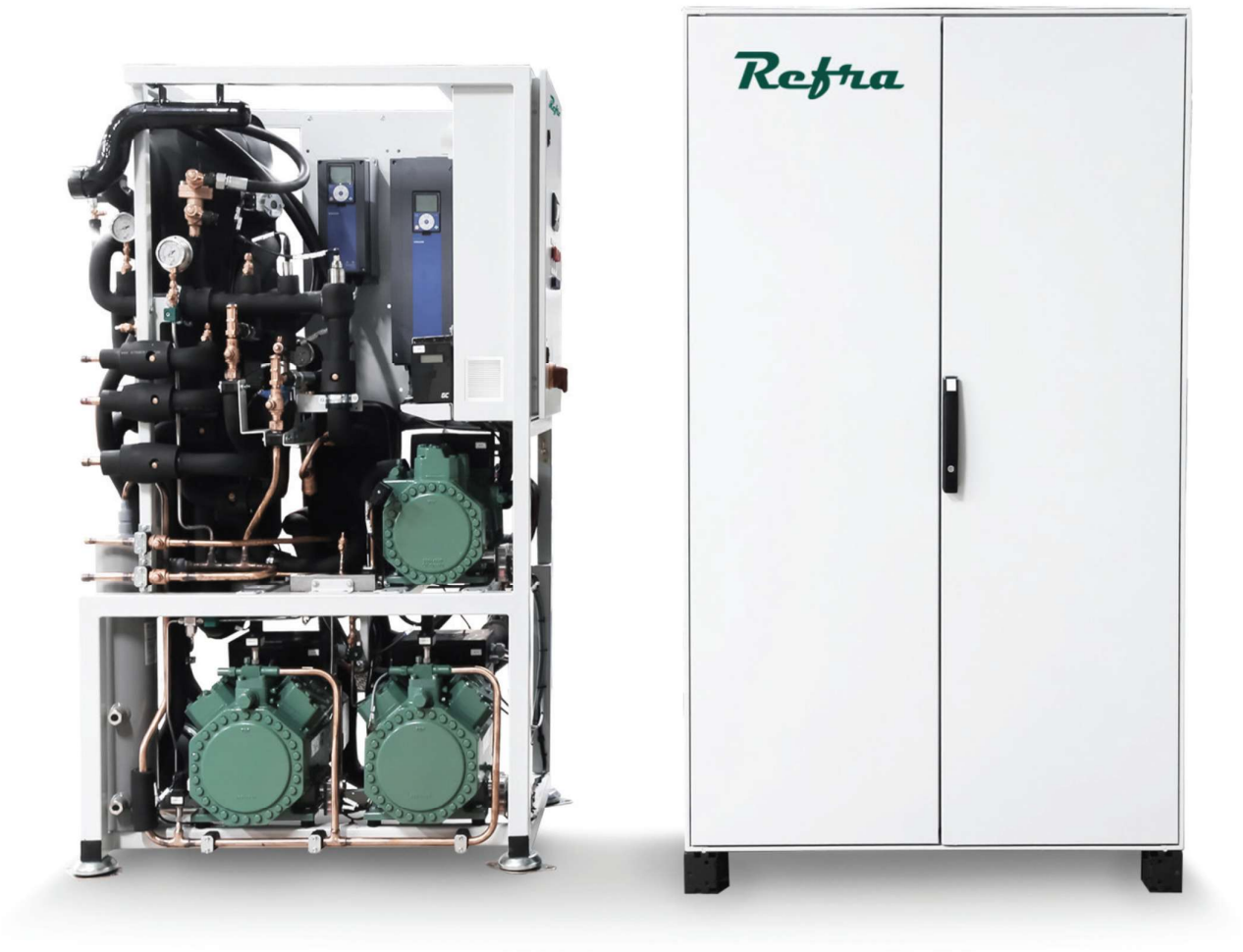
HUSSMANN®

REFRA GREEN SOLUTIONS

CO2 LIGHT

TRANSCRITICAL CO2 NATURAL REFRIGERANT SYSTEMS



NATURAL REFRIGERATION SYSTEMS SOLUTIONS FOR A MORE SUSTAINABLE FUTURE

NATURAL SOLUTIONS CO_2

PRODUCT BENEFITS

- Suitable for small food retail stores or gas stations
- Provide up to 56 kW of cooling capacity, split between medium temperature and low temperature refrigeration
- Designed with reliable refrigeration technologies
- Maximum of 3 compressors on a welded and powder coated frame
- Reliable insulation material to ensure proper unit protection and noise reduction
- Designed to house the system indoors
  Can be made with a special protective frame, which allows you to install the equipment outdoors and connect it to the premises

STANDARD FEATURES

- Open type welded, powder coated frame
- Anti-vibration legs
- Carel controllers
- Reciprocating Bitzer compressors
- Frequency inverters on lead compressor
- Low level liquid switch
- Filters (strainers)
- Filter (drier) on LL (liquid line)
- 75L Liquid receiver
- Safety valves
- Manometers
- 400 V/3 phases/50 Hz

