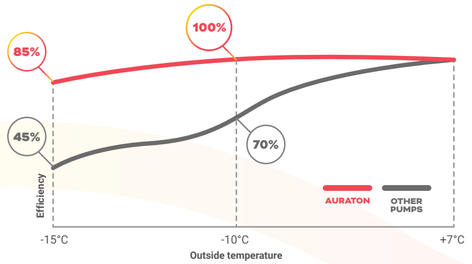
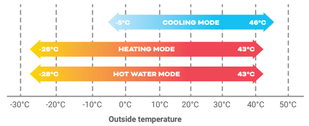
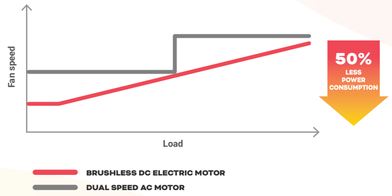
HIGH EFFICIENCY

High power and excellent parameters in low temperatures make AURATON TIVANO a perfect solution for houses and companies. This pump remains **100% efficient when the temperature is -10°C** and it can work alone at -28°C outside.







STEERING AND INSTALLATION

Hydronic module contains of **wired steering touchpad** with a temperature sensor built-in. The touchpad can be easily removed and **installed in a room**. Control modes available: temperature settings, heeting mode, cooling mode, W.U.W. mode and mixed mode. It helps to **adjust the device to the user's needs**.
Additional functions: AntiFrost, weekly timer, or switching on the electric heater provide **comfort and safety**. Hydronic module **does not require** additional isolation of hot water pipes.

5 YEARS OF WARRANTY

Warranty is valid when the annual warranty inspections after 2 years from purchase are made.

AURATON TIVANO is a SPLIT system heating pump used in the new buildings and when the instalation is modernized (to exchange or complete the oil, gas or pellet boilers).

AUTHORIZED SERVICE
For instalators and users. We provide services across the country. Initial start, annual warranty controls, warranty and post-warranty repairs.

SAVING ON PURCHASE
No need to oversize the system

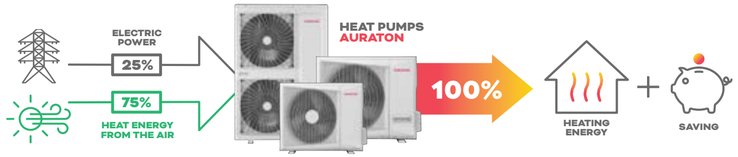
SAVING IN USE
75% of heat energy is taken from the air

SUPER EFFICIENCY
100% of efficiency at -10°C, 85% at -15°C

GMCC TOSHIBA
Compressor of the well-known and valued brand

R32 REFRIGERANT
Safe refrigerant complaint with the EU standard

OPERATING MODE
Heating in winter, cooling in summer.



AURATON TIVANO heat pumps work with **radiators** and can operate with surface heating systems **(floor, wall and ceiling heating), radiators and fan coil units.** The pump can also be connected to **solar heating or photovoltaic systems. AURATON TIVANO** can heat, cool the house and **provide** domestic **hot water** all year round.

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TIVANO

SPLIT SYSTEM HEAT PUMPS

AURATON

TIVANO 8kW

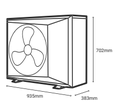
Split system heat pump with hydronic module

Outdoor unit			TIVANO-8KW
Power supply		V/Ph/Hz	220~240/1/50
Performance data			
The rated heating conditions: water flow 0.172m^3/(h·kW), ambient temperature 7°C DB, water inlet/outlet temperature 30/35°C.	Capacity	kW	8
	Power input	kW	1,95
	COP	kW/kW	4,1
The rated cooling conditions: water flow 0.172m^3/(h·kW), ambient temperature 35°C DB, water inlet/outlet temperature 12/7°C.	Capacity	kW	6,5
	Power input	kW	2,32
	EER	kW/kW	2,8
Heating condition: water flow 0.172m^3/(h·kW), ambient tempeature 7°C, water inlet/outlet temperature 40/45°C.	Capacity	kW	8
	Power input	kW	2,5
	COP	kW/kW	3,2
Cooling condition: water flow 0.172m^3/(h·kW), ambient tempeature 35°C, water inlet/outlet temperature 23/18°C.	Capacity	kW	6,5
	Power input	kW	1,7
	EER	kW/kW	3,8
Seasonal space heating energy eff. Class (average climate general)	water outlet 35°C		A++
	water outlet 35°C		4,15
	water outlet 55°C		A++
	water outlet 55°C		3,29
Max. power input		kW	4,2
Max. current input		A	19
Sound power level		dB(A)	66
Physical data			
Dimension (W×H×D)		mm	935×702×382
Packing (W×H×D)		mm	975×770×435
Net/gross weight		kg	55/58
Compressor	Brand		GMCC Toshiba
	Type		Rotary DC Inverter
	Model		EKTF235D22UMT
	Poles		6
	Speed	rps	12~120
	Oil		POE/670ml
Outdoor fan	Motor type		Brushless DC motor
	Model		DRN-310-75-8
	Number of fans		1
	Air flow	m³/h	3200
Air side heat exchanger	Number of rows		3
	Tube pitch(a)× row pitch(b)	mm	21×13,3
	Tube dia. and type		Φ7 inner grooved copper
	Fin space	mm	1,4
	Fin type (code)		Hydrophilic aluminum
	Coil (length×height×width)	mm	784×651×40,11
	Number of circuits		7
Piping connections			
Liquid pipe	Type		Flaring
	Dia.(OD)	mm	Φ9,52
Gas pipe	Type		Flaring
	Dia.(OD)	mm	Φ15,88
Max. piping length		m	20
Max. height difference	Outdoor unit upside	m	10
	Oudoor unit downside	m	10
Refrigerant	Type		R32
	Quantity	kg	1,4
	Throttle type		EXV

