







# Water-cooled chillers Remote condenser chillers













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.



- 9 models available with cooling capacities ranging from 123 to 546kW and heating capacities from 148 to 659kW
- ideal for use in severe weather conditions and over a wide operation range.
- 2 independent circuits from 120hp onwards
- remote condenser version available (EUWL40-200MX)
- compact, simple and robust construction



### Easy installation

- standard fitted with victaulic joints on evaporator and condenser pipes
- victaulic joints absorb vibrations, reduce operating sound and thermal deflection and simplify chiller piping and installation.
- They can accommodate 8° angles and guarantee stress free, leak tight water piping connection.



#### A range to rely on.





### Single screw compressor

All chillers in this range are fitted with a G-type semi hermetic single screw compressor NEW: high efficiency motor, screw shape, design of slide valves, gate rotor shaft

#### BENEFIT:

- overall COP increase of 5 to 10% compared to the previous series
- unequalled reliability for increased long life operation
- overhaul only necessary after 4.5 years of continuous operation



### **Electronic** control

- advanced pco<sup>2</sup> control
- detailed information on and accurate control of all functional parameters by easy menu scrolling: schedule timer, floating set point, free cooling, double evaporator pump, manual pump on, date and time information, daily pump on.
- chilled water temperatures down to -10°C on standard unit.

  (Parameter in the service menu of the DDC controller must be set by the installer)
- changeable digital input/output such as remote on/off, remote cooling/heating, dual setpoint and limit capacity.
- self diagnostic and can be set up in several languages.
- Lead lag function is standard
- standard equipped with night setback and peak load limitation.
- optional digital controller can be installed up to 600 m from the unit.
- thanks to the standard DICN, simultaneous operation of up to 4 chillers is allowed. This function enables a Daikin 2MW chiller plant to be operated via a single controller.

### **Heat** exchanger

- plate heat exchanger offers a maximum heat exchange between refrigerant and the water circuit.
- the use of this plate heat exchanger results in a compact unit: single and double circuits have the same small footprint (2,672mm x 898mm)
- new shell & tube condenser reducing drastically the amount of refrigerant.



EUW(L)-M(A)XY			40	60	80	100				
Nominal capacity	cooling (EUW)	kW	123	183	249	273				
	cooling (EUWL)	kW	116	170	235	265				
	heating (EUW)	kW	148	217	292	329				
Nominal input	cooling (EUW)	kW	29.6	47	64	71.6				
	cooling (EUWL)	kW	32.4	50.4	67.4	78.7				
	heating (EUW)	kW	35.2	55.3	74.5	85.3				
EER (EUW/EUWL)			4.16 / 3.58	3.89 / 3.37	3.89 / 3.49	3.81 / 3.37				
COP			4.20	3.92	3.92	3.86				
Capacity steps		%		100-74-48-36						
Refrigerant circuit	type		R-134a							
	charge (1) kg		18	35	37	38				
	control		thermostatic expansion valve electronic expansion valve							
	oil type		FVC68D							
	oil charge	1	7.5	10	10	14				
Compressor type			Semi-hermetic single screw compressor							
No. of circuits/compressors		1/1								
Dimensions mm			1,014 x 2,672 x 898							
Machine weight (EU	W(L))	kg	993 (884)	1,263(1,100)	1,515 (1,332)	1,613 (1,418)				
Sound power level	standart/Low Noise option	dB(A)	91/85	95/89	96/90	96/90				
Casing	material / colour			Polyester painted galvanised steel plate / Ivory white - Munsell 5Y7.5/1						
Piping connections	evaporator water in/outlet		3" victaulic							
	evaporator water drain		field installation							
	condenser water inlet/outlet		2" 1/2 victaulic 3" victaulic							
	condenser water drain		M6							
	relief device outlet		1 x 1" 2 x 1"							
Operation range	leaving water condenser	°C		20°C -	~ 50°C					
	condensing temperature	°C		25°C ~ 55°C						
	leaving water evaporator	°C		-10°C -	~ 20°C					

