

Leonardo™ TDEV-TUEV



Energy saving units

Backward curved blades fans with EC motors

Range

From 25 to 65 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.

One or two independent refrigerant circuits equipped with Scroll compressors.

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

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

Total front access for unit maintenance.

Downflow and upflow versions.

Electronic expansion valve integrated with the microprocessor and managed with exclusive Uniflair software.

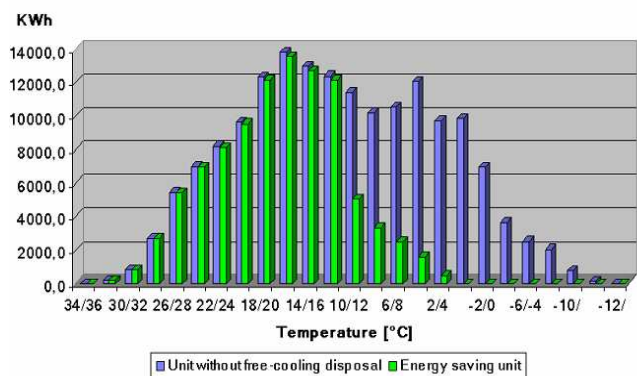
Intelligent dehumidification control integrated with the electronic expansion valve.

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

Bigger exchange surface due to the interlaced coil.



Power absorption [KWh]



Technical Data

Energy saving units with EC backward curved blades fans

Model TDEV-TUEV		721	722	921	922	1021	1022	1121
Height	mm	1960	1960	1960	1960	1960	1960	1960
Width	mm	1310	1310	1310	1310	1310	1310	1720
Depth	mm	865	865	865	865	865	865	865
Weight	kg	430	447	430	447	430	447	548
Airflow	m ³ /h	7940	7940	7940	7940	7940	7940	11650
External static pressure	Pa	20	20	20	20	20	20	20
Total cooling capacity	kW*	25.7	26.6	30.2	31.2	34.4	35.4	37.7
Sensible cooling capacity	kW*	25.7	26.6	29.2	29.9	31.8	31.6	37.7
N° refrigerant circuits		1	2	1	2	1	2	1
N° compressors		2	2	2	2	2	2	2
Electric supply voltage	V	400 V / 3 ph + N / 50 Hz						

Model TDEV-TUEV		1122	1321	1322	1422	1622	1822
Height	mm	1960	1960	1960	1960	1960	1960
Width	mm	1720	1720	1720	2171	2171	2171
Depth	mm	865	865	865	865	865	865
Weight	kg	559	575	585	698	714	714
Airflow	m ³ /h	11650	11650	11650	15420	15420	15420
External static pressure	Pa	20	20	20	20	20	20
Total cooling capacity	kW*	38.6	40.5	41.4	49.1	58.0	64.3
Sensible cooling capacity	kW*	38.6	40.2	40.6	49.1	55.0	57.6
N° refrigerant circuits		2	1	2	2	2	2
N° compressors		2	2	2	2	2	2
Electric supply voltage	V	400 V / 3 ph + N / 50 Hz					

(*) Based on 24°C @ 50%, ESP=20 Pa, inlet condensing water T = 30° C outlet condensing water T = 35° C

Applications



Upflow unit with air discharge on the top
and hot gas reheat on the side.



Upflow unit with air suction from the base
and hot gas reheat on the side.



Downflow unit with hot water reheat on the top
and hot gas reheat on the side.



Upflow unit with air discharge on the top
and hot gas reheat on the side.



Upflow unit with air suction from the base
and hot gas reheat on the side.



Downflow unit with hot water reheat on the top
and hot gas reheat on the side.

Versions

The energy saving 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 with standard backward curved fans
- condensate drain pump
- immersed-electrode humidifier
- humidifier with cleanable electrodes
- air filter installed inside the unit up to EU5 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