



**ENERGY EFFICIENT**



**QUIET**



**WIFI**



**NEW PV SERIES**



**BEST WARRANTY**

# FC SERIES

**SIMPLY THE BEST HEAT PUMP**



**PERFORMANCES TESTED IN ACCORDANCE WITH THE AHRI CERTIFICATION PROGRAM**

[NIRVANAHP.COM](http://NIRVANAHP.COM)

THE PERFORMANCE AND QUALITY  
YOU DEMAND, IMPROVED WITH

# SMART FAN\*

T E C H N O L O G Y



## FEATURES AND BENEFITS

### ULTRA RESISTANT INJECTION MOLDED CABINET

Provides durability and easy care

### COMPRESSOR ACOUSTIC COVER

Protects compressor and reduces noise  
\*except FC30 / FC45 / FC55 / FC70

### REFRIGERATION SYSTEM DISCHARGE

insulated to increase performance \*except FC30 / FC45

### SWEPT WING FAN BLADE

Designed to reduce noise \*FC30 / FC45 standard blade

### OVERSIZED BLUE FIN EVAPORATOR

For better performance

### R410A REFRIGERANT

Clean and efficient

### ELECTRONIC CONTROL BOARD

Easy to use

### DEFROST

Electronic and intelligent

### TITANIUM HEAT EXCHANGER

Double coil insulated on FC30 / FC45 / FC55 / FC70

### CORROSION INHIBITING TREATMENTS

Maximizes durability

### WIFI

Remote control (Optional)

### CORTEC VPCI INSIDE ELECTRIC BOX

Prevents corrosion

**100% OF FINISHED UNITS ARE TESTED BY  
A REFRIGERATION TECHNICIAN PRIOR TO SHIPMENT**

## HIGH PERFORMANCE COMPONENTS

### VARIABLE SPEED WITH SMART FAN\* TECHNOLOGY

Smart mode optimizes COP. Quiet mode reduces fan speed to lower noise. Boost mode increases thermal output (BTU) of the unit.

\* The SMART FAN technology is included on FC100 / FC120 / FC140 PV80 and PV105 models.

### HEAT EXCHANGER

Our unique double coil heat exchanger is manufactured out of titanium to produce optimal heat transfer while resisting corrosion and erosion. It is excellent for all common pool chemical systems, including chlorine and salt water

### COMPRESSOR


Scroll compressor technology provides the NIRVANA with unparalleled efficiency along with quiet, sustainable and proven reliability \*FC30 / FC45 rotary compressor.

### THERMOSTATIC EXPANSION VALVE

The Thermostatic Expansion Valve maximizes performance by automatically regulating the supply of refrigerant to the evaporator in all weather conditions.



Member of  Made in 

TECHNICAL DATA		FC SERIES				
MODELS		FC30	FC45	FC55	FC70	FC85
(80/80/80 – AHRI) <sup>1</sup>	BTU COP	27 500 6,0	41 000 5,7	56 000 7,0	71 000 6,8	85 000 6,8
(80/63/80 – AHRI) <sup>1</sup>	BTU COP	26 000 5,8	39 000 5,4	53 000 6,8	67 000 6,5	81 000 6,6
(50/63/80 – AHRI) <sup>1</sup>	BTU COP	18 000 4,0	26 000 3,8	37 000 4,6	46 000 4,5	55 000 4,7
COMBINED WITH A SILENSOR® PUMP <sup>2</sup>	 BTU COP	31 500 6,3	45 000 6,1	60 000 7,4	73 000 7,2	90 000 7,5
REFRIGERANT		R410A				
MINIMUM / MAXIMUM BREAKER		20	20/30	20/30	30/30	30/40
AMPS		11,7	9,0	10,3	12,3	15,5
DECIBEL AT 10 M		42	44	42	42	42
VENTILATION		26" 1 SPEED				
HEAT EXCHANGER		TITANIUM - DOUBLE COIL				
DEFROST MODE		PASSIVE (37°F)				
CONTROL BOARD		DIGITAL 4 LINES X 20 CHARACTERS				
COMPRESSOR TYPE		ROTARY	ROTARY	SCROLL		
VOLTAGE		120V	240V / 60HZ / 1 PHASE			
CABINET		INJECTED POLYPROPYLENE COMPOSITE REINFORCED WITH FIBERGLASS				
WATER FLOW (GPM)		15-65	15-65	20-80	26-80	32-80
DIMENSIONS (INCHES) (W X L X H)		39 X 37 X 30	39 X 37 X 30	39 X 37 X 30	39 X 37 X 30	39 X 37 X 34
WEIGHT (LBS)		150	160	191	222	241
WATER CONNECTION		2" QUICK CONNECT FITTINGS - INCLUDED				
POOL WATER LITER		USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST
		30 000 Liters or less	40 000 Liters or less	55 000 Liters or less	70 000 Liters or less	85 000 Liters or less
		USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER
		20 000 Liters or less	30 000 Liters or less	40 000 Liters or less	50 000 Liters or less	60 000 Liters or less
POOL DIMENSIONS	ABOVE GROUND	12'-15'	12'-15'-18'	15'-18'-21'	21'-24'	24'-27'
	INGROUND	N/A	10' X 16'	10' X 20'	12' X 24'	14' X 28'
			10' X 20'	12' X 24'	14' X 28'	16' X 30'
					16' X 32'	