HYDRONIC module				8kW
Power supply			V/Ph/Hz	220~240/1/50
Leaving water temperature	Space heating		℃	25~60
	Space cooling		℃	5~25
	Domestic hot water		℃	40~60
Max. power input			kW	3,6
Max. current input			A	17
Sound power level			dB(A)	45
Dimension (W×H×D)			mm	490×910×340
Packing (W×H×D)			mm	620×1105×425
Net/gross weight			kg	47/55
Water circuit	Piping connection Dia	Outlet	mm	DN32
		Inlet	mm	DN32
	Safty valve		kPa	600
	Drainage pipe Dia		mm	DN20
	Expansion tank	Volume	l	2
		Max. water pressure	kPa	800
		Pre pressure	kPa	150
	Water side heat exchanger	Type		Plate type
		Volume	l	0,658
	Water pump	Model		Para 25/9
		Pump head	m	9
Refrigerant circuit	Liquid side Dia		mm	Φ9,52
	Gas side Dia		mm	Φ15,88
Back-up E-heater	Power supply		V/Ph/Hz	230V/1Ph/50Hz
	Power		kW	3kW
	Step			1
	Max. power input		kW	3kW
	Max. current input		A	13,6A

TIVANO- 8kW

LWE / Tamb	35 HC	35 PI	35 COP	55 HC	55 PI	55 COP
-25/-	3,10	2,06	1,50			
-20/-	4,15	2,16	1,92	3,02	2,46	1,23
-15/-	6,83	2,90	2,36	4,49	2,55	1,76
-7/-8	8,04	2,45	3,29	6,20	2,91	2,13
2/1	8,15	2,53	3,23	6,34	2,84	2,23
7/6	8,26	2,29	3,61	6,14	2,53	2,42
15/12	8,36	1,76	4,75	6,06	2,24	2,70
20/15	8,01	1,45	5,54	5,85	1,93	3,04
25/18	8,19	1,34	6,10	5,95	1,77	3,37
35/24	8,38	1,29	6,52	6,03	1,66	3,63
43/28	8,38	1,17	7,19	5,92	1,46	4,05



The integrated value takes into account the loss of capacity during freezing and defrosting periods.
Efficiency is tested in a slow frequency situation.

Comment:
LWE: Outlet water temperature (℃)
Tamb: Ambient temperature (℃)
HC: Heating capacity (kW)
PI: Power consumption (kW)

AURATON

TIVANO 12kW

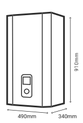
Split system heat pump with hydronic module

