



TRANE **CUBE**

*Air-cooled
Chillers and Heat Pumps*

15-40 kW

Systems



TRANE **CUBE**

Small chillers / heat pumps



TRANE

TRANE CUBE

*Air-Cooled Scroll Chillers
and Heat Pumps*

Model CGB
Cooling capacity 17 - 39 kW

Model CXB
Cooling capacity 16 - 33 kW
Heating capacity 17 - 39 kW

IR Ingersoll Rand.



17 – 40 kW

17 – 40 kW



- ✓ Tandem scroll compressors on single circuit
- ✓ Electronic expansion valve
- ✓ Microprocessor controller Dixell I-Chill
- ✓ Capacity steps 0 - 50% - 100%
- ✓ Temperature control on outlet water
- ✓ Inverter driven fans (optional) with optimized fan control
- ✓ Brazed plate HX with differential pressure switch and antifreeze protection electric heater
- ✓ All models only 78 cm depth !
- ✓ Electrical panel with main switch



17 – 40 kW

17 – 40 kW

*Extensive testing in Epinal (F)
Eurovent certified laboratory*

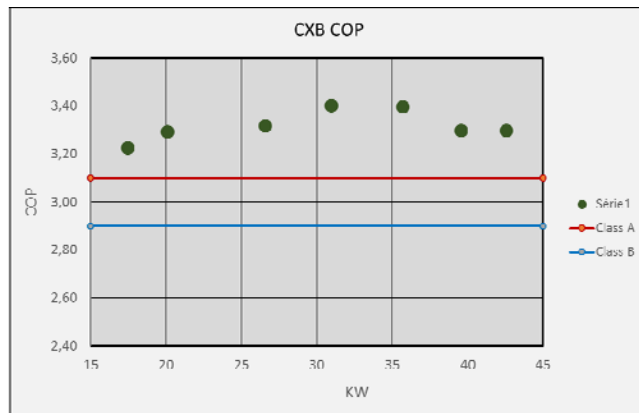
- ✓ High seasonal efficiencies and Ecodesign compliance
 - All CXB: Ecodesign efficiency class A+
 - CGB: Eurovent class A or B
- ✓ Competitive to inverter driven products from competition
- ✓ Very small refrigerant charge due to micro-channel condenser (CGB)
 - All CGB units: 5 or 6 kg of R410A
- ✓ CGB chiller: Cooling down to -10°C ambient air temperature
- ✓ CXB heat pump: Hot water 40°C at -15°C ambient air temperature

Chiller version
General data

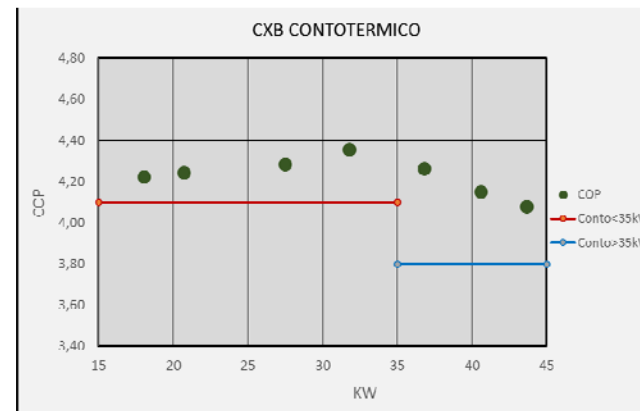
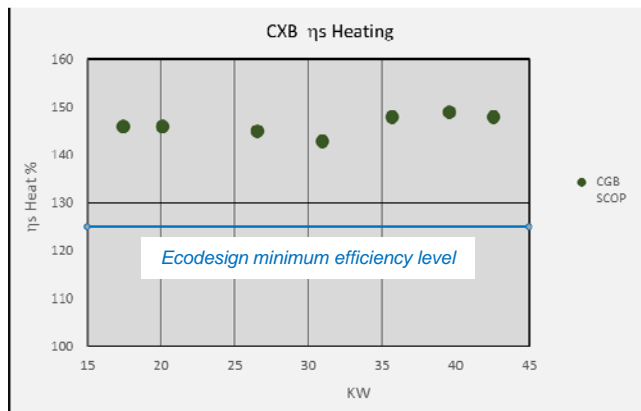
High Sustainability + Low Operating Costs

