CX: 32x74mm

IC200CX –1 OR 2 CIRCUIT – UP TO 4 STEP CONTROLLERS

The necessities of the dynamic world of conditioning find the answer in the **IC200CX** controllers. This series, allows management and control **of chillers, heat pumps and geothermal heat pump units** (with **solar** integration and **sanitary hot water** production) with single or dual circuits "gas and water reversibility" and up to 4 steps. By means of a compact instrument, the possibility of controlling and managing system like:

air/air – "roof top"
air/water
water/water
motor–condensing

PLUS

- Single circuit/compressor stand-by through key
- LAN for master/slave connection
- Combined/forced defrosting
- Alarm control, even in stand-by or remote off
- Pump-down function (stop and start)
- PWM/4÷20mA/0÷10V output for condensing management
- Temperature/pressure unloading function
- Screw compressor management
- Compressor rotation control (also from start/hour number)
- Direct, part-winding, star-delta compressor start
- Dynamic set point
- Geothermal free cooling management
- Compressor management through inverter
- EEV management
- Start and stop by time bands (from RTC)
- Energy saving by time bands (from RTC or digital input)
- Easy programming through HOT KEY 64 or PC (PROG TOOL KIT)
- TTL (convertible in RS485) serial output with ModBUS protocol

DISPLAY ICON	MEANING
°C	Celsius degrees
°F	Fahrenheit degrees
bar	Bar
PSI	PSI
🔥1	Compressor 1
🔥2	Compressor 2
☀	Unit on - heat pump status
❄	Unit on – chiller
❄❄	Defrost start delay / Defrost on
🕐	RTC
⟳	Water pump – Supply fan
♨	Anti-freezing heater
⚠	Generic alarm
Cir1	Circuit 1
menu	Function menu

COMPLETE

The **dual display** and the **icons** display complete information about the machine status. With a single touch of one key, all main functions of the cooling system are displayed without the need to enter programming mode.

DISPLAY	MEANING
✺	Condenser fan
⧄	Open collector output on
Cir2	Circuit 2
Vset	Dynamic set / Energy saving on
Flow!	Flow alarm

CONNECTIONS

All the controllers of the ICHILL series, have connection for quick wiring.

ALARM MANAGEMENT

The user interface give complete visual information about the plant status and allow the acknowledgement of the alarm events signals.

Each alarm has a dedicat label
(eg. C1tr: thermal compressor 1 alarm)
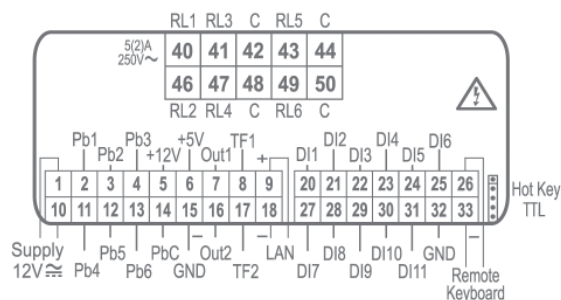
Alarm reset protects by password
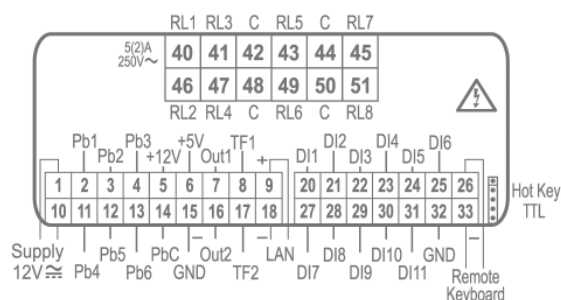
Internal data logger (up to 100 events)

CONTROLLED DEVICES

- 1 circuit - 1 compressor up to 4 steps management
- 2 circuits - 1 compressor with 1 capacity stages management
- 2 circuits - 1 compressor for circuit management
- Management of up to 2 evaporator section and 2 condenser section water pumps
- Management of up to 2 proportional or ON/OFF outputs 0÷10V
- 2 configurable 0÷10V AUX outputs
- 2 remote LED keyboard management
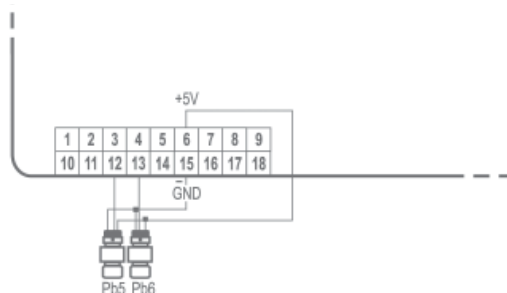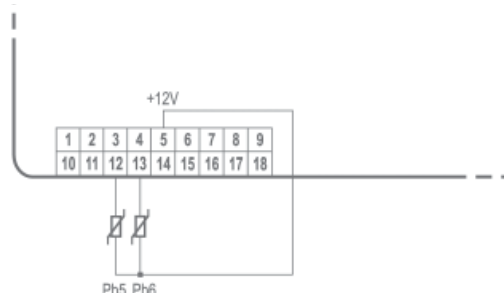- 1 remote LCD (VISOGRAPH) keyboard management

