



CX: 32x74mm



IC100 SERIES: 1 CIRCUIT up to 2 COMPRESSOR UNIT CONTROLLERS

IC100CX is Dixell's answer to real management and control requirements of **chiller units and heat pumps** single circuit (gas and water reversibility) with up to two compressors or a single compressor with capacity stages, by means of a compact instrument with the possibility of controlling units like: **air/air, air/water, water/water, motor-condensing**.

- Twin compressor functioning
- Function of compressor capacity stages for high and low condensing pressure
- ON/OFF or variable speed condensing fan control without the need to use external devices
- Forced and combined defrost
- Energy saving for time band or digital contact
- Internal data logger with up to 50 alarms
- Real time clock
- Voltage output for additional external relay management
- 4÷20mA/0÷10V output for condensing fan management
- Analog input configurable as NTC, 4÷20mA and 0÷5V ratiometric
- Configurable relays, probes and digital inputs
- Easy programming through HOT KEY or PC (WIZMATE PROG TOOL KIT)
- TTL (convertible in RS485) serial output with ModBUS protocol
- Quick tab connectors on all models



ICON	MEANING
°C	Celsius degrees
°F	Fahrenheit degrees
bar	Bar
PSI	PSI
1	Compressor 1
2	Compressor 2
☀	Unit ON – heat pump status (configurable as chiller)
❄	Unit ON – chiller status (configurable as heat pump)
❄	Defrost start delay/Defrost ON
🕒	Clock
🚰	Water pump – Supply fan
🔥	Anti-freezing heater – Boiler
⚠	Alarm
LP	Low pressure alarm
⊕ menu	Function menu
↕	Arrow keys

