ZANOTTI
a member of DAIKIN group

SB

Ceiling-mounting monoblock units

- Quick installation on the cold room roof
- The ceiling installation leaves the space inside the cold room completely free
- The white color of the evaporator blends discreetly with the walls of the cold room
- Extremely quick to install, reducing times and costs of installation
- Best surface-capacity ratio
- Remote electronic control panel with user-friendly interface

Units easy to be installed and to be managed

The models of the SB range are monoblock units characterized by great versatility of use and accessible to anyone looking for a type of ceiling installation.

Suitable for small rooms, the SB range is composed by 2 lines: the MSB for medium temperatures (max 57 m^3 at Tc= +0°C, Tamb= +30°C) and the BSB for low temperatures (max 68 m^3 at Tc= -20°C, Tamb= +30°C).

Pursuing the objectives of robustness and efficiency, the body of the condensing unit is made of sheet steel like the evaporator contained in a thermally insulated compartment and connected directly to the condenser part.

The reciprocating hermetic compressor and the programmed automatic hot gas defrosting, with cycle frequency, make the SB a stand-alone machine without the need for recurring maintenance.

The installation of the unit on the ceiling is very easy, the mounting consists of a single hole in which the evaporating part will be inserted, which does not require other connections.

The condensing water elimination system is automatic. The electrical panel of the SB has an electronic control unit whose operating parameters are already programmed.

The electronic control unit manages the SB and allows the signalling of any anomalies.

The type of installation and the machine control, simple and intuitive thanks to the remote electronic control panel to be installed on the wall to set the desired temperature and visualize possible alarms, make the SB unit easy to be managed.

This range of monoblocs, characterized by remarkable compactness, allows to optimize the useful space inside the cold room, guaranteeing excellent performance, reliability and efficiency.

Standard configuration

- Hermetic compressor
- Power supply 220-230/1N~/50 or 380-400/3N~/50
- Air + Axial Fan
- Crankcase heater + Pressure controlled condenser fan speed regulator + Double solenoid valve for defrosting (only units MSB530, BSB545, BSB550)
- Remote electronic control panel
- Expansion through capillary tube
- Liquid line filter
- Coldroom light with bulb
- Door micro switch cable
- Door heater cable for low temperature units
- Condensate water evaporation drip tray
- Ceiling mounted configuration
- High and low pressure switches
- Cables length 5m
- Hot gas defrost
- Refrigerant charge

Personalization options and accessories

Power supply:

- 220-230/1N~/50 (standard MSB005÷210 and BSB010-117 units)
- 380-400/3N~/50 (standard MSB212÷530 and BSB220÷550 units)
- 220-230/1N~/60
- 220-230/3~/50
- 220-230/3~/60
- 440/3~/60
- 380-400/3N~/60
- 110-115/1N~/60
- 460/3~/60

Condensation type:

- Air + Centrifugal fan (no MSB005, BSB010 units)
- City water with pressure valve

Winter Kit, low ambient temperature accessories:

- Crankcase heater + Condenser fan pressure switch + Double solenoid valve for defrosting (only MSB005, MSB106, MSB107, MSB210, MSB212, BSB010, BSB117, BSB220 units)
- Crankcase heater + Pressure controlled condenser fan speed regulator + Double solenoid valve for defrosting (only MSB315, MSB320, MSB425, BSB330, BSB440 units)

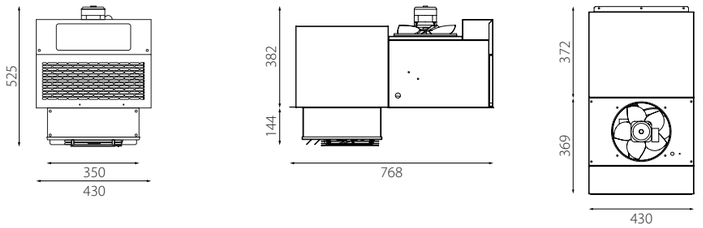
Accessories kit:

- Audible and visual alarm
- Remote control panel for 2-3-4 units
- Prearrangement for supervision system
- Remote control panel for 2 units with alternating operation

