	<b>€ 5,976.00</b>	



**Efficient air conduction and intelligent control of operating modes achieve savings of up to 90%.**

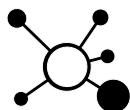
Energy consumption taking the TelAir TXGA6 unit as an example, with a return air temperature of 30°C, based on the temperature profile of the city of Hamburg, 0.15 €/kWh

# Optimum operational reliability for your application



## Backup operation for maximum reliability

In telecommunications, in particular, high reliability is vital to prevent network downtime. Backup operation with Free Cooling is possible, thanks to the additional 48 V DC power source. If the main power supply fails, the Shelter Cooling units continue to provide backup cooling to keep your system running reliably.



## Connectivity for maximum availability

All units can be monitored and remotely diagnosed via a web interface. This enables rapid intervention and therefore immediate troubleshooting in all situations. In addition, our units support numerous communication protocols for integration in building services management systems.

- Data recording
- Remote configuration
- Firmware updates
- Alarm relaying

# Air conduction with maximum flexibility

**With different air conduction options, these units offer greater flexibility for individual customer solutions. With or without raised floor, with or without displacement, STULZ designs precisely the right solution for your particular case.**

**Upflow** units draw the return air out of the room through the lower front of the air conditioning unit and expel the cooled supply air upward.

**Downflow** units draw the return air out of the room from above and expel the cooled supply air down into the raised floor. Through the raised floor, the supply air gets to precisely those spots in the room that need cooling, preventing hot and cold air from mixing and increasing efficiency.

**Displacement** units enable cold supply air to flow close to the floor at a low speed. The resulting “pool” of cold air on the floor prevents hot and cold air from mixing. This technique increases the number of operating hours with Free Cooling, achieving maximum potential savings.



Upflow



Downflow



Displacement

# Climate. Customized. You have the challenge, we have the solution.

From standard units to fully customized solutions – the ability to offer such a wide range to customers is the embodiment of our philosophy, “**Climate. Customized.**”

## # 1 Climate. Customized.

### # 1 Standard units

For its standard units, STULZ offers a huge selection of accessories and options, enabling a high level of flexibility and customization.



## # 2 Climate. Customized.

### # 2 Standard units with special options

Above and beyond our standard units, STULZ designers provide customized options to create highly individualized standard units.

## # 3 Climate. Customized.

### # 3 Custom-made air conditioning solutions

STULZ has the solution! In collaboration with the customer and tailored to suit requirements, we plan, implement and provide continuous support for your perfect air conditioning solution.

This way, we develop individual air conditioning solutions with performance features that are all perfectly harmonized from the outset.

## Variable-speed components for quiet and efficient operation

Units from the **STULZ Shelter Cooling** series are available with fan speed control and optional variable-speed EC compressor.

The fans we use not only ensure maximum potential savings, but quiet operation as well. Fan speed control and the units' optimized design combine to ensure low noise levels, enabling our units to be used in residential areas as well.

The EC compressor we use is especially energy efficient in partial load mode, and guarantees a constant supply temperature. The integrated compressor soft start and stepless control without compressor on/off cycles guarantee a long service life in continuous operation.





# STULZ control systems

To be able to cool IT systems efficiently and reliably, air conditioning units and their control systems must work in perfect harmony. That is why here at STULZ, we design both – air conditioning units and controllers – under one roof. And because of this, we can guarantee maximum reliability and efficiency for STULZ hardware and software – to your lasting advantage.

## SEC.blue/C2020 microprocessor for WallAir, TelAir and SplitAir

The SEC.blue/C2020 consists of a controller and optional operator terminal. The controller manages all functions of STULZ Shelter Cooling products. The operator terminal, consisting of a keypad and LCD, displays the most important operating states and alerts.

### Sequencing

- Up to ten units can be configured in one air conditioning system. If an individual unit drops out or the heat load rises, the standby unit is activated for additional support.
- The operating times of all connected air conditioning units are compared to make sure each one is used to an equal extent.

### Night mode

- Time-controlled limitation of the condenser and evaporator fan speed ensures quiet operation.

### Energy-saving mode

- The (adjustable) fan speed is automatically reduced at times when neither heating nor cooling is required.

### Multi-step configuration menu via operator terminal (password-protected)

- Plant operator
- Service

### Multilingual display

- The operator terminal offers a choice of seven languages for displaying the general menu, alarms and setpoints.