Nirvana recommends the use of a liquid or conventional solar blanket, especially in colder weather for better energy efficiency.

REFERENCE ONLY, RESULTS MAY CHANGE BASED ON AMBIENT AIR TEMPERATURES AND USAGE OF A SOLAR BLANKET AND REGIONS.

<sup>1</sup> Rated in accordance to AHRI standard 1160 : ambient air (°F) / humidity (%) / water temperature (°F) at a water flow of 0.45 gpm / 1000 btu at the 80/63/80 btu rating.

<sup>2</sup> Rated outside the scope of AHRI 1160 using a Silensor® SLL300 swimming pool pump at 80/63/80 conditions with 65 gpm water flow.

### FC30

- Electrician not required • Plug directly into a 120V outlet • Greatly reduced noise

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

because that's when the pool needs the most heat and when the heat pump will operate for the longest amount of time. NIRVANA has the highest ranked units, according to AHRI at low temperatures, which will translate to the lowest total operating costs in the industry. Please visit [www.AHRINET.org](http://www.AHRINET.org)  
The coefficient of performance (COP) is the efficiency of the heat pump at transferring heat from the air into the pool water. Higher COPs equate to lower operating costs.

AHRI certification ensures that the performances of the unit have been independently tested and validated.



# BEST OF BOTH WORLDS

## Novelties 2021

TECHNICAL DATA		FC SERIES SMART FAN* TECHNOLOGY			PV SERIES			
MODELS		FC100	FC120	FC140	PV80 Low speed	PV80 Low speed	PV105 Low speed	PV105 Low speed
(80/80/80 – AHRI) <sup>1</sup>	BTU COP	95 000 6,4	120 000 6,2	140 000 6,0	58 000 9,4	77 000 7,1	84 000 8,5	105 000 6,7
(80/63/80 – AHRI) <sup>1</sup>	BTU COP	91 000 6,2	111 000 6,0	133 000 5,8	55 000 9,0	71 000 6,9	77 000 8,0	99 000 6,5
(50/63/80 – AHRI) <sup>1</sup>	BTU COP	63 000 4,3	77 000 4,2	90 000 4,2	39 000 5,4	50 000 4,8	52 000 5,2	68 000 4,5
COMBINED WITH A SILENSOR® PUMP <sup>2</sup>	BTU COP	96 500 6,7	116 000 6,3	138 500 6,3	61 000 9,8	78 000 7,5	87 000 8,8	107 000 7,0
REFRIGERANT					R410A			
MINIMUM / MAXIMUM BREAKER		40/50	40/50	50/60	30/30	30/30	40/50	40/50
AMPS		17,5	23,7	27,5	8,7	13,5	14,2	19,1
DECIBEL AT 10 M		43	43	45	38	42	39	43
VENTILATION		26" VARIABLE SPEED SMART FAN*			26" VARIABLE SPEED SMART FAN			
HEAT EXCHANGER		TITANIUM - DOUBLE COIL						
DEFROST MODE		PASSIVE (37°F)						
CONTROL BOARD		DIGITAL 4 LINES X 20 CHARACTERS						
COMPRESSOR TYPE		SCROLL			SCROLL 2 VITESSES PUISSANCE VARIABLE			
VOLTAGE		240V / 60HZ / 1 PHASE						
CABINET		INJECTED POLYPROPYLENE COMPOSITE REINFORCED WITH FIBERGLASS						
WATER FLOW (GPM)		40-80	40-80	40-80	26-80	26-80	40-80	40-80
DIMENSIONS (INCHES) (W X L X H)		39 X 37 X 34	39 X 37 X 38	39 X 37 X 42	39 X 37 X 34	39 X 37 X 34	39 X 37 X 38	39 X 37 X 38
WEIGHT (LBS)		245	250	255	241	241	245	245
WATER CONNECTION		2" QUICK CONNECT FITTINGS - INCLUDED						
POOL WATER LITER		USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST	USE FROM JUNE TO AUGUST		USE FROM JUNE TO AUGUST	
		100 000 Liters or less	120 000 Liters or less	140 000 Liters or less	80 000 Liters or less		105 000 Liters or less	
		USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER	USE FROM MAY TO SEPTEMBER		USE FROM MAY TO SEPTEMBER	
		68 000 Liters or less	80 000 Liters or less	95 000 Liters or less	50 000 Liters or less		70 000 Liters or less	
POOL DIMENSIONS		ABOVE GROUND	27'	N/A	N/A	21' X 24'		27'
		INGROUND	16' X 30'	16' X 34'	18' X 36'	14' X 28'		16' X 32'
		16' X 32'	18' X 36'	20' X 40'	16' X 30'		18' X 32'	

