

# ALPS COMPACT CO<sub>2</sub>



[WWW.RMC-GLOBAL.COM](http://WWW.RMC-GLOBAL.COM)

FUTURE AVAILABLE  
TODAY





# ABOUT US

## **The RMC Manufacturer Company**

produces a large range of serial and tailored refrigeration equipment.

Our products are designed and manufactured in accordance with the European standards and meet high quality and energy efficiency requirements.

The in-house Design Bureau develops unique models of units and housings, paying special attention to reliability, ease of use and noise reduction.

All products are certified.

# RMC MANUFACTURER COMPANY:

## COUNTRIES OF DELIVERY:



**21+**  
EMPLOYEES

**1441 m<sup>2</sup>**  
PRODUCTION  
AREA

**3000+**  
EQUIPMENT  
PRODUCED

**2017**  
YEAR OF  
FOUNDATION



# ALPS COMPACT CO2

Alps Compact CO2 is a series of condensing units that use natural gas R744 as a refrigerant. With years of experience with natural refrigerants, RMC offers a new line of transcritical CO2 condensing units with semi-hermetic compressors.

The product concept that meets all the needs of the food retail trade, large distribution and logistics sectors, providing high performance, maximum reliability, safety and energy savings owing to, in particular, compressor performance regulation. In addition, the built-in gas cooler makes this solution compact, easy to transport and install, even near the house thanks to additional sound insulation. Equipment, always guaranteed by RMC quality.

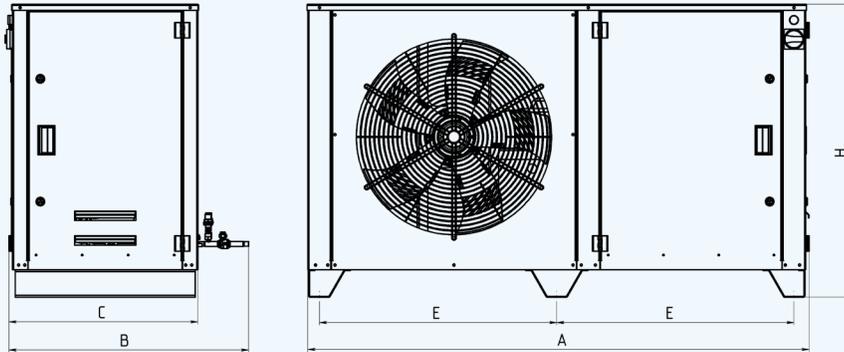
## FEATURES AND BENEFITS

- ✓ Built-in intercooler (LT models only)
- ✓ Inverter-operated compressors with power modulation and performance adjustment utilizing SR2 technology
- ✓ Filter and inspection glass
- ✓ Subcooling with suction/liquid heat exchanger (+3% efficiency)
- ✓ Design pressure:
  - 60 bar on the suction line for MT and LT
  - 80 bar on the medium pressure receiver
  - 120 bar at discharge
- ✓ Electronic lubrication control system
- ✓ Built-in gas cooler with EC fans
- ✓ HPV electronic pressure valve
- ✓ RPRV electronic pressure relief valve
- ✓ Medium pressure receiver with safety valve and insulation

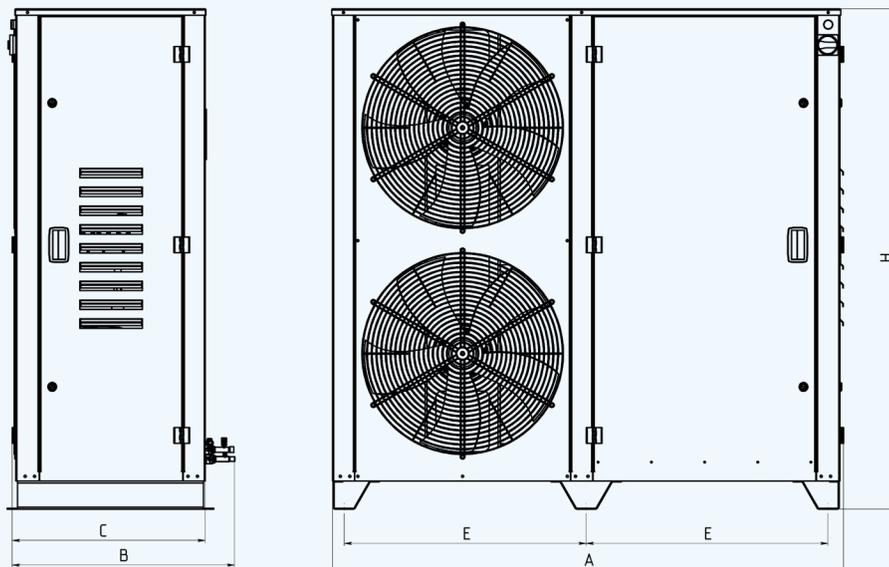




# OVERALL DIMENSION TABLE



Model	Dimensions (mm)					Weight kg
	A	B	C	H	E	
Alps CO2 8HP-M-INV	1360	675	510	812	775	135
Alps Compact CO2 8HP-M-INV(P)	1635	780	615	955	775	250
Alps CO2 3HP-L-INV	1635	780	615	955	775	250



