S.T.A. BRANCA IDEALAIR

HFO CLIMATIC UNITS

GENERAL CATALOGUE 2018/2019

UNI EN ISO 9001:2015 CERTIFIED MANAGEMENT SYSTEM

ASSO FRIGORISTI

INDEX

S.T.A. BRANCA IDEALAIR MANUFACTURES CLIMATIC UNITS SUITABLE FOR THE PRECISION AIR CONDITIONING OF LABORATORIES

LEADER IN PROJECT DEVELOPMENT AND CONSTRUCTION OF **TESTING LABORATORIES** FOR METROLOGY, TEXTILE, PAPER, PAPERBOARD, CEMENT, GLUE AND ADHESIVE, PM10 AND OTHER APPLICATIONS

S.T.A. BRANCA IDEALAIR OFFERS A WIDE RANGE OF SOLUTIONS TO COVER REQUIREMENTS ABOUT CLIMATIC CONDITIONS WHERE LAB TESTS MUST BE PERFORMED LEADING LABORATORIES TO THE **LAB ACCREDITATION**

QUALITY MANAGEMENT SYSTEM
ISO 17025
ACCREDITED
LABORATORY

IN TERMS OF REFRIGERATION, THE CONCEPT OF INNOVATION AND UPGRADE WITH THE STANDARD REPRESENTS FOR OUR COMPANY A FUNDAMENTAL ASPECT TO BE COMPLIANCE TO ECO SUSTAINABILITY

OUR COMPANY ALWAYS INVESTS ON R&D OF NEW PRODUCTS UPDATES COOPERATING TOGETHER WITH UNIVERSITIES AND SUPPLIER TO FINALIZE GOALS AND NEW VENTURES

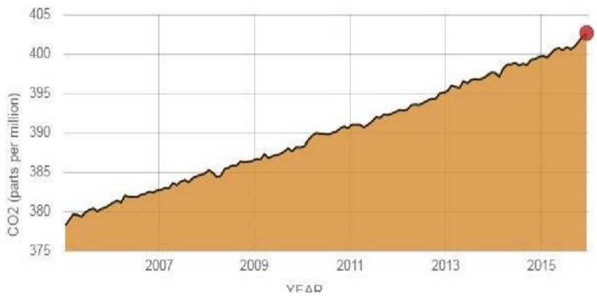
BRANCA CLIMATIC UNITS USE AN ADVANCED TECHNOLOGY ABLE TO PERFORM THE PRECISE CONTROL OF TEMPERATURE AND HUMIDITY GUARANTEEING UNIFORM CONDITIONS IN EVERY POINT OF THE LAB 24/24 HOURS ALL OVER THE YEAR

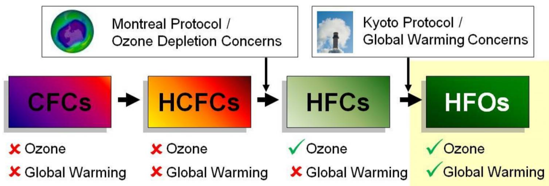
THE REFRIGERANTS OF THE FUTURE …

The increase in CO_2 concentration in the last decade is particularly worrying!
Actions:

F-GAS - PHASE DOWN

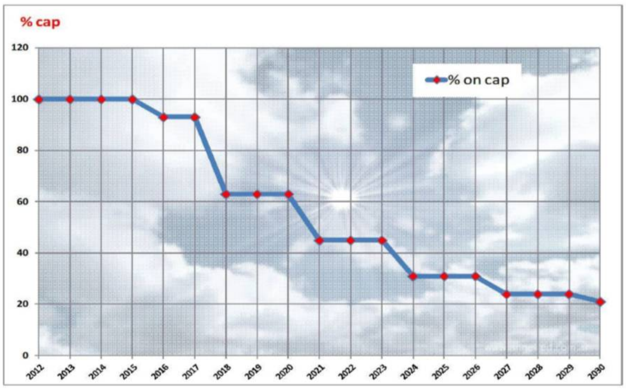
Prohibition to use HFC with GWP> 2,500 in fixed refrigeration systems from **1/1/2020** (except those for systems designed for cooling products at T <50 °C)