Nirvana recommends the use of a liquid or conventional solar blanket, especially in colder weather for better energy efficiency.

REFERENCE ONLY, RESULTS MAY CHANGE BASED ON AMBIENT AIR TEMPERATURES AND USAGE OF A SOLAR BLANKET AND REGIONS.

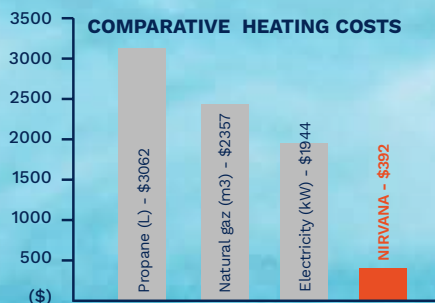
<sup>1</sup> Rated in accordance to AHRI standard 1160 : ambient air (°F) / humidity (%) / water temperature (°F) at a water flow of 0.45 gpm / 1000 btu at the 80/63/80 btu rating.

<sup>2</sup> Rated outside the scope of AHRI 1160 using a Silensor® SLL300 swimming pool pump at 80/63/80 conditions with 65 gpm water flow.

### PV80 et PV105

- 2 speed scroll compressor
- 67% at low speed
- 100% at hi speed
- Maximize performance and energy efficiency
- The unit remains simple at the electronic level
- Greatly reduced noise especially when starting
- Smart fan technology
- Intelligent management prioritizes energy efficiency

### COMPARATIVE HEATING COSTS



Based on the average price 0,082 \$ / kWh, in Quebec (2020).  
Conditions : 12'x24' pool heated to 80°F (27°C), from May to September.



### WARRANTY

COMPONENTS	DURATION
LABOR	5 YEARS
PARTS	5 YEARS
COMPRESSOR	5 YEARS
TITANIUM COIL	10 YEARS - LIMITED
CASING	15 YEARS - LIMITED

# REVOLUTIONARY WATER COOLED AND SUPER QUIET POOL PUMPS



## SILENSOR® SLL SERIES



### WATER COOLED PUMP

The exclusive, patented, water cooled Silensor® pumps transfer their excess heat to the pool water. This technology saves energy, eliminates the noisy fan that plagues other pumps with TEFC Motors, and dramatically reduces noise to let you enjoy summer peacefully. Silensor® is designed for long service life in an outdoor, poolside environment and replaces highly corrodible metal components with high performance, long-life plastics for low maintenance and dependable service. SLL models feature a large leaf basket for long intervals between cleaning. Available in 110v with plug (SLL200) or 240v (SLL150, SLL250, SLL300).

