



ZDHT-01-8500-R744-L1
COMPACT SOLUTION



jbg2.com



CONDENSING UNIT

ZDHT-01-8500-R744-L1

There is no doubt that CO₂ is a natural choice for refrigeration's future. Ecology and legal regulations boost efficiency of big transcritical carbon dioxide systems by using parallel compression, ejectors and complex heat recovery systems that ensure every joule of energy is utilized.

We know that for a small format stores, complex solutions are often economically unjustified. That is why we designed compact condensing unit for your basic needs.

TWINROTARY COMPRESSOR

In our project we used reliable BLDC Twin Rotary compressor, that results with greater efficiency, better capacity control and reduced noise and vibration.



System is designed as one stage subcritical/transcritical, with gas by-pass valve. This is well proven concept when it comes to simplicity and work reliability.

Unit is divided into three pressure sections.

120 bar

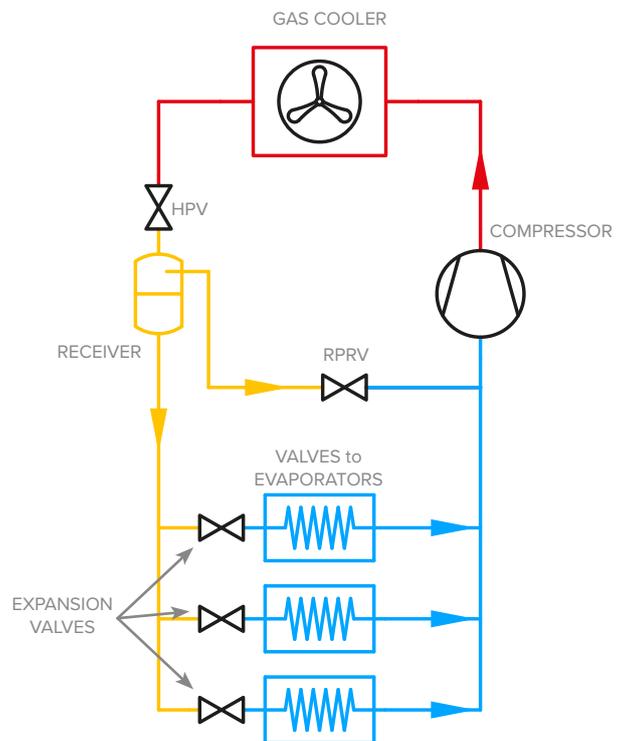
High pressure begins at compressor's outlet and continues through gas cooler, where refrigerant is cooled (and condensed during subcritical operation), to the high pressure control valve.

80 bar

Intermediate pressure section begins at high pressure control valve, where CO₂ is divided into gas and liquid in the receiver. Liquid flows to cabinets expansion valves and feeds MT evaporators. Gas phase is sent to the suction line through flash gas by-pass valve (to maintain proper receiver pressure).

80 bar

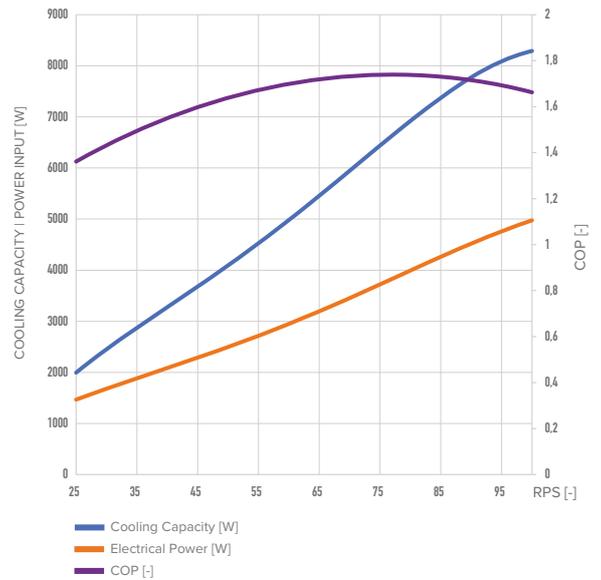
Medium pressure section begins at cabinets expansion valves, where refrigerant flows through evaporators, and completes the cycle to the compressor's inlet.