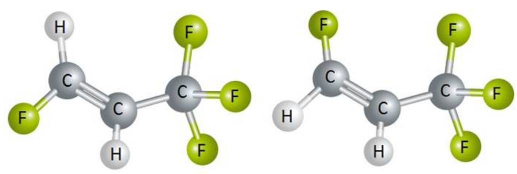
GOALS OF THE REGULATION

- ☑ Production control, import and marketing of products on the basis of equivalent GWP quantities, with reduction of quotas starting from 2015, up to a minimum level of 21% forecast for **2030**
- ☑ Prohibition of the use of F-Gas with a particularly high GWP value, for new plants and for particular applications
- ☑ Prohibition of the use of F-Gas with a GWP> 2500 in maintenance



BRANCA IDEALAIR DESIGNS ALREADY CLIMATIC UNITS COMBINED TOGETHER WITH AN HYDRONIC MODULE CHARGED WITH HFO REFRIGERANTS …

HERE BELOW THE PROPERTIES OF HFO REFRIGERANTS



Chemical Name	trans-1,3,3,3-Tetrafluoroprop-1-ene
Molecular Formula	$CF_3CH=CHF$
Appearance	Colourless
Ozone Depletion Potential (ODP-R11=1)	0
Global Warming Potential rev 5th IPCC ($GWP\ CO_2=1$)	<1
ASHRAE Std. 34 Safety Classification	A2L
Flammability Limits – ASTM E681-04 @ 21°C	Non Flammable
Flammability Limits – ASHRAE 34 @ 100°C	7% – 12% (by volume)

HFO Type MIN

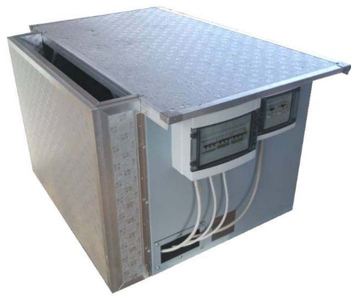
HFO CLIMATIC UNITS

AIR VOLUME	(20 ÷ 100) m^3
Heating:	4,5 KW
Cooling:	3,5 KW
Humidification:	3 KW
Refrigerant:	R1270/ HFO1234ze
Ventilation:	0,8 KW
Air flow:	1000 m3/h
Blower transmission:	Coaxial
Air exchange:	1 volume/h
Measure ranges:	°C (10..30) % (40..80)
Water charge pipe:	¼"
Water discharge pipe:	½"
Water discharge connection:	½"
Cooled water send/return:	12 mm
GWP:	<1
Lubrificant:	POE, PAG
Power supply:	Three-phases (3PH+N+PE)
Dimensions:	(80x50x190)cm
Net weight:	300 Kg

FUNCTIONALITIES AND ADVANCED PERFORMANCES

- Wide operation ranges with critical atmospheres from (-20 ÷ 40) °C of temperature and (10 ÷ 90) % of relative humidity;
- Electrical compatibility in compliance with **CE**, **UL**, **CSA**, etc.;
- Air flow distribution with tangential diffusion and air velocities < **0,15 m/s** on the work tops;
- Refrigerant circuit modulation through solenoid or electronic valves;
- Water depuration with osmosis group;
- Humidification device;
- One centrifugal blower with automatic speed control in compliance with EU standard;
- Air pre-filters with filtration class ***G3 - G4;***
- ECO Energy and water saving logic system;
- Final air HEPA filters (***F6***);
- **HMI Touch Screen 7"** for user interface and monitor screen;
- Remote support;
- Probes resolution at **± 0,01°C** for temperature and **± 0,01%** for relative humidity to reduce at minimum level thermal and temporal gradients;
- Alarms diagnostics and statistics with throubleshooting areas;
- Integrated datalogging system and trend graphs analyses;
- ECO Weekly programming;

