Explosion Proof HVAC

Heating Ventilation Air-Conditioning System
TC Series

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Features

User friendly HMI
By adopting user friendly HMI(Human Machine Interface), easier maintenance with powerful function and convenient interface was realized.

Various and stable communication
Communication network can be easily built on any site through the VNC Serial (RS-485) and Ethernet communication, realizing remote control of the equipment.

Specialized design to ensure safety
TC series are designed in accordance to EN60079-0, 60079-1, 60079-2 and international standards which is suitable for safety area as well as for Zone2 or Zone1.

Full redundant system
A stable positive pressure inside a shelter is maintained by a full redundant fan system and the motor are protected programmatically through the 24-hour auto changeover system.

Customized design
The dimensions of some parts such as stack, cabinet and also the location of the control panel can be customized.

Real-time data logging
Data can be saved to its memory, SD card, USB memory in CSV file.

Description
- IECEx, ATEX, KCs
- Zone1 IIB+H2 T3 or T4
- Suitable for hazardous area Zone1(Zone2) according to EN60079-10 standard.
- Power 380~400Vac / 3Ph / 50,60Hz
- Power 440~460Vac / 3Ph / 60Hz
- Heating capacity_1~10kW
- Ambient temperature: -20℃ to 50 ℃ or -20 ℃ to 55 ℃
- HVAC cabinet material_Galvanized steel
- Evaporator fan (Full redundant_option)
- Condenser fan
- HVAC control via PLC (Programmable Logic Controller)
- Refrigerant fluid_R407c or R134a
- Aluminum finned copper tube coils
- High/Low pressure switch for compressor
- High pressure switch for condenser
- Dual Low pressure switch for compressor low purge alarm
- DP switch for shelter positive pressure (option)
- DP switch for evaporator fan fault
- Dust filter in Evaporator inlet (Grade MERV8_only TC66,77)
- Dust filter in stack for fresh air (Grade MERV8)
- Humidity sensor for Dehumidification (option)

Model	Cooling Capacity	Heating Capacity	Type of Protection	Electric Data
TC66	30,000 BTU	1~6KW	Ex d e ia mb px IIB+H2 T3, Zone1 Tamb. -20℃ to +50℃ ATEX, IECEx, KCs	380~400VAC / 3Ph / 50Hz 460VAC / 3Ph / 60Hz
TC77	50,000 BTU	1~10KW	Ex d e ia mb px IIB+H2 T4, Zone1 Tamb. -20℃ to +55℃ ATEX, IECEx, KCs	380~400VAC / 3Ph / 50,60Hz 440~460VAC / 3Ph / 60Hz
TC-050CD	50,000 BTU	1~10KW	Ex d e ia mb px IIB+H2 T4, Zone1 Tamb. -20℃ to +55℃ ATEX, IECEx, KCs	380~400VAC / 3Ph / 50,60Hz 440~460VAC / 3Ph / 60Hz
TC-070CD	70,000 BTU	1~10KW	Ex d e ia mb px IIB+H2 T4, Zone1 Tamb. -20℃ to +55℃ ATEX, IECEx, KCs	380~400VAC / 3Ph / 50,60Hz 440~460VAC / 3Ph / 60Hz
TC-100CD	100,000 BTU	1~10KW	Ex d e ia mb px IIB+H2 T4, Zone1 Tamb. -20℃ to +55℃ ATEX, IECEx, KCs	380~400VAC / 3Ph / 50,60Hz 440~460VAC / 3Ph / 60Hz

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Air velocity : 7~9 m/s
Overpressure :More than 25pa.
Cooling Air from HVAC

Air velocity : 2~5 m/s
Fresh Air from Stack

Warmed Air to HVAC
Air velocity : 2~3 m/s

Damper - Adjust Fresh air flow, velocity and overpressure

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Model : TC66

Model : TC77

Model : TC-***CD

Optional

- Cabinet material: Stainless steel 304 or 316
- Industrial cabinet coatings
- BLYGOLD anti-corrosion coating on tube coils and fin
- External emergency push button switch
- Location of stack
- Humidity sensor for dehumidification (only TC77 and TC-***CD)

Certificate

Phone + 82-31-908-6789 *Mail* sales@taechin.com *Website* http://www.taechin.com
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Model : TC66 & TC77
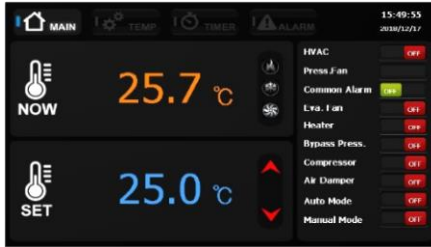
Main page
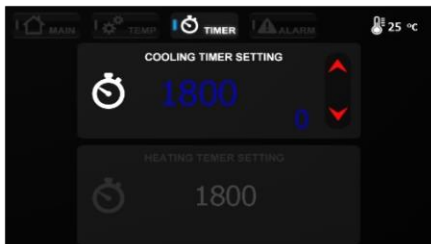Setting up now temperature by external pushbutton switches.
Checking overall current status for HVAC.

