

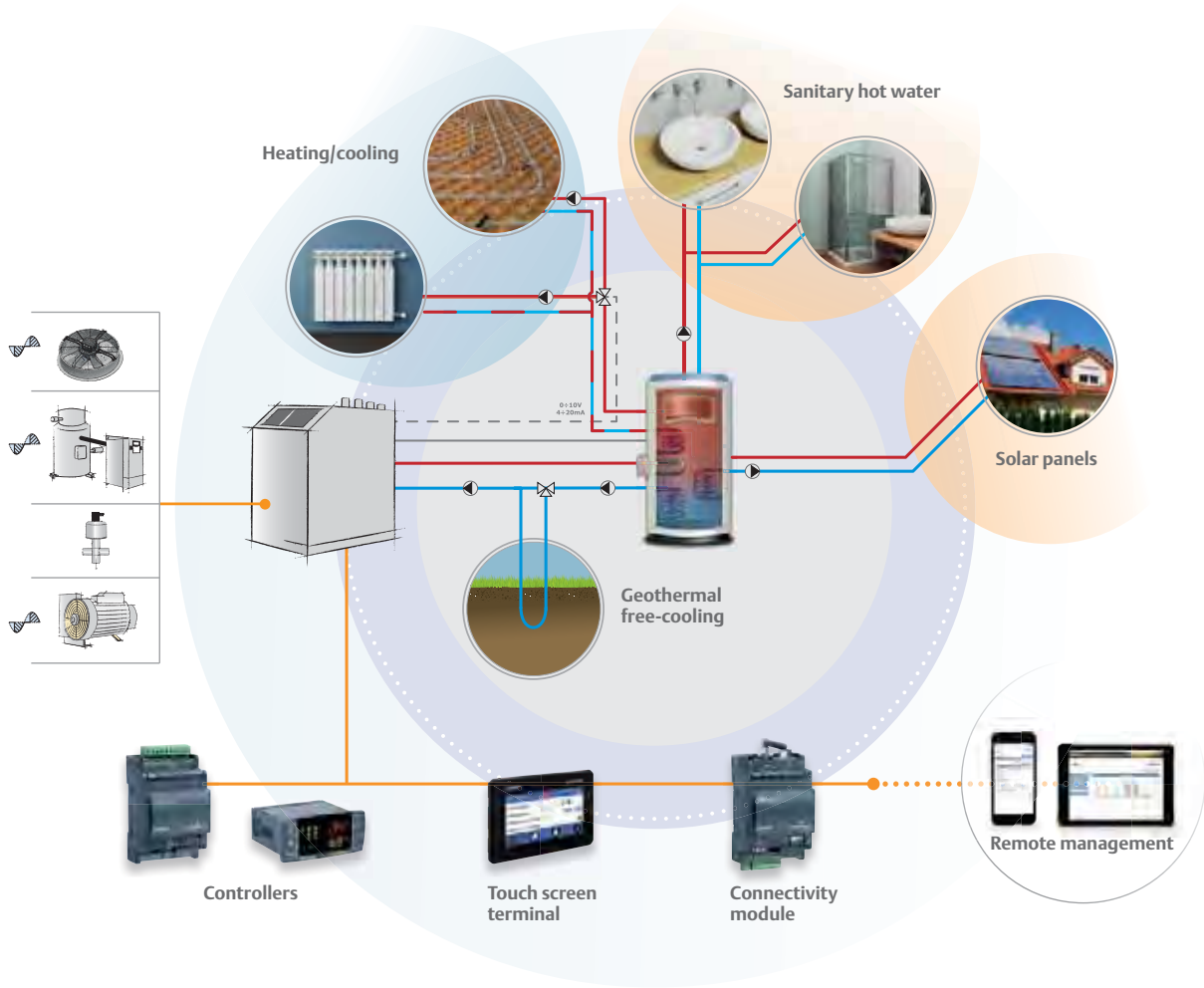
# IC200 evo SERIES

2-CIRCUIT up to 6-COMPRESSOR UNIT  
CONTROLLERS with EEV MANAGEMENT

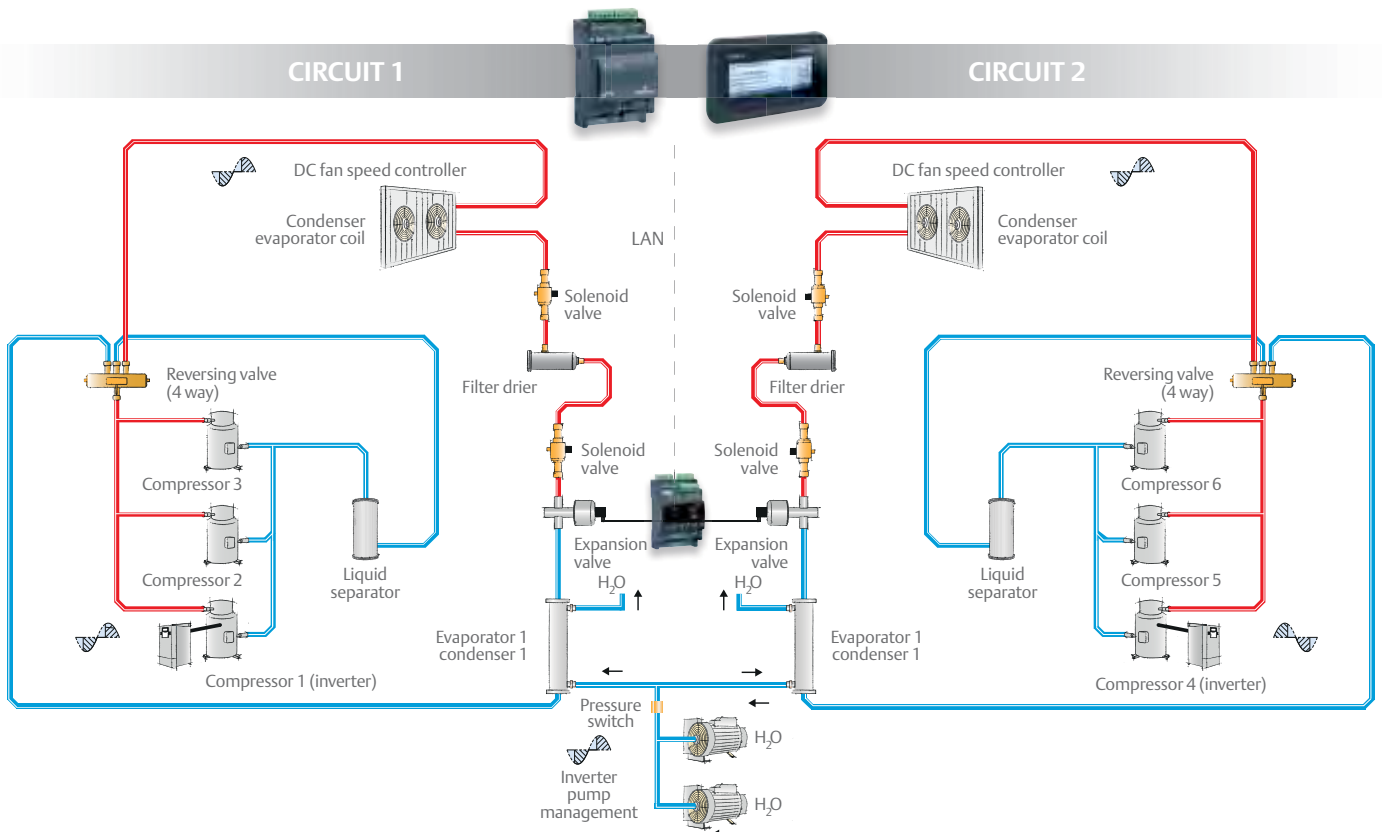


**IC200 evo** is the iCHILL evolution series of controllers, dedicated to **chiller and heat pump units**. Compactness, extreme flexibility, driver control for the electronic expansion valves and advanced functions such as free cooling and sanitary hot water production are only some of the main elements that make the series complete and suitable for the majority of plants. Controlled units can be **single or dual circuit with 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
- Identification of the compressors to activate based on the n° of hours/start-ups
- Data logger up to 100 alarms (alarm type, date, hours, machine status)
- Pump-down function (stop and start)
- Capacity function of machine power during critical functioning conditions
- 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
- Master/Slave function in combination with IPM500D module (see page 30)
- Heat recovery management
- Free-cooling management