Model	Dimensions (mm)					Weight kg
	A	B	C	H	E	
Alps CO2 12HP-M-CR2	1635	780	615	1595	775	325
Alps CO2 18HP-M-CR2	1635	780	615	1595	775	355

## FEATURES AND BENEFITS

- ✓ General low pressure sensors
- ✓ High pressure safety switches according to the PED directive
- ✓ Temperature and pressure sensors for system control and monitoring
- ✓ Envelope, power and current control on each compressor
- ✓ Discharge and suction temperature control





# PERFORMANCE PARAMETER TABLE

## AVERAGE TEMPERATURE UNITS

Unit model	Alps Compact CO2 8HP-M-INV			Alps Compact CO2 8HP-M-INV(P)	Alps Compact CO2 12HP-M-CR2	Alps Compact CO2 18HP-M-CR2	
Dimensions	Length	A	mm	1360	1635	1635	1635
	Height	H	mm	812	955	1595	1595
	Width	C	mm	510	615	615	615
Weight	kg			135	250	325	355
Condenser	Fan number/ diameter	mm		1 / 630	1 / 630	2 / 630	2 / 630
	Air flow	m <sup>3</sup> /h		6 060	6 250	12 270	12 270
	Fan power supply voltage	V/ph/Hz		230 - 240 / 1~ / 50	230 - 240 / 1~ / 50	230 - 240 / 1~ / 50	230 - 240 / 1~ / 50
	Fan maximum current	A		1,00	1,00	1,00	1,00
	Fan consumed power	W		240	240	240	240
Compressor	Model			RY100L1F-10FU	2MTE-5K	4MTE-10K	4KTE-12K
	Volumetric capacity	m <sup>3</sup> /h		0,9...3,6	1,9...4,6	1,6...6,5	2,4...9,6
	Power supply voltage	V/ph/Hz		25...100	30...70	50	50
	Current	MCC	A	18,0	11,5	21,9	27,2
	Oil type			VG100	BSE85K	BSE85K	BSE85K
	Oil charge	L		0,45	1,20	2,00	2,00
	Crankcase heater	W		35	0...120	0...120	0...120
Adjustment depth	%			25...100	55...146 (@50 Hz)	25...100	25...100
Sound pressure @10 m	dB(A)			43	44	45	45
Connection	Liquid	mm		10	10	12	12
	Suction			12	12	15	15
Receiver volume	L			8	8	15	25
Maximum pressure	Discharge	bar		120	120	120	120
	Receiver / liquid			80	80	80	80
	Suction			80	80	80	80
Unit power	Power supply voltage	V/ph/Hz		380-420 / 3~ / 50	380-420 / 3~ / 50	380-420 / 3~ / 50	380-420 / 3~ / 50
	Cable minimum cross- section (PBC brand)			5x2,5 mm <sup>2</sup>	5x2,5 mm <sup>2</sup>	5x4,0 mm <sup>2</sup>	5x4,0 mm <sup>2</sup>

# PERFORMANCE PARAMETER TABLE

## LOW TEMPERATURE UNITS

Unit model				Alps Compact CO2 3HP-L-INV
Dimensions	Length	A	mm	1635
	Height	H	mm	1595
	Width	C	mm	615
Weight	kg			250
Condenser	Fan number/ diameter		mm	1 / 630
	Air flow		m <sup>3</sup> /h	6 960
	Fan power supply voltage		V/ph/Hz	230 - 240 / 1~ / 50
	Fan maximum current		A	1,00
	Fan consumed power		W	240
Compressor	Model			CD25360
	Volumetric capacity		m <sup>3</sup> /h	1,88...2,83 (LP) / 0,58...0,88 (HP)
	Power supply voltage		V/ph/Hz	40...60
	Current	MCC	A	7,5
	Oil type			PAG 68
	Oil charge		l	1,30
	Crankcase heater		W	100
Adjustment depth	%			82...118 (@50 Hz)
Sound pressure @10 m	dB(A)			44
Connection	Liquid	mm		10
	Suction			10
Receiver volume	l			10
Maximum pressure	Discharge	bar		120
	Receiver / liquid			80
	Suction			80
Unit power	Power supply voltage	V/ph/Hz	380-420 / 3~ / 50	
	Cable minimum cross- section (ПВС brand)			5x1,5 mm <sup>2</sup>



