



D: 4 DIN Rail

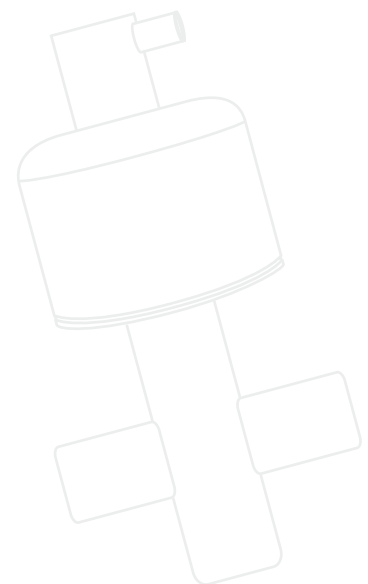
CX: 32x74mm



## IC200 evo SERIES: 2 CIRCUIT up to 6 COMPRESSOR UNIT CONTROLLERS with EEV MANAGEMENT

**IC200 evo** is the iCHILL evolution series of controllers, dedicated to the **chiller and heat pump units**. Compactness, extreme flexibility, driver control for the **electronic expansion valves**, and advanced functions such as free cooling and sanitary hot water production are only some of the main elements that make the series complete and suitable for the majority of plants. Controlled units can be **single or dual circuit up to 6 compressors** such as: **air/air, air/water, water/water, motor-condensing, geothermal heat pumps and dryers**.

- Management of scroll, screw and inverter compressors
- Compressor rotation control (also from start/hour number)
- Data logger (alarm type, date, hours, machine status)
- Pump-down function (stop and start)
- Capacity function of machine power during critical functioning conditions such as high or low condensing pressure
- Forced defrost during critical conditions
- Combined defrost temperature/pressure
- Sanitary hot water production
- Solar panel management
- Dynamic set point
- Start and stop by time bands
- Second set point (by time bands or digital input)
- PWM/4÷20mA/0÷10V output for condensing control
- Easy programming through HOT KEY or PC (WIZMATE PROG TOOL KIT)
- RS485 and/or TTL (convertible in RS485) serial output with ModBUS protocol
- Quick tab connectors on all models
- LAN output for I/O expansion modules or EEV driver connection



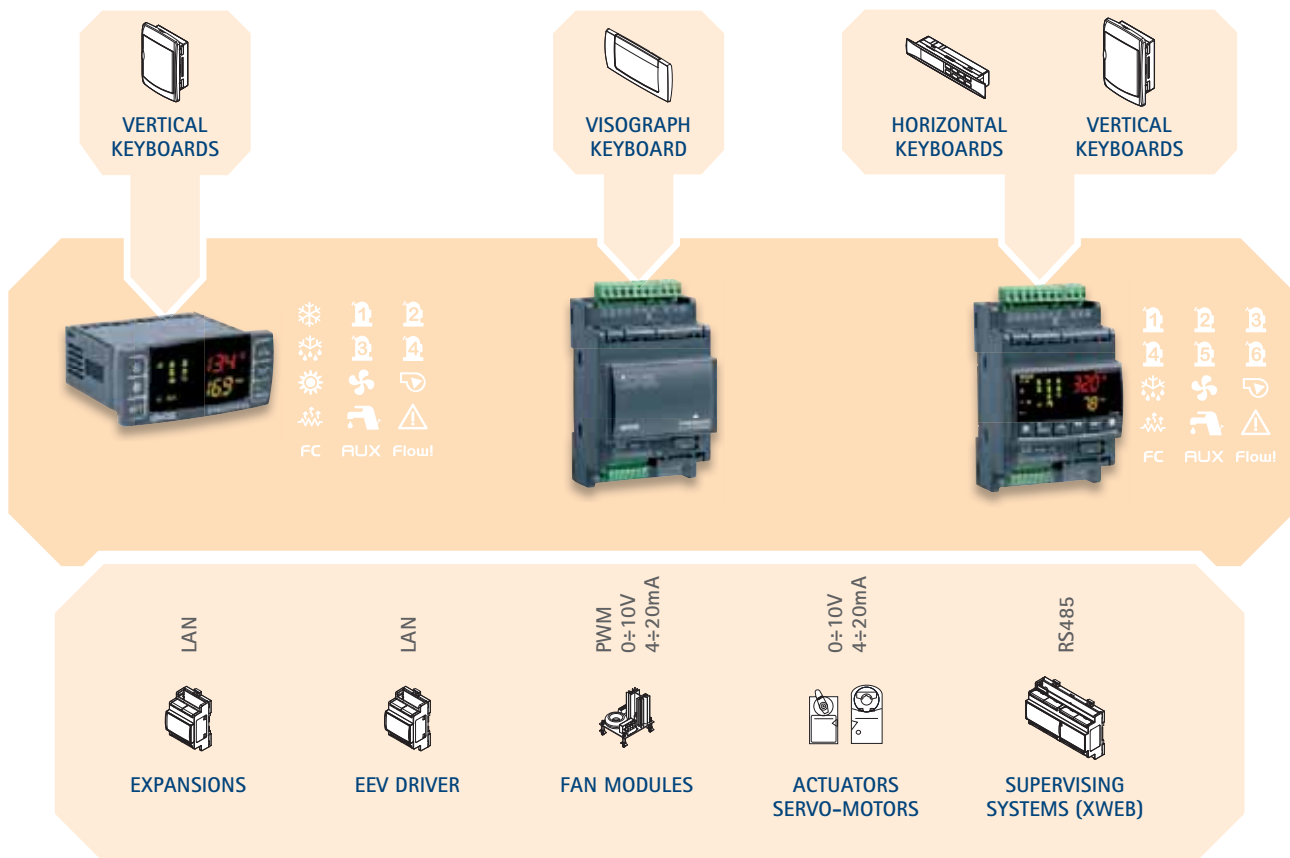
## COMPLETE INTERFACE and HIGH CONNECTIVITY