HYDRONIC MODULE ON REQUEST



LAB PROJECT

HFO Type MED

HFO CLIMATIC UNITS

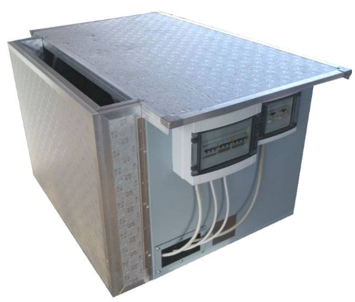
INDUSTRY 4.0

AIR VOLUME	(100 ÷ 300) m^3
Heating:	9 KW
Cooling:	7 KW
Humidification:	4,5 KW
Refrigerant:	R1270/ HFO R1234ze
Ventilation:	1,6 KW
Air flow:	3000 m3/h
Blower transmission:	Coaxial
Air Exchange:	1 volume/h
Measure ranges:	°C (10..30) % (40..80)
Water charge pipe:	¾”
Water discharge pipe:	¾”
Water discharge connection:	¾”
Cooled water send/return:	20 mm
GWP:	< 1
Lubrificant:	POE, PAG
Power supply:	Three-phase (3PH+N+PE)
Dimensions:	(130x60x190) cm
Net weight:	400 Kg

FUNCTIONALITIES AND ADVANCED PERFORMANCES

- Wide operation ranges with critical atmospheres from (-20 ÷ 40) °C of temperature and (10 ÷ 90) % of relative humidity;
- Electrical compatibility in compliance with **CE**, **UL**, **CSA**, etc.;
- Air flow distribution with tangential diffusion and air velocities < **0,15 m/s** on the work tops;
- Refrigerant circuit modulation through solenoid or electronic valves;
- Water depuration with osmosis group;
- Humidification device;
- Two centrifugal blowers with automatic speed control in compliance with EU standard;
- Air pre-filters with filtration class ***G3 - G4;***
- ECO Energy and water saving logic system;
- Final air HEPA filters (***F6***);
- **HMI Touch Screen 7”** for user interface and monitor screen;
- Remote support;
- Probes resolution at **± 0,01°C** for temperature and **± 0,01%** for relative humidity to reduce at minimum level thermal and temporal gradients;
- Alarms diagnostics and statistics with throubleshooting areas;
- Integrated datalogging system and trend graphs analyses;
- ECO Weekly programming;

HYDRONIC MODULE ON REQUEST



LAB PROJECT

HFO Type MAX

HFO CLIMATIC UNITS

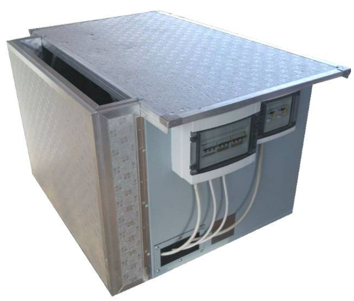
INDUSTRY 4.0

AIR VOLUME	(300 ÷ 800) m^3
Heating:	18 KW
Cooling:	15 KW
Humidification:	12 KW
Refrigerant:	R1270/ HFO R1234ze
Ventilation:	2,4 KW
Air flow:	7000 m3/h
Blower transmission:	Coaxial
Air Exchange:	1 volume/h
Measure ranges:	°C (10..30) % (40..80)
Water charge pipe:	1”
Water discharge pipe:	1”
Water discharge connection:	1”
Cooled water send/return:	30 mm
GWP:	< 1
Lubrificant:	POE, PAG
Power supply:	Three-phase (3PH+N+PE)
Dimensions:	(190x65x190) cm
Net weight:	600 Kg