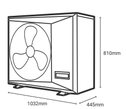
Outdoor unit			TIVANO-12KW
Power supply		V/Ph/Hz	220~240/1/50
Performance data			
The rated heating conditions: water flow 0.172m^3/(h·kW), ambient temperature 7°C DB, water inlet/outlet temperature 30/35°C.	Capacity	kW	12
	Power input	kW	2,9
	COP	kW/kW	4,14
The rated cooling conditions: water flow 0.172m^3/(h·kW), ambient temperature 35°C DB, water inlet/outlet temperature 12/7°C.	Capacity	kW	10
	Pobór pocy	kW	3,7
	EER	kW/kW	2,7
Heating condition: water flow 0.172m^3/(h·kW), ambient tempeature 7°C, water inlet/outlet temperature 40/45°C.	Capacity	kW	12
	Power input	kW	3,53
	COP	kW/kW	3,4
Cooling condition: water flow 0.172m^3/(h·kW), ambient tempeature 35°C, water inlet/outlet temperature 23/18°C.	Capacity	kW	10
	Power input	kW	2,08
	EER	kW/kW	4,8
Seasonal space heating energy eff. Class (average climate general)	water outlet 35°C		A++
	water outlet 35°C		4,34
	water outlet 55°C		A++
	water outlet 55°C		3,33
Max. power input		kW	5
Max. current input		A	22
Sound power level		dB(A)	68
Physical data			
Dimension (W×H×D)		mm	1032×810×445
Packing (W×H×D)		mm	1075×875×495
Net/gross weight		kg	67,5/70,5
Compressor	Brand		GMCC Toshiba
	Type		Rotary DC Inverter
	Model		EKTF310D43UMT
	Poles		6
	Speed	rps	12~120
	Oil		POE/1000ml
Outdoor fan	Motor type		Brushless DC motor
	Model		DRN-310-90-8
	Number of fans		1
	Air flow	m³/h	4000
Air side heat exchanger	Number of rows		2,5
	Tube pitch(a)× row pitch(b)	mm	25×21,7
	Tube dia. and type		Φ9.52 inner grooved copper
	Fin space	mm	1,6
	Fin type (code)		Hydrophilic aluminum
	Coil (length×height×width)	mm	1003×750×43.3 + 580×750×21.65
	Number of circuits		5
Piping connections			
Liquid pipe	Type		Flaring
	Dia.(OD)	mm	Φ9,52
Gas pipe	Type		Flaring
	Dia.(OD)	mm	Φ15,88
Max. piping length		m	50
Max. height difference	Outdoor unit upside	m	20
	Oudoor unit downside	m	20
Refrigerant	Type		R32
	Quantity	kg	3,1
	Throttle type		EXV

HYDRONIC module				12kW
Power supply			V/Ph/Hz	220~240/1/50
Leaving water temperature	Space heating		℃	25~60
	Space cooling		℃	5~25
	Domestic hot water		℃	40~60
Max. power input			kW	3,6
Max. current input			A	17
Sound power level			dB(A)	45
Dimension (W×H×D)			mm	490×910×340
Packing (W×H×D)			mm	620×1105×425
Net/gross weight			kg	48/56
Water circuit	Piping connection Dia	Outlet	mm	DN32
		Inlet	mm	DN32
	Safty valve		kPa	600
	Drainage pipe Dia		mm	DN20
	Expansion tank	Volume	l	2
		Max. water pressure	kPa	800
		Pre pressure	kPa	150
	Water side heat exchanger	Type		Plate type
		Volume	l	1,22
	Water pump	Model		Para 25/9
		Pump head	m	9
Refrigerant circuit	Liquid side Dia		mm	Φ9,52
	Gas side Dia		mm	Φ15,88
Back-up E-heater	Power supply		V/Ph/Hz	230V/1Ph/50Hz
	Power		kW	3kW
	Step			1
	Max. power input		kW	3kW
	Max. current input		A	13,6A

TIVANO- 12kW

LWE / Tamb	35 HC	35 PI	35 COP	55 HC	55 PI	55 COP
-25/-	6,3	4,07	1,55			
-20/-	8,43	3,83	2,2	4,48	3,58	1,25
-15/-	10,2	4,23	2,41	7,99	4,96	1,61
-7/-8	12,12	4,25	2,85	8,42	4,94	1,7
2/1	12,6	3,6	3,5	10,92	4,42	2,47
7/6	12,84	3,38	3,8	11,4	4,2	2,71
15/12	13,44	2,85	4,72	11,64	4,16	2,8
20/15	13,8	2,37	5,83	11,88	3,53	3,37
25/18	14,04	2,19	6,42	12,12	3,24	3,74
35/24	12,48	1,82	6,85	10,68	2,72	3,92
43/28	12,24	1,62	7,56	10,2	2,39	4,26





The integrated value takes into account the loss of capacity during freezing and defrosting periods.
Efficiency is tested in a slow frequency situation.

Comment:
LWE: Outlet water temperature (℃)
Tamb: Ambient temperature (℃)
HC: Heating capacity (kW)
PI: Power consumption (kW)

AURATON

TIVANO 16kW

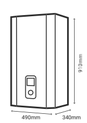
Split system heat pump with hydronic module