The IC200 evo family is available in the **CX version with display** and in **4 DIN Rail version with or without display** (LED).

The **dual display and the icons** for the machine status visualization, present on models with LED interface, ensure chiller/heat pump (compressor status, water heat pumps, fans, machine working mode) functioning. The **LCD graphic display** (Visograph) suitable for models without built-in display, give a more complete interface, adding functioning status in-full, menù, used probes, alarms descriptions, and more.



The **high connectivity** that marks these controllers, simplify communication with the most important devices of the HVAC world such as drivers for the electronic expansion valve management, modules for fans speed control, monitoring systems, and more.



## TYPE of MACHINE



IC200CX

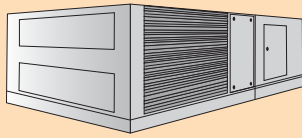
- 1 circuit – 4 compressors
- 2 circuits – 2 compressors per circuit
- 2 circuits – 1 screw compressor per circuit
- 2 circuits – 1 inverter compressor per circuit



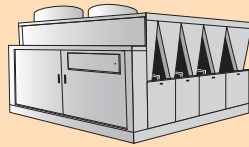
IC200D

- 1 circuit – 6 compressors
- 2 circuits – 3 compressors per circuit
- 2 circuits – 1 screw compressor per circuit
- 2 circuits – 1 inverter compressor per circuit

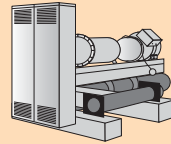
The **IC200 evo** family of controllers is able to easily manage units proper of the HVAC world using a simple and powerful hardware/software platform.



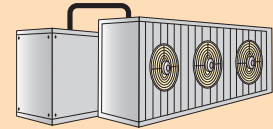
ROOF-TOP AIR/AIR



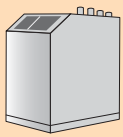
AIR/WATER



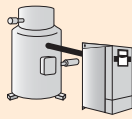
WATER/WATER



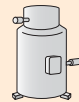
MOTOR-CONDENSING



GEOTHERMAL  
HEAT PUMPS



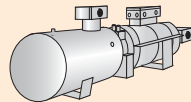
INVERTER COMPRESSORS  
(up to 2)



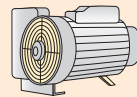
SCROLL COMPRESSORS  
(up to 6)



DRYERS



SCREW COMPRESSORS  
(up to 2)



INVERTER WATER  
PUMP



RTC



Alarm Logger  
(up to 100)

LAN



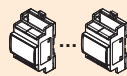
EEV  
DRIVER

ModBUS  
Slave



SUPERVISING  
SYSTEMS  
(XWEB)

LAN



CONTROLLERS  
(up to 5)



LOCAL PC  
(parameter  
configuration)

