# The driver's section is a workplace





Air conditioning of the driver's section with a big impact and variability





There are many reasons why preferential treatment should be given to the bus driver at his workplace when it comes to climate control – and even more reasons are sitting right behind him.

# ► Aluminium to the Front

Compared to older models which were usually made of steel the new aluminium frontbox is a lightweight (12 kg). With a housing and heat exchanger made of 100% aluminium we achieve not only significant advantages in terms of weight, but also with respect to corrosion protection. One may suspect that this was not possible without the loss of some of its old virtues, but the new frontbox remains true to its consistently simple and successful principle "always constant – infinitely variable". And the same applies to its customer- and vehicle-oriented air manifold.

### **Almost limitless applications**

Its modular design and variable connection options provide for the greatest possible flexibility. It is always precisely geared to the requirements of the bus manufacturers. In principle it can be mounted either vertically or horizontally, either in the centre of the dashboard or below the floor, or even below/behind the driver's seat. We can rightfully claim: "this box always fits".

# Possible applications with Valeo AC

- · REVO rooftop unit
- · Citysphere S compact unit
- · Split-type unit (horizontal)

(A frontbox works only in conjunction with an AC in cooling mode, of course, otherwise only heating function.)

### A/C solution for the driver's section

# Refrigerant circuit Refrigerant circuit Refrigerant circuit

# Autonomous A/C solutions for the driver's section

Frontbox with Citysphere S
(with integrated E-compressor)

Citysphere

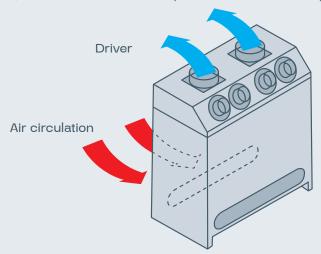
Refrigerant circuit

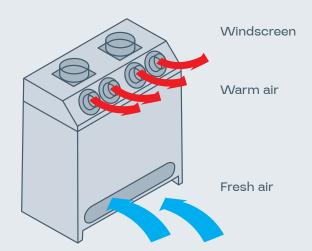
Heating circuit

Frontbox

### Air discharge models

(can be tailored to customer requirements via air diffuser flap and fresh/circulating air flaps)





# ▶ A comfort level we are used to from our own car

Any bus driver who sits at the wheel for long hours will welcome pleasant temperatures and a high degree of safety at his workplace at the front of the bus, with an uninterrupted view of the road and traffic. You may think that is as easy as you with your own car. But the air conditioning, heating or defrosting of the far larger bus windscreen cannot be compared with the more modest requirements of a car.

Significantly larger air masses must be moved in the bus, and no compromises can

be made when it comes to heating and air conditioning. Safety first, and comfort right behind it: those are the requirements placed on these systems. The new aluminium frontbox circulates up to an impressive 1,100 m³ of air per hour in and around the driver's section.

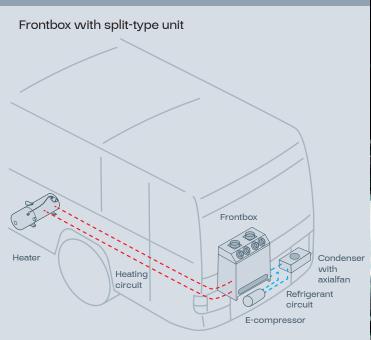
The system can be operated using the appropriate control panel from the Valeo Thermal Bus electronics kit, e.g. SC 1000 or SBI, but only in close consultation with the vehicle manufacturer.

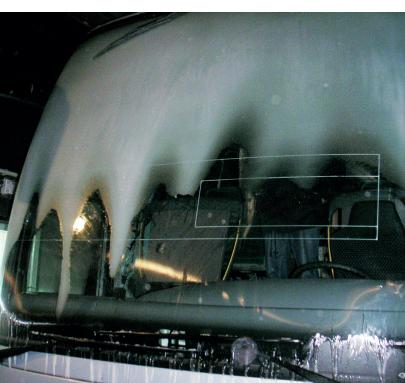


SC 1000



SBI





# Travel comfort for the driver



# **HIGHLIGHTS**



### Low life-cycle costs

 Lightweight construction through 100% aluminium (housing and heat exchanger) for less fuel/power consumption of vehicle and corrosion protection



### Comfort

- Frontbox with brush blower (2-stage) or EC fan (infinitely variable or 3-stage)
- · Horizontal or vertical mounting
- Installation: in the centre of the dash board, underfloor, below or behind the driver's seat
- Fresh/circulation air flap system and air diffuser flaps electrically operated



# **Easy installation**

 Variable connections, according to vehicle and bus manufacturer's requirements.

## **TECHNICAL DATA**

Air volume (free blowing):	1100 m³/h
Heating capacity (Q100):	16kW
Cooling performance:	6kW
Dimensions: w/o air duct	416 x 496 x 251 mm (H x W x D)
Dimensions: with air duct	528 x 496 x 251 mm (H x W x D)

