### **Topvex** Easy. Quick. Compact.



🏟 systemair

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At Systemair we constantly strive to develop new solutions and products that offer a comfortable indoor climate in a cost-effective, sustainable way. Our time and cost saving solutions make life easier for consultants, installers, and building owners. Inn

The Topvex floor standing range is a good example. It stems from Systemair's ambition to provide an integrated solution that is easy to configure to suit customer needs, while ensuring easy installation and fast delivery.



EASY.

QUICK.

COMPACT.

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topvex

### Exactly what you need!

Selection, installation and intuitive control system

Wide range of standardised units with fast delivery

Minimum space required with efficient performance

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# YOUR VENTILATION PROJECT STARTS HERE!

### **Topvex Floor Standing Range**

The range comprises two types of Topvex air handling unit: Rotary and Counterflow, plus a special outdoor version.

💫 High energy efficiency, space-saving design

Topvex AHUs offer high heat recovery, >80% dry air thanks to energy efficient EC fans. This in turn means low operating cost.

The units combine highest reliability with the smallest possible footprint. We selected the components to offer the performance we wanted, then optimized the size of the unit around them.

# 💫 Easy selection with Systemair Configurator

Select, design and configure air handling units for your project with this userfriendly software.

# 💫 Easy to transport

The standard unit has a small footprint and can fit through a standard door opening (Excl. SR 100). Larger units can be divided into sections to make installation even easier.



# 🖗 Easy to install

We set out to make installation really easy. The AHUs offer plug-and-play operation, with preconfigured integrated controls and easy start-up and commissioning using start-up wizard.

### $\lessapprox$ Easy to control with Systemair Access

Systemair Access is the brain of the AHU. It simplifies connection, configuration and control, offering intuitive menu navigation and a configuration wizard.

### $\lessapprox$ Cooling and heating with Systemair Fusion

Systemair Fusion solutions are smart, fully integrated Topvex systems comprising air handling, cooling/heating and controls.

# Check out our Configurator

You can easily choose the best Topvex configuration for your project.

The Systemair Configurator makes selecting, designing and configuring your air handling units easy. The user-friendly interface helps you choose the right Topvex unit quickly, simply by entering the operating parameter working points.

Based on your input, the Systemair Configurator will calculate all relevant, project-specific parameters to find and select the optimal Topvex configuration and the ideal accessories for the project.

#### Use your own design software with the Topvex plugin

Select and configure your Topvex AHU with just four simple commands, without leaving your CAD software! Our plugin for Topvex can be downloaded and used directly in Revit, AutoCAD and MagiCAD. It goes without saying that the plugin is free to use.



Systemair Projects - Project - Add

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22.0

All

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[kW/(m<sup>3</sup>/s)]

Topvex

Installation type

Heat exchange

Installation

Heater type

Air flow

Pressure

Options Impeller type

(wet) SFPv limit

Name

Heater options

Calculation based on

Inlet fluid temperature

Outlet air temperature

Outlet fluid temperature

Efficiency requirements Min. Temperature efficiency

> SFPv [kW/(m<sup>3</sup>/s)]

