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ESA-IB-BNDD Technical Information Air Conditioner for Electric Bus



Model:		ESA-IB-BNDD
Cooling Capacity (Evaporator Room 40°C/ 45%RH / Condenser Room 30°C)	Standard	8-16 kW (Variable frequency adjustable)
Recommended Bus Length (Applicable to China's climate)		6 ~7.5 m
Suitable power supply		400V-720V
Compressor		HIGHLY
Air Flow Volume(Zero Pressure)	Condenser (Fan Quantity)	5400 m ³ /h (3)
	Evaporator (Blower Quantity)	3200 m ³ /h (4)
	Fresh air	960 m ³ /h
Roof Unit	Dimension	2700(L)×1600(W) ×200(H)
	Weight	135 kg
cooling Power Consumption		4.2kW
Refrigerant	Type	R407C
Optional functions		
BTMS (Optional)	charging	≤10kw(outlet water 7°C-15°C)
	discharging	1~3kw(outlet water 10°C-20°C)
Cloud Control	Remote control check failure, Improve product services through big data applications	
Air purification function,	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;	



1. Evaporator Blower and Condenser Fan

World famous 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

World 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 and shell 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.