

Sphere Air Conditioning Electrical Units

STAC-E06 Roof Mounted Unit

Features:

STAC-E06 Roof mounted unit is designed for large electrical city bus of 10-12m or electrical coach of 11-13m, the compressor and electrical system is powered by vehicle battery.

System components

- ◇ LFT frame
- ◇ Shanghai HITACHI scroll compressor
- ◇ Refrigerant receiver and filter drier
- ◇ Danfoss expansion valve

Control system

DC voltage 24V
 Digital display
 CAN bus control system with 7 speed air flow adjusting module



Roof Mounted Unit

Application for	Large Electrical City Bus/Coach
Cooling capacity	32, 000 kcal/h
Heating capacity	30, 000 kcal/h
Evaporator Air Flow	5400 m ³ /h
Condenser Air Flow	10000 m ³ /h
Fresh Air	1500 m ³ /h
Power Consumption(700V)	10KW
Dimension in mm (l x w x h)	3000x1920x270
Max Ambient temperature	50 °C

Compressor

Brand	Shanghai HITACHI
Displacement	2*34 cc
Compressor oil type	HAF68
Compressor Weight	2*7.5kg

Refrigerant

Type	R407c
Amount	2*2.6 kg

Evaporator

Type	Hydrophilic aluminium foil with internal ridge copper tube
Fan motor	7-speed centrifugal type
No. of fan motor	6 pcs

Condenser

Type	Aluminium foil with internal ridge copper tube
Fan motors	3-speed axial type
No. of fan motor	5 pcs

Above data based on the test condition of: Temp =35°C, Tin=27°C Humidity=50%

STAC-E05

Features:

STAC-E05 Roof mounted unit is designed for large electrical city bus of 9m or electrical coach of

10m, the compressor and electrical system is powered by vehicle battery.

System components

- ◇ LFT frame
- ◇ Shanghai HITACHI scroll compressor
- ◇ Refrigerant receiver and filter drier
- ◇ Danfoss expansion valve

Control system

DC voltage 24V

Digital display

CAN bus control system with 7-speed air flow adjusting module



Roof Mounted Unit

Application for	Large Electrical City Bus/Coach
Cooling capacity	26, 000 kcal/h
Heating capacity	24, 000 kcal/h
Evaporator Air Flow	5400 m ³ /h
Condenser Air Flow	8000 m ³ /h
Fresh Air	1500 m ³ /h
Power Consumption(700V)	8KW
Dimension in mm (l x w x h)	2500x1920x270
Max Ambient temperature	50 °C

Compressor

Brand	Shanghai HITACHI
Displacement	2*34 cc
Compressor oil type	HAF68
Compressor Weight	2*7.5kg

Refrigerant

Type	R407c
Amount	2*1.8 kg

Evaporator

Type	Hydrophilic aluminium foil with internal ridge copper tube
Fan motor	7-speed centrifugal type
No. of fan motor	6 pcs

Condenser

Type	Aluminium foil with internal ridge copper tube
Fan motors	3-speed axial type
No. of fan motor	4 pcs

Above data based on the test condition of: Temp=35°C, Tin=27°C Humidity=50%

STAC-E04

Features:

STAC-E04 is roof mounted unit is Designed for large electrical city bus of 8m or electrical coach of 9m, the compressor and electrical system is powered by vehicle battery.

System components

- ◇ LFT frame
- ◇ Shanghai HITACHI scroll compressor
- ◇ Refrigerant receiver and filter drier
- ◇ Danfoss expansion valve

Control system

DC voltage 24V
Digital display
CAN bus control system with 7-speed air flow adjusting module



STAC-E04

Roof Mounted Unit

Application for	Middle Electrical City Bus/Coach
Cooling capacity	24,000 kcal/h
Heating capacity	22,000 kcal/h
Evaporator Air Flow	3600 m ³ /h
Condenser Air Flow	8000 m ³ /h
Fresh Air	900 m ³ /h
Power Consumption(700V)	7KW
Dimension in mm (l x w x h)	1940x1920x270
Max Ambient temperature	50 °C

Compressor

Brand	Shanghai HITACHI
Displacement	2*34 cc
Compressor oil type	HAF68
Compressor Weight	2*7.5kg

Refrigerant

Type	R407c
Amount	2*1.8 kg

Evaporator

Type	Hydrophilic aluminium foil with internal ridge copper tube
Fan motor	7-speed centrifugal type
No. of fan motor	4 pcs

Condenser

Type	Aluminium foil with internal ridge copper tube
Fan motors	3-speed axial type
No. of fan motor	4 pcs

Above data based on the test condition of: Temp =35°C, Tin=27°C Humidity=50%

STAC-E03

Features:

STAC -E03 Roof mounted unit is designed for electrical coach of 6-7m, the compressor and electrical system is powered by vehicle battery.

System components

- ✧ Aluminum frame
- ✧ Shanghai HITACHI scroll compressor
- ✧ Refrigerant receiver and filter drier
- ✧ Danfoss expansion valve

Control system

DC voltage 24V
 Digital display
 CAN bus control system with 7 speed air flow adjusting module



Roof Mounted Unit

Application for	Small Electrical City Bus/Coach
Cooling capacity	13, 000 kcal/h
Heating capacity	12, 000 kcal/h
Evaporator Air Flow	3200 m ³ /h
Condenser Air Flow	6000 m ³ /h
Fresh Air	800 m ³ /h
Power Consumption(700V)	5KW
Dimension in mm (l x w x h)	2399x1620x284
Max Ambient temperature	50 °C

Compressor

Brand	Shanghai HITACHI
Displacement	34 cc
Compressor oil type	HAF68
Compressor Weight	7.5kg

Refrigerant

Type	R407c
Amount	2.6 kg

Evaporator

Type	Hydrophilic aluminium foil with internal ridge copper tube
Fan motor	7-speed centrifugal type
No. of fan motor	4 pcs

Condenser

Type	Aluminium foil with internal ridge copper tube
Fan motors	3-speed axial type
No. of fan motor	3 pcs

Above data based on the test condition of: Temp=35°C, Tin=27°C Humidity=50%

Specification are subject to change without priority notice. For specific model performance data, capacities, and other technical Information, contact Sphere service man or your local sales representative.