

SERIES

AZ-I ZAE-I AZS-I

Integrated control systems for air-handling units,
with combined power board.

A series of AHUs complete with controls arranged in twenty-four management systems which may be combined with any motor capacity and all humidification systems. Thanks to our skilled and autonomous internal technicians, we are able to make whatever customisation on both the hardware and the software.



The whole control and power system is installed and wired on board the unit in the factory, to be then tested and thoroughly checked before despatching. The power and control board are made from a metal box with protection class IP65. The LCD display is illuminated from behind and the signal LED lights allow a quick and immediate view of the state of the AHU.



The installation of all the internal components is carried out at a state-of-the-art level. Our experts, in cooperation with our Technical Office, detect the most suitable position where each component will be installed, in order to guarantee the correct operation, precision of parameters reading and easiness of access for the normal maintenance operations.

■ **Microprocessor control** integrated with customised software, for the complete control of the AHU. TCF keeps in its archives a copy of the software installed and customised for each unit: if needed, TCF is able to send the customer, within the 48 hours from the request, a copy of the microprocessor which will just need to be substituted using the appropriate connectors. To facilitate the control and management operations, it is possible to remote an LCD semi-graphic display, available for both wall and niche-type installation.



On request, it is possible to supply the card integrating a week clock program and the different communication card (Modbus®, BACnet®, LonWorks®, LAN TCP/IP) compatible with the most common supervision systems.



If the AHUs are manufactured in more sections, specific connection devices are provided for, simple and reliable, of the one-way-joint type.



According to the application, valves with flanged or threaded connection, with press-type joints for pipes up to 2" diameter. Starting from the diameter 2" - 1/2 TCF uses the "Victaulic" coupling system which guarantees flexibility of use, reliability and extreme friendliness of use during maintenance operations



The supply of the unit may also be completed with a complete series of probes for duct or room installation, to achieve whatever type of AHU control.





On request, the supply of the control components may be completed with the following devices: AFSC system (Air Flow System Control) which allows the AHU, once connected to the network, to start up and automatically guarantee the designed air flow regardless of the real pressure drops of the installation (within the performances limits of the fan-motor assembly). Such a system, by nature, automatically compensates the increase of the pressure drop due to the clogging of the filters also when, such as the case is for hospital applications, they are installed outside of the AHU.

Further to an analysis from our technical office, it is also possible to complete the delivery with some components of the hydraulic circuits, such as control valves and related pipes, totally insulated and easily accessible, pumping kits with installation and control of twin pumps, water temperature control, charging lines, expansion vessels....

