

Leonardo™ TDCV-TUCV



Chilled water units
Backward curved fans

Range

From 24 to 88 kW

Leonardo Evolution™ direct expansion precision air conditioning units designed for environments where high-tech apparatus are used: web hotels, telephone exchanges, large computer rooms, data storage and transmission rooms.

The character within:

precision and reliability, high energy efficiency, versatile configurations, energy saving, compact dimensions, intelligent heart, connectivity, outstanding performance, respect for the environment.

Main characteristics

Air conditioning units characterized by high reliability and energy saving.

Possibility to control the temperature and relative humidity of the environment. Uniguard microprocessor control system for either local or remote control management.

Selection of the fan speed according to the EPS required by the aerualic system from the microprocessor.

Total front access for unit maintenance.

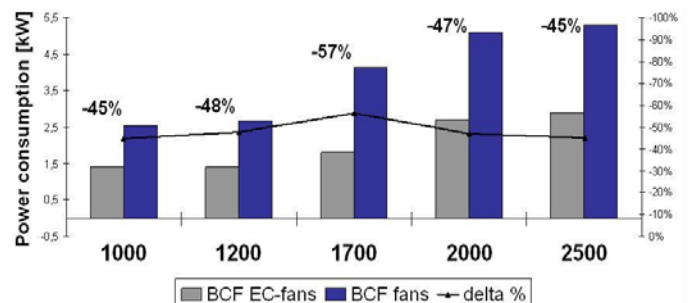
Downflow and upflow versions.

Integrated ModBus on RS485 serial card Built-in LAN card.

Wide connectivity.

Compact dimensions.

All models equipped with electronically commutated backward curved fans with very low power consumptions.



Technical Data

Chilled water units with EC backward curved blades fans

Model TDCV-TUCV		1000A	1200A	1700A	2000A	2500A
Height	mm	1960	1960	1960	1960	1960
Width	mm	1310	1310	1721	2172	2172
Depth	mm	865	865	865	865	865
Weight	kg	306	314	395	443	458
Airflow	m ³ /h	10000	10000	14000	18680	18880
External static pressure	Pa	20	20	20	20	20
Total cooling capacity	kW*	33.4	42.2	59.1	69.3	88.4
Sensible cooling capacity	kW*	32.7	40.0	57.7	67.0	82.2
Chilled water flow	l/h*	5750	7270	9210	11950	15230
Total cooling capacity	kW**	22.3	29.0	35.1	47.8	62.3
Sensible cooling capacity	kW**	22.3	29.0	35.1	47.8	60.8
Chilled water flow	l/h**	4420	4990	6060	8240	10740
Electric supply voltage	V	400 V / 3 ph + N / 50 Hz				

(*) Based on 24°C @ 50%, ESP=20 Pa, water temperature = 7/12°C, ethylen glycol 0%

(**) Based on 24°C @ 50%, ESP=20 Pa, water temperature = 10/15°C, ethylen glycol 0%

Applications



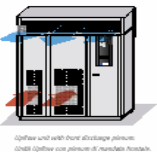
Upflow unit with discharge on the top.
Uniti Upflow con mandata verso l'alto.



Upflow unit with discharge from the base.
Uniti Upflow con espone dal basso.



Downflow unit with discharge from front and rear.
Uniti Downflow con espone di mandata fronte.



Upflow unit with three discharge plenums.
Uniti Upflow con plenum di mandata fronte.



Upflow unit with discharge from the side.
Uniti Upflow con espone dal lato.



Downflow unit installed on access floor.
Uniti Downflow installate su pavimento espansivo.

Versions

The direct expansion range is available for downflow and upflow versions with the following principal accessories:

- standard and enhanced electrical reheat
- hot water reheat
- hot gas reheat
- high ESP (external static pressure) available
- condensate drain pump
- immersed-electrode humidifier
- humidifier with cleanable electrodes
- air filter installed inside the unit up to EU5 efficiency
- air filter installed outside the unit with additional plenum or floor stand up to EU8 efficiency
- fresh air module
- microprocessor semi-graphic display control
- uniguard UG40
- upflow version available with air suction from the front, the rear or the base
- integration with low temperature air cooled condenser version available