CUSTOMISATION

- Can be manufactured with two different frame types - open Type and closed type
- System can be easily serviced as it is equipped with both front and side doors

AVAILABLE SYSTEMS

- CO2 transcritical rack MT 2x0
- CO2 transcritical booster MT+LT 2x1

TECHNICAL PARAMETERS

Calculations are made for basic units without additional options

Model			CL140	CL204	CL274	CL346	CL422	CL492	CL530
Standard version									
Refrigerant		Type	R744						
Maximum MT capacity	1)	kW	17.6	22.3	28.9	34.6	43.8	49.2	56.1
Number of MT compressors		n	2						
Receiver volume		L	75						
Design pressure									
High pressure		bar	120						
Receiver pressure		bar	80						
MT suction pressure		bar	60						
LT suction pressure	2)	bar	60						
Sound pressure level in 10m	3)	dB	47	47	47	48	56	56	56
Electrical design									
Power supply			400 V / 3 phases / 50Hz						
Max. Operating current		A	39.5	44.7	52.1	58.5	71.2	77.5	88.5
Main switch		A	63	63	63	63	125	125	125
Controller			Carel pR300T medium						
Cooling COP/EER	4)		1.46	1.52	1.53	1.54	1.62	1.65	1.67
Open frame information									
Length		mm	1090						
Width		mm	670						
Height		mm	1845						
Operating weight		kg	800	830	860	890	920	950	980

Technical parameters of additional options

Enclosed frame information									
Length		mm	1200						
Width		mm	800						
Height		mm	2120						
Operating weight		kg	920	950	980	1010	1040	1070	1100
Sound pressure level in 10m	3)	dB	40	40	40	42	50	50	50
Heat recovery module 40 plates									
10-60 °C	5)	kW	21	26	32	37	45	50	55
25-45 °C	5)	kW	20	25	31	36	44	48	54
HR frame information		mm	L820 x W720 x 1000						
Heat recovery module 120 plates									
10-60 °C	5)	kW	24	30	37	44	53	59	66
25-45 °C	5)	kW	23	28	36	42	52	58	64
HR frame information		mm	L820 x W720 x H1000						

Technical data for capacity selection | CO2 Light

LT Capacity kW at Evap. -30 °C			MT Capacity kW at evap. -10 °C, Gas cooler outlet:			
	Model		Model	34 °C	37 °C	42 °C
0			CL140	19.1	17.6	15.4
			CL204	24.1	22.3	19.5
			CL274	31.3	28.9	25.5
			CL346	37.4	34.6	30.5
			CL422	47.1	43.8	38.9
			CL492	52.7	49.2	44.1
			CL530	60.2	56.1	50.1
4.5	LTME042	+	CL140	13.7	12.2	10.1
		+	CL204	18.7	16.9	14.2
		+	CL274	25.9	23.6	20.2
		+	CL346	32.1	29.3	25.2
		+	CL422	41.7	38.4	33.6
		+	CL492	47.4	43.9	38.8
		+	CL530	54.8	50.8	44.8
7.5	LTME067	+	CL140	10.2	8.7	x
		+	CL204	15.2	13.4	10.8
		+	CL274	22.3	20.1	16.7
		+	CL346	28.5	25.8	21.7
		+	CL422	38.2	34.9	30.1
		+	CL492	43.8	40.4	35.3
		+	CL530	51.3	47.3	41.3
9.5	LTME091	+	CL140	7.8	6.4	x
		+	CL204	12.8	11	x
		+	CL274	19.9	17.7	14.3
		+	CL346	26.1	23.4	19.3
		+	CL422	35.8	32.6	27.8
		+	CL492	41.4	38	33
		+	CL530	48.9	44.9	39
12.4	LTME119	+	CL140	4.6	3.23	x
		+	CL204	9.6	7.89	x
		+	CL274	16.7	14.5	11.2
		+	CL346	23	20.3	16.2
		+	CL422	32.6	29.4	24.6
		+	CL492	38.2	34.8	29.8
		+	CL530	45.7	41.7	35.8
14.6	LTME140	+	CL140	2	x	x
		+	CL204	7	5.3	x
		+	CL274	14.1	11.9	x
		+	CL346	23.8	17.6	13.7
		+	CL422	30	26.8	22.1
		+	CL492	35.7	32.3	27.3
		+	CL530	43.1	39.1	33.3

1) Ambient temperature +35 °C, Gas Cooler outlet +37 °C, Evaporating temperature MT/LT -10/-30 °C.

1) Cooling capacity is specified for the lead compressor operating at 70 Hz. The second compressor is on/off

2) If LT compressor is selected as an option.

3) Sound pressure level at a distance of 10m in the free field and at the extended point, tolerance +/-2dB(A).

4) COP/EER according to compressor selection. The gas cooler and other components are not included in this calculation.

5) Heat recovery simulation based on 60% mass flow, 110 °C, 80 bar. Capacity may vary with actual compressor pack.

Additional Information

All Dimensions shown in Millimetres (mm) unless otherwise stated. Dimensions and features are subject to change. Please obtain current technical information prior to order confirmation.

NOTE: We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

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