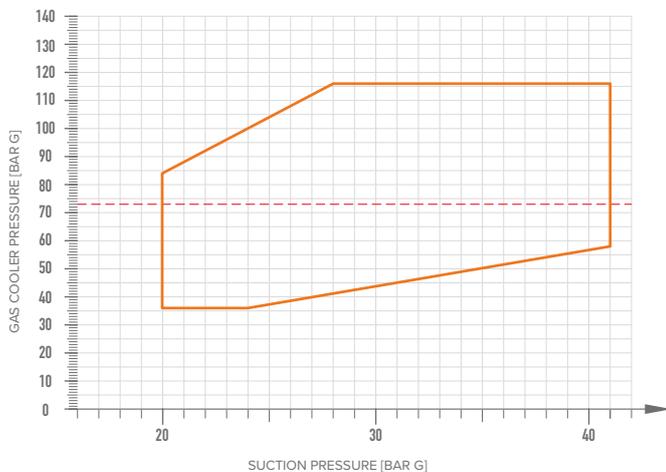
TECHNICAL DATA

WORK CHARACTERISTIC

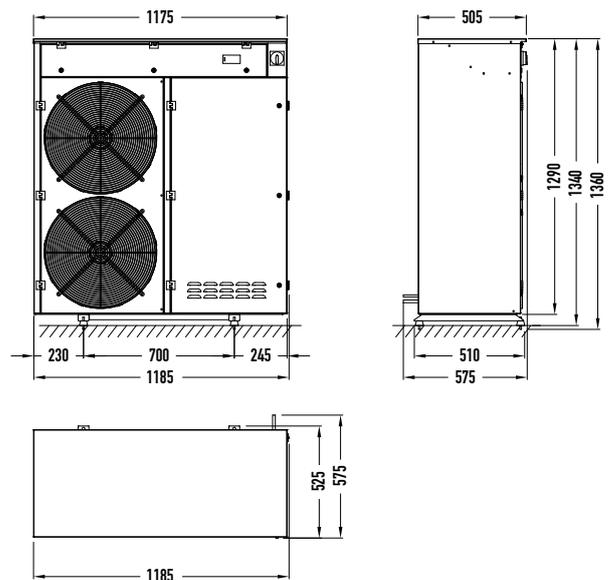
DISPLACEMENT	[cm ³]	10
RATED COOLING CAPACITY*	[W]	8200
RATED POWER INPUT*	[W]	5550
RECEIVER CAPACITY	[dm ³]	10
MAXIMUM CHARGE	[kg]	8,5
PROTECTION RATE	[-]	IP24
PIPING DIAMETER	[inch]	1/2" / 3/8" Suction / Liquid
DIMENSIONS	[mm]	1175 x 630 x 1270
DESIGN PRESSURE	[bar g]	80/80/120 Suction / Liquid / Discharge
PED CATEGORY	[-]	II
NET WEIGHT	[kg]	148
POWER SUPPLY	[V]	400/230 3/N/PE ~50 Hz
NOMINAL CURRENT	[A]	15,7
SOUND PRESSURE	[dB(A)]	45



WORKING ENVELOPE



TECHNICAL DRAWING



*RATED FOR: EVAPORATION TEMPERATURE -10 °C, GAS COOLER OUTLET TEMPERATURE 39 °C, DISCHARGE PRESSURE 101 BAR G, COMPRESSOR SPEED 100 RPS



CONDENSING UNIT

ZDHT-01-8500-R744-L1



LOW GWP
REFRIGERANT



PRECONFIGURED



OIL SEPARATION



ROTARY BLDC
COMPRESSOR



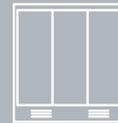
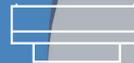
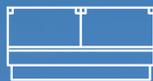
MODBUS/BMS



LCD DISPLAY



EC FANS



JBG-2 Sp. z o.o.
ul. Gajowa 5
43-254 Warszowice
Poland

Office:
E: info@jbg2.com
T: +48 32 494 00 00