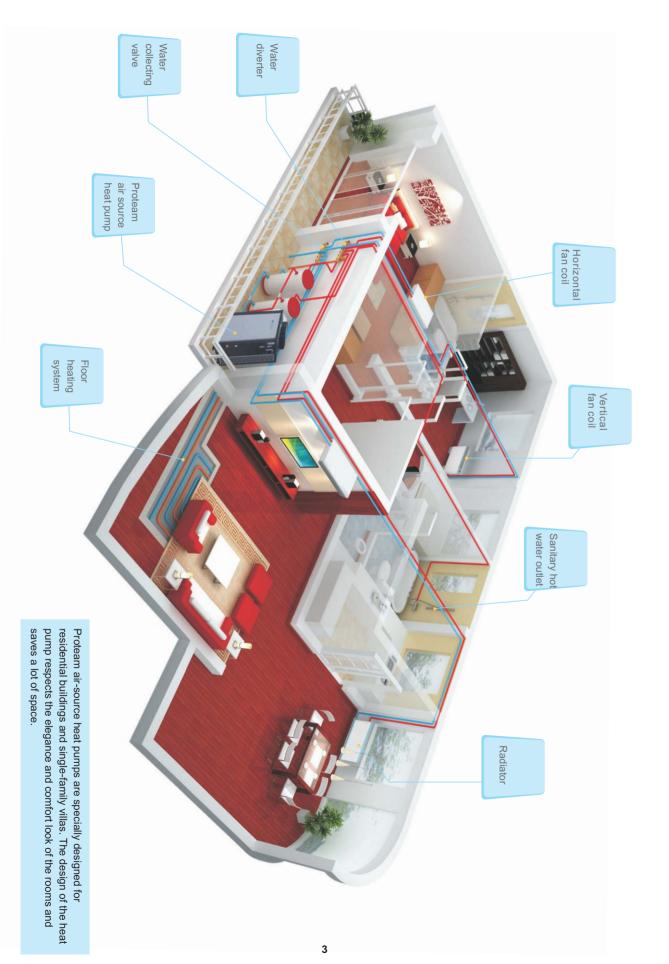
House Heating Solutions







Certifications

Guanghou Van Certification & Tealing Institute Certificate of Compliance	CVC Guargehou Vian Certification & Tealing Institute Certificate of Compliance	Guargebou Vitan Cartification & Testing Institute Cartificate of Compliance	CVC Guargetons Vian Certification & Testing Institute Certificate of Compliance	Ingela bila 4 baste bila Balanti Banta dalam Balanta Banta dalam Balanta Banta dalam Balanta dalam B	Angeles berge å spesse sater Angeles farmer angeles beste farmer	Compare Administration Compare Administration Compared and Administratio	Complete Integral & International Complete Integral & International Complete Integral &
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House Heating

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C3 - models



2013





Proteam Air Source Heat Pump for House Heating C3 - models





Tables and Calculations



PROTEAM Europa Norway 1972

PROTEAM Europa was started as Klimateknik in 1972 in Norway by Siv. Ing. Harald Einevoll. For many years PROTEAM has been developing and producing high quality heat pumps.

As energy costs continue to rise, governments in many countries across the globe are committing to reduce energy usage. As a result, systems that are able to reduce energy usage and consumption are becoming more and more important. Heat pumps represent a highly-efficient and environmentally-friendly technology as most of the energy required to generate heat is taken from the freelyavailable surrounding air, a renewable and inexhaustible source of energy.

This is why heat pumps have become one of the best low-cost options to produce "Green Energy".

PROTEAM **PROTEAM:** The leader in Heat Pump Technology

***** Innovations of the Year:

Proteam Corrugated Golden Evaporator. (Energy Collector) New Fan Blade design with ultra wide Airflow.

In addition to all of the standard features in Proteam Heat Pumps, our innovation gives you Higher COP, Higher Energy Gain, Less energy Consumption and Less noise.

★ Practical functions.

EEV(Ele. Expansion valve) for system; bottom-pan heating to prevent ice-formation around base of unit, waterproof display and easy operation LCD control panel;

★ <u>Value: best prices on the market for the performance and quality you get:</u> Proteam has many years of experience in efficient production, long-lasting relationships with suppliers of quality components and low-cost distribution system.

