



AIR COOLED LIQUID CHILLERS WITH CENTRIFUGAL FANS



HRA

0071 - 0502

UNIT DESCRIPTION

This series of air cooled liquid chillers, equipped with centrifugal fans, are suitable for use in little-medium sized systems where it is not possible to arrange for the unit itself to be located outdoors. Available static pressure can be set to meet the precise requirements of the system.

STANDARD UNIT COMPOSITION

- Base frame made of galvanised polyester sheet.
- Outer casing made of paraluman and frame of aluminium structural sections.
- Hermetic scroll compressors (up to size 0302).
- Hermetic reciprocating compressors (for sizes 0402 and 0502).
- Oversize centrifugal fans for less noise.
- Constant fan speed adjustment (outside air low ambient temperature device).
Optional for sizea 0071-0121.
- Electrical power and control panel complying with EN 60204-1/IEC 204-1 standards.
- Integral control and adjustment by microprocessor with possibility of remote control.
- Water side exchangers with highly efficient stainless steel AISI 316 plates.
- Differential pressure switch, water side.
- Interlock door mains isolator.
- Freeze-proof oil charge and refrigerant charge.
- General testing and operational test carried out in the factory in accordance with European Standard EN 12055.

MODELS

HRA This range of units features cooling only.

VERSIONS

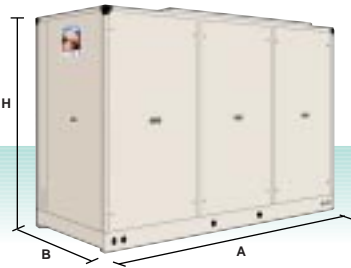
B Standard unit.



GENERAL TECHNICAL DATA

R22
REFRIGERANT

| MODELS | | 0071 | 0091 | 0101 | 0121 | 0152 | 0182 | 0202 | 0252 | 0302 | 0402 | 0502 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| HRA | | | | | | | | | | | | |
| Cooling capacity | ① kW | 19 | 23 | 26 | 32 | 38 | 45 | 51 | 65 | 79 | 98 | 117 |
| Compressor power input | ① kW | 6 | 7 | 8 | 11 | 12 | 14 | 17 | 21 | 27 | 34 | 43 |
| FANS RATING | | | | | | | | | | | | |
| Total air flow | m³/s | 2.2 | 2.5 | 2.8 | 2.8 | 5.6 | 5.6 | 5.6 | 7.8 | 7.8 | 11.7 | 11.7 |
| Max. external static pressure | Pa | 250 | 170 | 280 | 270 | 260 | 250 | 250 | 140 | 120 | 140 | 120 |
| OPERATING WEIGHT | | | | | | | | | | | | |
| HRA - B | Kg. | 335 | 340 | 375 | 395 | 600 | 615 | 625 | 760 | 860 | 1125 | 1175 |
| DIMENSIONS | | | | | | | | | | | | |
| A | ② mm | 1260 | 1260 | 1660 | 1660 | 2160 | 2160 | 2160 | 2362 | 2362 | 3362 | 3362 |
| B | ② mm | 845 | 845 | 845 | 845 | 845 | 845 | 845 | 1022 | 1022 | 1022 | 1022 |
| H | mm | 1410 | 1410 | 1410 | 1410 | 1410 | 1410 | 1410 | 1722 | 1722 | 1722 | 1722 |



| | |
|-----------------------------------|---------|
| ① Data referred to: | |
| Chilled water | 12/7 °C |
| Condensing air | 35 °C |
| ② Free areas required: | |
| Condensing coil side minimum | 1500 mm |
| Electrical panel side approx | 800 mm |
| Opposite side to electrical panel | 800 mm |
| Water connections side min. | 800 mm |

MAIN FUNCTIONS OF THE CVM CONTROLS

| | 2 | 2 | |
|---|------|------|---|
| Missing external consens led signal | • | • | Compressor start per hour and restarting time control |
| Remote on/off by external volt-free contact | • | • | Compressor working-hours control and display |
| Summer/winter mode in alternative to on/off remote switch | Par. | • | Compressor working hours balance system |
| Cumulative fault warning alarm | • | • | Led display of interface board correct operation |
| Suitable to control evaporator water pump | + | • | Auto-diagnostic of the electrical part |
| Evaporator-pump contactor | * | Opt. | Remote keyboard |
| Evaporator inlet/outlet water temperature display | • | | |
| Compressor/circuit failure signal | • | | |
| Unit general-alarm signal | • | | |
| Propor. regulating algorithm on the inlet water temp. | • | | |
| Delayed compressor start | • | | |

•: standard;
 +: unit with two compressors;
 *: unit with one compressor;
 Opt.: available upon request;
 Par.: available modifying a value of the configuration parameters