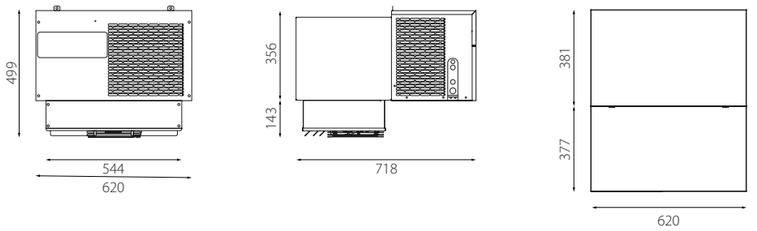
How and where to install the unit

Dimensions

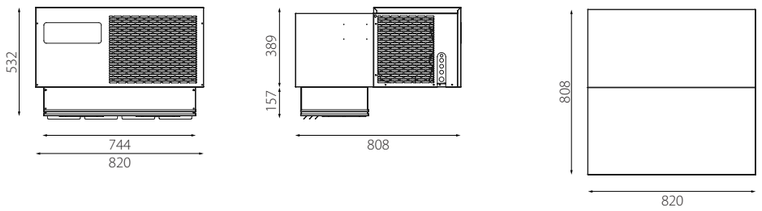
Constructive frame 0



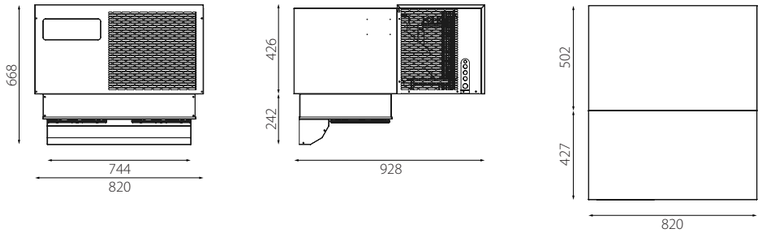
Constructive frame 1



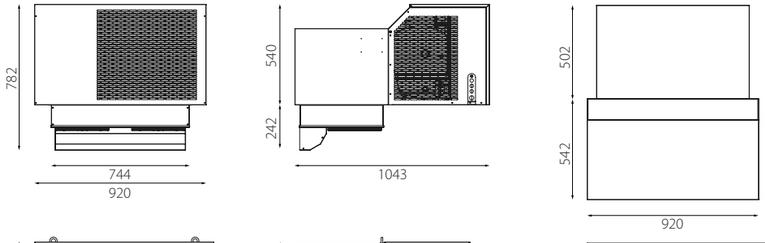
Constructive frame 2



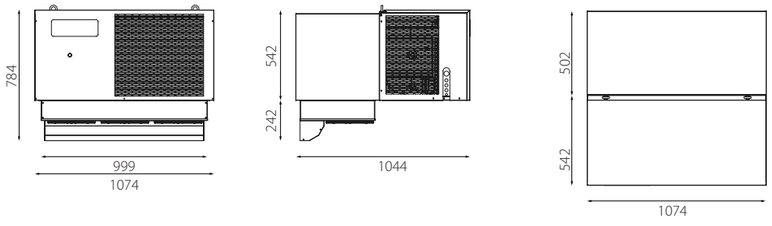
Constructive frame 3



Constructive frame 4



Constructive frame 5



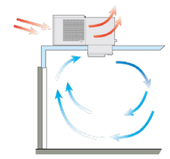
Air flow

The air flow of the SB units is composed by the flow of the condensing part and the one of the evaporating part.