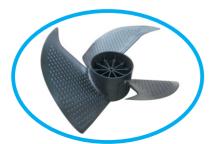
Innovations:

★ Corrugated Golden Proteam Evaporator. (Energy Collector) Our new Proteam Evaporator increases the efficiency with 25 to 30%.



Innovations:

★ New Fan Blade design with ultra wide Airflow. Wider and more uniform airflow results in less energy loss, and more efficient evaporator.





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Specifications							
Code	Unit	PRW13HC3-1	PRW22UC3-3	PRW44UC3-3	PRW50UC3-3	PRW65UC3-3	
Max Output	kW	13	22	44	50	65	
Heating Capacity	kW	11.5~12.8	19.5~21.6	39.5~43.5	44.5~48.5	58.5~64.5	
COP at 55°C		4.3	4.3	4.3	4.3	4.3	
Hot Water Generated	L/h	250	420	850	900	1260	
Input Power	kW	2.7	4.6	9.2	10.4	13.6	
Max. Input Power	kW	3.4	5.6	12.1	13.8	16.9	
Running Current	Α	12.8	8.1	16.5	18.9	24.3	
Max. Running Current	Α	16	10	21.6	24.7	30.5	
Power Supply	V/PH/HZ	220V~ 50Hz	380V~ 50Hz	380V~ 50Hz	380V~ 50Hz	380V~ 50Hz	
Compressor	Туре	Scroll	Scroll	Scroll	Scroll	Scroll	
	Number	1	1	2	2	3	
Heat Exchanger Type		High efficiency tube in shell heat exchanger					
Throttling Device		Electric Expansion Valve (E.E.V)					
	Туре	Low noise high efficiency axial type					
	Discharge	Vertical	Vertical	Vertical	Vertical	Vertical	
Fan	Quantity	1	1	2	2	3	
	Power Input (W)	250	250	250 x 2	250 x 2	250 x 3	
	RPM	830	850	850 x 2	850 x 2	850 x 3	
Refrigerant	R410a						
Low-Pressure Protection		Yes					
High-Pressure Protection		Yes					
Water Flow Switch	No						
Water Flow Rate	m3/h	2.0	2.5	5.0	6.5	7.3	
Thermostat Factory Setting	°C	55	55	55	55	55	
Thermostat Maximum Setting	°C	60	60	60	60	60	
Water Connections	inch	G 1"	G 1"	G 1-1/2"	G 1-1/2"	G 2"	
Water-side pressure loss	kpa	20	40	40	70	75	
Water proof level		IPX4	IPX4	IPX4	IPX4	IPX4	
Working Air Temp. Range	°C	-10 to 45	-10 to 45	-10 to 45	-10 to 45	-10 to 45	
Noise	dB(A)	54	56	59	60	61	
Cabinet			Coated				
Unit Dimension (mm)	L/W/H	700*670*965	820*820*1160	1570*820*1165	1570*820*1165	2150*764*1402	
Packing Dimension (mm)	L/W/H	740*710*1080	860*860*1275	1610*900*1320	1610*900*1320	2270*830*1570	
Net weight / Gross weight	kg	111/129	145/165	268/289	293/315	437/497	

Measuring Conditions: Dry bulb 20° C, wet bulb 15° C, Water heated from 15° C to 55° C



Proteam Heat Pumps









Model name: PRW13HC3-1 Output: 11.5~12.8kW Input: 2.7kW L x H x W: 700*670*965mm



Model name: PRW44UC3-3 Output: 39.5~43.5kW Input: 9.2kW L x H x W: 1570*820*1165mm



Model name: PRW22HC3-3 Output: 19.5~21.6kW Input: 4.6kW L x H x W: 820*820*1160mm



Model name: PRW50UC3-3 Output: 45.5~48.5kW Input: 10.4kW L x H x W: 1570*820*1360mm





Model name: PRW65UC3-3 Output: 58.5~64.5kW Input: 13.6kW L x H x W: 2150*764*1402mm