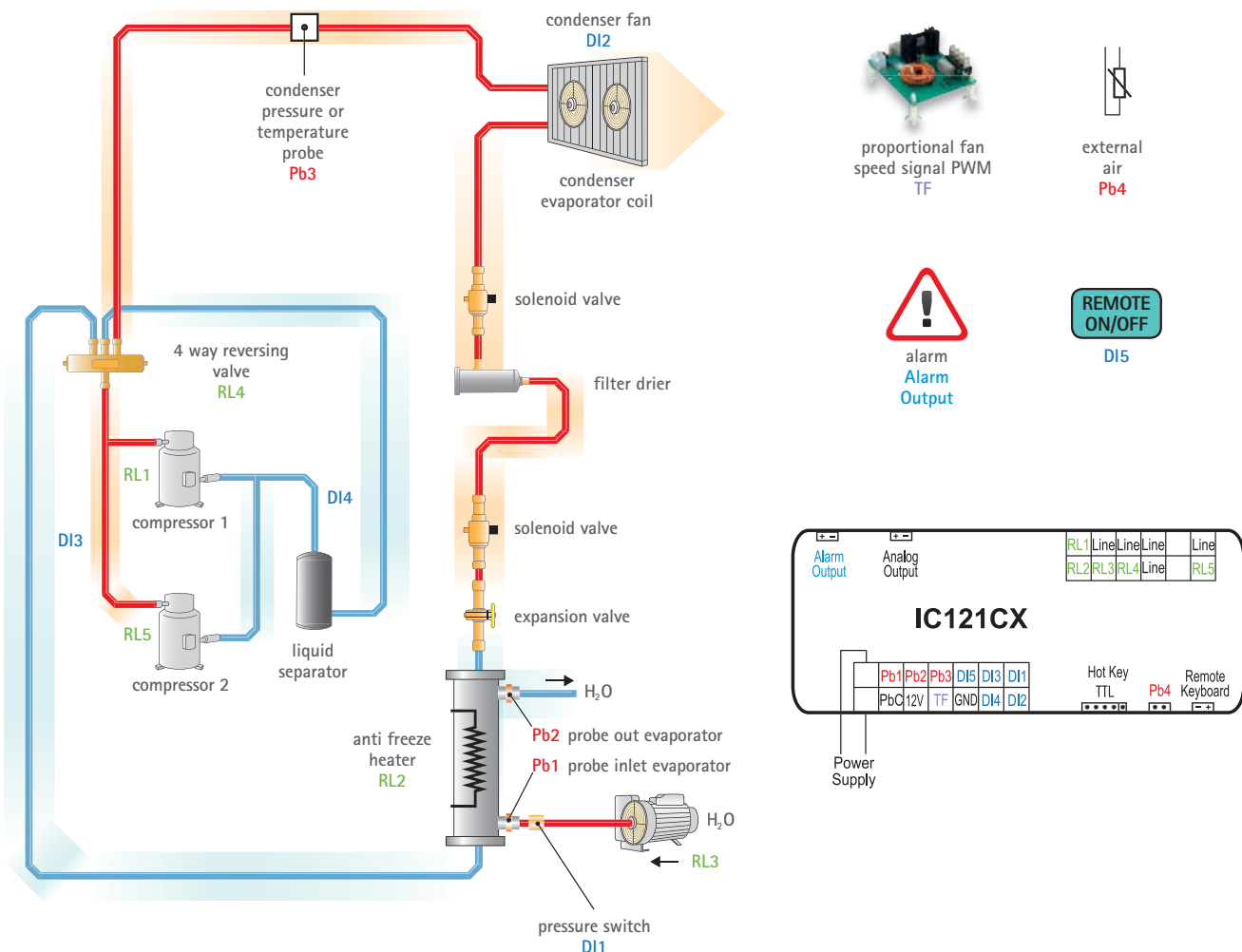


COMPLETE

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.

ICON	MEANING
🌀	Condenser fan
⚡	Voltage output ON for external relay
HP	High pressure alarm
Vset	Dynamic set/Energy saving ON
Flow!	Flow alarm

EXAMPLE of APPLICATION for 1 CIRCUIT up to 2 COMPRESSOR AIR/WATER CHILLER



IC100

1 CIRCUIT up to 2 COMPRESSOR UNIT CONTROLLERS



CX: 32x74mm

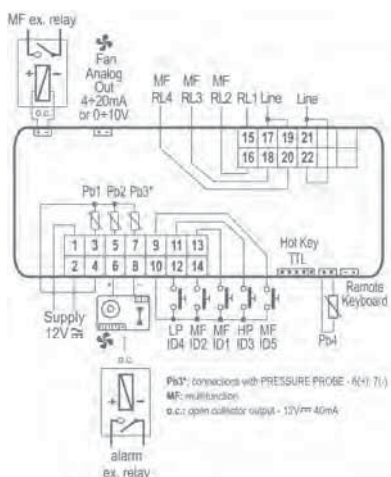
IC110CX	Advanced multifunction controller for chiller with 1 circuit and 1 compressor
IC111CX	Advanced multifunction controller for chiller/heat pump with 1 circuit and 1 compressor
IC120CX	Advanced multifunction controller for chiller with 1 circuit and 2 compressors
IC121CX	Advanced multifunction controller for chiller/heat pump with 1 circuit and 2 compressors

FEATURES	IC110CX - IC111CX	IC120CX - IC121CX
First display: n° digits	± 4 d.p.	± 4 d.p.
Second display: n° digits	± 4 d.p.	± 4 d.p.
Power supply	12, 24Vac/dc	12, 24Vac/dc
Probe inputs		
Pb1	NTC	NTC
Pb2	NTC	NTC
Pb3	NTC/4÷20mA/0÷5V config	NTC/4÷20mA/0÷5V config
Pb4	NTC/ID config	NTC/ID config
Digital inputs		
High pressure	pres	pres
Low pressure	pres	pres
N° 3 + 1(Pb4)	config	config
Relay outputs		
RL1 Compressor 1	°8A	8A
RL2	°8A config	8A config
RL3	8A config	8A config
RL4	°8A config	8A config
RL5	°8A config opt	8A config
Other outputs		
Analog output for fan control	4÷20mA/0÷10V opt	4÷20mA/0÷10V opt
Signal for fan speed control	*PWM	PWM
Voltage output for external relay	12Vdc-40mA max	12Vdc-40mA max
TTL/Hot Key/Prog Tool Kit	pres	pres
Other		
Triac inside	2A opt	VICX610
Remote keyboard	VICX610	VICX610
Buzzer	opt	opt
Real time clock	opt	opt
Connection kit	CF-KIT, CAB/CJ15, CAB/CJ30, CW15-KIT, CW25-KIT	CF-KIT, CAB/CJ15, CAB/CJ30, CW15-KIT, CW25-KIT