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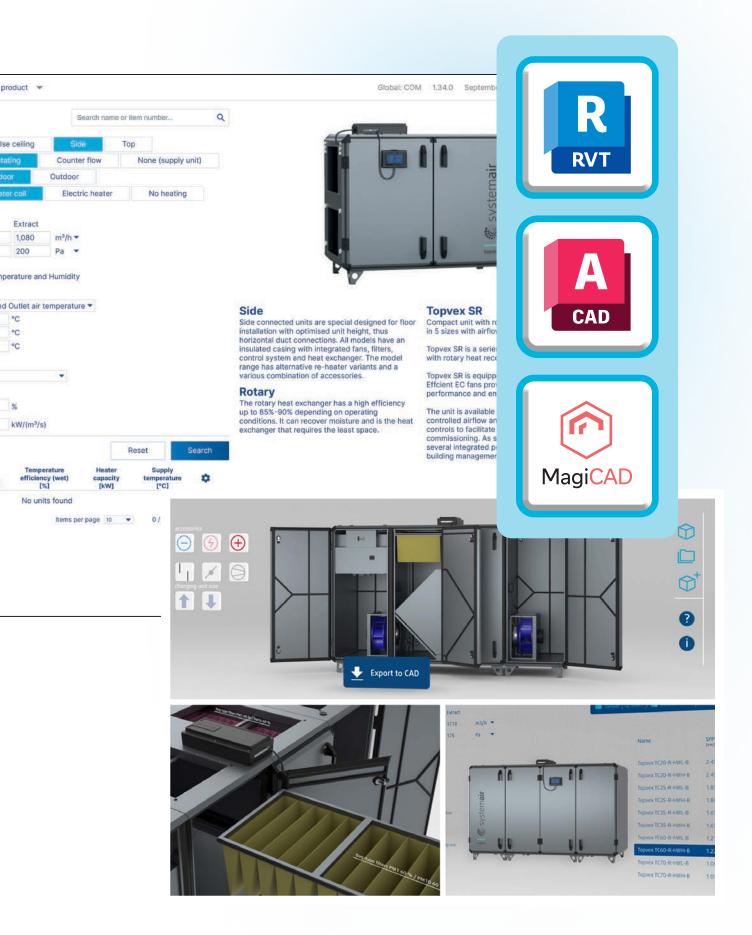
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- Easily select, design and configure your air handling units
- Obtain BIM data through plugin for Revit, AutoCAD and MagiCAD

Create and download all relevant documentation



### CONSULTANTS We understand your challenges

### INSTALLERS Get the job done faster with Topvex

Topvex offers high energy efficiency and spacesaving designs. Our wide standard range in terms of airflow and size will enable you to meet your specifications for projects of many types. It also allows us to offer fast delivery.

- Product selection tool with plugins for Revit, AutoCAD and MagiCAD
- BIM models for Topvex units can easily be integrated into the customer design, ensuring the accuracy and reliability of the drawings.
- With its minimum footprint, Topvex occupies less space in the building
- Indoor/outdoor flexibility: Choose outdoor installation to free up valuable indoor space without sacrificing performance
- Heater possibilities as standard, no need to find alternative suppliers

### Rapid response

Tell us your requirements and we will give you the proposal you need – fast! Including project specific documentation, product data and price information. This saves you time when you create the project budget and project plan. Choose Topvex and you can plan your installation project quickly and smoothly. Our standardised range with item numbers enables you to identify and order the correct units easily. QR codes on the documentation give easy access to relevant information and spare parts.

- Topvex AHUs are easy to handle during transportation and installation; bigger units can be split
- Two variants (Left/Right) mean less work onsite, saves time when installing
- External connection box, fast, easy connection, commissioning and maintenance
- Plug-and-play installation
- Easy startup with configuration wizard

Our lead times for Topvex are short and, of course, we will always respond quickly to your technical questions.



### BUILDING OWNERS AND MANAGERS Topvex offers low overall operating costs

Whatever your building, Topvex AHUs will provide a high-quality indoor climate that contributes to the health and wellbeing of the occupants. Attractive, frameless designs and a small footprint allow you to optimise the use of valuable space in the building without compromising performance.

- Eurovent certified energy efficiency, heat recovery >80%
- Reliable operation, minimum maintenance
- Efficient filters, with filter monitoring that tells you when they need changing

# OUR APPLICATION AREAS





# Important features

Our attention to detail ensures safety and reliability.

Casing performance EN1886	Topvex new generation	Benefits
Thermal Bridging	TB2	Good resistance to condensation.
Thermal Transmittance	T2	Reduced energy consumption in summer and winter.
Leakage	L2	Leakage class with superior seal design.
Deflection	D2	Stability and leak resistance with rigid, deflection class D2 casing assembly and hinges.

### T2 Example:

Typical impact on a 19 m<sup>2</sup> casing with average outdoor temperature of 6°C. Improving Thermal Class from T3 -> T2 = Saving 500 kWh/year.

