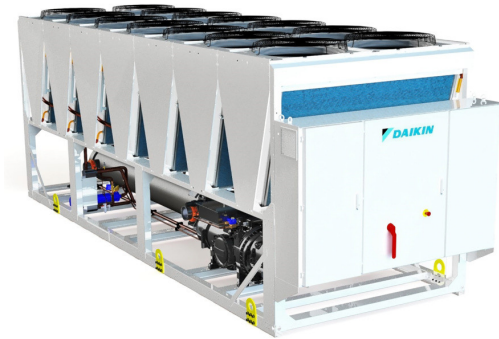


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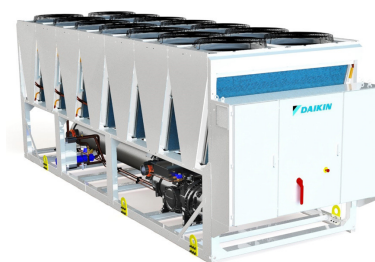
- > Air cooled chiller
- > Inverter Driven Single Screw compressor
- >
- > Reduced sound configuration
- > R134a refrigerant

- ➔ **Unit description:** Daikin air-cooled chiller with inverter driven screw compressor and R134a refrigerant. Color: Ivory White (Munsell code 5Y7.5/1) (±RAL7044).
- ➔ **Compressor:** New Daikin semi-hermetic single screw compressor driven by Variable Frequency Drive (VFD). Designed and manufactured by DAIKIN, the compressor is optimized to operate with both R1234ze and R134a refrigerant and to achieve the highest efficiency at full load (when all the capacity of the chiller is required) as well as the highest part-load efficiency (frequent conditions) thanks to the Variable Frequency Drive (VFD) allowing continuous modulation of compressor's rotational speed. The VFD, also designed and manufactured by Daikin, is integrated in the compressor's body and the electronics inside is cooled by the refrigerant from the chiller's circuit.
- ➔ **Evaporator:** The unit is equipped with a direct expansion shell and tube evaporator with copper tubes rolled into steel tube sheets and assures optimal heat transfer and minimized water pressure drops.
- ➔ **Condenser:** Full body Aluminum "Long Life Alloy" Microchannel coils providing superior resistance to corrosion compared to standard aluminum alloy. Coils' layout designed to guarantee optimized heat transfer allowing maximized performances and reduced turbulence for low noise emission.
- ➔ **Condenser coil fans:** The condenser fans are propeller type with high efficiency design blades to maximize performances. The material of the blades is glass-reinforced resin and each fan is protected by a guard. Fan motors are internally protected from over temperature and are IP54.
- ➔ **Refrigerant circuit:** Each unit has two independent refrigerant circuits and each one includes: Compressor Inverter driven with integrated oil separator, Electronic expansion valve, Discharge line shut off valve, Sight glass with moisture indicator, Filter drier, Charging valves, High pressure switch, High pressure transducers, Low pressure transducers, Oil pressure transducer, Suction temperature sensor.
- ➔ **Electrical:** Control and power sections are located in the main panel that is manufactured to ensure protection against all weather conditions. The electrical panel is IP54 and internally protected against possible accidental contact with live parts. The main panel is fitted with a main switch interlocked door that shuts off power supply when opening.
- ➔ **Controller:** Latest generation MicroTech 4 controller provides an easy to use control environmental. The control logic is designed to provide maximum efficiency, to continue operation in unusual operating conditions and to provide a history of unit operation. Sophisticated software with adaptive logic selects the most energy efficient combination of compressor load, electronic expansion valve position and condenser fans to keep stable operating conditions and maximize chiller efficiency and reliability. One of the greatest benefits is the easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications.



