

# ESD-VI-BNSD Technical Information

## Air Conditioner for ElectricBus



Model:		ESD-VI-BNSD
Cooling Capacity	Standard	24~37 kW (Variable frequency adjustable)
Compressor		HIGHLY DC250-750V (Adjustable)
Recommended Bus Length (Applicable to China's climate)		10.5-12m
Air Flow Volume(Zero Pressure)	Condenser (Fan Quantity)	10000 m3/h (5)
	Evaporator (Blower Quantity)	6000 m3 /h (6)
	Fresh air	1800 m3 /h
Roof Unit	Dimension	3170(L)×2000(W) ×278(H)mm
	Weight	275kg
power Consumption	Cooling	8.5kw
Refrigerant	Type	R407C
Optional		
BTMS	charging	≤10kw(outlet water 7℃-15℃)
	discharging	1~3.5kw(outlet water 10℃-20℃)
Cloud Control (Optional)	Remote control check failure, Improve product services through big data applications	
Air purification function (Optional)	Contains four major functions: electrostatic dust collection, ultraviolet light, ion generator, and photocatalyst filtering, to achieve sterilization, deodorization and efficient dust removal, and effectively block the virus transmission pathway;	



Expansion Valve



Compressor



Condenser Fan



Control Panel



Evaporator Blower



Air Return Grille

### 1. Evaporator Blower and Condenser Fan

EBM brand, the key components (like bearing and carbon brush) adopt famous brands, high air volume, low noise, high efficiency.

### 2. Evaporator and Condenser Core

SONGZ brand, adopt small diameter ( $\varnothing 7\text{mm}$ ) and inner grooved copper tube, comparing to  $\varnothing 9\text{mm}$  copper tube, the coefficient of heat transfer is improved by 5%, condensing temperature declines  $2\sim 3^{\circ}\text{C}$ , system COP rises 5~8%, refrigerant filling declines 10%.

### 3. Expansion Valve

Famous brand, high reliability, high adjustment accuracy and excellent performance.

### 4. Compressor

HIGHLY brand, hermetically sealed electric compressor, high efficiency, steady quality.

### 5. Control Panel

Digital display, intelligent temperature control, waterproof design and fault indication.

### 6. Air Return Grille

Adopt aluminum alloy, strong and durable, elegant appearance, various colors for selection.

### 7. Framework and Shell

The framework adopt high strength fiber glass. The roof unit has compact structure, elegant appearance, streamline design, small wind resistance.

### 8. Product EMC meets GB / T 18655 level 3 requirements.

The system adopts independent intellectual property rights insulation design, which is safe and reliable.