# PERFORMANCE WITH REFRIGERANTS

## AVERAGE TEMPERATURE UNITS



R744		Productivity (gas cooler outlet: 40 °C; overheating: 10 K)								
Unit model	Range	To, °C	-15		-10		-5		0	
		Ta, °C	Q0, kW	Pe, kW						
Alps Compact CO2 8HP-M-INV	min	32	-	-	1,48	1,50	1,82	1,49	2,19	1,47
		35	-	-	1,48	1,52	1,85	1,54	2,24	1,52
		38	-	-	1,50	1,57	1,85	1,57	2,24	1,54
	max	32	-	-	7,23	5,34	8,52	5,40	9,91	5,44
		35	-	-	7,23	5,34	8,08	5,08	8,40	4,52
		38	-	-	4,85	3,66	5,00	3,24	5,13	2,40
Alps Compact CO2 8HP-M-INV(P)	min	32	2,52	2,49	3,10	2,63	3,77	2,75	4,55	2,83
		35	2,52	2,49	3,10	2,64	3,77	2,76	4,55	2,84
		38	2,52	2,49	3,10	2,65	3,82	2,79	4,61	2,88
	max	32	6,30	5,44	7,75	5,73	9,44	5,94	11,37	6,13
		35	6,30	5,51	7,75	5,78	9,44	5,99	11,37	6,15
		38	6,30	5,51	7,62	5,69	8,13	5,23	8,11	4,55
Alps Compact CO2 12HP-M-CR2	min	32	3,61	3,98	2,72	2,30	3,33	2,39	4,02	2,42
		35	3,61	4,01	2,72	2,32	3,33	2,40	4,02	2,43
		38	3,61	4,05	2,72	2,35	3,39	2,43	4,09	2,49
	max	32	8,77	8,14	10,90	8,61	13,33	8,90	16,09	9,02
		35	8,77	8,19	10,90	8,66	13,33	8,95	16,09	9,07
		38	8,77	8,24	10,90	7,48	13,00	8,77	13,25	7,60
Alps Compact CO2 18HP-M-CR2	min	32	5,42	5,57	4,13	3,19	5,05	3,28	6,10	3,37
		35	5,42	5,60	4,13	3,21	5,05	3,33	6,20	3,42
		38	5,42	5,65	4,20	3,28	5,13	3,38	6,20	3,44
	max	32	13,27	11,64	16,53	12,09	20,20	12,50	24,40	12,79
		35	13,27	11,69	16,53	12,14	20,20	12,55	21,82	11,49
		38	12,80	11,31	12,93	9,97	13,12	8,57	13,39	7,61

## LOW TEMPERATURE UNITS



R744		Productivity (gas cooler outlet: 40 °C; overheating: 10 K)								
Unit model	Range	To, °C	-35		-30		-25		-20	
		Ta, °C	Q0, kW	Pe, kW						
Alps Compact CO2 3HP-L-INV	min	32	1,74	2,10	2,00	2,24	2,26	2,36	2,62	2,51
		35	1,74	2,11	2,00	2,25	2,26	2,37	2,62	2,54
		38	1,74	2,13	2,00	2,28	2,30	2,47	2,70	2,59
	max	32	2,61	3,11	3,00	3,31	3,39	3,50	3,93	3,70
		35	2,61	3,14	3,00	3,34	3,39	3,53	3,93	3,73
		38	2,61	3,16	3,00	3,37	3,39	3,64	3,38	3,18

Qo - cooling capacity; To - boiling point; Ta - air temperature; Re - consumed power

# CERTIFICATES

Даний сертифікат засвідчує, що

## ТОВ «РМСІ» (м. Миколаїв)

є **Партнером**  
холодильного напрямку  
**Danfoss** в Україні

Термін дії сертифіката: до 1 березня 2022 року

Категорія: Партнерський напрямок ТОВ «Р-Данфосс ТОВ»

ТОВ «Р-Данфосс ТОВ»  
Україна, 04000, м. Київ,  
вул. Банкова, будинок 15/15-Б,  
Т: +380 290 920 148  
www.danfoss.ua

## RMC LLC

62, 1-ст Slobidska Str., Mykolayiv, 54055, Ukraine

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below.

### ISO 9001:2015

Scope of certification  
**Production of refrigeration units.**

Original cycle start date: 11 August 2020  
Expiry date of previous cycle: NA  
Certification / Recertification Audit date: 14 July 2023  
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 10 August 2026

Certificate No. UA231015 Version: 0 Issue date: 14 July 2023

Olana Bryukhina  
Signed on behalf of BVQC SAS UK Branch

Certification body address: 37 Floor, 65 Fleet Street, London EC4A 3DF, United Kingdom  
Local office: 80 West 20, Queen's Parkway St, Kiev, 01020, UKRAINE  
Further certification regarding the scope and validity of this certificate, and the availability of the management system requirements, please call: +380 44 354 10 00

## CERTIFICATE OF COMPLIANCE

Entered in the CR Register with No. UAF.000246-24

Valid from 18 March 2024 to 18 March 2025

Product: Central refrigeration units TM "RMC Manufacturer Company" in assortment according to the agreement.