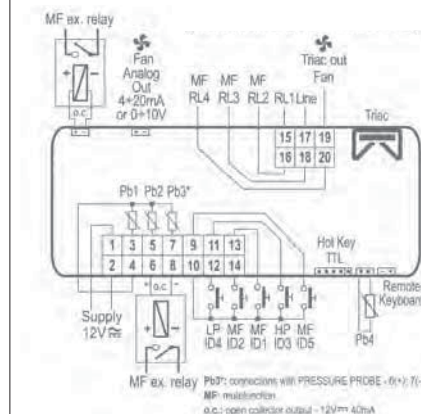
° With triac module: RL1 = 5A - RL2 = 5A - RL4 = 5A config - RL5 = not present - Connection kit: CWC15-KIT

* The PWM output is substituted for the output for the external relay driver when the triac is inside

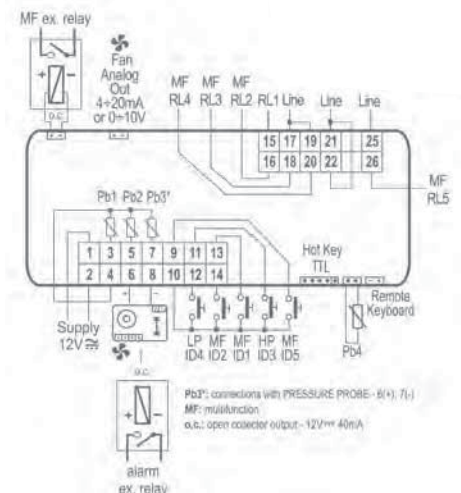
IC110CX - IC111CX



IC110CX - IC111CX (triac module inside)



IC120CX - IC121CX



TECHNICAL DATA

Housing	self extinguishing ABS
Format	frontal 32x74mm; depth 59,5mm
Display	4 digits red LED + 4 digits yellow LED + icons
Mounting	panel mounting in a 29x71mm cut-out
Front protection	IP65
Connections	disconnectable connectors 12-14 or 14-6 pins
Power supply	12Vac/dc -10% ÷ +15%, 24Vac/dc ±10% 50/60Hz
Power absorption	5VA max
Relay outputs	SPDT 8(3)A, 250Vac (SPDT 8(3)A + 3 SPST 5(2)A; 250Vac for model with triac)
External relay output	12Vdc - 40mA max
Analog outputs	PWM signal (single-fan module) 4÷20mA (fan module) 0÷10V (fan module)
Data storing	non-volatile memory (EEPROM)
Operating temperature	-10÷60°C (14÷140°F)
Storage temperature	-30÷85°C (-22÷185°F)
Relative humidity	20÷85% (non condensing)
Measuring and regulation range	pressure probe: 0÷50bar NTC probe: -40÷110°C (-40÷230°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

IC100 I C 1 C X - A B C D 0

A	B	C				D	
Power supply	Regulation inputs	IC110CX / IC111CX – Options				Buzzer	RTC
0 = 12Vac/dc 1 = 24Vac/dc	0 = 4xNTC 1 = 3xNTC + 4÷20mA 2 = 3xNTC + 0÷5V	4÷20mA	Aux	Triac 2A	0÷10V	0 = No 1 = Yes 2 = No 3 = Yes	No No Yes Yes
		0 = No 1 = No 2 = Yes 3 = Yes 4 = No 5 = No 6 = No 7 = No	No Yes No Yes No No Yes No	No No No Yes No No No Yes	No No No No Yes Yes Yes Yes		
		IC120CX / IC121CX – Options					
		4÷20mA		0÷10V			
		0 = No 1 = Yes 2 = No		No No Yes			