

FC/PV/PVT



# FC/PV/PVT HEAT PUMPS

HIGHEST EFFICIENCIES IN THE INDUSTRY

## SMART FAN TECHNOLOGY

HIGH-PERFORMANCE COMPONENTS



Warranty – Canada

5 years – Labour  
10 years – Parts



Quiet



Designed &  
manufactured in Quebec



Energy  
efficient



# PERFORMANCE AND QUALITY

## SMART FAN TECHNOLOGY



Wifi  
(Optional)



Environmentally  
friendly



Easy to use



Variable power



Smart fan technology

### FEATURES AND BENEFITS

**HEAVY-DUTY COMPOSITE CASE**  
Durable and easy to maintain.

**SWEPT WING FAN BLADES**  
Designed to reduce noise.

**OVERSIZED BLUE FIN EVAPORATORS**  
For a better performance.

**ELECTRONIC TIMERS**  
For more efficient management of your electrical consumption.

**ACOUSTIC COMPRESSOR COVERS**  
Protect compressor and reduce noise  
(FC85 to FC145 and PV series.)

**R410A REFRIGERANT**  
Clean and efficient

**SELF - DIAGNOSING DIGITAL CONTROL**  
Easy to use.

**PASSIVE DEFROST**  
Electronic and smart

**HEAT EXCHANGER**  
Covered with an insulating sheath.

**ANTI-CORROSION COATINGS**

**WIFI (OPTIONAL ADD-ON MODULE)**  
application available on the App Store and Play Store  
to control your heat pump and maintain the perfect  
temperature at all times.

### HIGH-PERFORMANCE COMPONENTS

**VARIABLE-SPEED VENTILATION  
SMART FAN TECHNOLOGY\***  
**Smart mode** (maximizes COP)  
**Quiet mode** (reduces noise)  
**Boost mode** (maximizes BTU)

#### PV / PVT SERIES (VARIABLE CAPACITY)

Variable-capacity scroll compressors  
PV80 and PV105;

Stage 1: 67 %

Stage 2: 100 %

Tandem scroll compressor  
PVT175;

Stage 1: 50 %

Stage 2: 100 %

#### HEAT EXCHANGER

The canister type heat exchanger is fitted with a top-grade titanium double coil, ensuring optimum heat exchange for the Nirvana pump. It is resistant to corrosion and erosion from the products used for water conditioning. It is just as effective for pools equipped with salt systems.

#### THE COMPRESSOR

The Nirvana's scroll technology compressors deliver unrivalled efficiency, quiet operation and proven durability and reliability.  
PV series = single 2 stage compressor  
PVT series = tandem (dual) compressors

#### THERMOSTATIC EXPANSION VALVE

The thermostatic valve regulates the supply of refrigerant to the evaporator according to climatic conditions, for maximum energy efficiency.

\*SMART FAN technology applies to models FC100, FC120, FC145, PV80, PV105, PVT175

**ALL OF OUR UNITS ARE TESTED AND INSPECTED BY AN HVAC SPECIALIST BEFORE SHIPMENT**

## HEAT PUMP DATA SHEET

# FC SERIES SMART FAN TECHNOLOGY

MODEL FC SERIES		FC55	FC70	FC85	FC100	FC120	FC145
(80/80/80 – AHRI) <sup>1</sup>	BTU / COP	56 000 / 7.0	71 000 / 6.8	84 000 / 6.8	95 000 / 6.4	120 000 / 6.2	145 000 / 6.5
(80/63/80 – AHRI) <sup>1</sup>	BTU / COP	53 000 / 6.8	67 000 / 6.5	80 000 / 6.5	91 000 / 6.2	111 000 / 6.0	134 000 / 6.2
(50/63/80 – AHRI) <sup>1</sup>	BTU / COP	37 000 / 4.6	46 000 / 4.5	55 000 / 4.6	63 000 / 4.3	77 000 / 4.2	95 000 / 4.3
REFRIGERANT		R410A					
MINIMUM / MAXIMUM BREAKER (A)		20/30	30/30	30/40	40/50	40/50	50/60
AMPS (A)		10.3	13.3	15.5	17.5	23.7	27.5
DECIBEL AT 10 METERS		42	42	42	43	43	45
VENTILATION		26" 1 SPEED			26" VARIABLE SPEED SMART FAN		
HEAT EXCHANGER		TWISTED TITANIUM DOUBLE COIL CANISTER					TWISTED TITANIUM QUAD COIL CANISTER
DEFROST		PASSIVE (3°C)					
CONTROL BOARD		DIGITAL TOUCH 4 LINES X 20 CHARACTERS					
COMPRESSOR TYPE		SCROLL					
VOLTAGE		240V / 60HZ / 1 PHASE					
CABINET		FIBREGLASS-REINFORCED, INJECTION-MOULDED POLYPROPYLENE COMPOSITE					
MINIMUM / MAXIMUM WATER FLOW (GPM)		20-80	26-80	32-80	40-80	40-80	40-80
DIMENSIONS IN INCHES (W X L X H)		39 X 37 X 30	39 X 37 X 30	39 X 37 X 34	39 X 37 X 34	39 X 37 X 38	39 X 37 X 40
WEIGHT (LBS)		191	222	241	245	250	270
WATER CONNECTION		2" QUICK CONNECT FITTINGS (INCLUDED)					
POOL WATER CAPACITY (L) June to August		UP TO 55 000	UP TO 70 000	UP TO 85 000	UP TO 100 000	UP TO 120 000	UP TO 145 000
POOL WATER CAPACITY (L) May to September		UP TO 45 000	UP TO 58 000	UP TO 72 000	UP TO 84 000	UP TO 102 000	UP TO 125 000
POOL DIMENSIONS – ABOVE GROUND		15'-18'-21'	21'-24'	24'-27'	27'	N/A	N/A
POOL DIMENSIONS – INGROUND		10' X 20' 12' X 24' 15' X 30'	12' X 24' 14' X 28' 15' X 30'	14' X 28' 16' X 32'	16' X 32' 18' X 32'	18' X 32' 18' X 36'	18' X 36' 20' X 40'