**\*Requires proper suction side installation, with a minimum length of 8" of 2" plumbing**

### OVERSIZED 4.5 LITER LEAF BASKET

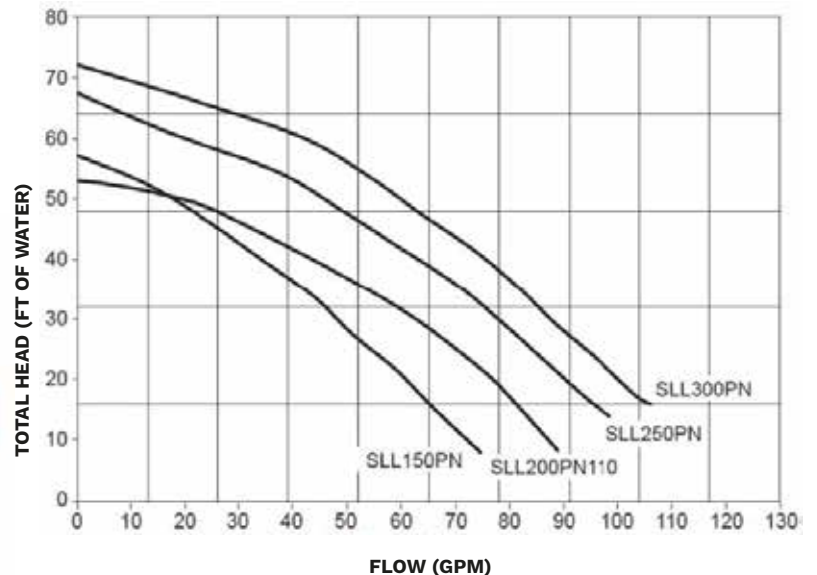


### SILENSOR® SLL SPECIFICATIONS

MODELS	SLL150	SLL250*	SLL300*	SLL200
POWER (HP)	1.2 HP	1.6 HP	2.0 HP	1.5 HP
CONSUMPTION (W/H) - 50 FT TOTAL HEAD	870	1240	1490	1140
AMPERAGE - 50 FT TOTAL HEAD	3.7	5.2	6.2	9.5
VOLTAGE	240	240	240	120
HEAT GENERATED BY THE WATER COOLED MOTOR (BTU/HOUR)	2500	3100	4000	2700

SILENSOR® PUMPS ARE LISTED WITH THEIR ACTUAL ELECTRIC CONSUMPTION.

### SILENSOR® SLL FLOW CHART





# CONNECT THE SILENSOR® PRO BTP TO THE NIRVANA HEAT PUMP

WITH A RELAY KIT (SOLD SEPARATELY), THE PUMP WILL RUN AT FULL SPEED WHEN THE HEAT PUMP IS RUNNING TO MAXIMIZE THE EFFICIENCY OF THE COMBINED SYSTEM. IT WILL AUTOMATICALLY RETURN TO THE LOW SPEED SETTING WHEN THE HEAT PUMP TURNS OFF TO FURTHER SAVE ELECTRICITY!



## SILENSOR® PRO BTP VARIABLE SPEED PUMP



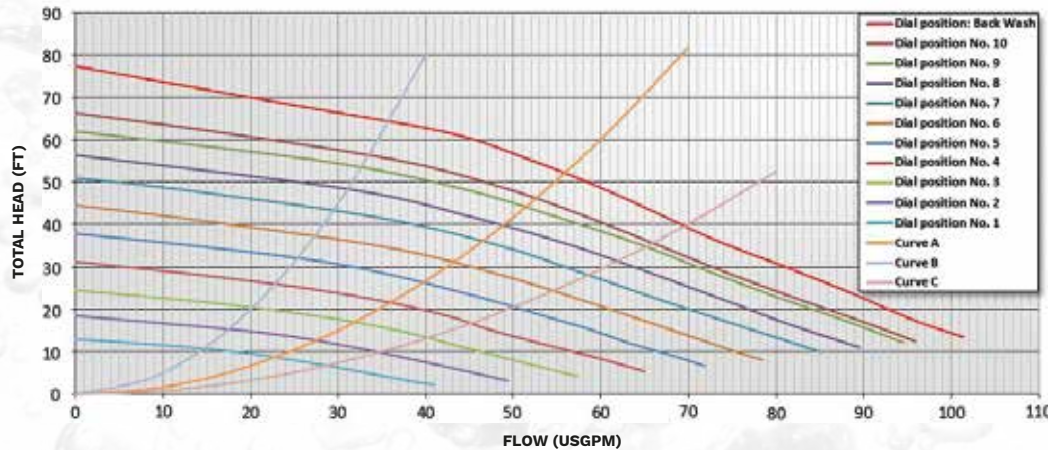
The Silensor® Pro offers the pool owner or operator total control over the speed at which the pump operates from 1,500 rpm to 3,600 rpm with an easy to use dial. Designed with a unique water-cooled motor which captures noise and vibration, and allows for super-quiet operation at all speeds, your neighbors won't even know it's there. Silensor® PRO also features a selectable backwash cycle that runs the pump for 2 minutes at 3,800 rpm before automatically turning off to safely, reliably and easily backwash your media filter. Silensor® PRO also incorporates unique loss of prime protection to prevent pump damage if no water is available to the pump. Furthermore, by water-cooling the motor, Silensor® PRO does not require air circulation and gives installers more flexibility with pump positioning.

