

BRRC



Condenserless chiller with remote condenser

Range:

Cooling capacity: 300 ÷ 1200 kW

Available versions:

- basic
- high condensing water temperature (**)

Refrigerant R134a

Double Screw Compressors

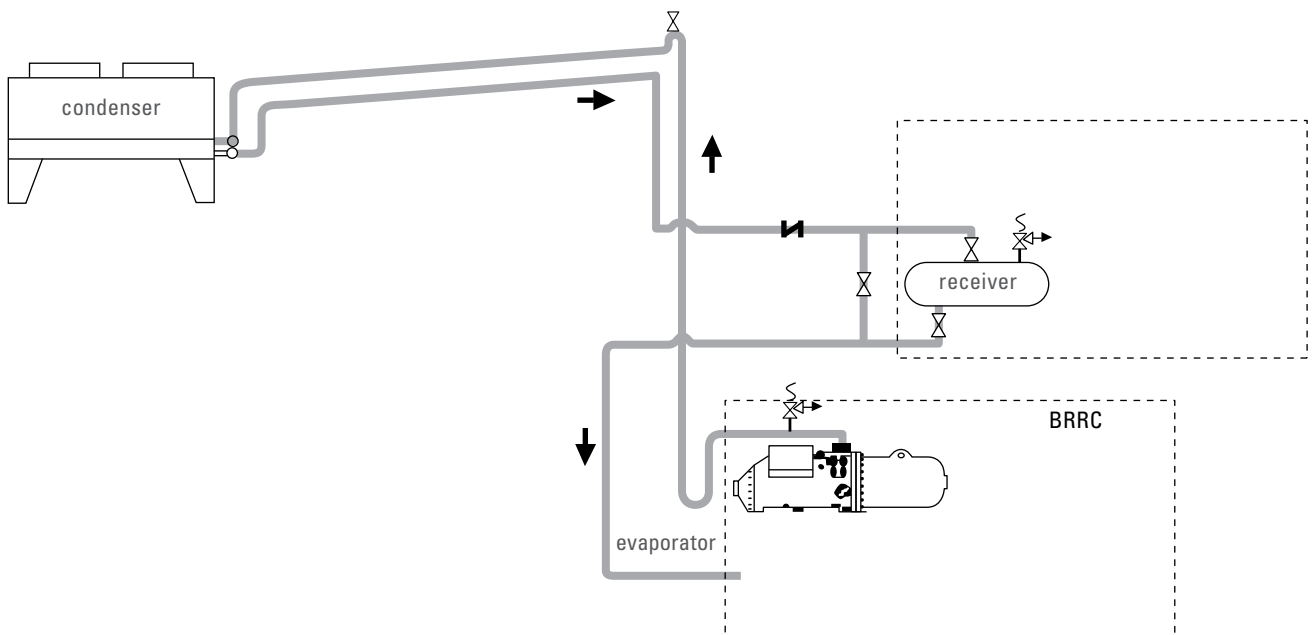
STANDARD FEATURES

- Self-supporting frame in galvanised steel with panels finished in epoxy powders (colour RAL7037)
- Two semi-hermetic double screw compressors with internal thermal protection, oil heaters and anti-vibration supports
- Two refrigerant circuits conforming to EC standards (PED 97/23/CE) in copper tubing including: filter dryer, liquid sight glass, electronic expansion valve, discharge shut-off valve, pressure gauges, pressure switches and high and low pressure transducers
- Shell & Tube evaporator insulated with closed-cell expanded neoprene
- Evaporator water flow pressure switch
- Electric panel conforming to EC standards (73/23/CE and EMC 89/336/CE directives) with maximum internal temperature control, auxiliary transformer, general cut off switch, fuses for compressors, cut off switches
- Phase sequence and min / max voltage control
- UPC1m microprocessor control system including:
 - mP20II local user terminal visible externally and accessible through a door panel
 - outlet chilled water temperature
 - advanced start-up management with 8 partialization steps with automatic set-point regulation and compressor rotation with FIFO logic (run time counter, inrush counter and counter threshold for programmed maintenance)
 - advanced evaporator anti-freeze protection
 - integrated LAN card for connection to the local network of a group of chillers (up to 10 units with one or two in reserve)
 - clock card
 - The microprocessor control system also includes:
 - external evaporator pump group management
 - set point adjustment from external 0-10V signal
 - double set-point management with contact selection
 - general alarm contact and 2 addressable alarm
 - ON-OFF remote contact
 - ability to interface with main external communication protocols: Modbus, Bacnet, Lonworks, Trend, Metasys, TCP/IP and SNMP

TECHNICAL DATA

BRRC MODEL		1402A	1602A	1802A	2002A	2202A	2502A	2802A	3202A	3602A	4202A	4802A
Power supply	V/ph/Hz	400 / 3 / 50										
Compressors	nr. x mod	2 x Semi hermetic double screw										
Evaporator	nr. x mod	1 x Shell & Tube										
Cooling capacity (1)	kW	284	336	377	414	482	551	630	726	842	938	1069
Absorbed power (1)	kW	88.7	100.3	115.5	122.2	143.9	159.0	176.3	208.3	244.0	272.0	299.8
EER		3.21	3.36	3.26	3.39	3.35	3.46	3.57	3.49	3.45	3.45	3.57
Noise levels												
Noise pressure level basic version (2)	dB(A)	73.5	73.7	73.8	78.0	79.5	79.7	79.6	77.3	75.3	76.3	78.4
Noise pressure level LN version (2)	dB(A)	64.0	63.9	64.6	68.5	69.6	68.7	72.4	69.3	69.1	71.8	72.5
Dimensions and weight												
Height	mm	2010	2010	2010	2010	2010	2010	2010	1870	1870	1870	1870
Length	mm	3700	3700	3700	3700	3700	3900	3900	4130	4130	4130	4130
Width	mm	850	850	850	850	850	850	850	1400	1400	1400	1400
Weight (3)	kg	2335	2385	2420	3139	3159	3191	3212	4616	4737	4858	4939

(1) Data refer to nominal conditions: Evaporator in/out water temperature: 12/7°C; Condenser temperature: 50°C; Evaporator fouling coefficient: 0,000043 m²C/W; R134a refrigerant
 (2) Measured in free field with Q=2 directionality factor, at 1 mt. from the unit
 (3) Data refer to a basic version empty unit



CONSTRUCTION OPTIONS

- Low-noise version with sound proofed housing for the compressors
 - Low temperature water production (to -10°C)
 - RS485 Serial card for connection to the Uniflair supervision system or an external BMS
 - LON FFT10 serial card for connection to an external BMS
 - with LON protocol
 - Power phase correction condensers
 - Unit predisposed for outdoor installation (*)
- (*) on request
 (**) available only for 1402A, 2002A, 2202A, 3202A, 3602A models

OPTIONS

- Remote control panel which allows:
 - display / modification of settings
 - display of activated alarms
- Spring anti-vibration supports
- Neoprene anti-vibration supports