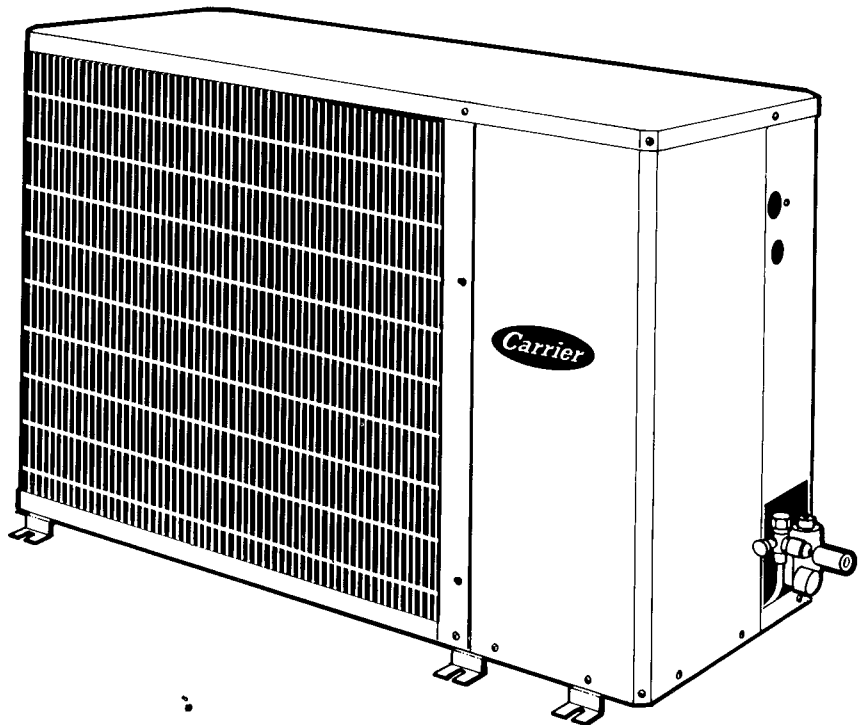




HEATING & COOLING

38QR

Commercial Duty Air Cooled Split System Heat Pumps



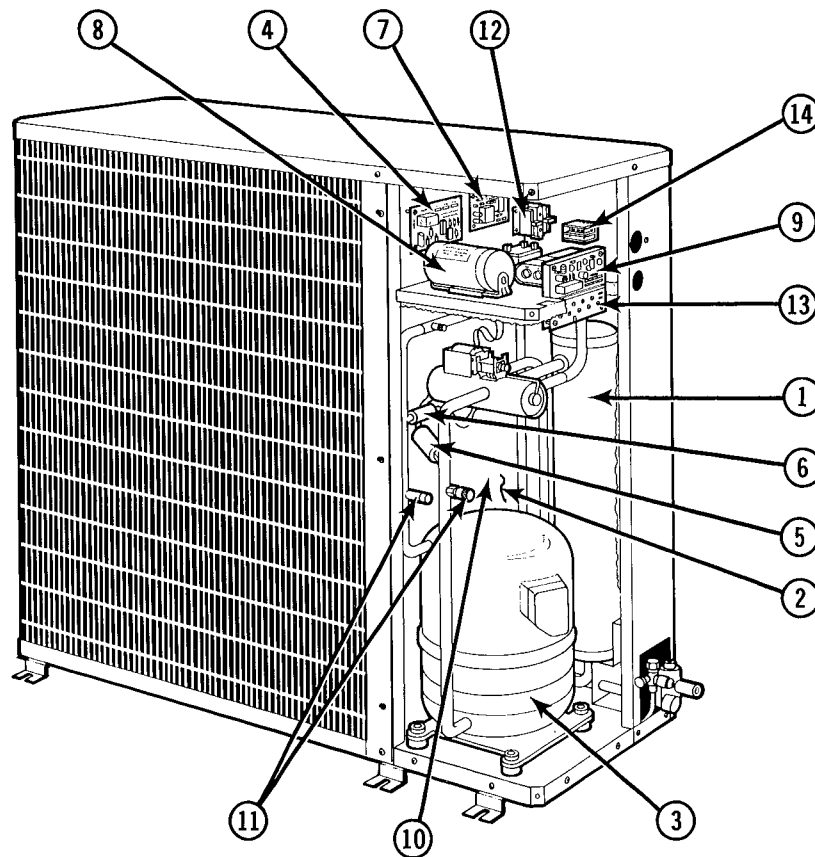
ADVANCE PRODUCT DATA

38QR COMMERCIAL DUTY

The 38QR, a dedicated line of commercial duty heat pumps are available in 6 sizes from 1-1/2 to 5 tons. The small footprint and the quietness makes the 38QR ideal for high density markets like inner cities where both space and sound are key design parameters.

Match the 38QR with the nonducted fan coils on commercial retrofit and add-on applications or use separately on replacement jobs.

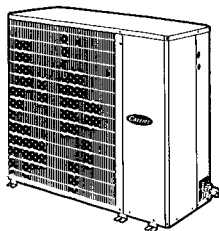
Use on your most demanding commercial jobs, where year round cooling and heating duty is required on multistory projects with high vertical rises and extended piping.



- ① **Accumulator** achieves high reliability under demanding commercial duty and safeguards the compressor against severe stress or loss of lubrication, lengthening the life of the unit.
- ② **Acoustic Lining** for compressor compartment ensures quiet operation.
- ③ **Crankcase Heater** prevents refrigerant dilution of oil.
- ④ **Time Guard** prevents compressor from restarting for at least 5 minutes after shutdown by t'stat. Prevents short cycling caused by t'stat jiggling.
- ⑤ **High-Pressure Switch** protects the compressor should abnormally high discharge pressure occur.