#### Higher energy efficiency

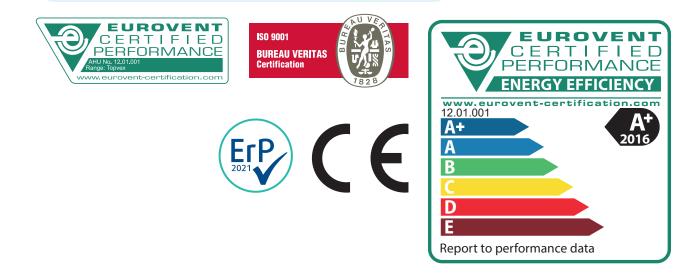
Increasing energy efficiency in our products is at the top of our list of priorities. We have made innovations within our Topvex units to meet growing market demands in relation to Specific Fan Power (SFP) values. These have been achieved without compromising performance, offering the same air volume and minimal footprint.

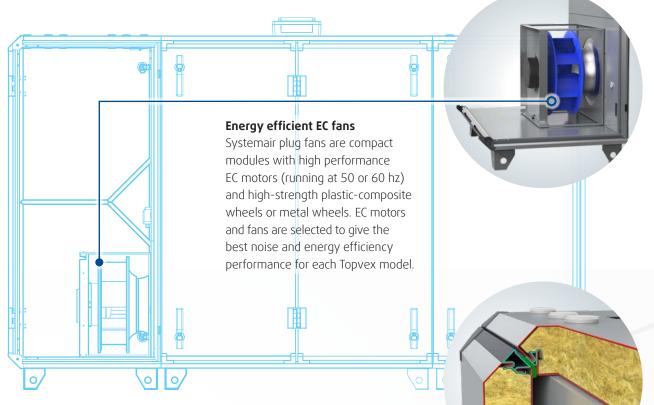
#### Energy efficiency through:

- Heat exchangers with low pressure drop and high heat recovery
- EC fans with high efficiency and low SFP values
- Casing EN1886

### Certificates

- Machinery Directive 2006/42/EC
- Ecodesign Directive 1253/2014
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU





#### High-performance casing

Our panels are made from 50 mm insulation and have natural-finish colour magnesium-zinc (MgZn) plate with a corrosion class corresponding to C5 according BS EN ISO 12944-2 and BS EN ISO 9223.

The joint panel and plastic profiles, combined with latch, hinge, insulation and seal concepts, result in a high-performance unit.

#### Standard bag-type filter

Bag-type filters are standard, with ePM1 60% (F7) classification for supply filters and ePM10 60% (M5) classification for extraction filters. The built-in filter monitoring system constantly measures pressure drop of the filter to verify condition. Filter change due to clogging is indicated in time to ensure best filter performance, lifetime and cost efficiency.

# A closer look at the Rotary range

Compact and energy efficient.

The Topvex range, featuring rotary heat exchangers with capacity well over 80%, ensures high efficiency while occupying minimum floorspace. A variety of options are available for configuring your air handling system.

Sizes 20, 25, 30 and 35 are all single case units, sizes 50, 60, 70, 80 and 100 are split units (size 100 is only available for side-connected models). All units and sections can fit through a 900 mm opening except for the biggest Topvex unit, SR 100.

- Top-connected models, 8 sizes
- Side-connected models, 9 sizes
- Indoor and outdoor application for sideconnected models
- Airflow range: 360 up to more than 9,500  $m^3/h^*$
- High-end casing with C5 corrosion resistance according to ISO 1294
- Built-in Access Control system
- Constant air volume control (CAV) is standard
- Variable air volume control (VAV) is available as an accessory
- \* (0 Pa external pressure)

