



Outdoor





SIDE DISCHARGE

Compact design for flexible application in small or narrow spaces





Carrier Product Benefits (4/5 HP)



Easy Installation

Double side '4' handles
 Easy to carry

2 '888' test panel

All running data and error codes can be checked from'888' screen, which is easy for installers



Four-way pipe connection Four-way (front, back, left and right) pipe connection, easy to design and install

Compact design

- Lower to 90kg net weight
- Compact design with only 0.35m² footprint
- Limited refrigerant charge with 3.3 kg











DC Fan and Motor

DC power brings higher efficiency to running partial load

- 16-stage speed control; high-efficiency running especially in low speed
- 45% higher efficiency than AC motors
- Lower power input





Large diameter fan The large fan of 550 mm diameter

The large fan of 550 mm diameter allows for greater airflow and hence, higher efficiency



DC motor

ø550mm fan

New DC inverter with twin rotary compressor Small torque changes & good dynamic balance allows the system to run stably, with little vibration, low poise and higher efficiency when running

stably, with little vibration, low noise and higher efficiency when running partial load





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Superior Comfort

New aerodynamic fan

550mm super big diameter aerospace helix fan lowers sound level by 3dB(A)



Carrier Product Benefits (4/5/6 HP

Leadership in Advanced Technology

- **Two-stage Sub-cooling Cycle Technology** Increases unit efficiency by 9%.
- Maximizing 30°C Sub-cooling
 Increase unit cooling capacity by 46%
- Adding of the Sub-cooler at the Bottom of the Outdoor Exchanger

Increases the efficiency of the sub-cooling in the system to achieve deep sub-cooling





More Powerful Heating Capacity

by Enthalpy Injection

In low ambient conditions, condenser heat rejection is weakened. The amount of hot gas returning to the compressor is greatly reduced. However, the Indoor units can receive more heating capacity thanks to residual enthalpy injection from the 2nd stage subcooling.











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High-Efficacy

- **DC Inverter Compressor** Carrier XCT7 unit uses DC inverter compressors, with 5% lower power input (14 kW)
- Large 550 mm DC powered fan 38% lower power input, 8% higher airflow
- Larger heat exchanger Heat exchange area increased by 10% **Charge valve**
- Built-in charge valve enables safer and easier maintenance Low standby power
- New PCB program reduces 20% standby power consumption

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Carrier Product Benefits (4/5/6 HP

8/10/12 HP



High Efficiency

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 Larger heat exchanger
- Larger heat exchanger Heat exchange area increased by 10%
- Charge valve
 Built-in charge valve to enable safer and easier maintenance
- Low standby power
 New PCB program to reduce 20% standby power consumption

Low Noise Level

- Night mode operation function
 Quiet Night Mode (-8 dB(A)) is also available by setting PCB
 - Noise can be reduced to 50 dB(A)



New DC inverter with twin rotary compressor

Small torque changes & good dynamic balance allows the system to run stably, with little vibration, low noise and higher efficiency when running partial load







Outdoor









Super Comfort

Enlarged air inlet path and spiral air outlet Air flow follows the grill direction to lower sound level by 2-4 dB(A)

Automatic sound-lowering program Night mode set by PCB to lower sound level by 8dB (A)



- Vector inverter control more precise
- DC fan motor bracket & non-resonance structure Ensures smooth running of the motor to reduce operating noise
- DC inverter twin rotary compressor Smooth operation with no need to frequently start the compressor effectively reduces the outdoor noise
- Big diameter fan
 Design according to the aviation quieter principle





Carrier Product Benefits 4/5/6 HP

Easy Installation

n Double side '4' handles Easy to carry 2

'888' test panel

All running data and error codes can be checked from'888' screen, which is easy for installers

3 Four-way pipe connection Four-way (front, back, left and right) pipe connection, easy to design and install



8/10/12 HP

Compact Discharge Design

Big capacity, small footprint with only 0.42 m², to reduce floor area by as much as 43%. No need for an additional ventilation hood as compared to the top discharge unit.



