- ⑥ **Low-Pressure Switch** protects compressor when abnormally low suction pressure occur.
- ⑦ **Lock Out** prevents unit from cycling if a safety device is activated.

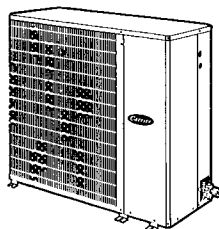
- ⑧ **Start Capacitor And Relay** assure dependable start up under demanding low voltage conditions
- ⑨ **Time Temperature Solid State Defrost Board** for increased reliability.
- ⑩ **Isolated Compressor/Control Area** behind single access panel, allows unit to be run checked without loss of head pressure control.
- ⑪ **Discharge And Suction Pressure Gauge Ports** allow the serviceman to monitor the exact operating conditions.
- ⑫ **3-Pole Contactor** a safety feature to prevent injury to the service people.
- ⑬ **Low Voltage Terminal Block**
- ⑭ **High Voltage Terminal Block**

38QR PRELIMINARY MATCHED RATINGS



Single Phase

38QR	018	024	030*	036	048	060
40QY						
Cooling	18,000	24,000	—	—	—	—
SEER	9.2	9.0	—	—	—	—
Heating	18,000	24,000	—	—	—	—
COP	3.0	3.0	—	—	—	—
42QN						
Cooling	NA	22,700	NA	34,600	47,200	NA
SEER	NA	9.5	NA	9.1	9.7	NA
Heating	NA	23,400	NA	35,800	48,900	NA
COP	NA	3.0	NA	3.0	3.0	NA
40QK						
Cooling	17,800	23,600	30,100	34,000	35,200	—
SEER	9.6	9.9	10.3	9.5	10.3	—
Heating	17,500	23,500	28,700	34,100	35,200	—
COP	2.8	2.9	3.1	2.9	2.9	—
40HD						
Cooling	—	23,500	31,200	35,000	47,800	63,000
SEER	—	9.3	9.9	9.0	9.8	9.9
Heating	—	23,500	29,800	34,700	49,500	57,000
COP	—	2.9	3.0	3.0	3.1	2.9