FUNCTIONALITIES AND ADVANCED PERFORMANCES

- Wide operation ranges with critical atmospheres from (-20 ÷ 40) °C of temperature and (10 ÷ 90) % of relative humidity;
- Electrical compatibility in compliance with **CE**, **UL**, **CSA**, etc.;
- Air flow distribution with tangential diffusion and air velocities < **0,15 m/s** on the work tops;
- Refrigerant circuit modulation through solenoid or electronic valves;
- Water depuration with osmosis group;
- Humidification device;
- Three centrifugal blower with automatic speed control in compliance with EU standard;
- Air pre-filters with filtration class ***G3 - G4;***
- ECO Energy and water saving logic system;
- Final air HEPA filters (***F6***);
- **HMI Touch Screen 7”** for user interface and monitor screen;
- Remote support;
- Probes resolution at **± 0,01°C** for temperature and **± 0,01%** for relative humidity to reduce at minimum level thermal and temporal gradients;
- Alarms diagnostics and statistics with throubleshooting areas;
- Integrated datalogging system and trend graphs analyses;
- ECO Weekly programming;

HYDRONIC MODULE ON REQUEST



LAB PROJECT

TECHNICAL TEAM

The servicing activities of BRANCA Technical team are described below:

- ☑ First visit by the customer for the development of a laboratory project at standard atmosphere;
- ☑ Installation, commissioning and testing of textile testing instruments;
- ☑ Periodic, preventive and corrective maintenance;
- ☑ Repair formula Business Next day;
- ☑ Mapping of Branca Idealair laboratories with Assman psychrometers with ACCREDIA certificate (release of an issue of certificate of compliance);
- ☑ Transfer of existing laboratories of Branca Idealair;
- ☑ Recovery of used Climatic Elements and textile testing instruments included their system upgrades and checks for successive re-sale;
- ☑ Climatic Elements upgrades next to the applicable norms;
- ☑ Updates of units in relation to the possible changes;
- ☑ Transfer of laboratories elsewhere with relative material substitution;
- ☑ Exchange parts supply;
- ☑ Phone support;
- ☑ Remote support;

S.T.A. BRANCA IDEALAIR obtained in the year1996 the first certification as a Quality Management System in compliance with **UNI EN ISO 9002:1994** until in the year 2009 the accreditation **ISO 9001:2015**

The last handouts are a further step towards the improvement of our Company in an area of fundamental importance as the formation of the Technical Staff.

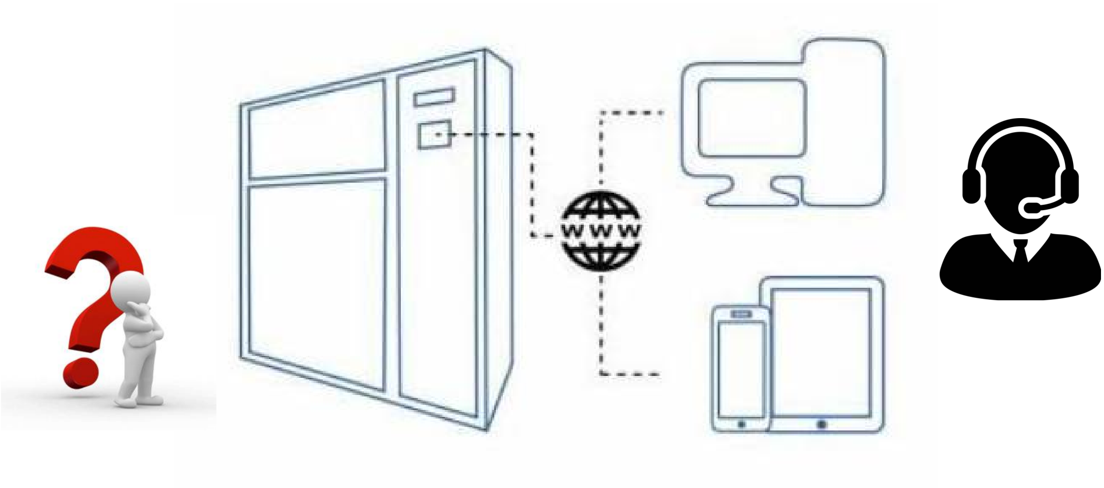
Certificate ICIM Nr. **0588/6**

Quality system certificate in compliance with Standard ISO 9001/2015 about maintenance of air-conditioning systems EA/28