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Performances calculated according to EN14511-3:2018



Cooling mode performances

Cooling capacity	1358 kW	Evaporator water IN/OUT	12.00 °C / 7.00 °C
Power input	426.3 kW	Evaporator water flow	72.13 l/s
EER Cooling Efficiency	3.185 kW / kW	Evaporator pressure drops	121 kPa
		Ambient temperature	32.0 °C
IPLV.IP	5.340 kW / kW	Lw / Lp @ 1m	94 dB(A) / 71 dB(A)
SEER / ηs	5.15 / 203.0%	Evaporator fluid	Ethylene glycol 35%
SEPR	5.61	Evaporator fouling factor	1.76E-05.000 m²°C/W

SEER declared according to EN14825, fan coil application 12/7°C (inlet/outlet) water temperatures. SEPR declared according to EN14825:2018, high temperature process cooling application. Sound power level according to ISO 9614-1. IPLV.IP and seasonal efficiency data generally refer to standard unit without options

Unit information

Compressor type	Inverter Driven Single Screw	Refrigerant type	R134a
Capacity control	Inverter	Condenser type	Microchannel
Compressor N°	2	Condenser fans N°	24
Circuit N°	2	Condenser fans control	VFD
Refrigerant charge	200 kg	Altitude	0 MSL
Nominal air flow	89145 l/s	Evaporator type	Shell & Tubes

Actual refrigerant charge depends on the final unit construction, refer to unit nameplate.

Electrical information

Power supply	400 V / 50.0 Hz / 3 Ph	Max. inrush current	0 A
Running current	712.36 A	Compressor starting method	Variable Frequency Drive
Max. Running current	1027 A		
Max. current wires sizing	1061 A		

Voltage tolerance ± 10%. Phase Voltage unbalance ± 3%. Electrical data referred to standard unit without options, refer to unit name plate data.



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Performances calculated according to EN14511-3:2018

Acoustic information

Sound pressure level at 1 m from the unit (rif. 2 x 10⁻⁵ Pa)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)
79.0	68.7	67.7	68.0	65.6	63.2	67.1	59.4	71.4

Values referred to Evap. IN/OUT 12/7°C and 35°C Amb., full load operation, standard unit configuration without options. Sound pressure level calculated from sound power level. Sound pressure in octave band is for information only and not considered binding.

Physical information

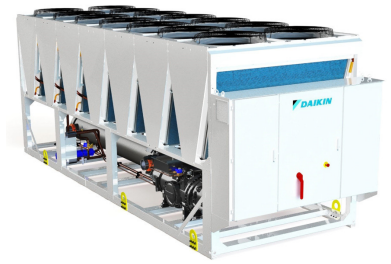
Evap. connections size	273 mm	Length	11404 mm
		Width	2282 mm
Weight shipping/operating	10112 kg / 11123 kg	Height	2540 mm

Information referred to standard unit configuration without options, refer to certified unit drawing.



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Performances calculated according to EN14511-3:2018



Certification notes



Certified in accordance with Eurovent Certification Program: Liquid Chilling Packages and Heat Pumps (LCP-HP). Standard ratings are specified in the section "Rating requirements" of the Rating Standards. All standard ratings are verified by tests conducted in accordance with the following standards: EN 14511-3:2018 (performance testing) and ISO 9614 (acoustic testing).

Within the scope of AHRI Air-Cooled Water-Chilling Packages Certification Program. AHRI Certified performance may be obtained from the manufacturer's representative

General notes

For more information about the above selected product, please go to <http://www.daikineurope.com/industrial/>. Unit performances are reproducible in laboratory test environment only in accordance to recognized industry standards. This technical data sheet is generated by Daikin Applied Tool software designed and distributed by Daikin Applied Europe S.p.A. The present software does not constitute an offer binding upon Daikin Applied Europe S.p.A who compiled the content of this software to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Product images are indicative only and are intended for illustrative purposes only; pictures may be differed from the ordered product and are subject to change without prior notice. Daikin Applied Europe S.p.A. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this document. All content is copyrighted by Daikin Applied Europe S.p.A.

