

50TGQ

AIR-TO-AIR ROOFTOP HEAT PUMPS



Physical data

50TGQ		090	120	140
Nominal cooling capacity*	kW	17.9	25.1	31.5
Nominal heating capacity**	kW	19	28.6	34.2
Weight				
Unit (AI/AI)	kg	342	415	422
With Economizer		462	435	442
Roof curb		65	65	65
Compressor				
Quantity		1	2	2
Nominal power input (each)	kW	7.3	4.6	5.8
Refrigerant charge R-407C				
Outdoor coil				
Rows ... fins spacing	mm	3/8" copper tubes, aluminium fins 1 ... 1.7		4 ... 1.5
Outdoor fan				
Nominal air flow	l/s	One, propeller type 2550		2800
Motor power input	kW	0.75		1.1
Motor speed	r/s	16		16
Indoor coil				
Rows ... fins spacing		3/8" copper tubes, double aluminium fins, Acutrol feed device 3 ... 1.8		4 ... 1.7
Indoor fan				
Nominal air flow	l/s	One, belt-driven centrifugal type 1230		1750
Motor power input	kW	2 ... 3.7		4 ... 6.4
Return air filters				
Quantity ... size	mm	Throwaway 4 ... 500 x 500 x 51		4 ... 500 x 500 x 51

* Based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°C.

** Based on an indoor air temperature of 20°C db and an outdoor air temperature of 6°C.

Electrical data

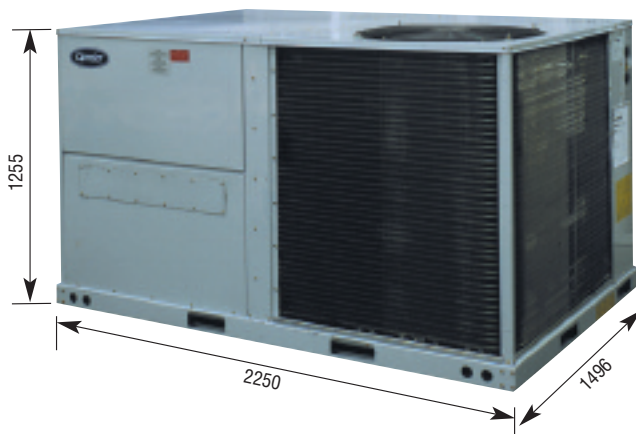
50TGQ	Nominal voltage V-ph-Hz	Voltage range		Compressor		OFM		IFM	
		Min.	Max.	RLA	LRA	FLA	FLA	FLA	FLA
090	380-3-50	360	440	12.3	98.0	2.2			3.7
120	380-3-50	360	440	2 x 8.0	61.8*	2.2			3.7
140	380-3-50	360	440	2 x 10.0	74.0*	2.2			7.0

* Start-up current of one compressor. The compressors do not start up simultaneously.

Legend:

FLA - Full load current, A
IFM - Indoor fan motor
LRA - Locked rotor current (each), A
OFM - Outdoor fan motor
RLA - Rated load current, A

Dimensions, mm





FEATURES

- Three sizes with nominal cooling capacities from 17.9 to 31.5 kW and nominal heating capacities from 19 to 34.2 kW.
- Reliable, high-performance rooftop heat pumps with vertical air discharge, designed for outdoor installation and ideal for a wide variety of commercial and industrial applications.
- Units can be easily field-converted to units with horizontal discharge by just moving two panels.
- Units use the refrigerant R-407C that does not deplete the ozone layer.
- Supply and control connections are on the same side.
- Pre-painted galvanised steel cabinet with baked enamel finish for long life.
- Scroll compressors with anti-vibration insulation and efficient fan and motor design for extra-quiet operation.
- Control system with a variety of thermostats; units with controllers allow integration into a building management system.
- Compressors incorporate over-current, over-temperature and high-pressure protection and a crankcase heater.
- Fan motors are equipped with permanently lubricated bearings.
- Chronotemp defrost system.
- Acutrol system for accurate refrigerant flow control.
- Economizer operation controlled by Accusensor I.
- Units include slots and holes in the base to facilitate handling and transport.
- Winter start control
- Corrosion resistant condensate tray.

OPTIONS/ACCESSORIES

- Roof curb
- Electric heaters
- Economizer
- Pre-coated aluminium coils
- Fan speed controller
- Premier Link control