### Monitoring and alarm relaying

- Via BMS systems (ModBus onboard, further protocols via WIB 1000/Ethernet)
- Via dry contacts (nine contacts are available): A high or low priority can be assigned to alarms.
- Via GSM modem (CompTrol SMS)



Operator terminal for  
SEC.blue / C2020 / C100 / C102

#### Controlling the various operating modes

- Free Cooling function dependent on temperature and enthalpy
- Mixed mode management
- Compressor mode
- Backup ventilation on failure of the main power supply
- Heating
- Humidification and dehumidification

#### High-pressure alarm management

- High-pressure alarms can be automatically canceled the first three times, to prevent unnecessary service callouts. If a further alarm occurs within four hours, this must be canceled manually.

#### Simple configuration and software updates

- Central configuration of units from a laptop
- Hardware key/USB stick for uploading and downloading software without a laptop and/or for copying the configuration to other units.

## C102 microprocessor for ShelterAir FC

The C102 microprocessor monitors and controls the ShelterAir FC units. Comfort air conditioning units can be integrated in the existing air conditioning system and also actuated by the C102 control. Whenever the outside temperature allows, Free Cooling mode is activated and the comfort air conditioning units are switched off.

### **The C102 microprocessor guarantees**

#### **maximum versatility**

- The integrated relays allow the C102 to control and monitor up to two connected comfort air conditioning units.
- Alternatively, it can control one air conditioning unit and one external heater.
- It directly measures the energy consumption of the ShelterAir FC units and records the operating hours of the comfort air conditioning units
- It provides backup ventilation on failure of the main power supply or a fault in the comfort air conditioning units
- It monitors DC voltage and disables the unit if the battery voltage is below an admissible threshold
- A configurable filter alarm is triggered by differential pressure, or based on an adjustable fan operating time
- Service mode: Forced shutdown of a unit is possible, to enable service work to be performed at the base station. The air conditioning unit starts automatically after an adjustable time interval.
- Semi-automated start-up test to check all components.
- Monitoring: ModBus onboard, further protocols such as HTTP and SNMP via WIB 1000.

## C100 microprocessor for CabinetAir PRT

The C100 control system is a microprocessor-controlled I/O controller. The controller is installed in the control box of the air conditioning unit. An optional operator terminal is required for displaying the operating status and messages, and for changing parameters.