**\*Requires proper suction side installation , with a minimum length of 8" of 2" plumbing.**

### SILENSOR® PRO BTP SPECIFICATIONS

MODEL	SP200SBTP*
POWER (W/HP)	116W/0.16hp (Dial 1) 488W/0.65hp (Dial 5) 1000W/1.34hp (Dial 10) 1316W/1.76hp (backwash)
VOLTAGE (V)	240V
MOTOR SPEED (RPM)	1500 TO 3600
BACK WASH (RPM)	3800
HEAT GENERATED BY THE MOTOR (BTU/HHOUR)	300 TO 2700 (DIAL 1 TO 10)
TECHNOLOGIE	BLUETOOTH

### SILENSOR® PRO FLOW CHART



## ANNUAL SAVINGS WITH THE SILENSOR®

MODELS	SLL150	SLL250	SLL300	SLL200
YEARLY CONSUMPTION – MARKET LEADING PUMP	\$551.58 <sup>1</sup>	\$669.77 <sup>2</sup>	\$787.97 <sup>3</sup>	\$464.90 <sup>4</sup>
YEARLY CONSUMPTION – SILENSOR® PUMP (24H/DAY, 150 DAYS, 0.0912\$/KWH)	\$285.64	\$407.12	\$489.20	\$374.28
YEARLY SAVINGS ON CONSUMPTION	\$265.94	\$262.65	\$298.77	\$90.62
YEARLY SAVINGS IN HEATING	\$240.33	\$298.11	\$384.46	\$259.37
<b>TOTAL YEARLY SAVINGS OF THE SILENSOR®</b>	<b>\$506.27</b>	<b>\$560.76</b>	<b>\$683.23</b>	<b>\$349.99</b>

<sup>1</sup> Compared to a popular 1.0hp pump which consumes 7.0 amps at 240v - 7.0 \* 240 = 1680w \* 24h/day \* 150 days \* 0.0912\$/kWh = \$551.58

<sup>2</sup> Compared to a popular 1.5hp pump which consumes 8.5 amps at 240v - 8.5 \* 240 = 2040w \* 24h/day \* 150 days \* 0.0912\$/kWh = \$669.77

<sup>3</sup> Compared to a popular 2.0hp pump which consumes 8.5 amps at 240v - 10 \* w240 = 2400w \* 24h/day \* 150 days \* 0.0912\$/kWh = \$787.97

<sup>4</sup> Compared to a popular 1.5hp pump which consumes 11.8 amps at 120v - 11.8 \* 120 = 1416w \* 24h/day \* 150 days \* 0.0912\$/kWh = \$464.90

<sup>5</sup> Explanation – Heating – compared to electric resistance heating: 1 BTU = 0.2928 watts/h

2500 BTU = 732w/h = 0.732kwh \* 0.0912 = 0.0667\$/h = 1.60\$/day \* 150 days = **\$240.33**

3100 BTU = 908w/h = 0.908kwh \* 0.0912 = 0.0828\$/h = 1.99\$/day \* 150 days = **\$298.11**

4000 BTU = 1171w/h = 1.171kwh \* 0.0912 = 0.1068\$/h = 2.56\$/day \* 150 days = **\$384.46**

2700 BTU = 790w/h = 0.790kwh \* 0.0912 = 0.0720\$/h = 1.73\$/day \* 150 days = **\$259.37**



4215, RUE ST-JOSEPH, TROIS-RIVIÈRES QC G8Z 4G3 CANADA / 1 844 519-8970

NIRVANAHP.COM