Easy Maintenance for Control

The control box is in front, reserving 108 mm between the control box and top panel, and along with the hinge design, allows for easy maintenance from the top

















Specifications



1-Ph

	Model			38VS14017SHQEE	38VS15517SHQEE
Capacity ⁽¹⁾	Capacity Range	HP	4	5	6
	Cooling	kW	12,1	14,0	15,5
	Heating	kW	14,2	16,0	18,0
	EER	W/W	4,05	3,99	3,60
Cooling Efficiency ⁽¹⁾	SEER	/	6,82	6,63	6,45
	ηs	%	269,8	262,2	255
	СОР	W/W	4,47	4,30	4,10
Heating Efficiency ⁽¹⁾	SCOP	/	3,92	3,85	3,8
	ηs	%	153,8	151	149
	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
Electrical Parameters	Rated power input (Cooling)	kW	2,99	3,51	4,31
	Rated power input (Heating)	kW	3,18	3,72	4,39
Dimensions	External	mm	950/370/1340	950/370/1340	950/370/1340
(W/D/H)	Shipping	mm	1023/471/1420	1023/471/1420	1023/471/1420
Weight	Net/Shipping	kg	108/123	108/123	108/123
Compressor	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary
	Motor power	w	4130	4130	4130
	Compressor quantity	/	1	1	1
Fan	Air flow (H)	m³/h	7200	7200	7200
Pressure Sound	Cooling	dB(A)	57	58	59
Level	Heating	dB(A)	57	58	59
	Cooling	dB(A)	69	71	73
Power Sound Level	Heating	dB(A)	71	73	75
Definement	Туре	/	R410A	R410A	R410A
Refrigerant	Charge	kg	4	4	4
Piping	Refrigerant liquid pipe (Ø)	mm	9,52	9,52	9,52
	Refrigerant gas pipe (Ø)	mm	15,88	15,88	15,88
	Total pipe length	m	300	300	300
	Max. pipe length (Equivalent/Actual)	m	175/150	175/150	175/150
	Max drop between IDU & ODU (ODU above/below)	m	50 / 40	50 / 40	50 / 40
	Max drop between IDU & IDU	m	15	15	15
Connection Ratio ⁽²⁾	Connectable indoor unit ratio	%	50-130	50-130	50-130
	Maximum number of indoor units	/	8	10	13
Westing T	Cooling	°C	-15~48	-15-48	-15~48
Working Temp.	Heating	°C	-20~27	-20~27	-20~27





Side Discharge Heat Pump 4-5-6 HP

3-Ph

COOLING HEATING

Model		38VS121173HQEE	38VS140173HQEE	38VS155173HQEE		
Capacity ⁽¹⁾	Capacity Range	HP	4	5	6	
	Cooling	kW	12,1	14,0	15,5	
	Heating	kW	14,2	16,0	18,0	
Cooling Efficiency ⁽¹⁾	EER	W/W	4,05	3,99	3,60	
	SEER	1	6,82	6,63	6,45	
	ηs	%	269,8	262,2	255	
	СОР	W/W	4,47	4,30	4,10	
Heating Efficiency ⁽¹⁾	SCOP	1	3,92	4,17	3,8	
	ηs	%	153,8	151	149	
	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	
Electrical	Rated power input (Cooling)	kW	2,99	3,51	4,31	
i di difictero	Rated power input (Heating)	kW	3,18	3,72	4,39	
Dimensions	External	mm	950/370/1340	950/370/1340	950/370/1340	
(W/D/H)	Shipping	mm	1023/471/1420	1023/471/1420	1023/471/1420	
Weight	Net/Shipping	kg	108/123	108/123	108/123	
Compressor	Compressor type	1	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary	
	Motor power	w	4060	4060	4060	
	Compressor quantity	1	1	1	1	
Fan	Air flow (H)	m³/h	7200	7200	7200	
Pressure Sound	Cooling	dB(A)	57	58	59	
Level	Heating	dB(A)	57	58	59	
Davies Council Local	Cooling	dB(A)	69	71	73	
Power Sound Level	Heating	dB(A)	71	73	75	
Defeirment	Туре	1	R410A	R410A	R410A	
Refrigerant	Charge	kg	4	4	4	
	Refrigerant liquid pipe (Ø)	mm	9,52	9,52	9,52	
	Refrigerant gas pipe (Ø)	mm	15,88	15,88	15,88	
	Total pipe length	m	300	300	300	
Piping	Max. pipe length (Equivalent/Actual)	m	175/150	175/150	175/150	
	Max drop between IDU & ODU (ODU above/below)	m	50 / 40	50 / 40	50 / 40	
	Max drop between IDU & IDU	m	15	15	15	
	Connectable indoor unit ratio	%	50-130	50-130	50-130	
Connection Ratio ⁽²⁾	Maximum number of indoor units	1	8	10	13	
	Cooling	°C	-15~48	-15~48	-15~48	
Working Temp.	Heating	°C	-20~27	-20~27	-20~27	





