

PRODUCTION LINE

EnviMatic B



EnviMatic

AIR CONDITIONING UNIT

EnviMatic B

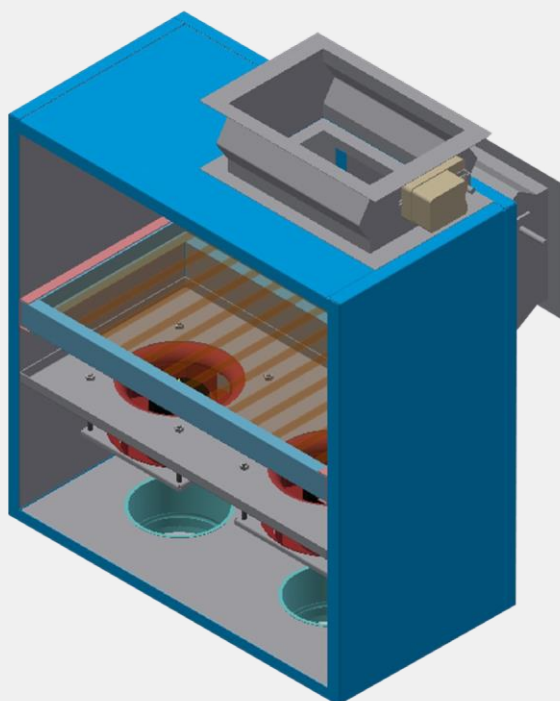
The air conditioning units of EnviMatic B series are designed for cooling of spaces less burdened by felt heat - particularly where the environmental parameters control (temperature, humidity ...) is required.

The air conditioning units EnviMatic B apply the utmost principle of direct free cooling using cold outdoor air, thereby dramatically reducing the operating costs.

The EnviMatic B line units are designed for smaller applications

The unit, regarding the use of a circulating mode and in a combination with an external source

- machine cooling, are suitable appropriate for maintaining stringent parameters of the internal environment even at extreme summer temperatures and outside air humidity during the day.



- The units are made of highly reliable components.
- The lifetime of maintained serviced equipment is over 10 years.
- By combining units you can achieve higher cooling performance.
- The EnviMatic B unit features a function of direct free cooling, i.e. utilizing the cooling potential of the outside air for substantial savings in operating costs.
- Air power 1,300 m³/h.
- Cooling power 2.3 kW.
- Flexible BOX arrangement.
- Minimum demands on space occupied.
- EC motors - advanced cooling power management.
- Machine cooling in air circulating mode ensures full cooling power even in extreme summer conditions.
- Modern control system with remote access and integration in superior systems.
- Reliability mode.
- Variant with cooling air supply in a sleeve or pipe canal or directly into the area.

COOLING POWER
0...2.3 kW

POWER PARAMETERS

| | | |
|---------------|------|------------|
| Air power | m3/h | 0.....1,30 |
| Cooling power | kW | 2.3 |

SUMMARISING INFORMATION ON A STANDARD UNIT

| | | |
|-------------------------------|-------|------------|
| Total power input | W | 196 |
| Power supply protection | A | 10A |
| Number | | 1 |
| Power supply | V | 36...57VDC |
| Acoustic pressure level in 1m | dB(A) | 46 |
| Inlet filter | Class | F7 |

DIMENSIONS

| | | |
|--------|----|-----|
| Width | mm | 660 |
| Depth | mm | 380 |
| Height | mm | 950 |
| Weight | kg | 28 |

OTHER PARAMETERS

| | | | |
|---|-----------|-----------|----------|
| Internal wall mounting | YES | | |
| Outdoor | YES | | |
| Sound pressure reduction | dB(A) | extension | |
| Inlet filter | Clas | F | extensic |
| Filter - dimensions | mm | 592 x 287 | |
| Mixing part | extensi | | |
| Motor flap control (overpressure, mixing) | YES (2x) | | |
| Electric heating control | YES | | |
| Electric heating contactor - external | extension | | |
| Control of external split units (including periodic rotation) | YES (2x) | | |
| Split unit contactor - external | extension | | |
| Outdoor and indoor temperature sensor | YES | | |
| Summary alarm report - contact | YES | | |
| LCD control panel | YES | | |
| Modbus/RTU communication | YES | | |
| TCP/IP communication | YES | | |
| Integrated web server | YES | | |
| Complete remote control over Ethernet | YES | | |
| Time program (6 points per day) | YES | | |
| | | | |
| Measurement of power consumption, hourly consumption | extension | | |
| Archive of temperature values and selected quantities | YES | | |
| Possibility to connect additional sensors -T, RH... | extension | | (3x) |
| Possibility to connect other binary input signals | extension | | (4x) |

OPERATING MODE OF THE EQUIPMENT

The unit operates in a free cooling mode depending on the indoor and outdoor temperature, optimum energy efficiency and the condition of the detection, alarm or other inputs. The operating modes are selected by the unit automatically based on the required set environmental parameters and the best fuel economy. The operating modes can be ordered to the air-conditioning unit by the superior system (depending on user preferences, or in response to external event - e.g. fire or another alarm).

DIRECT AIR FREE-COOLING AND FREE COOLING WITH AIR MIXING

For major part of the year, the outside air parameters are sufficient for cooling of the technology. In that case, the outside cool air is supplied to the technology.

In case the outside air is too cold, heat is recovered back into the inlet air flow

through mixing with exhaust air. Or (depending on the mode selection) the supply fan speed is changed.

The conditioned air is transported to a room or to a distribution duct. Warm exhaust air is discharged out of the room via a controlled overpressure flap.

The free air cooling unit control system is ready to control an external split cooling machine in circulation mode.

AIR CONDITIONING UNIT FREE AIR TECHNOLOGY