IC206CX

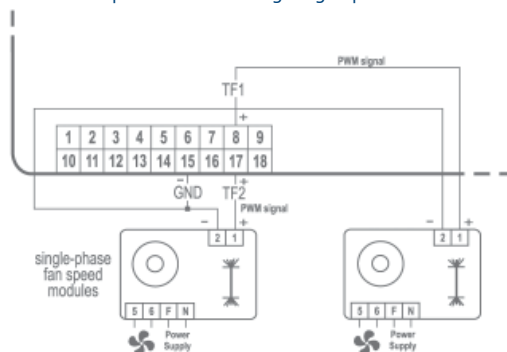| | | | | | | | | | | | RL1 | RL3 | C | RL5 | C | | |
5(2)A 250V~											40	41	42	43	44	
											46	47	48	49	50	
											RL2	RL4	C	RL6	C	

Pb1 Pb3 +5V TF1 DI2 DI4 DI6
Pb2 +12V Out1 + DI1 DI3 DI5

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Hot Key |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | 27 | 28 | 29 | 30 | 31 | 32 | 33 | TTL |

Supply Pb5 PbC Out2 LAN DI8 DI10 GND
12V⎓ Pb4 Pb6 GND TF2 DI7 DI9 DI11 Remote Keyboard

IC208CX

											RL1	RL3	C	RL5	C	RL7
5(2)A 250V~											40	41	42	43	44	45
											46	47	48	49	50	51
											RL2	RL4	C	RL6	C	RL8

Pb1 Pb3 +5V TF1 DI2 DI4 DI6
Pb2 +12V Out1 + DI1 DI3 DI5

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Hot Key |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | 27 | 28 | 29 | 30 | 31 | 32 | 33 | TTL |

Supply Pb5 PbC Out2 LAN DI8 DI10 GND
12V⎓ Pb4 Pb6 GND TF2 DI7 DI9 DI11 Remote Keyboard

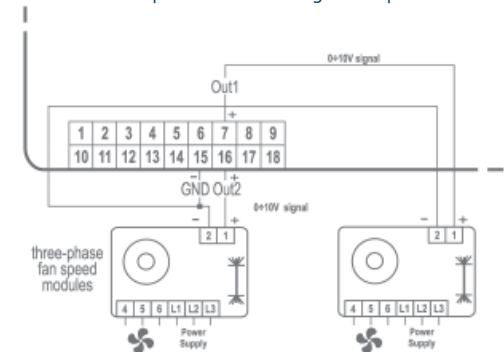### Analogue input for ratiometric pressure transducer PPR30 (0÷5V signal)

Analogue input for pressure transducer PP30 (4÷20mA signal)

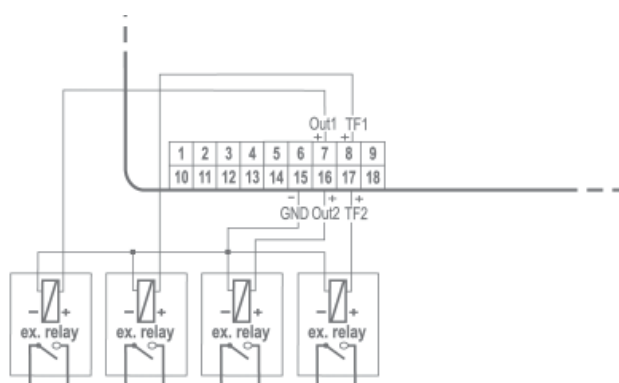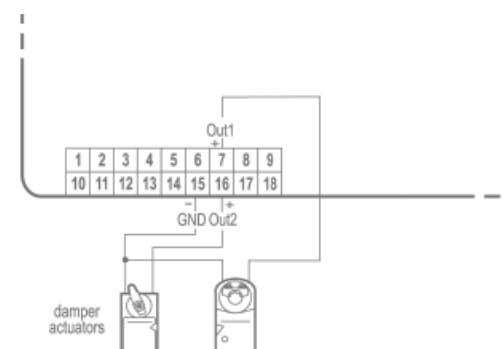### PWM output for condensing single-phase fans

0÷10V output for condensing three-phase fans

Proportional outputs configured for aux relay control

Proportional outputs configured for damper control (0÷10V)

EXAMPLE OF APPLICATION FOR 2 CIRCUIT UP TO 2 COMPRESSOR AIR/WATER CHILLER