NOTE: 1. For refrigerant charge of EUWL-MX, please consult the databook

EUW(L)-M(A)XY		120	140 160		180	200						
Nominal capacity	cooling (EUW)	kW	366	432	498	522	546					
	cooling (EUWL)	kW	340	405	470	500	530					
	heating (EUW)	kW	434	509	583	621	659					
Nominal input	cooling (EUW)	kW	94	111	128	136	143					
	cooling (EUWL)	kW	101	118	135	146	157					
	heating (EUW)	kW	111	130	149	160	171					
EER (EUW/EUWL)			3.89 / 3.37	3.95 / 3.43	3.95 / 3.48	3.93 / 3.42	3.94 / 3.38					
COP	COP		3.91	4.04	4.07	4.08	4.05					
Capacity steps		%		100-87-74-61-50-37-24	100-87-74-68-61-55-50-42-37-24-18	100-87-74-68-61-55-42-37-24-18						
Refrigerant circuit	type		R-134a									
	charge (1) kg		70	72	74	75	76					
	control		2 x thermostatic expansion valve 1x thermost, exp. valve+1x electr. exp. valve 2 x electronic expansion valve									
	oil type		FVC68D									
	oil charge	1	10	2 x 10	2 x 10	10 + 14	2 x 14					
Compressor type		Semi-hermetic single screw compressor										
No. of circuits/compressors		2/2										
Dimensions mm		2,000 x 2,672 x 898										
Machine weight (EUW(L))		kg	2,526 (2,200)	2,778 (2,432)	3,030 (2,664)	3,128 (2,750)	3,326 (2,836)					
Sound power level	standart/Low Noise option	dB(A)	98/92	99/93	99/93	99/93	99/93					
Casing	material / colour		Polyester painted galvanised steel plate / Ivory white - Munsell 5Y7.5/1									
Piping connections	evaporator water in/outlet		3" victaulic									
	evaporator water drain		field installation									
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Operation range	leaving water condenser	°(			20°C ~ 50°C							
	condensing temperature	°C										
leaving water evapora		°C			-10°C ~ 20°C							
Power supply Y1		3~/50Hz/400V										

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0.00	Oution description	model-type		unit size								A !! =  - !!!** .	
Option Number	Option description	-	S	40	60	80	100	120	140	160	180	200	Availability
Completely combinable options													
op03	dual pressure relief valve on the condenser (EUW)	0	std	0	0	0	0	0	0	0	0	0	factory mounted
op12	suction stop valve	0	std	0	0	0	0	0	0	0	0	0	factory mounted
op52	main isolator switch	0	0	0	0	0	0	0	0	0	0	0	factory mounted
ор57	a-meter, V-meter	0	0	0	0	0	0	0	0	0	0	0	factory mounted
OPLN	low noise operation	0	0	0	0	0	0	0	0	0	0	0	factory mounted
Available kits													
EKCLWS	Leaving water controlsensor for DICN	0	0	0	0	0	0	0	0	0	0	0	kit
EKAC200A	BMS card	0	0	0	0	0	0	0	0	0	0	0	kit
EKBMSMBA	BMS gateway modbus / j-bus protocol	0	0	0	0	0	0	0	0	0	0	0	kit
EKBMSBNA	BMS gateway bacnet protocol	0	0	0	0	0	0	0	0	0	0	0	kit

Model type for PED approval (-) Model type for SA approval (s)

To install EKBMSMBA, EKBMSBNA --> EKAC200A needs to be installed on the unit

o available std standard

## Measuring conditions

- 1. Nominal cooling capacities are based on: evaporator: 12°C/7°C condenser 30°C/35°C (EUW); condensing temperature 45°C (EUWL) • liquid temperature 40°C (EUWL)
- 2. Nominal heating capacities are based on: evaporator: 10°C/5°C condenser 40°C/45°C
- 3. The sound power level is an absolute value indicating the "power" which a sound source generates.

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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.



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