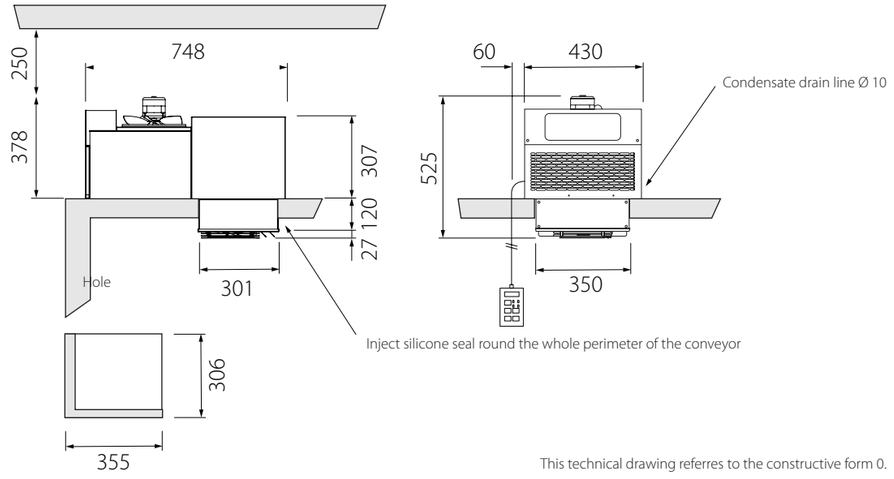
In the condensing part, the air is sucked from the front grille through the condenser axial fan (the diameter changes according to the constructive frame) and is discharged from the upper part in the frame 0 and from the side in the other frames.

The condensing part equipped with centrifugal fan (not avaiable for the frame type 0), thanks to the blades positioned differently compared to axial fan version, can direct the air flow by means of a duct towards a specific direction to avoid excessive heating of the surrounding environment.

Inside the room, in the evaporating part, the air is sucked from bottom to top by the fans and then expelled from the front by the air conveyor of the evaporator.



Installation method



This technical drawing referres to the constructive form 0.

The installation of the SB units is on the roof of the cold room.

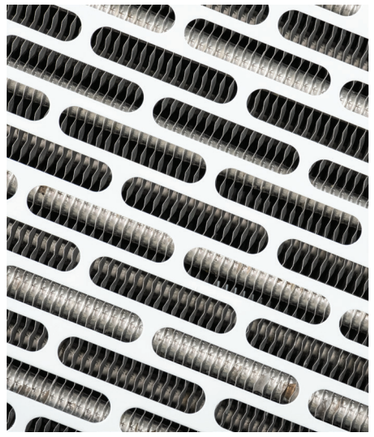
The body of the evaporator part has been designed to reduce as much as possible the occupied space inside the cold room. It is designed to be placed in the hole created in the roof of the cold room.

The condensing part lays on the top of the cold room.

The unit must be positioned in an environment with good air circulation, away from high heat sources and away from obstacles that could limit the possibility of good suction and equally good discharge of the treated air.

Units details









A wide range of applications

Technical data

SB

Medium temperature units

Code	MSB005EA11XX	MSB106EA11XX	MSB107EA11XX	MSB210EA11XX	MSB212EB11XX	MSB315EB11XX	MSB320EB11XX	MSB425EB11XX	MSB530EB13XX
Refrigerant	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Power supply [V/Ph~/Hz]	220-230/1N~/50	220-230/1N~/50	220-230/1N~/50	220-230/1N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50
HP compressor	5/8	3/4	1	1,2	2,3	3	3,5	4	5
Defrost	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas
PED category	0	0	0	0	0	0	0	0	1
Working temperature [°C]	+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]	857	1.120	1.338	1.799	2.022	3.282	3.550	3.774	4.871

Low temperature units

Code	BSB010DA11XX	BSB117DA11XX	BSB220DB11XX	BSB330DB11XX	BSB440DB11XX	BSB545DB13XX	BSB550DB13XX
Refrigerant	R452A	R452A	R452A	R452A	R452A	R452A	R452A
Power supply [V/Ph~/Hz]	220-230/1N~/50	220-230/1N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50	380-400/3N~/50
HP compressor	3/4	1,7	2	3	3,5	4	5
Defrost	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas	Hot gas
PED category	0	0	0	0	2	2	2
Working temperature [°C]	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25	-15 ÷ -25
Cooling capacity [Watt] [TC=-20°C | TA=30°C]	628	1.162	1.699	2.596	3.097	3.890	4.849

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