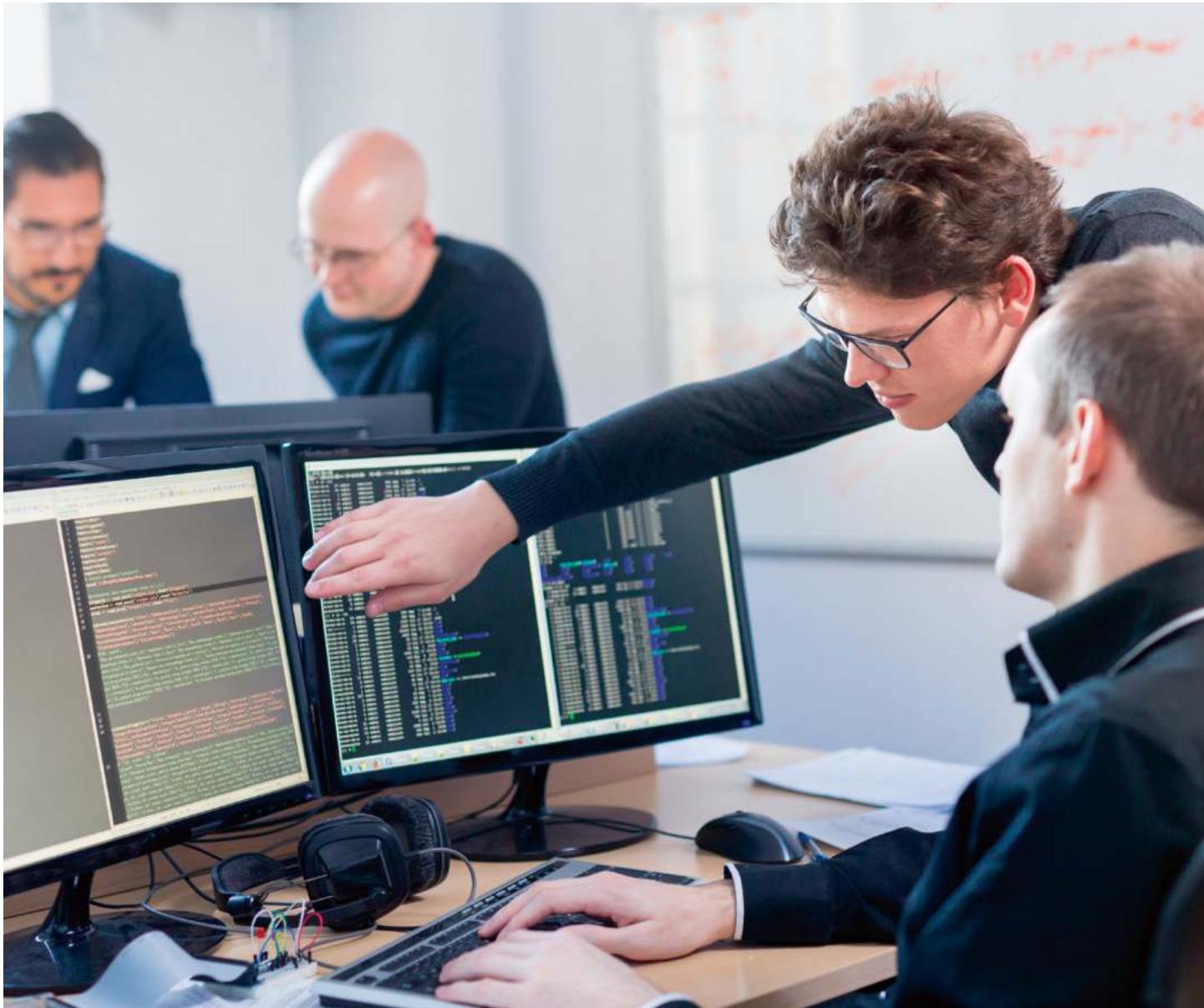
### **Controlling the various operating modes**

- Free Cooling function dependent on temperature and humidity
- Compressor mode
- Backup ventilation on failure of the main power supply
- Heating
- Operating hours counter for compressors, heaters, and condenser and evaporator valves

### **Multi-step configuration menu**

#### **via operator terminal (password-protected)**

- Values that can be set by the operator:  
Cooling setpoint, heating setpoint, alarm limit for excessively high and excessively low temperature
- For service: Easy configuration and software updates via hardware key



### Alarm Manager

- Alarms can be canceled automatically or manually to avoid unnecessary service callouts.
- In the case of high-pressure alarms, the system is started four times before an alarm is triggered.
- Configurable maintenance alarm for filters: Time until next maintenance can be selected as required
- Alarm history of the last 40 alarms

### Monitoring

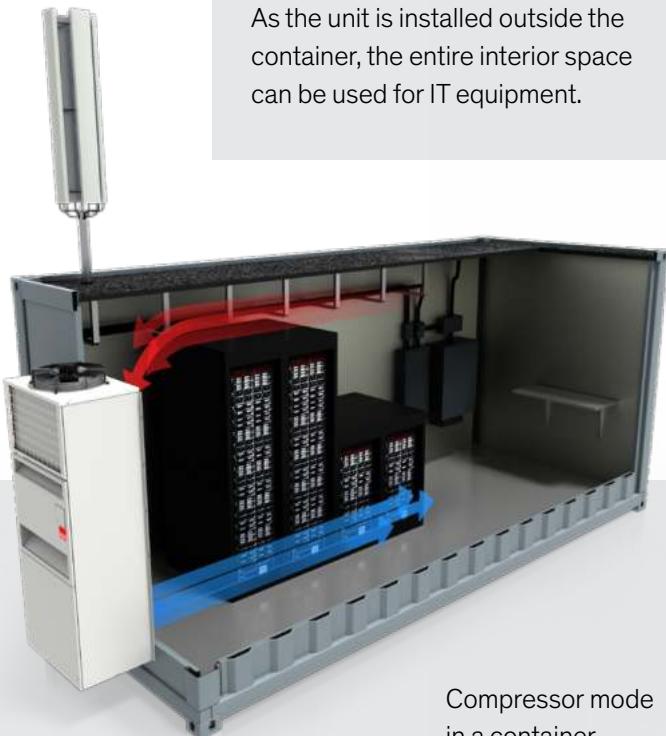
- Connection to common BMS systems via Modbus RTU interface
- Two configurable digital contacts for alarm signals

# WallAir for outdoor installation

In telecommunications containers, space is at a premium. WallAir units are installed outside the container, enabling the interior space to be exploited to the full. These compact, weather-resistant air conditioning units function using the displacement principle and are immediately ready for connection and use.

