

**STULZ**

CLIMATE. CUSTOMIZED.



## **SEC & iEC Series**

Air Cooled / Water Cooled / Dual Fluid Units

Maximum energy efficiency and optimum air conduction

# Production facility in India



# Services on your doorstep



STULZ is a global company with headquarters in Hamburg, Germany, 18 subsidiaries, 7 production sites and sales and service partners in more than 130 countries.

In 1998 we began operations in India in the field of Precision Air conditioning units for data centres. Currently we have the largest in house after sales service human resource base in India since the Stulz philosophy is to serve our customers directly providing assurance of quality of timely service support .



## Technical development from Germany

We put a great deal of experience and innovative spirit into our air conditioning systems. Engineers, specialist departments and sales employees work closely together and are involved through all stages of development, all the way to the finished product. We brook no compromise where the efficiency of our products is concerned, and cost-effective operation is at the heart of our endeavors.



## Test to your specifications

In our Test Center we can perform a variety of tests on precision air conditioning systems. If you decide to purchase a STULZ solution, you can book a witness test in our Test Center. This allows you to have the desired air conditioning system tested for compliance with your exact specifications, creating transparency and providing you with information about the system's performance and energy consumption.



# Precise control

Multiple airflow options available to ensure optimised and high efficiency air distribution



Down Discharge



Top Discharge

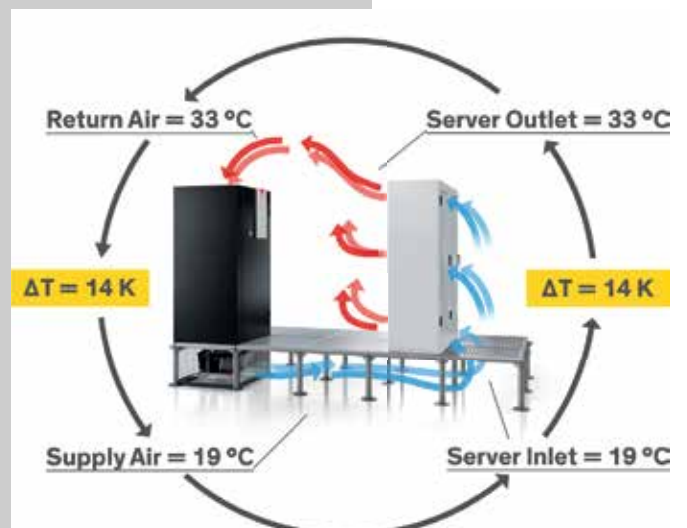


Front Discharge

## High energy savings thanks to fans in the raised floor

The new DP series comprises a heat exchanger and fan module. Unlike units with fans situated on a raised floor, the DP series achieves optimum air conduction and therefore high energy savings.

The installation of the fans in the raised floor produces less turbulence and changes in airflow direction hugely reducing fan power consumption.



# Extensive options

Thanks to the diverse options and equipment versions available, you can perfectly adapt your STULZ units to your requirements.

- Electric heater with several stages
- Hot Gas Bypass
- Refrigerant R407c/R410a/R134a
- Fan section below false floor
- C7000 Advanced user interface
- Smoke and fire alarms
- Control of ultrasonic humidifiers
- Dual power feed with automatic or manual switchover
- Pressure Control for raised floors and enclosure
- Suitable for connection to all common BMS systems, RS485 and RS232 interface for direct connection to a BMS
- and a great deal more

## Air Cooled with constant speed compressor

Direct Expansion and dual fluid systems

Model	161 A	221 A	251 A	271 A	301 A	351 A	361 A	431 A	382 A	452 A
DX Sensible Cooling Capacity-KW (total)	14.3	20.6	23.8	26.3	28.4	34.1	36.1	40.2	40.4	43.1
CW Sensible Cooling Capacity-KW (total)	11.8	24.6	26.1	29.5	29.5	31.9	41.5	45.2	45.6	45.6
Airflow-CMH	3600	6500	7000	7000	7000	7700	11000	11500	11500	11500
No of Fans	1	1	1	1	1	1	1	1	1	1
Type of Fan	EC-Radial									
Type of Drive	Direct									
No of Compressors	1	1	1	1	1	1	1	1	2	2
Type of Compressor	Scroll									
Configuration	FIX									
Power Supply (V)	400									
Heater	Electric									
Humidifier	Steam Electrode									
Size	1	2	2	2	2	2	3	3	4	4