CGB	Unit size	017	020	025	028	033	036	039
COOLING EN 14511 VALUE (1)								
Total cooling capacity	kW	17.0	20.1	24.6	28.3	33	36	39
Total power input	kW	5.2	5.9	7.7	8.8	10.6	12.2	13.4
Total EER		3.25	3.41	3.19	3.20	3.09	2.94	2.90
Eurovent class		A	A	A	A	B	B	B
Water flow	m ³ /h	<i>Eurovent Class A</i>				5.62	6.16	6.66
Water pressure drop	kPa					30.1	35.6	40.9
SEASONAL EFFICIENCY ACCORDING TO EN 14825 (2)								
P rated	kW	17.0	20.1	24.6	28.3	33	36	39
η _{s, cooling}		165%	169%	163%	167%	154%	150%	149%
SEER		4.21	4.31	4.16	4.24	3.92	3.83	3.80
HYDRAULIC MODULE (OPTIONAL)								
Available pump pressure	kPa	84	63	99	87	65	104	79
Water tank volume	l	100	100	100	100	100	100	100
Volume of expansion vessel	l	1	1	1	1	1	1	1
COMPRESSORS								
Number of compressors		2	2	2	2	2	2	2
Number of refrigerant circuits		1	1	1	1	1	1	1
Type of control / part load steps		Step control / 2 steps						
Minimum capacity step	%	50%	50%	50%	50%	50%	50%	50%
Refrigerant charge (3)	kg	5 5 5 6 6 6 6						
Oil charge	kg	2.5	2.5	2.5	2.5	3.3	3.5	3.5



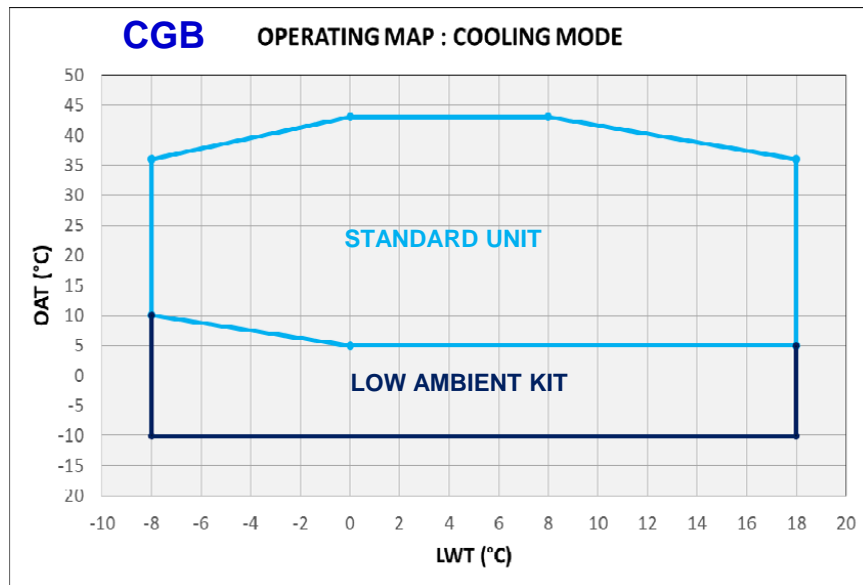


- ✓ Heating Efficiency Class A⁺
- ✓ Low Operating Costs
- ✓ Conto Termico approved (Italy)

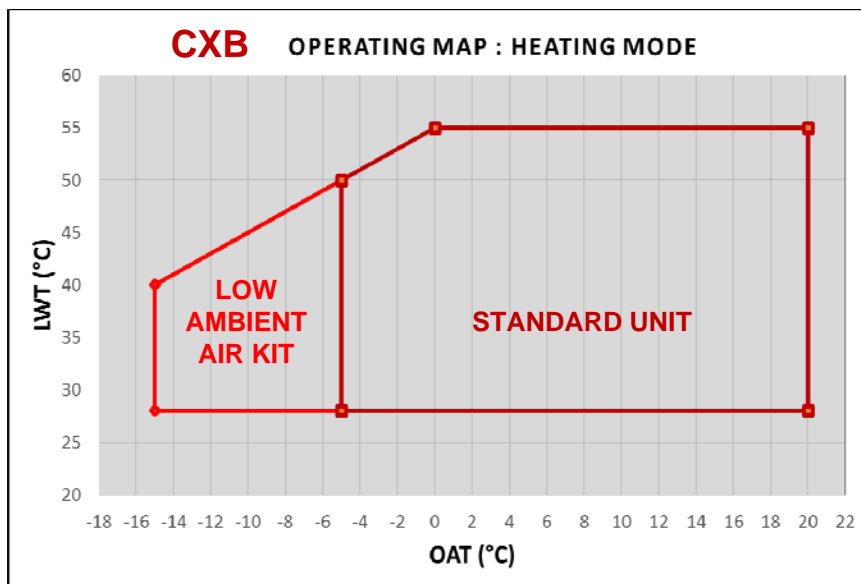




Operating Maps



- Standard ambient air temperature down to 5°C**
- ✓ Dual speed fans
 - ✓ Fan speed managed by electromechanical switch
- Low ambient air kit down to -10°C (optional)**
- ✓ EC fan motors / 0-10V signal
 - ✓ Heater in control panel
 - ✓ Dual insulation on Brazed Plate Heat Exchanger
 - ✓ Extended operating map compared to CGA