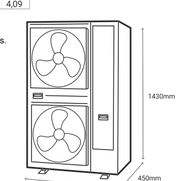
Outdoor unit			TIVANO-16KW
Power supply		V/Ph/Hz	380~415/3/50
Zakres wydajności			
The rated heating conditions: water flow 0.172m^3/(h·kW), ambient temperature 7°C DB, water inlet/outlet temperature 30/35°C.	Capacity	kW	16
	Power input	kW	3,75
	COP	kW/kW	4,27
The rated cooling conditions: water flow 0.172m^3/(h·kW), ambient temperature 35°C DB, water inlet/outlet temperature 12/7°C.	Capacity	kW	15,2
	Power input	kW	5,4
	EER	kW/kW	2,81
Heating condition: water flow 0.172m^3/(h·kW), ambient tempeature 7°C, water inlet/outlet temperature 40/45°C.	Capacity	kW	16
	Power input	kW	4,71
	COP	kW/kW	3,4
Cooling condition: water flow 0.172m^3/(h·kW), ambient tempeature 35°C, water inlet/outlet temperature 23/18°C.	Capacity	kW	15,2
	Power input	kW	3,17
	EER	kW/kW	4,8
Seasonal space heating energy eff. Class (average climate general)	water outlet 35°C		A++
	water outlet 35°C		4,07
	water outlet 55°C		A++
	water outlet 55°C		3,38
Max. power input		kW	6,4
Max. current input		A	12,1
Sound power level		dB(A)	70
Physical data			
Dimension (W×H×D)		mm	1014×1430×450
Packing (W×H×D)		mm	1095×1545×485
Net/gross weight		kg	124/138
Compressor	Brand		GMCC Toshiba
	Type		Rotary DC Inverter
	Model		EKTQ420D1UMU
	Poles		6
	Speed	rps	12~120
	Oil		POE/1400ml
Outdoor fan	Motor type		Brushless DC motor
	Model		DR-310-100-8-2
	Number of fans		2
	Air flow	m³/h	6100
Air side heat exchanger	Number of rows		2
	Tube pitch(a)× row pitch(b)	mm	25×21,7
	Tube dia. and type		Φ9.52 inner grooved copper
	Fin space	mm	1,6
	Fin type (code)		Hydrophilic aluminum
	Coil (length×height×width)	mm	995×1350×43,3
	Number of circuits		7
Piping connections			
Liquid pipe	Type		Flaring
	Dia.(OD)	mm	Φ9,52
Gas pipe	Type		Flaring
	Dia.(OD)	mm	Φ15,88
Max. piping length		m	50
Max. height difference	Outdoor unit upside	m	20
	Oudoor unit downside	m	20
Refrigerant	Type		R32
	Quantity	kg	3,8
	Throttle type		EXV

HYDRONIC module				16kW
Power supply			V/Ph/Hz	220~240/1/50
Leaving water temperature	Space heating		℃	25~60
	Space cooling		℃	5~25
	Domestic hot water		℃	40~60
Max. power input			kW	3,6
Max. current input			A	17
Sound power level			dB(A)	45
Dimension (W×H×D)			mm	490×910×340
Packing (W×H×D)			mm	620×1105×425
Net/gross weight			kg	48/56
Water circuit	Piping connection Dia	Outlet	mm	DN32
		Inlet	mm	DN32
	Safty valve		kPa	600
	Drainage pipe Dia		mm	DN20
	Expansion tank	Volume	l	2
		Max. water pressure	kPa	800
		Pre pressure	kPa	150
	Water side heat exchanger	Type		Płytowy
		Volume	l	1,22
	Water pump	Model		Para 25/9
		Pump head	m	9
Refrigerant circuit	Liquid side Dia		mm	Φ9,52
	Gas side Dia		mm	Φ15,88
Back-up E-heater	Power supply		V/Ph/Hz	230V/1Ph/50Hz
	Power		kW	3kW
	Step			1
	Max. power input		kW	3kW
	Max. current input		A	13,6A

TIVANO- 16kW

LWE / Tamb	35 HC	35 PI	35 COP	55 HC	55 PI	55 COP
-25/-	8,64	5,71	1,51			
-20/-	11,52	5,38	2,14	6,57	4,94	1,33
-15/-	13,60	5,94	2,29	12,00	6,98	1,72
-7/-8	16,32	5,98	2,73	12,64	6,95	1,82
2/1	16,96	5,06	3,35	14,72	6,21	2,37
7/6	17,28	4,75	3,64	15,36	5,91	2,60
15/12	18,08	4,00	4,52	15,68	5,84	2,68
20/15	18,56	3,33	5,58	16,00	4,96	3,22
25/18	18,88	3,07	6,15	16,32	4,56	3,58
35/24	16,80	2,56	6,56	14,40	3,82	3,77
43/28	16,48	2,28	7,24	13,76	3,36	4,09





The integrated value takes into account the loss of capacity during freezing and defrosting periods.
Efficiency is tested in a slow frequency situation.

Comment:
LWE: Outlet water temperature (℃)
Tamb: Ambient temperature (℃)
HC: Heating capacity (kW)
PI: Power consumption (kW)