### ENERGY EFFICIENCY AT LOW TEMPERATURES IS THE MOST IMPORTANT THING TO CONSIDER

NIRVANA heat pumps, ranked AHRI #1 for low-temperature efficiency, offer the lowest operating costs in the industry. The coefficient of performance (COP) measures their ability to extract energy from the air and transfer it to the pool water, and a high COP guarantees lower heating costs. Certify your smart purchase with AHRI-validated performances at [www.AHRINET.org](http://www.AHRINET.org).

<sup>1</sup> Certified according to AHRI 1160: Ambient temperature (°F) / Relative humidity (%) / At the water temperature (°F). With a water flow rate of 0.45 GPM per 1,000 BTU at the 80/63/80.

# HEAT PUMP DATA SHEET

## PV / PVT SERIES

B= Low capacity  
H= High capacity

MODEL PV/PVT SERIES		PV80/B	PV80/H	PV105/B	PV105/H	PVT175/B	PVT175/H
(80/80/80 – AHRI) <sup>1</sup>	BTU / COP	59 000 / 9.4	77 000 / 7.1	84 000 / 8.5	105 000 / 6.7	95 000 / 8.0	175 000 / 6.4
(80/63/80 – AHRI) <sup>1</sup>	BTU / COP	55 000 / 9.0	71 000 / 6.9	77 000 / 8.0	99 000 / 6.5	90 000 / 7.6	166 000 / 6.2
(50/63/80 – AHRI) <sup>1</sup>	BTU / COP	39 000 / 5.4	51 000 / 4.8	52 000 / 5.2	68 000 / 4.5	65 000 / 5.6	114 000 / 4.2
REFRIGERANT		R410A					
MINIMUM / MAXIMUM BREAKER (A)		30/30		40/50		60	
AMPS (A)		8.7	13.5	14.2	19.1	15.9	35.6
DECIBEL AT 10 METERS		38	42	39	43	43	45
VENTILATION		26” VARIABLE SPEED SMART FAN					
HEAT EXCHANGER		TWISTED TITANIUM DOUBLE COIL CANISTER				TWISTED TITANIUM QUAD COIL CANISTER	
DEFROST		PASSIVE (3°C)					
CONTROL BOARD		DIGITAL TOUCH 4 LINES X 20 CHARACTERS					
COMPRESSOR TYPE		VARIABLE CAPACITY SCROLL				TANDEM SCROLL	
VOLTAGE		240V / 60HZ / 1 PHASE					
CABINET		FIBREGLASS-REINFORCED, INJECTION-MOLDED POLYPROPYLENE COMPOSITE					
MINIMUM / MAXIMUM WATER FLOW (GPM)		26-80		40-80		50-100	
DIMENSIONS IN INCHES (W X L X H)		39 X 37 X 34		39 X 37 X 38		39 X 37 X 45	
WEIGHT (LBS)		241		245		395	
WATER CONNECTION		2" QUICK CONNECT FITTINGS (INCLUDED)					
POOL WATER CAPACITY (L) June to August		UP TO 80 000		UP TO 105 000		UP TO 175 000	
POOL WATER CAPACITY (L) May to September		UP TO 65 000		UP TO 85 000		UP TO 145 000	
POOL DIMENSIONS – ABOVE GROUND		21'-24'		27'		N/A	
POOL DIMENSIONS – INGROUND		14' X 28' 16' X 32'		16' X 32' 18' X 32'		20' X 40' 24' X 44'	

### ENERGY EFFICIENCY AT LOW TEMPERATURES IS THE MOST IMPORTANT THING TO CONSIDER

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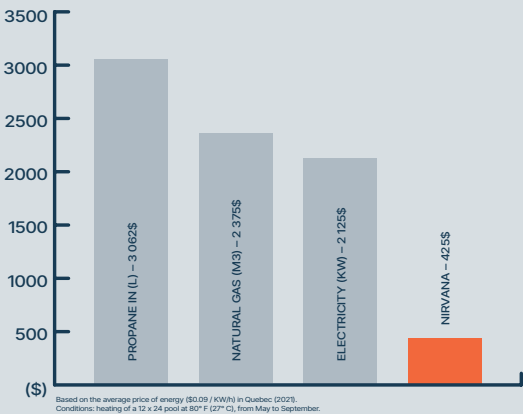
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NIRVANA WARRANTIES	
COMPONENTS	COVERAGE
LABOUR	5 YEARS
PARTS	10 YEARS
TITANIUM COIL	10 YEARS LIMITED
CABINET	15 YEARS LIMITED

HEATING COSTS COMPARISON



\*NIRVANA recommends the use of a liquid or conventional solar blanket, for greater energy efficiency.  
Information for reference only, results may vary depending on region, ambient temperature and use of solar blanket.