HEATING MODE

Standard ambient air temp. down to -5°C

- ✓ 2 speeds fans
- ✓ Optimized defrosting management

Low ambient air kit down to -15°C (optional)

- ✓ EC fan motors + Premium controller iPRO
- ✓ Heater in control panel
- ✓ Dual insulation on Brazed Plate Heat Exchanger
- ✓ Defrosting based on approach temperature
- ✓ Extended operating map compared to CXA



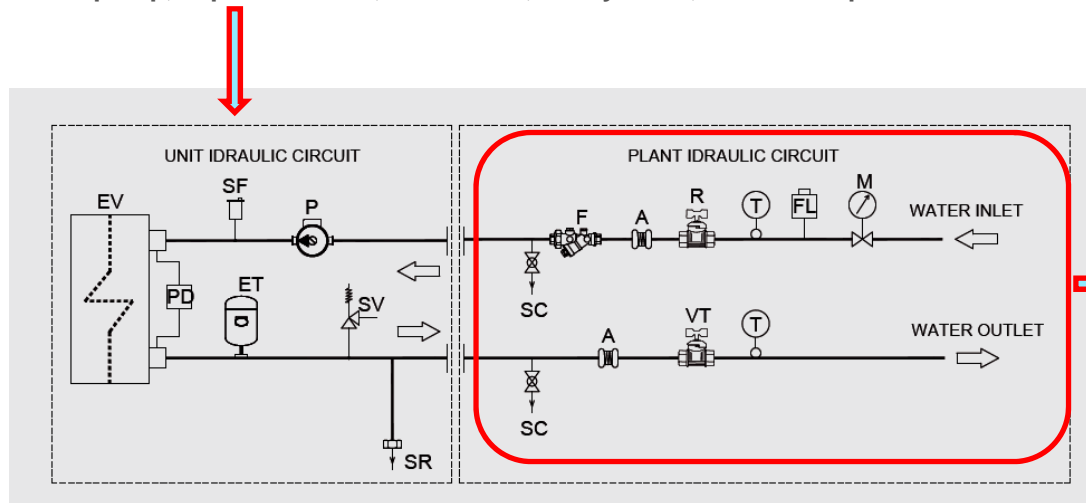
Options & Accessories

Hydraulic Version



Hydraulic kit with 1 Pump

Water pump, expansion tank, relief valve, safety valve, differential pressure switch



Loose options available in price list

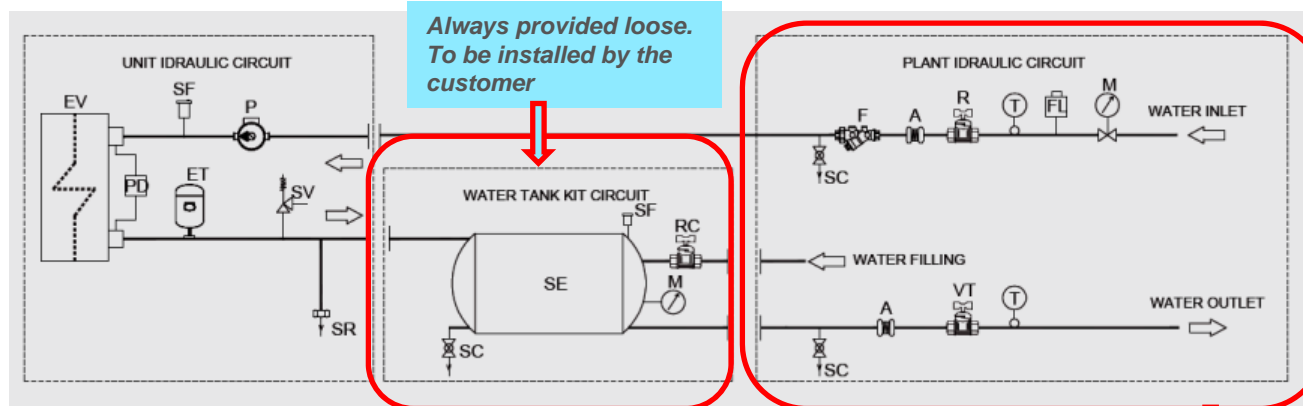
M	GAUGE	F	WATER STRAINER	PD	WATER DIFFERENTIAL PRESSURE SWITCH
FL	FLOW SWITCH	SC	DRAINAGE VALVE	ET	EXPANSION VESSEL
T	TERMOMETER	P	PUMP	SV	SAFETY VALVE
R	SHUT OFF VALVE	SF	RELIEF VALVE	SR	DISCHARGE / FILLING CAP
A	ANTIVIBRATION	EV	EVAPORATOR	VT	CALIBRATION VALVE

