



AIR-COOLED CHILLERS

Remote evaporator chillers



APPLIED SYSTEMS

R-407C



www.daikin.eu

ERAP110-170MBYN COOLING ONLY

ENVIRONMENTAL AWARENESS

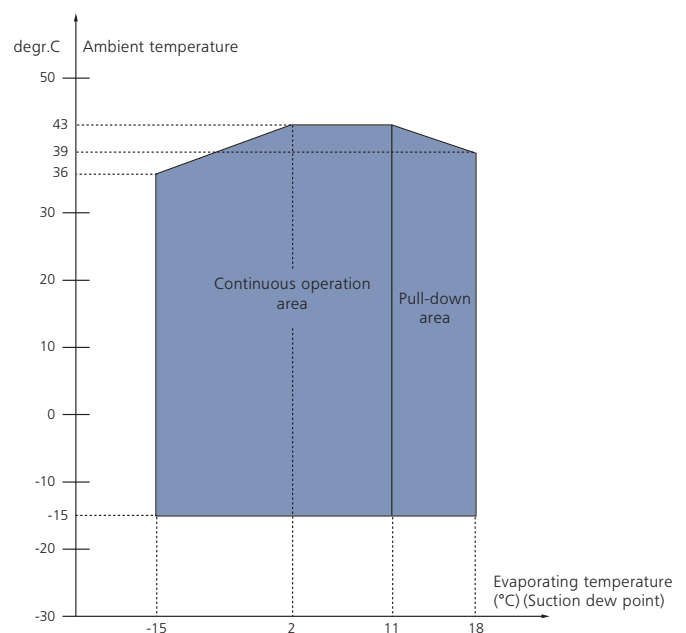
Air Conditioning and the Environment

Air conditioning systems provide a significant level of indoor comfort, making possible optimum working and living conditions in the most extreme climates. In recent years, motivated by a global awareness of the need to reduce the burdens on the environment, some manufacturers including Daikin have invested enormous efforts in limiting the negative effects associated with the production and the operation of air conditioners. Hence, models with energy saving features and improved eco-production techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.

OPERATION RANGE

The ERAP-MBYN is available in 3 different versions with cooling capacities ranging from 114 to 171kW. The units are ideal for use in severe weather conditions and over a wide operation range. This major benefit results from the incorporation of an auto adaptive control system with the following functionality:

- > Head pressure setback for high ambient operation: on hot days, when cooling is most needed, Daikin chillers will stay on line by modulating the capacity control in function of the high pressure.
- > Optional: Head pressure control: fan control for low ambient down to -15°C .

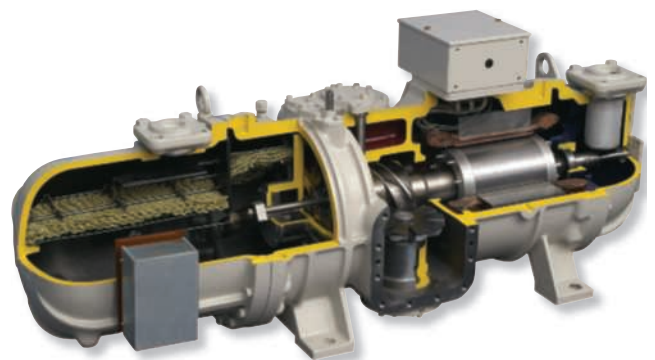


SINGLE SCREW COMPRESSOR

The ERAP-MBYN is fitted with a single screw compressor with stepless capacity control. The capacity control enables the requirements to be closely matched by modulating the sliding valve position according to the chilled water control condition. Capacity control is infinitely variable between 30 and 100%.

Main advantages:

- > Better part load efficiency (ESEER)
- > More stable chilled water temperature
- > Closer control tolerance





HEAT EXCHANGER

Condenser

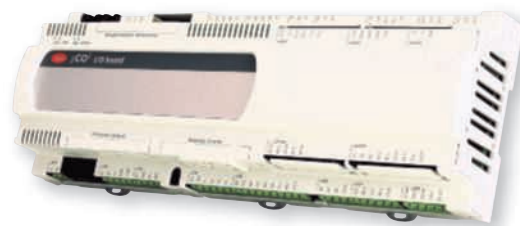
- › Constructed from specially designed header distribution pipes, combined with internally grooved Hi-X tubing and PE coated waffle louvre pressed fins.
- › Standard anti-corrosion treated to better withstand the effects of the external environment
- › Optional: Condenser protection grilles (OPCG) are available throughout the whole range

NOISE

ERAP-MBYN units can be fitted with Option Low Noise (OPLN). OPLN includes lower speed condenser fans and an insulated compressor compartment to reduce the sound power level by a further 6dBA.

ELECTRONIC CONTROL

- › Advanced pCO² control
- › Detailed information on and accurate control of all functional parameters by easy menu scrolling
- › Changeable digital input/output such as remote on/off, dual setpoint and capacity limit
- › Lead lag function is standard
- › Standard equipped with night setback and peak load limitation
- › Remote DDC (EKRUPC) can be installed up to 1,000m from the unit



Open Network Integration

Daikin has released a gateway for connection to BACnet and Modbus networks equipment and building control systems. BACnet and Modbus networks are recognised worldwide as the de facto standard within the building controls industry. BACnet and Modbus data communication protocols make it possible to control access, energy management, fire/life/safety, HVAC and lighting etc.

SPECIFICATIONS

Cooling only			110	150	170
Capacity	Cooling	kW	114.00	150.00	171.00
Nominal input	Cooling	kW	42.10	52.40	65.20
EER			2.71	2.86	2.62
Capacity Steps		%	30-100		
Dimensions	(Height x Width x Depth)	mm	2,250x2,346x2,238		
Unit		kg	1,326	1,440	1,516
Air heat exchanger	Type		Cross fin coil/Hi-X tubes and PE coated waffle louvre fins		
Sound Power	Cooling	dB(A)	91	96	
Compressor	Type		Semi-hermetic single screw compressor		
	Model	Quantity	1		
Refrigerant circuit	Refrigerant type		R-407C		
	Refrigerant charge	kg	5.5	7.5	
	No of circuits		1		
Power Supply			3~/400V/50Hz		
Piping connections	Suction line connection		2" 1/8		
	Liquid line connection		7/8"		
	Relief device outlet		compressor: 1"npt		

OPTIONS

Type	Compr.	Refr.	Mode	Reference	Products	Noise & Head Pressure Control			Electrical			Refrigerant	Condenser
						Low noise	Inverter fans	High ESP fans	Evaporator heater	Main switch	A/V meter	Pressure relief valve	Coil guards
						OPLN	OPIF	OPHF	OP10	OP52	OP57	OP03	OPCG
R/E	SCREW	R-407C	❄️	ERAP-MBYNN	110-150-170	•	•	•	STD	•	•	•	•

ACCESSORIES

Type	Compr.	Refr.	Mode	Reference	Products	Communication cards	Modbus gateway Bacnet gateway		Remote user interface
						EKAC200A	EKBMSBNA	EKBMSBNA	EKRUPC
R/E	SCREW	R-407C	❄️	ERAP-MBYNN	110-150-170	•	•	•	•



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 products that have limited impact on the environment.

This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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.

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

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www.fsc.org Cert no. SGS-COC-003924
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EPELN08-412 - 300 • 04/08 • Copyright © Daikin
Printed on non-chlorinated paper. Prepared by La Movida, Belgium
Responsible Editor: Daikin Europe N.V. Zandvoordestraat 300, B-8400 Oostende