As well as compressor mode, these units feature Free Cooling and Mixed modes, delivering you high savings on energy costs – fully automatically.

 Up to 84 % savings on energy costs with Mixed and Free Cooling modes



**Installing the WallAir**  
As the unit is installed outside the container, the entire interior space can be used for IT equipment.



## ADVANTAGES +

- Lower energy costs thanks to:
  - Free Cooling and Mixed modes
  - Displacement principle
  - Condensation pressure control
- Remote monitoring
- Outside air conditions -20/+50 °C winter/summer
- Low refrigerant quantity  
(less than ten tons CO<sub>2</sub> equivalent)
- Thanks to the low refrigerant quantity and hermetically sealed refrigerant circuit (standard with EC compressor, optional with On/Off compressor), the annual leak test as per the EU F-gas Regulation is unnecessary
- Refrigerant R410A for EC compressor
- Refrigerant R407C for On/Off compressor
- Filter monitor and airflow alarm
- Inside and outside temperature sensor
- Zigzag filter class ISO 16890: ePM<sub>10</sub> 50%
- Condenser with microchannel technology
- SEC.blue control system

## OPTIONS ✓

- High-temperature operation up to 55 °C with R134a
- Winter kit down to -40 °C
- Compressor soft start for low start-up currents
- Electrical wiring, with connector for plug & play
- Backup operation with 48 V DC or 230 V/50 Hz/1 Ph
- Can be retrofit without changes to container cutout:  
Universal adapter frame for fast and easy replacement by a new WallAir model
- External operator terminal
- Electric heater
- Humidity sensor

## AT A GLANCE



- ✓ Free Cooling
- ✓ Mixed mode
- ✓ Displacement
- ✗ Upflow
- ✗ Downflow
- ✓ Outdoor installation

## Plug & play



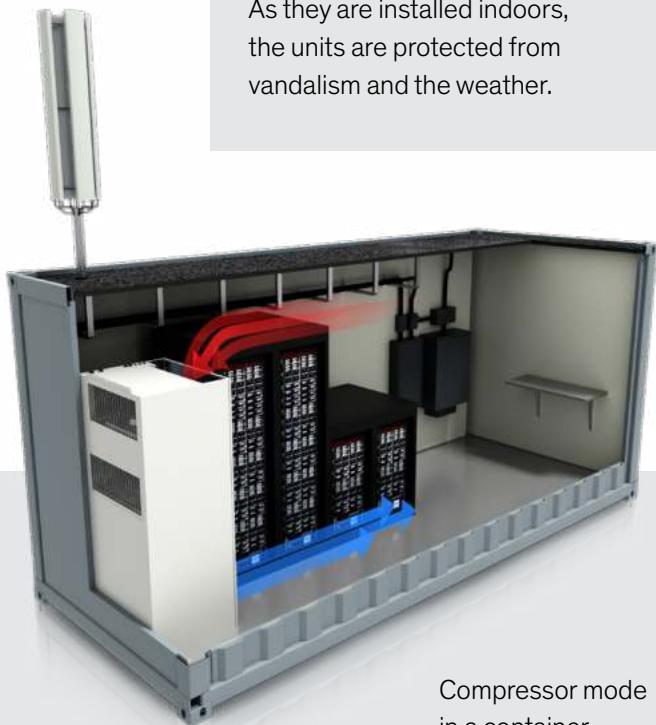
# TelAir for indoor installation

**TelAir units are designed for installation in telecommunications containers, equipment rooms and server rooms. The units are installed indoors for protection against environmental influences and vandalism. Thanks to their low noise levels, these air conditioning units can be used in residential areas without problem.**

TelAir units are especially efficient in Free Cooling mode. With their high airflow in Free Cooling and Mixed modes, the units achieve maximum EER values.