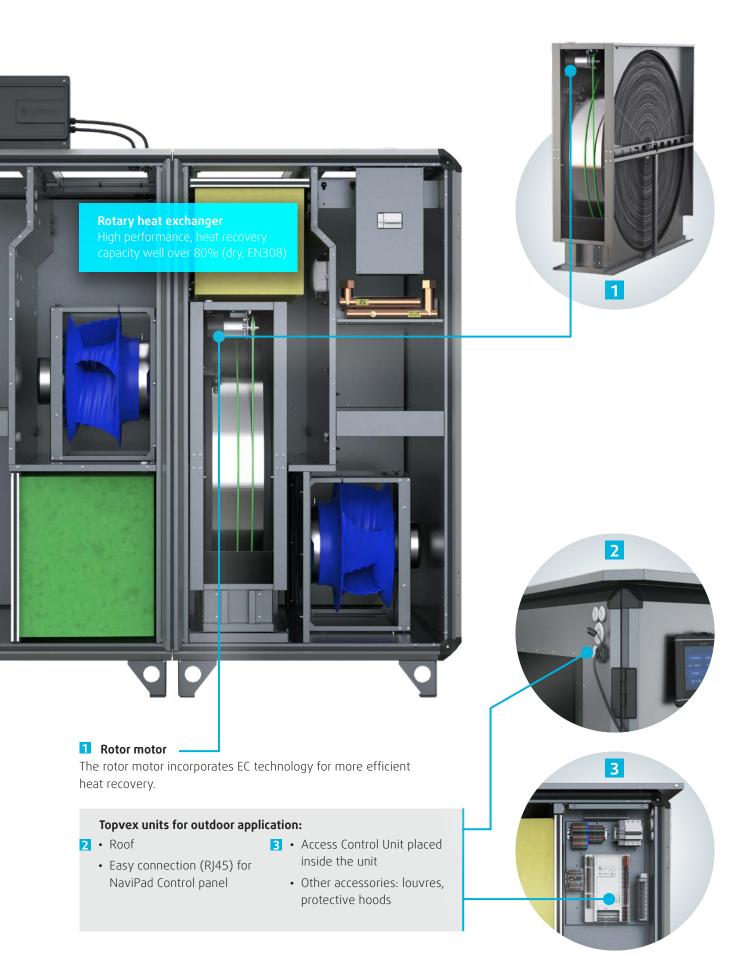
- Wide range of accessories available including connectors, such as flanges, extension cables, cooling coils or extra filtration
- All Topvex air handling units now feature a **sorption rotor**. It recovers moisture from the extract air and returns it to the supply air. The indoor air is kept moist, comfortable and hygienic, and less cooling is needed.

### COOLING AND HEATING POSSIBILITIES

### Check out our Fusion solutions -they're smart!

- Systemair Fusion solutions combine ventilation systems with traditional cooling and heating
- systems into one optimised package, linked by smart communication. Bringing preconditioned
- air into the premises, they provide the high quality indoor climate you're looking for.
- The Access control system in the AHU optimises the temperature in the refrigerant/chilled water
- system, keeping the running time of the compressor to a minimum. This ensures highest energy
- efficiency whenever the system is operating. That's really smart!





# Get to know our Counterflow range

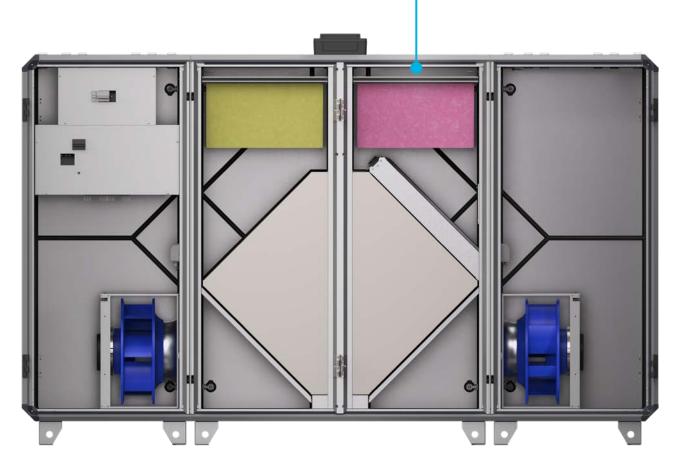
Designed for flexibility.

The Topvex counterflow range comes in a variety of standard configurations. The unit can be combined with heaters, silencers, dampers, sectional defrosting and more accessories.

Sizes 20, 25, 30 and 35 are all single case units and can pass through a 900 mm opening. Sizes 50, 60 and 70 are split units that can be divided into three sections where the heat exchanger section can be disassembled and reassembled as needed.

- Top-connected models, 7 sizes
- Side-connected models, 7 sizes
- Indoor and outdoor application for sideconnected models
- Airflow range: 360 up to more than 6,800  $\rm m^3/h^{\star}$
- High-end casing with C5 corrosion resistance according to ISO 1294
- Built-in Access Control system
- Constant air volume control (CAV) is standard
- Variable air volume control (VAV) is available as an accessory

\* (0 Pa external pressure)





### Heat exchanger and defrosting functions

Our top-quality, aluminium heat exchangers are 100% tested for air tightness. They are all designed with a full-flow bypass function. Choose between bypass defrosting or sectional defrosting.