## 2-CIRCUIT up to 6-COMPRESSOR MANAGEMENT

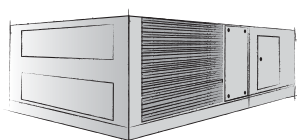


## HIGH CONNECTIVITY

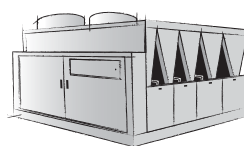
The high connectivity that marks these controllers ensures communication with the main devices of the HVAC world such as drivers for the electronic expansion valve management, modules for fans speed control and monitoring systems.



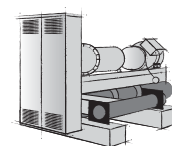
## MACHINE TYPES



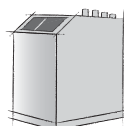
ROOF-TOP AIR/AIR



AIR/WATER



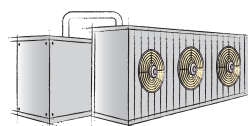
WATER/WATER



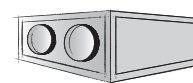
GEO THERMAL HEAT PUMP



DRYERS



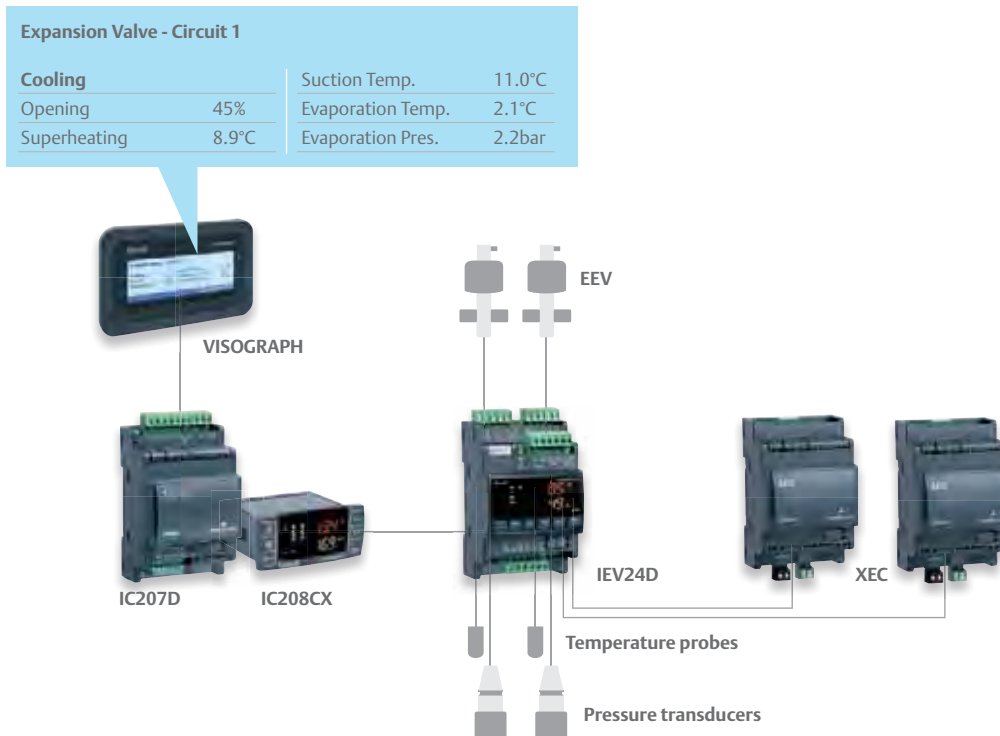
MOTOR-CONDENSING



HEAT RECOVERY UNIT

## POSSIBLE COMBINATIONS

In plants which require the use of IC200 evo, connected both to IEV and VISOGRAPH terminal, information on the driver operation can be viewed in a full and detailed way directly on VISOGRAPH interface.



Here there are some of the possible combinations including IC200 evo controllers. ICX207D expansion module and IEV22/24D drivers for EEV management.

