

Waterloop | R-290 intartop

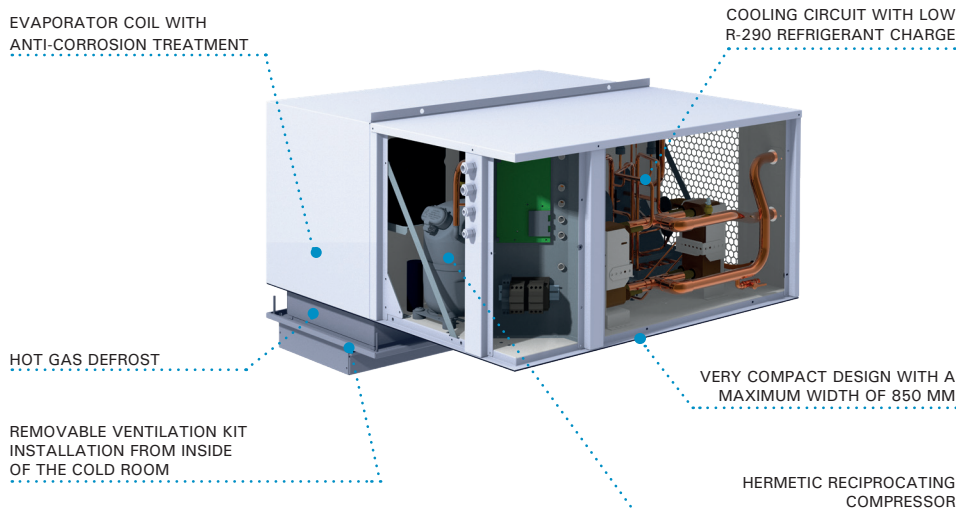


- ❄️ Compact unit condensed by water
- ❄️ Natural refrigerant R-290 with high energy efficiency.
- ❄️ Designed for extreme ambient conditions, with water temperatures up to 50°C.

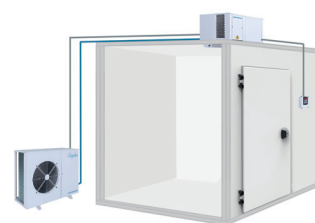
Water-condensed roof-top monoblock unit for refrigeration at positive and negative temperature.

Features

- ▶ Power supply: 230V 50Hz or 115V/220V 60Hz.
- ▶ R-290 refrigerant load, below 150 gr per circuit
- ▶ Hermetic reciprocating compressor.
- ▶ Hot gas defrost.
- ▶ Evaporator coil with anti-corrosion treatment by cataphoresis.
- ▶ Single / double refrigeration circuit.
- ▶ Water solenoid valve for multi-equipment installation in water loop (without assembly).
- ▶ Kit to adapt the evaporator mounting to cold rooms with panel thickness between 80 and 150 mm.



Installation



Compact R-290 system

CR-VHD **waterloop** are hermetically sealed compact systems with a minimum charge of R-290, exempt from the application EN 378.

They have a minimum R-290 refrigerant charge lower than the practical limit of the refrigerated volume.

Electrical board (optional)

Electrical power and control board for outside cold room installation.

- MCB protection of compressor and manoeuvre.
- Electronic control with temperature control and recording of maximum and minimum temperatures.
- Jet Cool function.
- Energy saving function.

230V 50Hz | Positive temperature | Hermetic reciprocating compressor | R-290

Series / Model	Compressor		Cooling capacity / Cold room volume (W) ⁽¹⁾		Input power (W)	Max. current (A)	Evap. air flow (m³/h)	Conden. water flow (litro/hora)	Pressure drop (kPa)	Hydraulic connection	Refrigerant load (gr) ⁽²⁾	Weight (kg)	SPL dB(A) ⁽⁴⁾	
	HP	Power supply	0 °C											
			W	m³										
R-290	MCR-VHD-1 008	3/4	230V	620	5	340	2,9	868	160	< 50	1/2"	< 150	75	24
	MCR-VHD-1 018	1	230V	1 280	14	620	5,2	868	313	< 50	3/4"	< 150	75	23
	MCR-VHD-2 028	1 + 3/4	230V	1 870	22	970	8,0	1 253	477	< 50	3/4"	< 150	122	26
	MCR-VHD-2 036	2x 1	230V	2 570	36	1 260	10,3	1 253	646	< 50	1"	< 150	122	46