The individual models of the TelAir series are available as Upflow, Downflow and Displacement versions. In the Displacement model, the airflow can be directed horizontally or vertically entirely individually as required via adjustable fins, to ensure optimum operation of your servers.

 **Up to 83 % savings on energy costs  
with Mixed and Free Cooling modes**



Compressor mode  
in a container



Free Cooling mode

## ADVANTAGES +

- Lower energy costs thanks to:
  - Free Cooling and Mixed modes
  - Displacement principle
  - Condensation pressure control
- Remote monitoring
- Various air conduction options
- Outside air conditions -20/+50 °C winter/summer
- Low refrigerant quantity  
(less than ten tons CO<sub>2</sub> equivalent)
- Thanks to the low refrigerant quantity and hermetically sealed refrigerant circuit (standard with EC compressor, optional with On/Off compressor), the annual leak test as per the EU F-gas Regulation is unnecessary
- Refrigerant R407C
- Filter monitor and airflow alarm
- Inside and outside temperature sensor
- Zigzag filter class ISO 16890: ePM<sub>10</sub> 50 %
- Condenser with microchannel technology
- SEC.blue control system

## AT A GLANCE



- ✓ Free Cooling
- ✓ Mixed mode
- ✓ Displacement
- ✓ Upflow
- ✓ Downflow
- ✓ Indoor installation

## Plug & play

## OPTIONS ✓

- High-temperature operation up to 55 °C with refrigerant R134a
- Winter kit down to -40 °C
- Compressor soft start for low start-up currents
- Electrical wiring,  
with connector for plug & play
- Backup operation with 48 V DC or 230 V/50 Hz/1 Ph
- External operator terminal
- Electric heater
- Humidity sensor
- Ethernet port

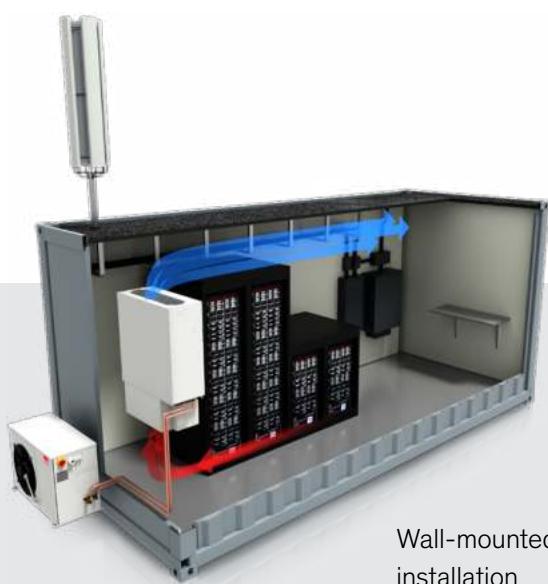


# SplitAir for use when space is at a premium

The SplitAir is the energy and space-saving version for reliably cooling containers and modular buildings. The unit consists of an evaporator unit and condenser unit, and features Free Cooling and Mixed modes.

Because the indoor unit can be installed either on the ceiling or wall, the SplitAir is also ideal when space is at a premium. Thanks to the low noise produced by the outdoor unit, the SplitAir can also be used without problem in residential areas.

 Up to 83 % savings on energy costs with Mixed and Free Cooling modes



## ADVANTAGES +

- Lower energy costs thanks to:
  - Free Cooling and Mixed modes
  - Condensation pressure control
- High flexibility
  - Ceiling or wall-mounted installation
  - Variable air supply via the front or underside
  - Optionally with Free Cooling module
- Remote monitoring
- Quiet operation
- Refrigerant R407C
- Filter class ISO 16890 ePM<sub>10</sub> 50 %
- Filter monitor
- C2020 microprocessor control
- Easy installation and maintenance
- Outside air conditions -25/+50 °C winter/summer

## AT A GLANCE

- ✓ Free Cooling
- ✓ Mixed mode
- ✗ Displacement
- ✗ Upflow
- ✗ Downflow

## ► Plug & play

## OPTIONS

- High-temperature operation up to 55 °C with R134a
- Winter kit down to -40 °C
- Compressor soft start
- Electric heater
- Heat exchangers with corrosion-proof coating
- Installation kit for outdoor unit
- Air intake and blow-out grills
- Air duct for indoor unit
- WIB 1000 interface



