

DB-D

Split units suitable for industrial applications
and freezing tunnel



- › Extreme versatility of use, low-medium temperatures, polyvalent temperatures and freezing tunnels
- › Suitable for different types of industrial applications
- › Compact and highly resistant to any environmental condition (ideal for outdoor installation)
- › Possible simultaneous management of one or more units



Powerful, reliable and versatile units mainly for industrial applications

The DB-D units are suitable for outdoor installation and designed to meet the requirements of storing goods inside big rooms.

The series is composed by four ranges: MDB for positive temperature rooms (max 1.776m³ at Tc= +0°C, Tamb= +30°C), BDB for negative temperature rooms (max 2.140m³ at Tc= -20°C, Tamb= +30°C), PDB for polyvalent rooms utilized either in medium or in low temperature (max 2.140m³ at Tc= -20°C, Tamb= +30°C) and CDB for freezing tunnel.

It is a range that therefore responds to different types of industrial applications.

The split structure allows the assembly of evaporator and condenser separately, which ensures that the user has a choice of flexible installation, overcoming all the problems deriving from the lack of space that might prevent the mounting of the monoblock on the room wall.

The condensing unit is suitable for outdoor installation, is protected by a resistant pre-painted sheet steel body which preserves the machine against atmospheric agents and requires ground installation.

The units are equipped with semi-hermetic reciprocating compressors.

The CDB range in particular is equipped with semi-hermetic two-stage reciprocating compressors for applications in freezing tunnels reaching a temperature range of [-30°C | -50°C].

The DB-D units are supplied ready to use, already tested, precharged with refrigerant (only the condensing part, the evaporating part is under nitrogen pressure) and equipped with automatic electrical defrosting system.

The evaporating unit, positioned on the ceiling or on the floor inside the room and equipped with thermostatic expansion valve, is available in cubic version with waste water drainage.

An electrical panel with electromechanical instrumentation manages all the functions of the machine allowing the user a simple and complete adjustment of the parameters.

Maintenance is facilitated by the presence of front panels that can be opened for direct and safely access to the refrigeration system.

The DB-D units are available also for polyvalent applications: a special design that allows the use of the room either in medium or in low temperatures.

A remote control panel allows the simultaneous management of one or more units installed inside the same room.

All these features make the DB-D unit a powerful, reliable and versatile machine mainly for industrial applications.

Standard configuration

- › Bitzer semi-hermetic compressor
- › Power supply 380-400/3N~/50
- › Air + Axial fan
- › Cataphoresis to the condenser coil
- › Crankcase heater
- › Pressure controlled condenser fan speed regulator
- › Electric defrost
- › Cooling
- › Bitzer semi-hermetic compressor
- › Remote control panel with serial output
- › Pressure gauges LP/HP (630mm)
- › Fan cowl heaters on B - P - C temperature range (low temperature, dual-temperature, freezing)
- › Circuit breaker + Magnetothermic Switches
- › Voltage monitor
- › Cumulative alarm relay in the main switchboard => Signal to DI of XLH360 remote control panel
- › Cubic evaporator
- › Packing in wooden box
- › Liquid Receiver + Liquid receiver shut off valves
- › Filter dryer
- › Sight glass
- › Liquid separator / exchanger
- › Thermostatic valve expansion
- › Pump-down stop system
- › Condensing unit with refrigerant charge
- › Evaporator under nitrogen pressure
- › Switchboard with automatic switches
- › Thermal overload protection for compressor
- › Adjustable calibration Hp switch with manual reset
- › Pressure controlled condenser fan speed regulator
- › Adjustable calibration Lp switch with automatic reset
- › 3m cable for power supply



Personalization options and accessories

Power supply:

- › 220-230/3~/50
- › 220-230/3~/60
- › 440/3~/60
- › 380-400/3N~/60

Type of defrost:

- › Hot gas

Control (temperature/humidity):

- › Cooling + heating
- › Cooling + Heating + Dehumidification with heat recovery system
- › Cooling + Heating + Dehumidification with heat recovery system and undersized evaporator (heavy dehumidification)

Evaporator characteristics:

- › Cataphoresis to the evaporator coil

Accessories kit:

- › Audible and visual alarm
- › Remote control panel for 2-3-4 units
- › Evaporator air streamers