0÷10V  
4÷20mA



ACTUATORS  
SERVO-MOTORS

PWM  
0÷10V  
4÷20mA



FAN  
MODULES

ModBUS  
Master



ROOM PROBE  
(temperature/humidity)

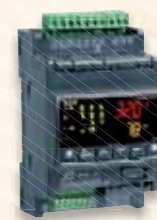
## 2 CIRCUIT up to 6 COMPRESSOR UNIT CONTROLLERS

# IC200 evo

|                |   |
|----------------|---|
| <b>IC205D</b>  | Controllers for chillers and heat pumps with 5 relay outputs (available also without display) |
| <b>IC206CX</b> | Controllers for chillers and heat pumps (up to 4 compressors) with 6 relay outputs            |
| <b>IC207D</b>  | Controllers for chillers and heat pumps with 7 relay outputs (available also without display) |
| <b>IC208CX</b> | Controllers for chillers and heat pumps (up to 4 compressors) with 8 relay outputs            |
| <b>ICX207D</b> | Expansion module with 7 relay outputs   |



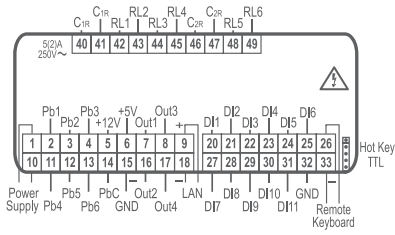
CX: 32x74mm



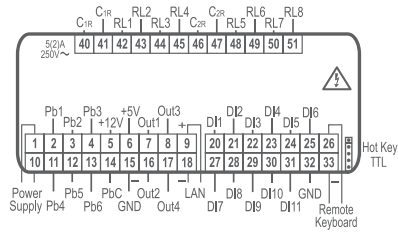
D: 4 DIN Rail

| FEATURES                         | IC205D  | IC206CX                                       | IC207D                      | IC208CX                                       | ICX207D  |   |            |
|----------------------------------|---|---|-----------------------------|---|--|---|------------|
| <b>First display: n° digits</b>  | ± 4 d.p.                                      | no display                                    | ± 4 d.p.                    | ± 4 d.p.                                      | no display   |   |            |
| <b>Second display: n° digits</b> | ± 4 d.p.                                      |   | ± 4 d.p.                    | ± 4 d.p.                                      |  |   |            |
| <b>Power supply</b>              | 12, 24Vac/dc                                  | 12, 24Vac/dc                                  | 12, 24Vac/dc                | 12, 24Vac/dc                                  | 12, 24Vac/dc   |   |            |
| <b>Probe inputs</b>              |   |   |                             |   |  |   |            |
| NTC/PTC                          | 5 config                                      | 5 config                                      | 4 config                    | 5 config                                      | 5 config   |   |            |
| NTC/PTC/4÷20mA/0÷5V              | 3 config                                      | 3 config                                      | 2 config                    | 3 config                                      | 3 config   |   |            |
| <b>Digital inputs</b>            |   |   |                             |   |  |   |            |
| Free voltage                     | 9 config                                      | 9 config                                      | 11 config                   | 9 config                                      | 9 config   |   |            |
| <b>Relay outputs</b>             |   |   |                             |   |  |   |            |
| 5A                               | 5 config                                      | 5 config                                      | 6 config                    | 7 config                                      | 7 config   |   |            |
| <b>Other outputs</b>             |   |   |                             |   |  |   |            |
| Analogs                          | 2xPWM<br>0÷10V<br>4÷20mA<br>1x0÷10V<br>4÷20mA | 2xPWM<br>0÷10V<br>4÷20mA<br>1x0÷10V<br>4÷20mA | 2xPWM<br>0÷10V<br>2x0÷10V   | 2xPWM<br>0÷10V<br>4÷20mA<br>1x0÷10V<br>4÷20mA | 2xPWM<br>0÷10V<br>4÷20mA<br>2x0÷10V<br>1x0÷10V<br>4÷20mA | 2xPWM<br>0÷10V<br>4÷20mA<br>1x0÷10V<br>4÷20mA |            |
| LAN                              | pres  | pres  | pres                        | pres  | pres   |   |            |
| RS485                            | pres  | pres  | pres                        | pres  | pres   |   |            |
| TTL/Hot Key 64/Prog Tool Kit     | pres  | pres  | pres                        | pres  | pres   |   |            |
| <b>Other</b>                     |   |   |                             |   |  |   |            |
| Remote keyboard                  | 1xTI620<br>2xVI622                            | VGI820  | 2xVICX620                   | 1xTI620<br>2xVI622                            | VGI820   | 2xVICX620                                     |            |
| Buzzer                           | pres  | pres  | pres                        | pres  | pres   | pres  |            |
| Real time clock                  | opt   | opt   | opt                         | opt   | opt  | opt   |            |
| Connection kit                   | DWDE30-KIT                                    | DWDE30-KIT                                    | CWCXA15-KIT,<br>CWCXA30-KIT | DWDE30-KIT                                    | DWDE30-KIT   | CWCXB15-KIT,<br>CWCXB30-KIT                   | DWDE30-KIT |
| Expansion module                 | ICX207D                                       | ICX207D                                       | ICX207D                     | ICX207D                                       | ICX207D  | ICX207D                                       |            |

