

# Air-cooled chillers

*for indoor installation*

EUWAC5-10FZW  
*Applied systems*





Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues.

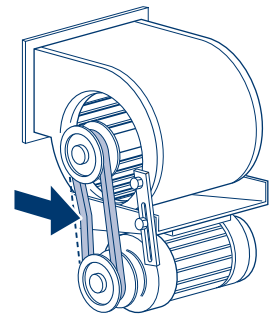
For several years Daikin has had the intention to become a leader in the provision of environmental friendly products. This challenge demands the eco design and development of a wide range of products and an energy management system; which involves energy conservation and reduction of waste.



## Flexible *application*

Out of sight, quiet, discrete – the new EUWAC-FZ for ducted indoor installation complies with architectural, environmental and aesthetic requirements. The unit can be fully built into cellar, garage and attic installations and is highly suited to refurbishment applications.

The EUWAC-FZ cooling only chiller is produced in 3 models with capacities from 12 to 24kW. As a result of the unit's wide operating range from  $-10^{\circ}\text{C}$  to  $43^{\circ}\text{C}$ , it is highly adaptable to varying climatic conditions and temperature fluctuations. The inlet and outlet air can be connected to ducting and the fan motor set up allows ESP to vary between 0 and 100Pa for EUWAC5FZ and between 0 and 150Pa for EUWAC8-10FZ.



## Quiet *operation*

The heart of the unit is a Daikin hermetic scroll compressor, optimised for use with R-407C refrigerant and designed to the very highest technical standards.

The use of this optimised scroll compressor generates less noise and vibration than was possible with earlier reciprocating compressor R-22 models.



## Efficient heat transfer *condenser*

The coils themselves are constructed from specially designed header distribution pipes, in combination with internally grooved Hi-X tubing and aluminium waffle louver pressed fins.

This unique combination of increased contact surfaces and reduced overall coil size, results in optimum heat transfer efficiency. Also, the counter flow design utilised for refrigerant and water overcomes all problems associated with R-407C temperature glide characteristics.

The use of subcool sections results in a complete changeover to liquid, whereas the lower refrigerant charge resulting from contributes to the environment and the cost effectiveness.

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## Efficient heat transfer *evaporator*

The use of stainless plate heat exchanger for the evaporator results in maximum heattransfer between refrigerant and water circuits within minimal and compact areas with high  $W/m^3$  values that ensure optimum efficiency.

Compared to other heat exchangers, the use of plate heat exchangers results in a much more efficient pump selection. Also, the counter flow design utilised for refrigerant and water overcomes all problems associated with R-407C temperature glide characteristics.



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## flexible *control*

The chiller is fitted with a  $\mu$  chiller auto diagnostic controller enabling it to be integrated with a building management system (BMS), which can monitor and control chillers, lighting, alarms and ventilation etc.



The Daikin BMS connection supports popular standard protocols such as MODBUS, J-BUS and BACNET and consists of built-in address cards for each chiller and a single gateway that can link as many as 16 units to the BMS. The BMS supports the complete operation of the chiller and can also monitor and control more than 130 parameters including unit settings, status, temperatures, pressures, alarm, set points and on/off operation.

A remote user interface is also available as option. Moreover, the unit is standard equipped with pressure gauges to allow reading of high and low pressure values.

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**Daikin EUWAC-FZ chillers provide an economic and efficient solution  
for air cooled applications in many fields.  
Daikin the choice of professionals, everywhere.**

# EUWAC-FZW

			5	8	10
Nominal capacity	kW		11.6	18.4	23.8
Nominal input	kW		5.25	7.78	9.85
EER			2.21	2.37	2.42
Capacity steps	%		100-0		
Water heat exchanger	type	Brased plate heat exchanger			
	qty x model	1 x AC50-24		1 x AC50-34	1 x AC50-40
Refrigerant circuit	type	R-407C			
	charge	kg	2.1	3.9	4.7
	control	Thermostatic expansion valve			
	oil type	FVC68D			
	oil charge	l	1.5	2.7	2.7
Compressor	type	Hermetically sealed scroll			
	No. of circuits/compressors	1/1		1/1	1/1
Fan	type	Centrifugal			
	drive	Direct drive		Belt drive	
	ESP	Max.	Pa	100	150
Nom.		Pa	50	60	72
Air heat exchanger	type	Cross fin coil Hi-X tubes and PE coated waffle louvre fins			
Dimensions (hwxwxd)	mm	1,345x856x630	1,290x1,180x630	1,395x1,330x630	
Machine weight	kg	164	224	261	
Operation weight	kg	166	228	266	
Sound power	dBA	63	66	69	
Casing	material	Polyester coated galvanised steel plate			
	colour	Ivory white / Munsell code 5Y75/1			
Piping connections	Evaporator water in/out	FBSP 1"			
	Evaporator water drain	field installation			
Safety & functional devices	High pressure switch/low pressure switch/evaporator temperature protection/discharge temperature protection/outlet water temperature protection/compressor motor overcurrent relay/fan thermal protector/anti-recycling and guard timer/DDC control with electronic temperature control/reverse phase protector/internal fuses				
Power supply	W1	3N~/400V/50Hz			

Measuring conditions:  
Nominal cooling capacities are based on: evaporator 12°C/7°C • ambient 35°C  
The sound power level is an absolute value indicating the "power" which a sound source generates.

Option Number	Option description	unit size			Availability
		5	8	10	
OPZH	LWE till -5°C	0	0	0	Factory mounted
OPZL	LWE till -10°C	0	0	0	Factory mounted
EKAC10B	Address card for BMS	0	0	0	Kit
EKBMSMBA	Gateway for MODBUS	0	0	0	Kit
EKBMSBNA	Gateway for BACNET	0	0	0	Kit
EKRUMC	Remote user interface	0	0	0	Kit

Impossible option combinations: ZH + ZL  
0 available

To install EKBMSMBA, EKBMSBNA, EKRUMC  
-> EKAC10B needs to be installed on the unit.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



Daikin units comply with the European regulations that guarantee the safety of the product.



Daikin Europe NV participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

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