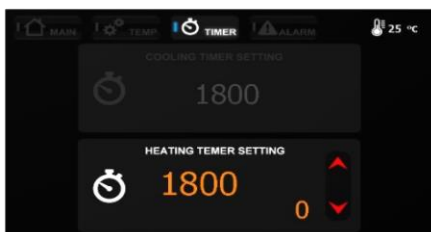**High temperature setting page**
Factory setting: 35℃

Low temperature setting page
Factory setting: 2℃

Cooling timer setting page
Factory setting: 180s

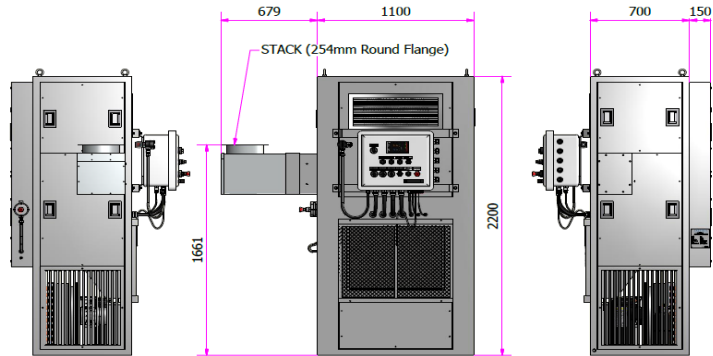**Heating timer setting page**
Factory setting: 180s

Alarm page
You can see major alarms and add alarms by user's request.

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Dimensions

TC66
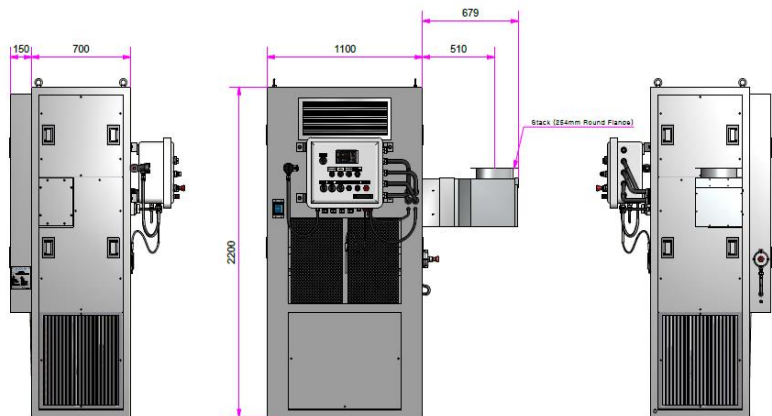- 1100 X 700 X 2200mm

Left view   **Front view**   **Right view**

TC77
- 1100 X 700 X 2200mm

Left view   **Front view**   **Right view**

TC-050CD
- 1130 X 765 X 2160mm
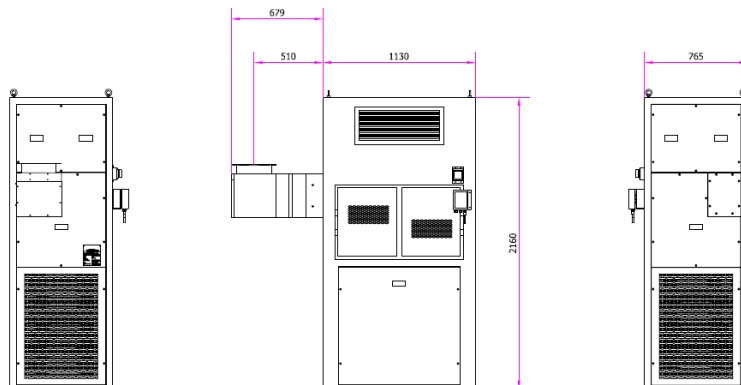### TC-070CD
- 1130 X 765 X 2160mm
TC-100CD
- 1180 X 900 X 2350mm

Left view   **Front view**   **Right view**