Indoor unit: Evaporator unit  
with Free Cooling module



Outdoor unit:  
Compressor-condenser unit

# Retrofit ShelterAir FC for indoor or outdoor installation

**Even today, many shelters and small data centers are still cooled by comfort air conditioning units. They therefore do not enjoy the benefits of Free Cooling, and unnecessarily large amounts of energy are used for air conditioning. To drastically cut the energy costs of base stations, they can be retrofitted with the STULZ ShelterAir FC.**

Both the ShelterAir FC and existing comfort units are monitored and controlled by the C102 microprocessor control. Whenever the outside temperature allows, Free Cooling mode is activated and the comfort air conditioning units are switched off. The ShelterAir FC enables you to transform your existing system into an energy-efficient solution at low cost.

The return on investment for this retrofit is achieved especially quickly in situations where comfort air conditioning units are running 24 hours a day. The units are available in two versions for maximum versatility – FCL-IN for indoor installation and FCL for outdoor installation.

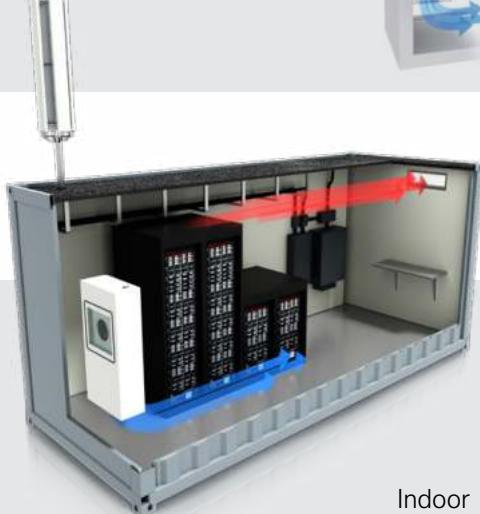
 **Up to 96 % savings on energy costs with Free Cooling mode**

## Installing the FCL-IN

The FCL-IN is installed indoors, for when maximum protection against vandalism and adverse weather conditions is your priority.



Free Cooling mode  
FCL-IN



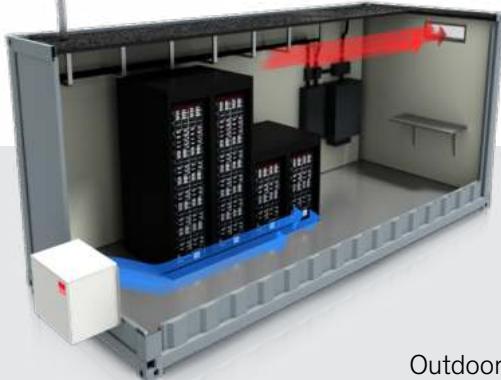
Indoor installation

## Installing the FCL

The FCL is installed outside the container, so that the whole of the interior can be used for IT equipment. Full access from outside for maintenance purposes.



Free Cooling mode  
FCL



Outdoor installation

## ADVANTAGES +

- Simple integration of existing comfort air conditioning units
- Set the outside temperature figure for Free Cooling just as you wish
- The entire system including comfort air conditioning units is controlled by the C102 microprocessor control
- Remote monitoring
- Full access from the front for maintenance
- Air filter class ISO 16890 ePM<sub>10</sub> 50%:  
The larger filter area reduces pressure drops and extends maintenance intervals.
- Insulated, powder-coated housing of galvanized sheet steel
- The filter alarm can be triggered either by differential pressure or based on a manually adjustable fan operating time

## AT A GLANCE

- ✓ Free Cooling
- ✗ Mixed mode
- ✗ Displacement
- ✗ Upflow
- ✗ Downflow

## ► Plug & play

## OPTIONS ✓

- Aluminum or stainless steel housing
- Humidity sensor
- Weather-proofed pressure relief damper
- User-friendly LCD operator terminal for operation, installation and service
- External operator terminal with 3 × 7-segment display
- Protective grill for fitting to the air intake, keeps out dust and leaves
- Support frame for secure mounting on thin walls
- Supply air grill with adjustable fins
- Metal prefilter
- WIB 1000 interface