Three Phase

38QR	036	048	060
42QN			
Cooling	34,600	47,200	—
EER	8.6	9.2	NA
Heating	35,800	48,900	—
COP	3.0	3.0	—
42QK			
Cooling	34,000	35,200	—
EER	9.0	9.8	—
Heating	34,100	35,200	—
COP	3.0	3.0	—
40HD			
Cooling	35,000	47,800	63,000
EER	8.5	9.3	9.4
Heating	34,700	49,500	57,000
COP	3.0	3.1	3.0

*Size 30 ratings are with size 036 fan coil.

NA = Not Available at this time.

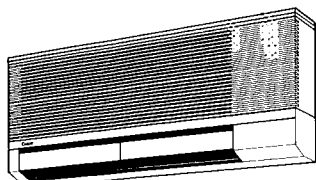
NOTE: Above data is preliminary and subject to change.

38QR PRELIMINARY SPECIFICATIONS

OUTDOOR UNIT		38QR018	38QR024	38QR030	38QR036	38QR048	38QR060
POWER SUPPLY		1ϕ 208/230-60	1ϕ 208/230-60	1ϕ 208/230-60	1ϕ 3ϕ 208/230-60	1ϕ 3ϕ 208/230-60	1ϕ 3ϕ 208/230-60
VOLTAGE RANGE		187-254					
MAX FUSE		15	20	25	30 20	40 30	60 40
MCA		11.1	13.6	17.6	21.6 13.6	27.3 20.5	39.6 25.7
FAN MOTOR	FLA	.60		.70		1.2	
COMPRESSOR	RLA	8.4	10.4	13.5	16.7 10.1	20.9 15.4	30.7 23.6
	FLA	52	60	65	82 67.5	127.0 98.5	135 105
DIMENSIONS	W (in)	36-7/8				44-5/8	
	D (in)	14-1/2				17-1/8	
	H (in)	24-0				36-0	
WEIGHT	(lb)	170	173	188	192 185	257 248	277 268
SOUND RATINGS	BELS	6.8				7.0	7.2
INDOOR UNIT		40QY018	40QY024				
POWER SUPPLY		208/230-1-60					
VOLTAGE RANGE		187-254					
STANDARD HEATER		2.0 kw					
AIR FLOW	HI CFM	540	570				
DIMENSIONS	W (in)	48					
	D (in)	8-5/8					
	H (in)	14-1/8					
WEIGHT	(lb)	59					
INDOOR UNIT		42QN018	42QN024	42QN036	42QN048	42QN060	
POWER SUPPLY		208/230-1-60					
VOLTAGE RANGE		187-254					
STANDARD HEATER			2.5 kw	3.0 kw	3.5 kw		
AIRFLOW	HI CFM		700	900	1200		
DIMENSIONS	W (in)		50	57-7/8	65-3/4		
	D (in)		23-5/8				
	H (in)		9-7/8				
WEIGHT	(lb)		73	95	119		
INDOOR UNIT		40QK018	40QK024	40QK036	40QK048		
POWER SUPPLY		208/230-1-60					
VOLTAGE RANGE		187-254					
STANDARD HEATER		2.7 kw	2.7 kw	3.6 kw	5.4 kw		
AIR FLOW	HI CFM	560	650	975	1300		
DIMENSIONS	W (in)	22-3/8					
	D (in)	22-3/8		46-1/16			
	H (in)	11-5/8					
WEIGHT	(lb)	48	59	95	115		
INDOOR UNIT		40HD024	40HD036	40HD048	40HD060		
POWER SUPPLY		208/230-1-60					
VOLTAGE RANGE		187-254					
STANDARD HEATER		2.8 kw	4.0 kw	5.5 kw	6.0 kw		
AIR FLOW	HI CFM	800	1200	1600	2000		
DIMENSIONS	W (in)	46	59			56-5/8	
	D (in)	25-1/2				37-1/8	
	H (in)	14-1/8				23-1/8	
WEIGHT	(lb)	80	105	125	140		
SYSTEM SIZE		018	024	030	036	048	060
REFRIGERANT CONTROL		Accurater					
REMOTE CONTROLLER		Standard Honeywell Type, Optional Programmable Electronic Thermostat					
REFRIGERANT PIPING		Not Supplied (Optional Parts)					
PIPE SIZE	SUCTION	5/8			3/4		1-1/8
	LIQUID	3/8					
CONNECTION METHOD:							
	INDOOR	Flare & Sweat					
	OUTDOOR	Flare & Sweat					