### UNIT CONTROL with 2 CIRCUITS up to 4 COMPRESSORS



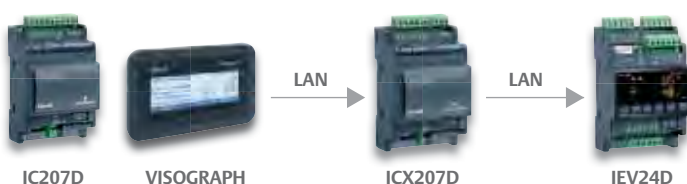
- 1 circuit - 4 compressors
- 2 circuits - 2 compressors per circuit
- 2 circuits - 1 screw compressor per circuit
- 2 circuits - 1 inverter compressor + 1 ON/OFF compressor per circuit

### UNIT CONTROL with 2 CIRCUITS up to 6 COMPRESSORS

#### BUILT-IN DISPLAY VERSION



#### LCD DISPLAY VERSION



- 1 circuit - 6 compressors
- 2 circuits - 3 compressors per circuit
- 2 circuits - 1 screw compressor per circuit
- 2 circuits - 1 inverter compressor + 2 ON/OFF compressors per circuit

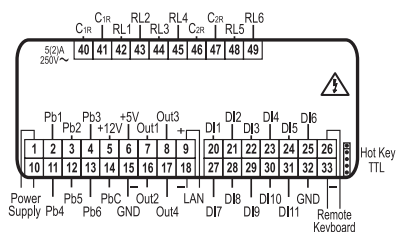
UP to 2 CIRCUITS and 6 COMPRESSORS with EEV MANAGEMENT UNIT CONTROLLERS



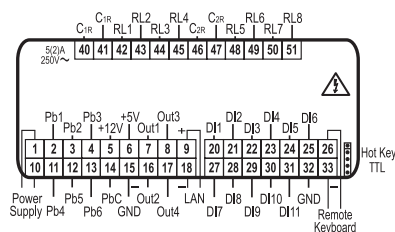
|                |                                                                                                  |
|----------------|--------------------------------------------------------------------------------------------------|
| <b>IC205D</b>  | Controllers for chillers and heat pumps with 5 relay outputs<br>(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<br>(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                                                            |

[illegible]