FCL  
Version for outdoor installation

FCL-IN  
Version for indoor installation

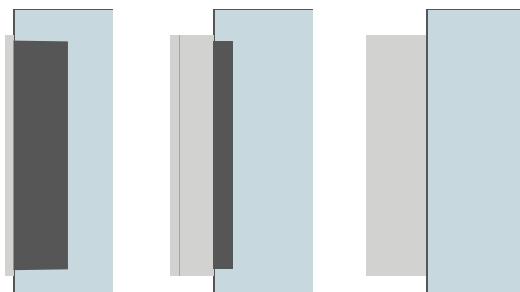
# CabinetAir PRT for air conditioning your outdoor cabinet

The CabinetAir PRT with Direct Free Cooling ensures maximum energy efficiency for your outdoor cabinet. It not only cuts operating costs to a minimum – in connection with 48 V DC it also ensures maximum reliability: if the main power supply fails, backup ventilation with Free Cooling keeps your electronics working without interruption. What's more, the unit is designed to ensure that the air conditioning keeps all system equipment running quietly. Regardless of the outside temperature, the air conditioning system creates ideal operating conditions, drastically reducing the noise level of the system equipment as a whole.

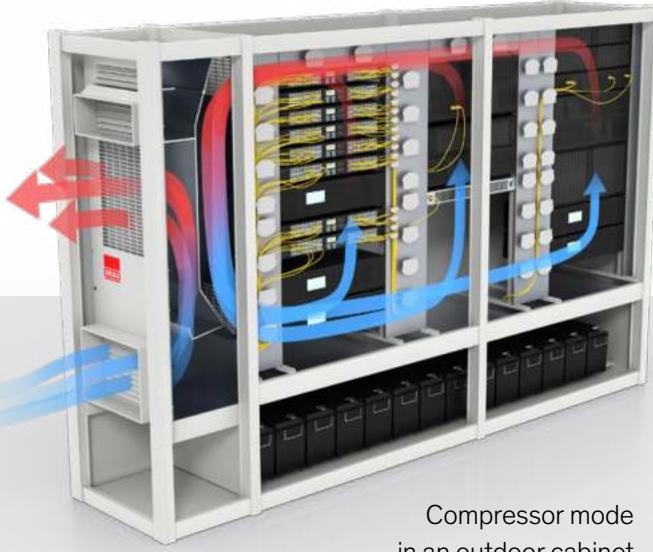
## Maximum savings on energy costs with Free Cooling mode

### Individual installation options

The units are available in three versions for maximum flexibility. Whether you need more space for your IT equipment or protection from vandalism and adverse weather – the CabinetAir PRT will satisfy all your installation requirements.



Fully integrated    Semi-integrated    Side-mounted



Compressor mode  
in an outdoor cabinet



Free Cooling mode

## ADVANTAGES +

- Optimum air conditioning keeps the entire system running quietly
- Huge energy savings with Direct Free Cooling
- Compressor mode ensures constant air conditioning on hot days
- System equipment can run at 100 % capacity in all operating conditions (no fluctuations in the performance of IT components)
- Various installation options ensure high flexibility
- Optimum operating conditions ensure a long life for your system equipment
- Outside temperature range from -20 to +60 °C
- Automatic restart after power failure
- Hermetically sealed refrigerant circuit
- Service concept:
  - Simple installation and removal
  - Fast and easy replacement of units while the outdoor cabinet is still in operation
  - Units can be serviced and replaced by the operator's own personnel (no refrigeration engineers required)
- C100 control system
- Integrated fault signaling contacts for alarm signals

## AT A GLANCE

- ✓ Free Cooling
- ✗ Mixed mode
- ✗ Displacement
- ✗ Upflow
- ✗ Downflow

## ► Plug & play

## OPTIONS ✓

- Available operating voltages:
  - 230 VAC 1ph 50/60 Hz,
  - 230 V + 48 V DC backup cooling,
  - 48 V DC
- Electric heater
- External operator terminal
- Connection to common BMS systems via Modbus RTU interface



# Technical data

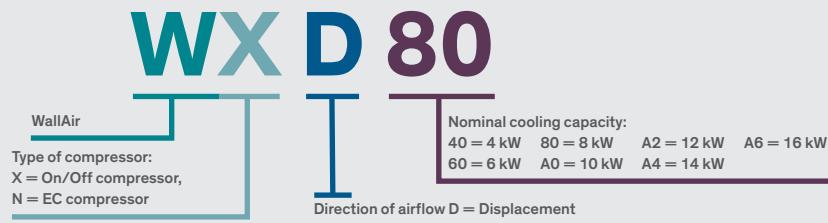
## WallAir

Model		WXD40	WXD60	WXD80	WXDA0	WXDA2	WXDA4	WXDA6	WND80	WNDA4	WNDA6
Cooling capacity <sup>1</sup>	kW	4.6	6.1	8.0	10.0	11.8	13.6	15.5	7.7	13.2	16
Size		<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>