230V 50Hz | Negative temperature | Hermetic reciprocating compressor | R-290

Series / Model	Compressor		Cooling capacity / Cold room volume (W) ⁽¹⁾		Input power (W)	Max. current (A)	Evap. air flow (m³/h)	Conden. water flow (l/h)	Pressure drop (kPa)	Hydraulic connection	Refrigerant load (gr) ⁽²⁾	Weight (kg)	SPL dB(A) ⁽⁴⁾	
	HP	Power supply	W	m³										
R-290	BCR-VHD-1 018	1	230V	590	3	460	5,2	868	175	< 50	1/2"	< 150	75	23
	BCR-VHD-1 034	2 1/2	230V	920	9	890	7,6	868	297	< 50	3/4"	< 150	75	25
	BCR-VHD-2 036	2x 1	230V	1 180	14	920	10,3	1 253	351	< 50	3/4"	< 150	122	46
	BCR-VHD-2 068	2x 2 1/2	230V	1 840	18	1 750	15,2	1 253	605	< 50	1"	< 150	122	48

115V 60Hz / 220V 60Hz | Positive temperature | Hermetic reciprocating compressor | R-290

Series / Model		Compressor		Cooling capacity / Cold room volume (W) ⁽¹⁾ 0 °C W m³		Input power (W)	Max. current (A)	Evap. air flow (m³/h)	Conden. water flow (l/h)	Pressure drop (kPa)	Hydraulic connection	Refrigerant load (gr) ⁽²⁾	Weight (kg)	SPL dBI(A) ⁽⁴⁾
R-290	MCR-VHD-1 008 +B1	3/4	220V	750	6	280	2,9	868	180	< 50	5/8" - 1/2"	< 150	75	24
	MCR-VHD-1 008 +B2	3/4	115V	680	5	340	2,9	868	180	< 50	5/8" - 1/2"	< 150	75	24
	MCR-VHD-2 028 +B1	1 + 3/4	220V	1 250	12	560	8,0	1 253	311	< 50	7/8" - 3/4"	< 150	122	26
	MCR-VHD-2 036 +B2	2x 1	115V	2 210	24	1 320	10.3	1 253	610	< 50	1 1/8" - 1"	< 150	122	46

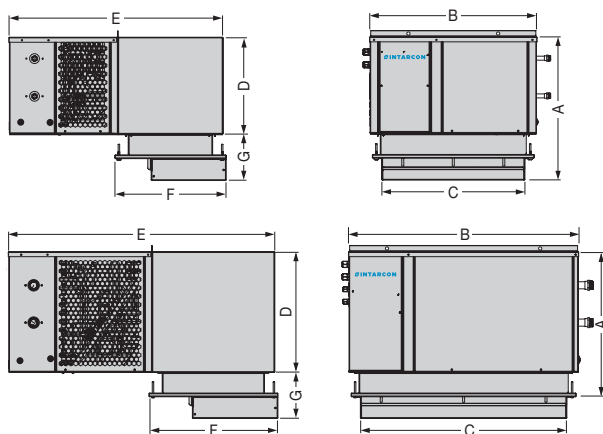
115V 60Hz / 220V 60Hz | Negative temperature | Hermetic reciprocating compressor | R-290

Series / Model	Compressor		Cooling capacity / Cold room volume (W) ⁽¹⁾		Input power (W)	Max. current (A)	Evap. air flow (m³/h)	Conden. water flow (l/h)	Pressure drop (kPa)	Hydraulic connection	Refrigerant load (gr) ⁽²⁾	Weight (kg)	SPL dB(A) ⁽⁴⁾	
	HP	Power supply	W	m³										
R-290	BCR-VHD-1 018 +B2	1	115V	550	2	460	5,2	868	180	< 50	5/8" - 1/2"	< 150	75	23
	BCR-VHD-1 034 +B1	2 1/2	220V	1 030	8	1 030	7,6	868	360	< 50	7/8" - 3/4"	< 150	122	46
	BCR-VHD-2 036 +B2	1	115V	1 010	8	950	5,2	1 253	330	< 50	7/8" - 3/4"	< 150	75	23
	BCR-VHD-2 068 +B1	2 1/2	220V	1 890	19	2 120	7,6	1 253	690	< 50	1 1/8" - 1"	< 150	122	46

Options

- ▶ Maritime packaging.
- ▶ Master-slave (alternating + simultaneous).
- ▶ Door micro-switch.
- ▶ Voltage control.
- ▶ Without water solenoid valve.

Dimensions



Dimensions (mm)	A	B	C	D	E	F	G
1 series	570	666	570	388	865	443	102
2 series	670	925	830	488	1 084	518	102

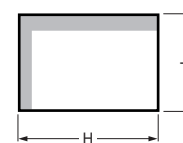
⁽¹⁾ Nominal performances refer to operation with cold room temperatures of 0 °C (PT) and -20 °C (NT) and water inlet condensation temperature of 40 °C. Estimated cold room volume according to conditions of the calculation bases.

⁽²⁾ Condenser pressure drop in the water circuit.

⁽³⁾ A3 refrigerant charge less than 0.5 kg, units exempt from, Regulation (EU) No 517/2014.

⁽⁴⁾ Sound pressure in dB (A) in open field at 10 m from the unit.

Mounting frame



DROP-IN FRAME

Dimensions (mm)	H	I
1 series	581	336
2 series	841	411