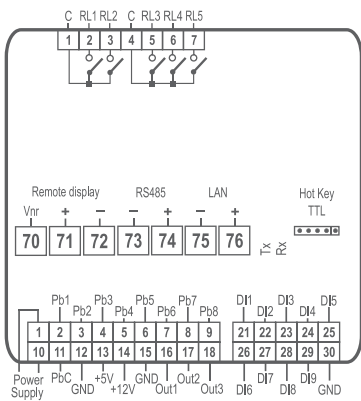
### IC206CX



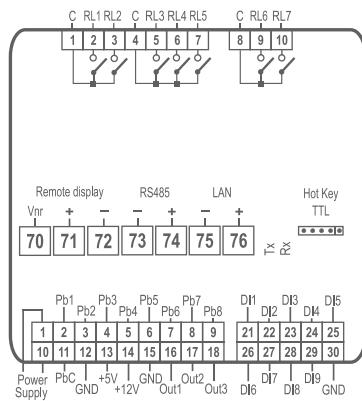
### IC208CX



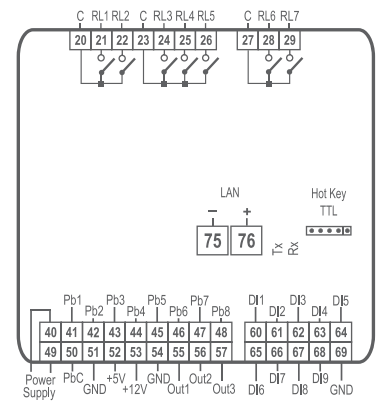
### IC205D



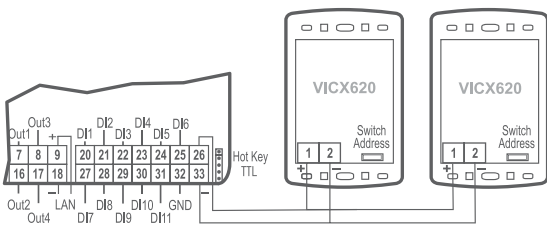
### IC207D



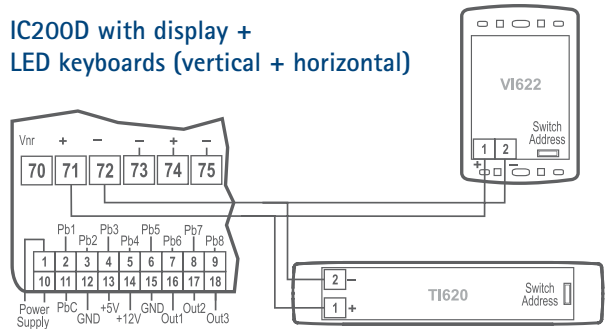
### ICX207D



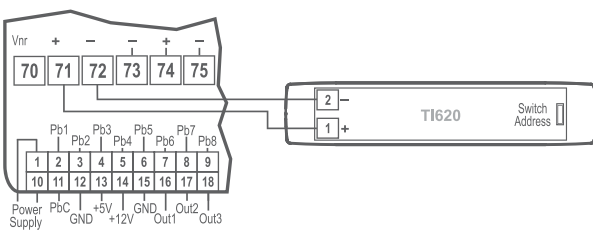
### IC200CX + LED keyboards (vertical)



