

TELECOMMUNICATIONS

NTS

**SPLIT UNIT
WITH MODULATING COMPRESSORS
FOR SHELTERS DESIGNED FOR IT EQUIPMENT**

10-36 kW



Indoor unit

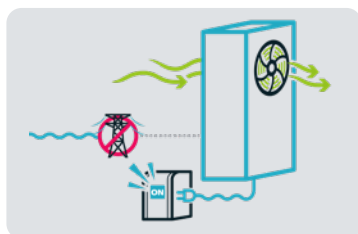


Outdoor unit



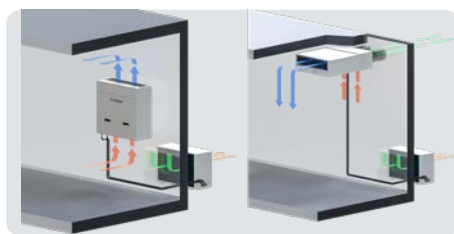
The air conditioners of the NTS series are units specially designed for telephone exchange facilities and shelters. Designed for **ceiling or wall mounting**, they are suitable for air conditioning of control centres with limited internal space or space entirely taken up by technological equipment. The rational layout of the internal components makes **installation easy**. Thanks to the wide range of available accessories, the NTS units are **suitable for different shelter configurations**. The **meticulous thermodynamic and aeraulic design boosts energy efficiency**.

- Refrigerant R410A.
- Version available with dual power supply for emergencies: 230/400V network and 24/48VDC backup supply
- Fans on evaporating side with standard EC motor
- Condensing side fans available with EC motor
- Standard stainless steel condensate drain pan
- Evaporating coils with hydrophilic coating supplied as standard equipment
- Dehumidification function on request
- Electric lamination valve with optional electronic control
- Epoxy powder painted structural metalwork supplied as standard
- Electric heating function on request
- Temperature control through heating and post-heating systems with electric heaters (on request)



Maximised Redundancy

If **dual power supply** (mains + DC UPS) is provided, unit control and ventilation always remain active, **even in the event of a mains failure**. If the unit is configured as a Free-Cooling version (upon request), the damper will continue to operate too and this guarantees **operational continuity for the conditioning system**.



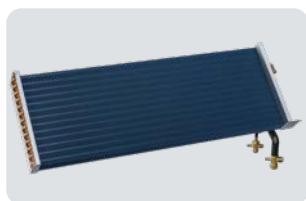
Maximised shelter internal space

The units of the NTS series are designed for **ceiling or wall mounting**: in this way, all the available internal space can be **entirely and efficiently used** for IT equipment installation.



Easier scheduled maintenance

The unit has been accurately designed to ensure **frontal access to components**. This aspect, combined with full extractability of filters and Free-Cooling damper (if any), **facilitates routine maintenance operations**.



Shelter safety

All models in the split range feature evaporating coils with hydrophilic coating. This special coating - together with adequate adjustment of air through-flow speeds - **helps condensate collection during the dehumidification process, preventing any dripping on the inside and outside of the unit**.



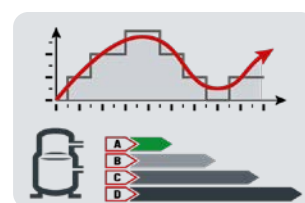
Maximised energy saving with direct Free-Cooling

The units can, on request, be equipped with a **direct Free-Cooling** module. This system, which can also be retrofitted on site on units already in place, reduces compressor work requirements (partial Free-Cooling) and, under full Free-Cooling conditions, allows the compressor to be turned off, **with major benefits for the system's PUE (Power Usage Effectiveness)**.

Unit suitable for any kind of climate and environment

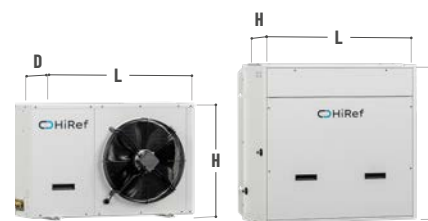
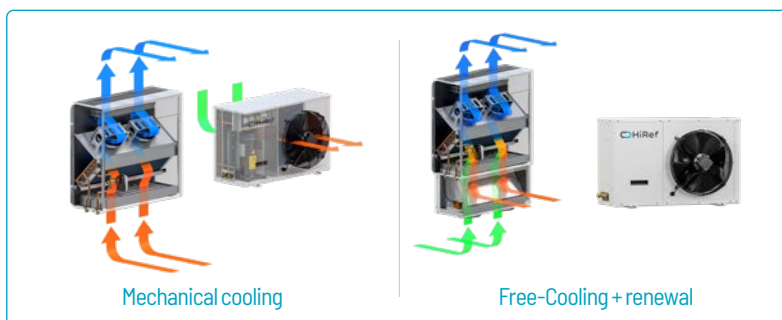
Different configurations and layouts are available, suitable for the setting in which the unit is to be installed.

- In the case of extremely cold climates (down to -40°C) **a version for low external temperatures is available**. In this option, the outdoor unit is equipped with special condensing fans to be able to operate at low temperatures, an electrically heated switchboard, double compressor casing heaters, and condenser coil flooding system.
- In case of exposure to aggressive atmospheric agents such as sand or sunlight, **the outdoor unit metalwork can be ordered with double 160 μm paint finishing layer or in AISI 304 stainless steel alloy**. An epoxy powder painted condensing coil is also available.



Efficiency and precision

The range includes compressors with Brushless DC motors. As the thermal load changes, the integrated microprocessor allows combined modulation of air flow - via control of the EC fans and cooling capacity, by managing the speed of the DC inverter compressors (supplied as standard). This ensures **not only accurate adjustment of ambient hygrothermal parameters, but also maximised energy savings at partial loads, particularly if in combination with direct Free-Cooling**.



NTS		0851	1101	1601	3101
R410A - Indoor air 27°C - 40% / Outdoor air 35°C					
Cooling capacity	kW	9.5	10.9	18.3	34.4
Total absorbed power	kW	3.1	3.9	6.8	11
EER		3.9	3.29	2.97	3.81
SHR		0.99	0.9	0.85	0.95
R410A - Indoor air 30°C - 35% / Outdoor air 35°C					
Cooling capacity	kW	10	11.4	19.1	36.2
Total absorbed power	kW	3.2	3.9	6.9	11.1
EER		4.03	3.38	3.07	3.98
SHR		1	0.94	0.92	1
Indoor unit air flow rate	m ³ /h	2300		3200	7750
Outdoor unit air flow rate	m ³ /h	5100	5580		16300
Power supply	V/ph/Hz	230/1/50		400/3+N/50	
Indoor unit dimensions [LxHxD]	mm	1050x350x936		1150x410x1026	1585x685x1096
Outdoor unit dimensions [LxHxD]	mm	1305x648x490		1121x1128x579	1965x950x1322

Also available with 60 Hz power supply. | Indoor unit that can only be installed on the ceiling for size 3101.