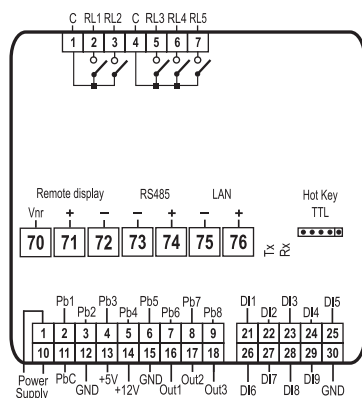
## IC206CX



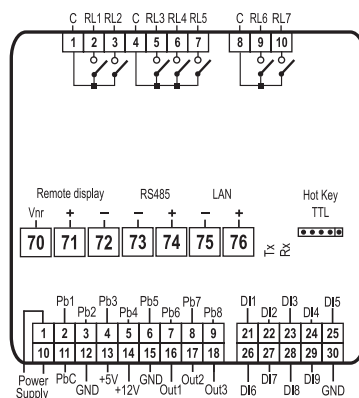
## IC208CX



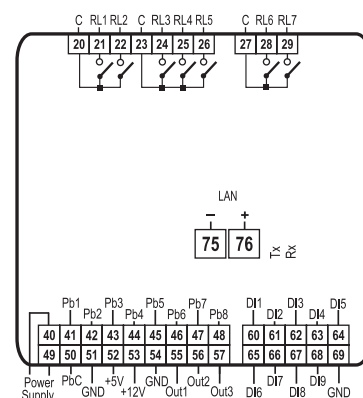
## IC205D



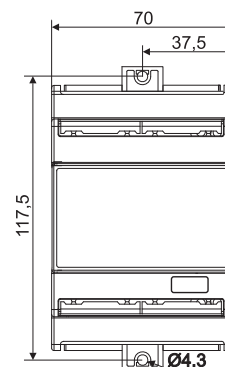
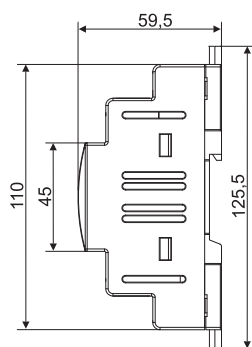
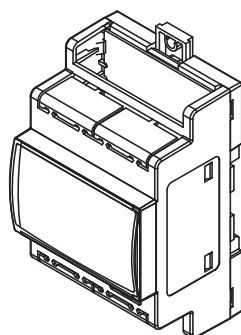
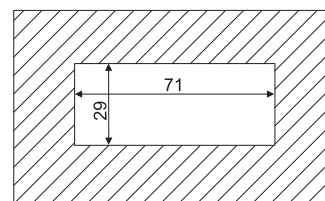
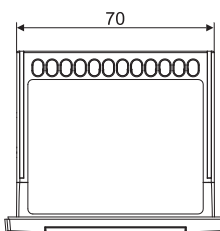
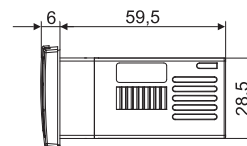
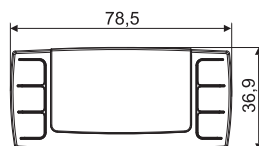
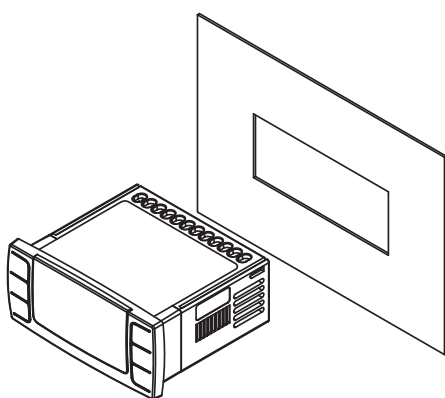
## IC207D



## ICX207D



## DIMENSIONS & CUT-OUT



## TECHNICAL DATA

|                                          |                                                                                                            |
|------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Housing</b>                           | self-extinguishing ABS                                                                                     |
| <b>Format</b>                            | CX: frontal 32x74mm; depth 59,5mm<br>D: frontal 110x70mm; depth 59,5mm                                     |
| <b>Display</b>                           | models with display: 4 digits red LED + 4 digits yellow LED + icons                                        |
| <b>Mounting</b>                          | CX: panel mounting in a 29x71mm cut-out<br>D: DIN Rail or wall mounting through integrated brackets        |
| <b>Front protection</b>                  | CX: IP65                                                                                                   |
| <b>Connections</b>                       | disconnectable connectors                                                                                  |
| <b>Power supply</b>                      | 12Vac/dc -10% ÷ +15%, 24Vac/dc ±10% 50/60Hz                                                                |
| <b>Power absorption</b>                  | 10VA max                                                                                                   |
| <b>Relay outputs</b>                     | SPST 5(2)A, 250Vac                                                                                         |
| <b>Analog inputs</b>                     | CX: 2xPWM/0÷10V<br>2x0÷10V<br>D: 2xPWM/0÷10V/4÷20mA<br>1x0÷10V                                             |
| <b>Data storing</b>                      | non-volatile memory (EEPROM)                                                                               |
| <b>Operating temperature</b>             | -10÷55°C (14÷131°F)                                                                                        |
| <b>Storage temperature</b>               | -30÷85°C (-22÷185°F)                                                                                       |
| <b>Relative humidity</b>                 | 20÷85% (non condensing)                                                                                    |
| <b>Measuring and regulation range</b>    | pressure probe: 0÷50bar (0÷725PSI)<br>NTC probe: -50÷110°C (-58÷230°F)<br>PTC probe: -50÷150°C (-58÷302°F) |
| <b>Resolution</b>                        | 0,1°C or 1°F or 0,1bar or 1PSI                                                                             |
| <b>Accuracy (at ambient temperature)</b> | ±0,8°C (±1°F)                                                                                              |

## HOW to ORDER

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

**IC200CX**

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

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

**IC200D**

| 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    |

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

**ICX207D**

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