# Chillquick Deco

Variable capacity control combined with free cooling









Significant energy and cost savings with continuously variable capacity control

The free cooling feature reduces operational costs A smart solution enables the use of colder liquid coolant for dehumidification Eco Design The option of having two cooling circuits with different temperatures

**Energy efficient** Meets the 2018 and 2021 requirements



# Saves space in machine room

Because the Chillquick Deco chilled water station can be installed outdoors, it saves space in the machine room. Often, a separate machine room is not required at all. The system can be equipped with an indoor unit with customisable water circuits. This enables cooling at two different temperatures.

#### Efficient dehumidification

Efficient dehumidification proceses are guaranteed with a separate dehumidification circuit with a brine temperature that is several degrees cooler than that of operating circuits. This solution achieves improved water separation in dehumidification.

# **Energy efficient**

The Chillquick Deco chilled water station's energy efficiency is based on reductions in the on-site time needed. its compressor's continuously variable In comparison with conventional water capacity control, which offers excellent efficiency, particularly at partial capacity.

The system can be equipped with a free cooling function, which reduces the overall need for compressor cooling, thereby introducing significant energy savings.

## An easy-to-use combo

The indoor and outdoor units communicate seamlessly with one another. Both units are controlled in a centralised manner via a user interface integrated into the indoor unit.

## Cost effective

The solution enables significant chiller systems, a substantial amount of time is saved.

The functional testing performed at the factory and the factory-assembled indoor unit play an important role in speeding up the on-site stage. All that needs to be performed on-site is the connecting of the units to one another and the property's cooling networks.

# Life cycle services

We look after our machines throughout their life cycles. The Service Next IoT service offers optimisation, documentation and maintenance in a single, reliable package.



## **Functionalities**

#### Options:

Chilled water station with free cooling, continuously variable capacity control Chilled water station without free cooling, continuously variable capacity control Water chiller with free cooling, continuously variable capacity control Water chiller without free cooling, continuously variable capacity control

## Standard accessories

**Cold circuits:** 1Si models come with a single circuit, 2Di and 3Di models are equipped with two separate refrigerant circuits Compressors: Scroll compressors with continuously variable capacity control Heating resistors and heat and overcurrent protection for the oil compartment.

Fans: EC fans with variable speed control.

Heat exchangers: plate heat exchangers made of stainless steel and an epoxy-coated condenser.

Electric expansion valves: optimal control of the refrigerant circuit's superheating function enhances energy efficiency

External adjustment of settings: 0-10 VDC signal

Flow switch

Standard colour: outdoor unit RAL7016

## Additional accessories

#### Brine and water circuits

P1 Pump (standard, booster, frequency convener)

V Water buffer tank

P2 Constant-temperature operating circuit VL Replacement connectors for the main

PSP Controlled operating circuit

P9 Dehumidification circuit

Refrigerant circuit

PCK Process use model YH/AH Customised evaporator

#### Mechanics

CR Sound proofing shells for compressors RTU Modbus RTU connection

VD Vibration control set

#### **Electronics**

CE2 Reactive power compensation

CE3 Soft starters

#### **Automation**

TCP Modbus TCP/IP connection

**BAC BACnet connection** SN Service Next IoT

MSC Master/slave automation

GCC Group controller automation

Other

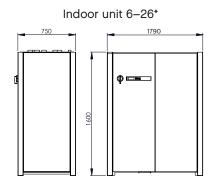
EP Remote-use screen DIN DIN flange connections

## Technical data

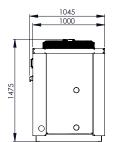
Model		6-1Si	9-1Si	12-1Si	15-1Si	17-1Si	21-1Si	26-1Si	30-2Di	36-2Di	40-2Di	44-2Di	48-3Di	55-3Di	63-3Di
Cooling capacity, max kW		21	31	40	51	59	73	83	109	131	142	154	168	187	205
Cooling capacity, min. kW		8	8	8	13	13	21	21	13	21	21	21	21	21	21
Input power**	kW	6	9	13	14	19	21	26	29	35	39	43	48	55	67
Flow rate	l/s	1,1	1,6	2,1	2,7	3,2	3,9	4,4	5,8	6,9	7,6	8,2	8,9	9,9	10,8
Pipe size	DN	50	50	50	50	50	50	50	80	80	80	80	80	80	80
Fuse	Α	25	25	35	50	50	63	63	80	100	125	125	160	160	200

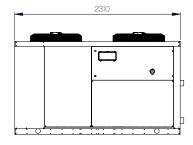
Performance values at various temperatures: Performance values at various temperatures: 35% EG 7/12 °C, outdoor air 30 °C. Refrigerant R410a

# **Dimensions**



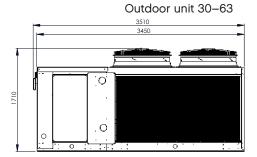
Outdoor unit 6-26





More detailed dimension drawings are available in the selection program









<sup>\*)</sup> Continuously variable control of the cooling capacity between the minimum and maximum values.

<sup>\*\*)</sup> Input power when the machine is operating at full capacity

<sup>\*</sup> The dimensions of the indoor unit depend on the accessories