Specifications

Side Discharge Heat Pump 8-10-12 HP

Model			38VS226174HQEE	38VS280174HQEE	38VS335174HQEE	
Capacity ⁽¹⁾	Capacity Range	HP	8	10	12	
	Cooling	kW	22,6	28	31,5	
	Heating	kW	22,6	30,5	31,5	
	Max Heating	kW	25,0	32,0	35,0	
Cooling Efficiency ⁽¹⁾	EER	W/W	3,5	3,2	3,1	
	SEER	/	8,5	8,2	7,7	
	ηs	%	337	325	305	
	СОР	W/W	3,9	3,8	3,7	
Heating Efficiency ⁽¹⁾	SCOP	/	5	4,8	4,7	
	ηs	%	197	189	185	
	Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	
Electrical Parameters	Rated power input (Cooling)	kW	6,46	8,75	10,16	
	Rated power input (Heating)	kW	5,79	8,03	8,51	
Dimensions	External	mm	1050/400/1636	1050/400/1636	1050/400/1636	
(W/D/H)	Shipping	mm	1150/510/1790	1150/510/1790	1150/510/1790	
Weight	Net/Shipping	kg	149/168	149/168	149/168	
	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary	
Compressor	Motor power	w	6270	6270	6270	
	Compressor quantity	/	1	1	1	
Fan	Air flow (H)	m³/h	10000	10000	10000	
Pressure Sound	Cooling	dB(A)	63	64	65	
Level	Heating	dB(A)	65	66	67	
Power Sound Level	Cooling	dB(A)	74	75	76	
	Heating	dB(A)	76	77	78	
Pofrigorant	Туре	/	R410A	R410A	R410A	
Refrigerant	Charge	kg	5,1	5,1	5,1	
Piping	Refrigerant liquid pipe (Ø)	mm	9,52	9,52	12,7	
	Refrigerant gas pipe (Ø)	mm	19,05	22,22	25,4	
	Total pipe length	m	300	300	300	
	Max. pipe length (Equivalent/Actual)	m	175/150	175/150	175/150	
	Max drop between IDU & ODU (ODU above/below)	m	50 / 40	50 / 40	50 / 40	
	Max drop between IDU & IDU	m	15	15	15	
Connection Ratio	Connectable indoor unit ratio ⁽²⁾	%	50~130	50~130	50~130	
	Maximum number of indoor units	/	13	16	19	
Working Temp.	Cooling	°C	-5~48	-5~48	-5~48	
	Heating	°C	-20~27	-20~27	-20~27	





HEATING

COOLING

	Model		38VS125C7SHQEE	38VS140C7SHQEE
	Capacity Range	HP	4	5
Capacity ⁽¹⁾	Cooling	kW	12,1	14,0
	Heating	kW	12,1	14,0
	Heating (Max)	kW	14,0	15,5
Cooling Efficiency ⁽¹⁾	EER	W/W	2,85	2,80
	SEER	/	4,90	4,85
	ηs	%	193	191
	СОР	W/W	2,95	2,90
Heating Efficiency ⁽¹⁾	SCOP ⁽¹⁾	/	3,50	3,55
	ηs	%	137	139
	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
Electrical	Rated Power input (Cooling)	kW	4,25	5,00
	Rated Power input (Heating)	kW	4,10	4,83
Dimensions	External	mm	950×370×965	950×370×965
(W/D/H)	Shipping	mm	1010×458×990	1010×458×990
Weight	Net/Shipping weight	kg	90/97	90/97
	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary
Compressor	Motor Power	W	4130	4130
	Compressor quantity	/	1	1
Fan	Air flow (H)	m³/h	5400	5400
Pressure Sound	Cooling	dB(A)	58	60
Level	Heating	dB(A)	60	62
	Cooling	dB(A)	69	71
Power Sound Level	Heating	dB(A)	71	73
Definement	Туре	/	R410A	R410A
Refrigerant	Charge	kg	3,3	3,3
Piping	Refrigerant liquid pipe (Ø)	mm	9.52	9.52
	Refrigerant gas pipe (Ø)	mm	15.88	15.88
	Total pipe length	m	120	120
	Max. pipe length (Equivalent/Actual)	m	70/60	70/60
	Max drop between I.U.&O.U (ODU above / below)	m	30/20	30/20
	Max drop between I.U.&I.U	m	10	10
Connection Dati	Connectable indoor unit ratio ⁽²⁾	%	50~130	50~130
Connection Ratio	Maximum number of indoor units	/	7	8
Westing T	Cooling	°C	-5~52	-5~52
working temp.	Heating	°C	-15~21	-15~21

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Dimensions (4-6HP)



4/5 HP Single Fan Side Discharge

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4/5/6 HP Dual Fan Side Discharge







Dimensions (8-12HP)



8/10/12 HP Dual Fan Side Discharge