A wide range of applications



Technical data



Medium temperature units

Code	SB.MDB150TEB23EXX	SB.MDB245NEB23EXX	SB.MDB245TEB23EXX	SB.MDB250NEB23EXX	SB.MDB250TEB23EXX	SB.MDB251TEB23EXX	SB.MDB351NEB23EXX	SB.MDB351TEB23EXX	SB.MDB352TEB23EXX	SB.MDB260TEB23EXX	SB.MDB360NEB23EXX	SB.MDB360TBB23EXX
Refrigerant	R134a											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	5	5	12	12	15	25	25	30	30	30	50	50
Defrost	Electric											
PED category	2	2	2	2	2	2	2	2	2	3	3	3
Working temperature [°C]	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5
Cooling capacity [Watt] [TC=0°C TA=30°C]	9.164	12.657	15.364	20.284	24.165	28.414	35.852	40.837	41.181	54.638		

Code	SB.MDB150TBB23EXX	SB.MDB245NBB23EXX	SB.MDB245TBB23EXX	SB.MDB250NBB23EXX	SB.MDB250TBB23EXX	SB.MDB251TBB23EXX	SB.MDB351NBB23EXX	SB.MDB351TBB23EXX	SB.MDB352TBB23EXX	SB.MDB260TBB23EXX	SB.MDB360NBB23EXX	SB.MDB360TBB23EXX
Refrigerant	R449A											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	4	5	7,5	10	15	20	25	30	25	35	40	40
Defrost	Electric											
PED category	2	2	2	2	2	2	2	2	2	3	3	3
Working temperature [°C]	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5	+10÷-5
Cooling capacity [Watt] [TC=0°C TA=30°C]	10.067	14.408	17.863	23.636	26.549	26.114	35.976	38.891	40.747	52.262	58.189	

Low temperature units

Code												
Refrigerant	R449A											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	7,5	10	12,5	15	20	25	30	30	40	40	50	50
Defrost	Electric											
PED category	2	2	2	2	2	2	3	2	3	2	3	
Working temperature [°C]	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25
Cooling capacity [Watt] [TC=-20°C TA=30°C]	8.191	8.670	11.102	14.423	18.531	21.344	23.648	27.906	31.599	32.589	35.030	43.996

Multi-temperature units

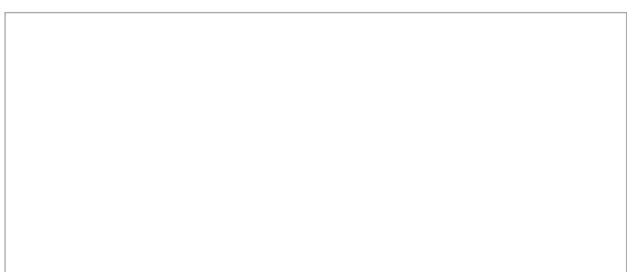
Code												
Refrigerant	R449A											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	10	15	30	60	80							
Defrost	Electric	Electric	Electric	Electric	Electric							
PED category	2	2	2	3	3							
Working temperature [°C]	+5 ÷ -5 -15 ÷ -25											
Cooling capacity [Watt] [TC=-20°C TA=30°C]	8.669	14.123	21.923	32.589	50.751							

Code	SB.BDB360TBB23EXX											
Refrigerant	R449A											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	60											
Defrost	Electric											
PED category	3											
Working temperature [°C]	-15 ÷ -25											
Cooling capacity [Watt] [TC=-20°C TA=30°C]	50.751											

Freezing units

Code												
Refrigerant	R449A											
Power supply [V/Ph~/Hz]	380-400/3N~/50											
Compressor type	Semi-hermetic											
HP compressor	7,5	10	15	25	30	40	50	75				
Defrost	Electric											
PED category	2	2	2	2	3	3	3	3				
Working temperature [°C]	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50	-30 ÷ -50				
Cooling capacity [Watt] [TC=40°C TEV=-40°C]	3.826	5.439	12.334	16.413	19.637	28.592	32.826	49.239				

Responsible Editor: Zanotti S.p.A. Via M.L. King, 30 · 46020 Pegognaga (MN) · Italy · www.zanotti.com · P.IVA IT01856570203 · REA 220625



ECPEN21-847B

09/2023



The present publication is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this publication to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this publication. All content is copyrighted by Daikin Europe N.V.