38QR FAN COIL LINE

40QY HI-WALL



1-1/2 AND 2 TONS

Use on simple add-on & retrofit projects where wall space is available.

- Lowest cost nonducted system
- Electric heat available
- Auto air sweep standard

42QN CEILING SUSPENDED

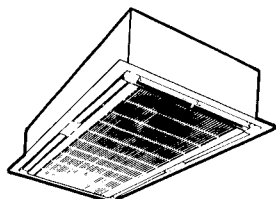


1-1/2, 2, 3, 4, AND 5 TONS

Use on your office and shop retrofit work where wall space is not available.

- Easiest system to retrofit on larger tonnage jobs
- Installs conveniently below ceiling line
- Auto air sweep standard
- Electric heat available
- Optional ventilation air kit
- Optional economizer

40QK CASSETTE

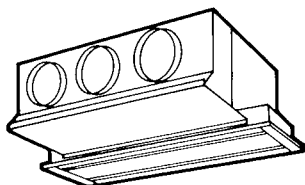


1-1/2, 2, 3, AND 4 TONS

Use on retrofit and modernization projects with hung ceilings.

- Fits standard 2 x 4 foot hung ceiling grid
- Installs like a fluorescent light fixture
- Requires only 12" high ceiling plenum
- Built-in condensate pump
- Can condition adjacent room using feeder duct
- Exclusive power ventilation kit
- Electric heat available

40HD SATELLITE



2, 3, 4, AND 5 TONS

Most sophisticated commercial nonducted fan coil. Use where the ultimate in air distribution is required.

- Installs in the ceiling plenum
- Optional discharge adapter kit for multiple 8" round flex duct
- Powers multiple Moduline boot diffusers
- Rear return standard
- Accessory return grill for 2 x 4 hung ceiling with boot connectors
- Built-in condensate pump
- Optional economizer accessory
- Optional electric heat accessory
- Optional hot water/steam coil accessory

38QR ADVANTAGES AND APPLICATION DATA

Compact Size — 38QR is the smallest in the industry, even the 17" wide 5 ton unit will fit in any service truck and pass thru any door.

Install them:

- On roof or grade level
- On balcony or parapet
- Rack mounted on wall
- Under a deck

Blow Thru Design — With the blow thru design, inspect and clean operations are a snap. The coil loads from the inside out. All that is needed to clean it is a pressure hose from the outside. No need for fin combs or removing the grill.

Defrost time is actually reduced up to 1/3 when compared to draw thru units because of the uniform air distribution over the coil and the improved heat transfer.

Operating Range

Cooling

- 35° to 125°F
- -20°F with head pressure control

Heating

- -20°F to 70°F

Clearances

38QR is normally installed with coil side (air discharge side) installed against the building. Required clearances are:

- 6" minimum from coil side to wall. Having coil side 6" from wall provides maximum coil protection against vandals and the elements.
- 8" minimum clearance required on fan intake (front) side.
- 24" minimum on service compartment end.

38QR is a good neighbor, with low velocity air discharge quietly directed against the building, plants and neighbors are never disturbed.

Refrigerant Line Lengths

- 60 ft elevation differential between indoor and outdoor unit.
- Up to 200 ft equivalent line length (extended piping).
- Additional charge required for piping runs longer than 25 ft.