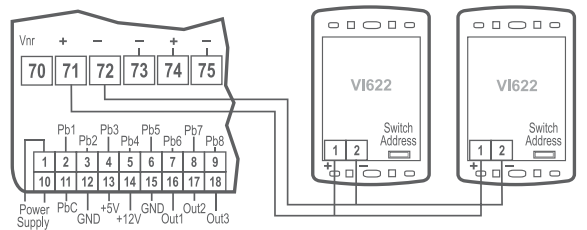
### IC200D with display + LED keyboards (vertical + horizontal)



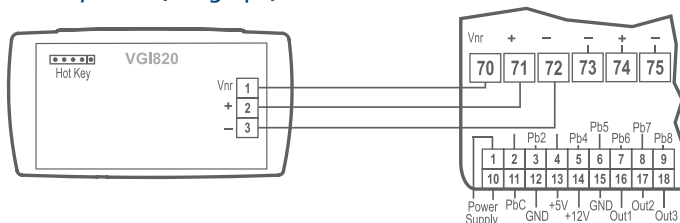
### IC200D with display + LED keyboard (horizontal)



### IC200D with display + LED keyboards (vertical + vertical)



### IC200D without display + LCD keyboard (visograph)



## TECHNICAL DATA

|                                   |  |
|-----------------------------------|--|
| Housing                           | self extinguishing ABS   |
| Format                            | CX: frontal 32x74mm; depth 59,5mm<br>D: frontal 110x70mm; depth 59,5mm                                     |
| Display                           | models with display: 4 digits red LED + 4 digits yellow LED + icons  |
| Mounting                          | CX: panel mounting in a 29x71mm cut-out<br>D: DIN Rail or wall mounting through integrated brackets        |
| Front protection                  | CX: IP65   |
| Connections                       | disconnectable connectors  |
| Power supply                      | 12Vac/dc -10% ÷ +15%, 24Vac/dc ±10% 50/60Hz  |
| Power absorption                  | 10VA max   |
| Relay outputs                     | SPDT 5(2)A, 250Vac   |
| Analog output                     | CX: 2xPWM/0÷10V<br>2x0÷10V<br>D: 2xPWM/0÷10V/4÷20mA<br>1x0÷10V/4÷20mA                                      |
| Data storing                      | non-volatile memory (EEPROM)   |
| Operating temperature             | -10÷55°C (14÷131°F)  |
| Storage temperature               | -30÷85°C (-22÷185°F)   |
| Relative humidity                 | 20÷85% (non condensing)  |
| Measuring and regulation range    | pressure probe: 0÷50bar (0÷725PSI)<br>NTC probe: -50÷110°C (-58÷230°F)<br>PTC probe: -50÷150°C (-58÷302°F) |
| Resolution                        | 0,1°C or 1°F or 0,1bar or 1PSI   |
| Accuracy (at ambient temperature) | ± 0.7°C ± 1 digit  |

## HOW to ORDER

IC200CX 

|   |   |   |   |  |   |   |   |   |   |   |   |   |
|---|---|---|---|--|---|---|---|---|---|---|---|---|
| I | C | 2 | 0 |  | C | X | - | A | 1 | C | 0 | 0 |
|---|---|---|---|--|---|---|---|---|---|---|---|---|

|   |
|---|
| A |
|---|

|   |
|---|
| C |
|---|

|                     |            |
|---------------------|------------|
| <b>Power supply</b> | <b>RTC</b> |
| 0 = 12Vac/dc        | 0 = No     |
| 1 = 24Vac/dc        | 1 = Yes    |

IC200D 

|   |   |   |   |  |   |   |   |   |   |   |   |
|---|---|---|---|--|---|---|---|---|---|---|---|
| I | C | 2 | 0 |  | D | - | A | B | C | 0 | 0 |
|---|---|---|---|--|---|---|---|---|---|---|---|

|   |
|---|
| A |
|---|

|   |
|---|
| B |
|---|

|   |
|---|
| C |
|---|

|                     |                |            |
|---------------------|----------------|------------|
| <b>Power supply</b> | <b>Display</b> | <b>RTC</b> |
| 0 = 12Vac/dc        | 0 = No         | 0 = No     |
| 1 = 24Vac/dc        | 1 = Yes        | 1 = Yes    |

ICX207D 

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | C | X | 2 | 0 | 7 | D | - | A | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

|   |
|---|
| A |
|---|

|                     |
|---------------------|
| <b>Power supply</b> |
| 0 = 12Vac/dc        |
| 1 = 24Vac/dc        |