### 2 Optimised dampers

Internal dampers used for heat exchanger bypass and sectional defrosting are an important detail. We aim to offer optimum function as well as a high seal class. Developing and testing our own damper design ensures we have the best knowhow and cutting-edge experience.

#### **Heater options**

All our units offer a variety of standard electrical or water heater options. Our goal is to meet the requirements of any comfort zone. Choose from high/ low coil or electrical power.



# Systemair Access Control system

Simplifies connection, configuration and control

Installed in our air handling units (AHUs), Systemair Access is a user-friendly control solution which makes it easier than ever for you to get the best performance from your AHUs. Explore and utilise the full functionality using the NaviPad control panel, supplied as an accessory with Topvex AHUs, or via our Access Connect app on your smartphone or tablet. By operating your AHUs efficiently you also gain control over your energy consumption and operating costs.



### Wireless communication makes Access even more convenient

Install the **Access Connect app** on your device and you don't need to access the AHUs physically to interact with them. Connect directly to the control unit in the AHU, or via the building's network.



# Access benefits

- Great user experience with intuitive menu navigation and configuration wizard
- Installation and commissioning are truly plug-and-play
- Integrated support for BMS/SCADA using Modbus and BACnet communication
- Prepared for easy connection to Systemair Connect Cloud solution
- Wireless Communication



### **Designed by Systemair**

Designed specifically for easy, quick and compact installation of Systemair air handling units.

### **BACnet fully integrated**

BACnet native integrated in the application provides rich functionality and a user friendly graphical user interface.

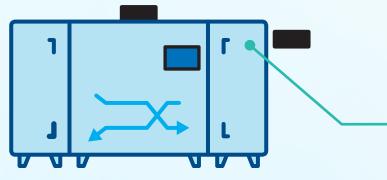
### **Connectors for external components**

All connectors for external components on the control unit are clearly marked and grouped together to reduce installation and startup time.

### Systemair Connect

Gather all your air handling units in an easy-touse **cloud** service for complete overview and accessibility.





# Access Application Tool

Easy upgrade, configuration and commissioning record in "one click"



The PC based Access Application Tool offers

easy upgrade to latest Access software and backup and restore of configuration files.

A commissioning record is automatically generated with "one click" and the trend log function provides detailed historical data.

Systemair

### ROOM UNIT

#### Areas in the building with limited control needs? With the wall mounted room

unit ED-RUD, with built in temperature sensor, you can control a Topvex with the Access control system. The unit is ideal for conference rooms, reception halls, and other areas with limited control needs.

### **Dedicated BMS connection**

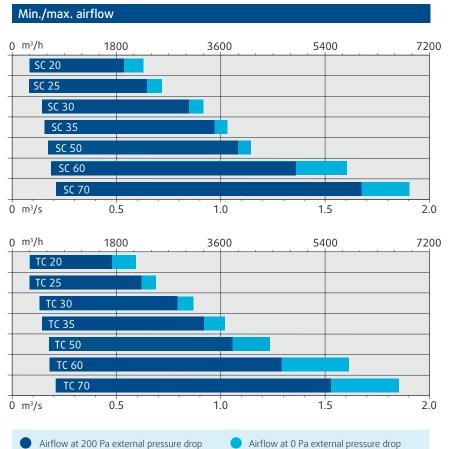
Provides simplified connection setup to BMS/SCADA using Modbus and BACnet communication.

### **Bus-based field devices**

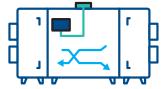
There are internal and external communication links for Modbusbased field devices. Wiring to all connected devices is simplified. All needed data and diagnostics are available in real time.



# Technical data



Airflow at 200 Pa external pressure drop



**Topvex SC - Side connected** Side connected series with counterflow heat exchanger for indoor installation.

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Overall product measurements\*

#### Topvex TC - Top connected

Top connected series with counterflow heat exchanger for indoor installation.