Hydraulic Version



Hydraulic kit with 1 pump + water tank

Water pump, expansion tank, relief valve, safety valve, differential pressure switch, built in water tank, water gauges and connection kit supplied loose



M	GAUGE	SC	DRAINAGE VALVE	SV	SAFETY VALVE
FL	FLOW SWITCH	P	PUMP	SR	DISCHARGE / FILLING CAP
T	TERMOMETER	SF	RELIEF VALVE	VT	CALIBRATION VALVE
R	SHUT OFF VALVE	EV	EVAPORATOR	SE	WATER TANK
A	ANTIVIBRATION	PD	WATER DIFFERENTIAL PRESSURE SWITCH	RC	FILLING VALVE
F	WATER STRAINER	ET	EXPANSION VESSEL		

Always provided as loose options

Water Tank



Water tank is provided as a loose component complete with

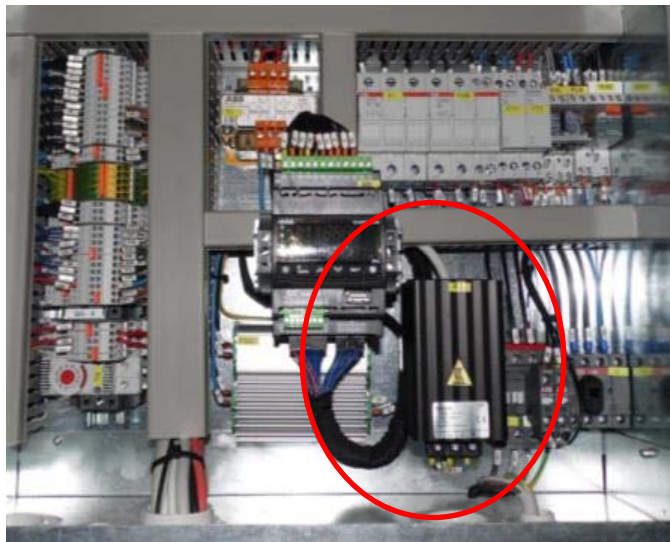
- base frame
- water gauges and
- connection kit for an easy installation

Installation of the water tank underneath the unit is at customer care

Mounted Accessories



Low ambient air temperature kit



CGB chiller includes:

- additional evaporator heater
- double insulation for evaporator
- control panel electric heater with thermostat

CXB heat pump includes:

- additional coil heater
- control panel electric heater with thermostat
- advanced electronic controller Dixell iPro with digital defrost function



Mounted Accessories



Compressors sound jackets



Compressors sound jackets also available as loose accessory

- Can be ordered as a Part

Mounted Accessories



Soft-starter

Reduces compressor inrush current

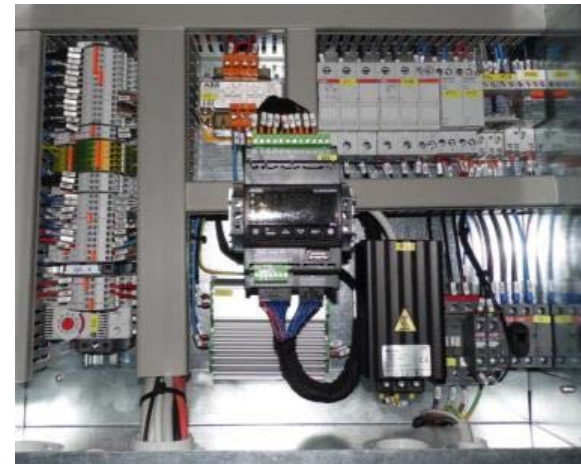


Over/under voltage + phase failure protection relay

To protect unit from power supply instability issues



Control panel electric heater with thermostat



Loose Accessories



Remote control display for basic unit equipped with iCHILL



Remote control display for units equipped with *iPro small* only for CXB heat pumps with low ambient kit



Communication card RS485

- *Optional for all units*
- *Standard for CXA units with low ambient air kit (with iPROSMALL controller)*

The installation is at customer care

Loose Accessories



Flow switch



Automatic water filling



The installation is at customer care

Loose Accessories



Water gauges



Water strainer



The installation is at customer care