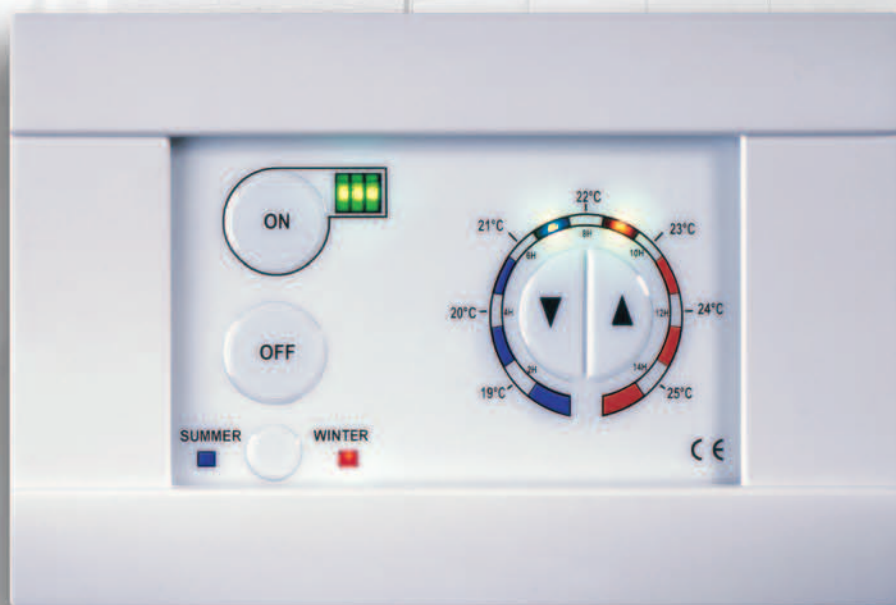


TcNet

空調微電腦控制器

Micro Controller



誥鑫企業有限公司
ARITH COMPANY LTD.
地址：台北市復興北路427巷30號
電話：(02)2717-5038
傳真：(02)2717-5039
e-mail: taipei@arith.com.tw
網址：<http://www.arith.com.tw>

空調微電腦控制器



General:

The TcNet controller is a micro controller specifically designed for air conditioning units, fan & coil and large capacity fan & coil units.

The TcNet controller is the optimal solution for air conditioning and fan & coil units that includes heating and cooling systems.



Features:

- Power supply 230VAC.
- 3 Speed fan velocities.
- Time operation control.
- Heating and cooling solenoid control.
- Input for no flow/temperature protector.
- Time proportional control using Solid State Relay (SSR).
- Input for fire/smoke detector.
- Communication RS485.

Options:

- Modulation control for heating and cooling valves.
- Operating up to 3 heating elements with 20A relays each.
- Selectable on/off OR start/stop fan operation.
- Selectable summer/winter OR automatic heating/cooling operation.



Modulating Control

The TcNet+ controller includes a modulating PI control algorithm (0-10VDC) for controlling the heating and cooling valves. The TcNet uses an accurate PI algorithm that maintains an accurate setpoint.



Specifications:

- Power requirements : 230VAC, 30VA, 50/60Hz
- Dimensions
(height, length, width)
Thermostat : 25, 120, 80 mm
TcNet + Power unit : 60, 160, 90 mm
- Total Weight:
Thermostat panel : 80 gr
Power unit : 450 gr
- Valve actuator output : 0-10 VDC, 8MA
- Solenoid operation : 230VAC, max 150MA
: 24VAC, max 150MA
- Fan relays : 3X5A (option 3X10A)
- Heating element relays : 20A
- SSR output: : 24VAC, max 150MA
- Fire/smoke sensor input : dry contact
- Flow/temp.
Protector input : dry contact
- Environmental
operating limits : 0-50



Solenoid Valves Control

The controller includes a thermostat control algorithm for heating and cooling solenoid valves. The algorithm maintains the setpoint that can be changed from the control panel.



Heating Elements Control

The controller has a control algorithm enabling the operation of the heating elements in equal stages, binary stages and/or continuous control (SSR).



Fan shut-off during fire detection

The controller has a special input for a fire/smoke detector that shuts the fan off in case of fire.



No flow/high temperature protector

The controller has a special input that can shut off the heating elements in situations that there is no airflow and/or in a case where the high temp protector is switched "off".



Communication with BMS

The controller has a communication port with an open protocol algorithm (MODBUS) enabling the Building Management System to communicate with the TcNet controller.