Overall product measurements*						
Side connection	Duct size	Width [mm]	Height [mm]**	Depth [mm]	Divisible [mm]	Depth [mm]***
SC 20	Ø 315	2002	1318	763		679
SC 25	Ø 400	2002	1318	879		795
SC 30	500x400	2540	1695	879		795
SC 35	500x400	2540	1695	879		795
SC 50	700x400	2742	1696	1083	728+1286+728	
SC 60	700x400	2742	1696	1083	728+1286+728	
SC 70	800x400	2742	1696	1427	728+1286+728	

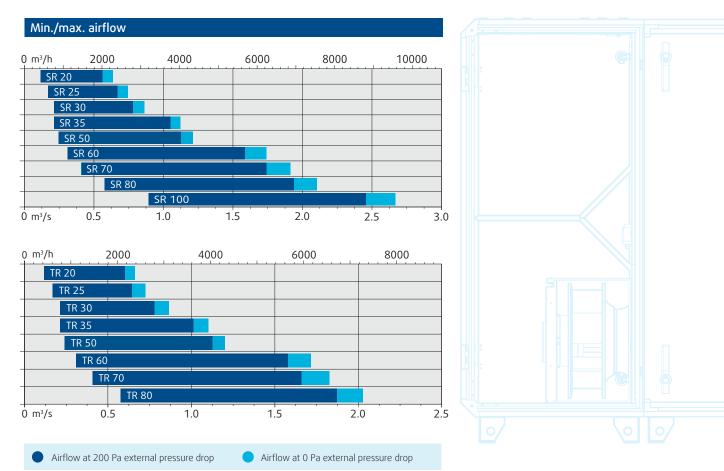
Top connection	Duct size	Width [mm]	Height [mm]**	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Divisible [mm]	Depth [mm]***
TC 20	Ø 315	2002	1319	764		680
TC 25	500x250	2002	1319	876		792
TC 30	500x400	2540	1695	879		795
TC 35	500x400	2540	1695	879		795
TC 50	700x400	2742	1697	1083	728+1286+728	
TC 60	700x400	2742	1697	1083	728+1286+728	
TC 70	800x400	2742	1697	1427	728+1286+728	

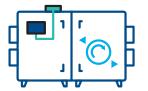
- \* Measurement does not include handles
- \*\* Access Control Cabinet is not included
- \*\*\* Without back panels and doors

Access Control Cabinet	Width [mm]	Height [mm]	Depth [mm]
Control Cabinet	450	92.5	230
Navipad	221	153	40.3



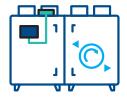
Unique scannable code in each unit that gives users access to technical documentation and the spare parts list. This relates to operation and maintenance instructions, declaration documents, wiring diagram, etc. By scanning the scannable code, you can digitally download the documentation for the unit.





### **Topvex SR - Side connected** Side connected series with rotating heat exchangers for indoor/outdoor installation.

Overall product measurements*						
Side connection	Duct size	Width [mm]	Height [mm]**	Depth [mm]	Divisible [mm]	Depth [mm]***
SR 20	Ø 315	1384	1080	764		680
SR 25	Ø 400	1482	1180	879		795
SR 30	500x400	1604	1293	972		888
SR 35	500x400	1604	1293	972		888
SR 50	700x400	1786	1448	1152	893+893	
SR 60	700x400	1786	1448	1152	893+893	
SR 70	800x400	1786	1597	1312	893+893	
SR 80	1000 x 500	1786	1798	1513	893+893	
SR 100	1200 x 500	2008	2057	1747	1004+1004	



### Topvex TR - Top connected

Top connected series with rotating heat exchangers for indoor installation.

Overall product measurements*						
Top connection	Duct size	Width [mm]	Height [mm]**	Depth [mm]	Divisible [mm]	Depth [mm]***
TR 20	400 x 200	1284	1320	764		680
TR 25	500 x 250	1484	1320	879		795
TR 30	500 x 250	1604	1500	972		888
TR 35	500 x 250	1604	1500	972		888
TR 60	700 x 300	1786	1697	1152	893+893	
TR 60	700 x 300	1786	1697	1152	893+893	
TR 70	900 x 300	1786	1858	1312	893+893	
TR 80	1100 x 300	1786	2097	1513	893+893	

\* Measurement does not include handles

\*\* Access Control Cabinet is not included

\*\*\* Without back panels and doors

# Notes

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# Notes