Model	451 A	462 A	521 A	542 A	652 A	692 A	702 A	802 A	852 A	1052 A	1103 A	1393 A
DX Sensible Cooling Capacity-KW (total)	44.2	46.3	51.1	53.7	56.4	64.8	71.2	77.2	89.8	100.3	108.4	120.8
CW Sensible Cooling Capacity-KW (total)	44.9	49.3	53.5	56.4	65.9	67.6	80.7	80.7	84.5	88.9	88.9	101.2
Airflow-CMH	12000	13500	15000	16000	16500	17000	22000	22000	28000	30000	30000	34000
No of Fans	2	2	2	2	2	2	2	2	3	3	3	4
Type of Fan	EC-Radial											
Type of Drive	Direct											
No of Compressors	1	2	1	2	2	2	2	2	2	2	3	3
Type of Compressor	Scroll											
Configuration	FIX											
Power Supply (V)	400											
Heater	Electric											
Humidifier	Steam Electrode											
Size	5	5	5	5	5	5	6	6	7	7	7	8

- Gross capacity based on 45 Deg C midpoint condensing temperature at 20 Pa ESP at sea level.
- Capacities are for 24 Deg C db return air temperature and 40% RH and for chilled water inlet/outlet temperature 7 deg C / 12 deg C
- Data for water cooled available on request
- Technical Data subject to change without notice. All right reserved worldwide.



## EC fan

- Speed-controlled fan
- Minimum power consumption
- Minimum noise level
- Nominal airflow rate at a fan speed optimized for partial load
- Increased airflow in each size
- The latest motors, electronic processor and impellers
- Aerodynamically optimized blades



## EC compressor for high-precision Control

- Infinite compressor control for maximum efficiency and precise temperature regulation
- Maximum efficiency especially in partial load and Mixed mode
- Constant supply air temperature
- Integrated compressor soft start to protect the power line
- Fast, precise reaction to variations in heat load
- Long service life thanks to continuous operation without compressor on/off cycles



## Characteristics

- Cooling range up to 140 kW
- Largest possible heat exchanger and filter surfaces for minimal pressure losses
- Available with refrigerants R410A
- STULZ C7000 microprocessor controls all functions and components, even when several units are combined in one system
- Filter control management
- All parts requiring maintenance can be accessed from the front
- Flexible installation in the data center
- 2 refrigeration systems  
(air cooled, direct expansion air cooled, water cooled & dual fluid units)

# Air cooled with EC variable speed compressor

Direct Expansion and dual fluid systems

Model - iEC	251 AS	351 AS	381 AS	451 AS	541 AS	652 AS	752 AS	852 AS	962 AS	1022 AS	1092 AS	1332 AS
DX Sensible Cooling Capacity-KW (33 deg Return Air Temperature)	22.3	33.1	36.3	43.4	53.2	65.6	75.2	85.9	96.1	102.2	108	133.2
CW Sensible Cooling Capacity-KW Water Temperature : 12/18 deg C	28.6	34.9	39.4	51.4	70.2	73.6	73.6	100	100	105.3	110.7	125.8
DX Sensible Cooling Capacity-KW(24 deg Return Air Temperature)	18.5	27.3	30.1	36.2	44.1	54.4	60.1	71.2	79.8	85.3	90.6	113.6
CW Sensible Cooling Capacity-KW Water Temperature : 7/ 12 deg C	23.1	28.2	31.9	41.5	56.4	59.1	59.1	80.7	80.7	84.5	88.9	101.2
Airflow-CMH	6000	7700	7700	11000	16000	17000	17000	22000	22000	28000	30000	34000
No of Fans	1	1	1	1	2	2	2	2	2	3	3	4
Type of Fan	Ec-Radial											
Type of Drive	Direct											
No of Compressors	1	1	1	1	1	2	2	2	2	2	2	2
Type of Compressor	Scroll											
Configuration	INV	INV	INV	INV	INV	INV+FIX	INV+FIX	INV+FIX	INV+FIX	INV+FIX	INV+FIX	INV+FIX
Power Supply (V)	400											
Heater	Electric											
Humidifier	Steam Electrode											
Size	2	2	2	3	5	5	5	6	6	7	7	8

## Unit Dimension

Dimensions/Number of Fans		1	2	3	4	5	6	7	8
Size		1	2	3	4	5	6	7	8
Width	mm	610	1010	1210	1410	1760	2150	2500	2910
Height	mm	1980	1980	1980	1980	1980	1980	1980	1980
Depth	mm	810	920	920	920	920	920	920/1020	920/1020
Number Of Fans		1	1	1	1	2	2	3	4

- Gross capacity based on 45 Deg C midpoint condensing temperature at 20 Pa ESP at sea level
- Capacities are for Return Air condition @ 33 Deg C db and 30% RH and for chilled water inlet / outlet temperature of 12 deg C /18 deg C
- Capacities are for Return Air condition @ 24 Deg C db and 40% RH and for chilled water inlet / outlet temperature of 7 deg C /12 deg C
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**Close to you around the world**

STULZ has worked towards lowering expenses by reducing operating costs, life cycle costs and power consumption. Now the same German efficiency will be available in India at an unbeatable price advantage!

For further information, please visit our website at [www.stulz.in](http://www.stulz.in)