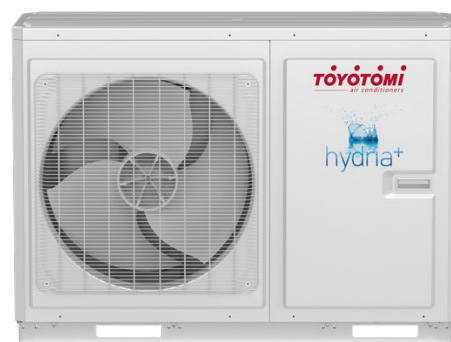




Why TOYOTOMI Heat Pump?

The hydria+ heat pump is designed to offer maximum performance in extreme conditions and at the same time save electricity.

The outlet water up to 65°C makes it ideal for installation in existing heating installations.



Outlet Water
Temperature up
to 65°C



Economizer



Golden Fin
anticorrosion
protection



R32 Refrigerant



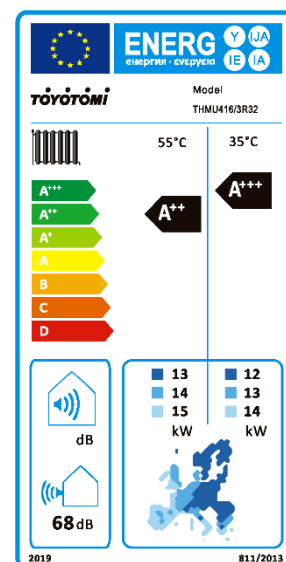
Wi-Fi Standard



Input current
limitation

MODEL	THMU416/3R32
EAN BAR CODE OUTDOOR UNIT	5205022021025
COUNTRY OF ORIGIN	CHINA

Product Code	SAP Code	Product Description
20.22THMU416/3R32	614715	THMU416/3R32 ATW MONO 16KW (3PH) TOYOTOMI



Monobloc TOYOTOMI hydria⁺ THMU416/3R32

Rated Heat Output (Prated) / Warmer climate - Medium Temperature Application (2°C / 55°C)		kW	15.00
Air 7°C db - Water 30°C/35°C Floor Heating	Heating Capacity	kW	15.70
	Input Power	kW	3.57
	COP ¹		4.40
Air 7°C db - Water 40°C/45°C Fan Coils - Radiators	Heating Capacity	kW	16.20
	Input Power	kW	4.49
	COP ¹		3.61
Air 2°C db - Water 50°C/55°C	Heating Capacity	kW	13.35
	Input Power	kW	5.60
	COP ¹		2.38
Sound Pressure Level ²		dB(A)	59
Air 35°C db - Water 12°C/7°C Fan Coils	Cooling Capacity	kW	13.80
	Input Power	kW	5.09
	EER ¹		2.71
Air 35°C db - Water 23°C/18°C Floor Cooling	Cooling Capacity	kW	15.40
	Input Power	kW	4.05
	EER ¹		3.80
dB(A)		dB(A)	56
Minimum Water Content		L	5lit/kW
Nominal Water Flow Rate		L/min	46
Hydraulic Connection			25mm/1"
Electrical Characteristics		Ph/Hz/V	3/50/380-415
Maximum Operating Current (MOC)		A	12,50
Unit Dimensions (Length-Height-Depth)		mm	1206x878x445
Net Weight		kg	144
Factory Refrigerant Charge		kg	R32 – 2.20
GWP			675

Seasonal Energy Efficiency TOYOTOMI hydria⁺

Water outlet 35°C according EN14825 for Average Climate	Pdesing (EN 14825) ³	kW	13.00
	Seasonal heating Efficiency (ηs) ⁴	%	179
	Annual energy consumption	kWh	5927
	SCOP ³		4.55
Water outlet 55°C according EN14825 for Average Climate	Energy Class ⁴		A+++
	Pdesing (EN 14825) ³	kW	14.00
	Seasonal heating Efficiency (ηs) ⁴	%	138
	Annual energy consumption	kWh	8014
	SCOP ³		3.53
	Energy Class ⁴		A++

Operation Limits TOYOTOMI hydria⁺

	Ambient Temperatures	Water Temperatures
Heating	-25°C ~ +35°C	+20°C ~ +65°C
Cooling	-15°C ~ +48°C	+5°C ~ +25°C
Hdw	-25°C ~ +45°C	+25°C ~ +55°C



Features

Energy class A+++
R32 eco -friendly refrigerant
Twin rotary 2-stage high efficiency compressor
Inverter single fan motor design
Golden fin anticorrosion protection
Smart defrost function
Danfoss plate heat exchanger with integrated antifreeze protection
Integrated inverter water pump
Increased efficiency with Economizer
Additional heating source control (oil or gas boilers)
Wide electrical operation range (1ph models 185V-264V & 3ph models 320V-460V)
4.3" High resolution touch screen
DHW Anti-legionella treatment
Wi-fi standard for ios/android
Air purge operation
Whether dependant operation (compensation)
Fast DHW
Floor Drying Operation
Holiday operation
Dry Contact Control
Input Current limitation
Modbus RTU interface
Quiet mode
Daily & weekly heating/cooling & domestic hot water schedule
Control board Anticorrosion protection
BMS connectivity
Self – diagnosis malfunctions
Wired controller
Lock function
Auto restart
Smooth Start Operation
PWM secondary water pump control
Additional room sensor for precise calculation of room temperature
Small dimensions & silent operation
Display of all operation parameters for troubleshooting

 Energy Class A+++
 Outlet Water temperature up to 65°C
 R32 eco – friendly Refrigerant
 Twin Rotary high efficiency compressor
 Inverter single fan motor design
 Golden Fin anticorrosion protection
 Smart Defrost Function
 Antifreeze function
 Integrated Inverter water pump
 Economizer
 Additional heating source control
 Wide electrical operation range
 4.3" High resolution touch screen
 DHW Anti-legionella treatment
 Wi-Fi Standard for IOS/Android
 Air purge operation
 Weather dependent operation (compensation)
 Fast DHW operation
 Floor Drying Operation
 Holiday operation
 Dry Contact Control
 Input current limitation
 Modbus RTU
 Quiet operation
 Daily & weekly operation schedule
 Control board anticorrosion protection
 BMS Connectivity
 Self – diagnosis malfunctions
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