## Dimensions

Size	<b>1</b>	<b>2</b>
Width x height x depth mm	879 x 2,137 x 565	992 x 2,192 x 730

## Nomenclature



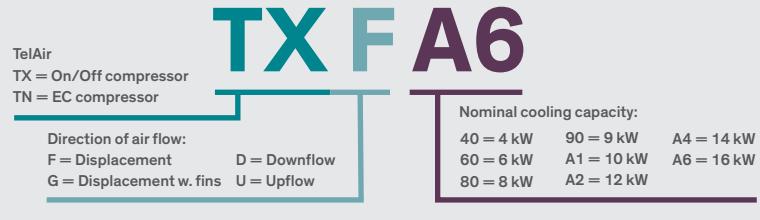
## TelAir

Model		TXD/TXF/TXG/TXU						
		40	60	80	90	A1	A4	A6
Cooling capacity <sup>1</sup>	kW	4.3	5.7	7.8	9.5	11.4	14.1	16.1
Size		<b>1</b>				<b>2</b>		
Model		TND/TNF/TNG/TNU						
		<b>80</b>			<b>A1</b>		<b>A6</b>	
Cooling capacity <sup>1</sup>	kW	8.2			11.4		15.5	
Size		<b>1</b>				<b>2</b>		

## Dimensions

Size	<b>1</b>	<b>2</b>
Width x height x depth mm	650 x 2,050 x 650	900 x 2,050 x 750

## Nomenclature



<sup>1</sup> Operating conditions: Inside temperature 30 °C, relative humidity 30 %, outside temperature 35 °C

<sup>2</sup> With Free Cooling module

<sup>3</sup> Operating conditions: Inside temperature 30 °C, outside temperature 20 °C

<sup>4</sup> Operating conditions: Return air temperature 35 °C, outside temperature 35 °C

Refrigerants: R410A (GWP: 2,088); R407C (GWP: 1,774); R134a (GWP: 1,430)

## SplitAir

Model		SAL40	SAL60	SAL80	SALA0	SALA2	SALA5	SIL80	SILA5
Cooling capacity <sup>1</sup>	kW	5.4	6.7	8.4	11.4	13.5	15.7	8.1	13.0
Size		<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>

### Dimensions

Size		<b>1</b>	<b>2</b>
Width x height x depth (indoor unit <sup>2</sup> )	mm	850 x 350 x 1,160	1,040 x 410 x 1,370
Width x height x depth (outdoor unit)	mm	1,050 x 695 x 492	1,050 x 1,334 x 491

### Nomenclature

**SAL 80**

SplitAir  
SAL = On/Off compressor  
SIL = EC compressor

Nominal cooling capacity:  
A6 = 4 kW    80 = 8 kW    A2 = 12 kW  
60 = 6 kW    A0 = 10 kW    A5 = 15 kW

## ShelterAir FC

Model		FCL 35	FCL-IN 35	FCL 60	FCL-IN 60	FCL-IN 70
Cooling capacity <sup>3</sup>	kW	3.5		6.0		15.0
Size		<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>

### Dimensions

Size		<b>1</b>	<b>2</b>	<b>3</b>
Width x height x depth	mm	640 x 1,271 x 289	720 x 612 x 604	600 x 1,250 x 600

### Nomenclature

**FCL 60**

ShelterAir FC  
FCL = outdoor installation  
FCL-IN = indoor installation

Nominal cooling capacity:  
35 = 3.5 kW  
60 = 6.0 kW  
70 = 15.0 kW

## CabinetAir PRT

Model		PRT10H	PRT14H	PRT20H
Cooling capacity <sup>4</sup>	kW	1.0	1.4	2.0
Width x height x depth	mm		1,200 x 417 x 300	

### Nomenclature

**PRT 10 H**

CabinetAir PRT  
Nominal cooling capacity:  
10 = 1.0 kW  
14 = 1.4 kW  
20 = 2.0 kW

Free Cooling

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