Meets the requirements: TU U 39.2-4177:2006-09:1019 «CENTRAL REFRIGERATION UNITS» TECHNICAL CONDITIONS (clause 3.2.1 table 1 clause 3.7, clause 3.2.3.2.3, 3.2.3.2.4, 3.2.3.2.5, 3.2.3.2.6, DSTU EN 60205-5:2015 sections 6, 10, 11, 16, 21, DSTU EN 60206-1:2015 sections 6, 7, 9, 10, 11, 13, 16, 17, DSTU EN 60914-1:2019 clauses 4.1.1, 4.1.2, 4.1.3

Product name/holder: RMC Limited Liability Company, registered address: Mykolajiv region, 54055, city of Mykolajiv, str. 62 1-a Slobidska str., EDRPOU code 41774399 (manufacturer address: City of Mykolajiv str. 62 1-a Slobidska str.)

This Certificate is issued to: RMC Limited Liability Company, registered address: str. 62 1-a Slobidska str., Mykolajiv, Mykolajiv region, 54055, EDRPOU code 41774399

Additional information: Products manufactured entirely from March 15, 2024 to March 14, 2025 with technical supervision of certified products once a year.

This Certificate is issued by the Certification Body: Testmetstandart LLC, 10003, city of Zhytomyr, Victory Square, 10

As per: Testmetstandart LLC, city of Zhytomyr, Victory Square, 10 - 3661 report №041.0.0.24 of 18.03.2024 p.

Deputy Head of the Certification Body: Leonid LABUNETS

### DECLARATION OF CONFORMITY

Central refrigeration units TM "RMC Manufacturer Company" in assortment according to the agreement, SCCS code 28.24.1

Manufacturer by: RMC Limited Liability Company, registered address: Mykolajiv oblast, 54055, city of Mykolajiv, 1-a Slobidska str., str. 62 EDRPOU code 41774399, manufacturer address: City of Mykolajiv, 1-a Slobidska str., str. 62

Central refrigeration units TM "RMC Manufacturer Company" in assortment according to the agreement, SCCS code 28.24.1

Declaration object described above meets the requirements:  
Technical regulation on electrostatic compatibility of equipment (PR.ME. 1077 of 18.12.2015); TU U 39.2-4177:2006-09:1019 «CENTRAL REFRIGERATION UNITS» TECHNICAL CONDITIONS (clause 3.2.1, table 1, clause 3.2.3.2.3, 3.2.3.2.4, 3.2.3.2.5, 3.2.3.2.6, DSTU EN 60205-5:2015 sections 6, 10, 11, 16, 21, DSTU EN 60206-1:2015 sections 6, 7, 9, 10, 11, 13, 16, 17, DSTU EN 60914-1:2019 clauses 4.1.1, 4.1.2, 4.1.3); CERTIFICATION BODY TESTMETSTANDART, Ltd., Zhytomyr, Ukraine, str. 10 - 3661 report №041.0.0.24 of 18.03.2024

CD Testmetstandart LLC, 10003 Zhytomyr, Victory Square, 10

performed examination of documents, product testing, analysis of test protocols and issued the Certificate UAF.00019-23 dated 17.03.2023

Additional information: ...

Signed on behalf of the RMC Limited Liability Company, registered address: Mykolajiv oblast, 54055, city of Mykolajiv, str. 62 1-a Slobidska str., EDRPOU code 41774399  
city of Mykolajiv - 17 March 2023

A.E. Riabko

Declaration of Conformity entered the Testmetstandart LLC Certification Body Register, 10003, city of Zhytomyr, Victory Square, 10  
number: UA.IB.D.01/26-23 dated 17.03.2023 in 16.01.2024

www.rcf.org.ua

## СВІДОЦТВО

ТОВ «РМСІ»  
м. Миколаїв

є партнером  
Членом Громадської Спілки  
«Холодильна Асоціація України»

Голова Правління  
Сергій АНАШКІН

11.12.2018

## КОМПАНІЯ РОКУ 2019

НАДІЙНІ ТА ІНВЕСТИЦІЙНО ПРИВАБЛИВІ ПІДПРИЄМСТВА ІНДИВІДУАЛЬНО

AWARD

## CLIMATE INNOVATION VOUCHER

awarded to  
**RMC**



RMC LLC  
+38 (067) 512 46 55

62 PERSHA SLOBIDSKA STR.,  
MYKOLAIV, 54055

MON. - FRI. (09:00-18:00)

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