REMOTE SUPPORT

REMOTE SUPPORT, powered by S.T.A. Branca Idealair, is a technical service offered to our customers based on remote control of the climatic units followed by S.T.A. Branca Idealair technicians on Climatic Units.

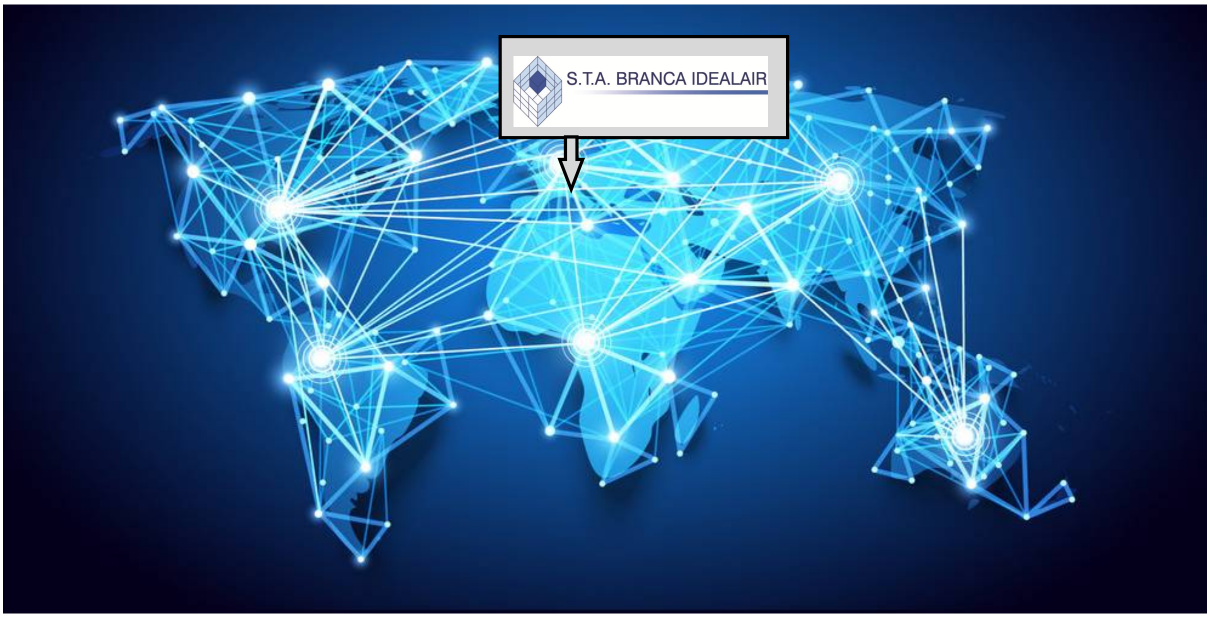
The service allows a direct communication with the Climatic units and particularly to programmable logic recording relevant data, commands execution analyzing the responses from the unit, without any local interaction, only if requested by the technician.



The remote support includes the following:

- ☑ Functional checks and monitor of real time conditions and setting parameters
- ☑ Optimization and adjustment on real time
- ☑ Alarms diagnostics and statistics and history logs analyses
- ☑ Hardware functional checks
- ☑ Functional checks of refrigeration and electrical parts
- ☑ Preventive quote for future repairs
- ☑ Top services with formula "Business Next Day"
- ☑ Software upgrades
- ☑ Special discount on spare parts
- ☑ Visit by our technician for new projects

GLOBAL NETWORK



We support customers with our full **global network**

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