

A2W HEAT PUMP RANGE





WHAT IS AN AIR TO WATER HEAT PUMP?

An air source heat pump also known as an Air-To-Water Heat Pump transfers heat from the outside air to water. This in turn heats the space via radiators or underfloor heating. It can also heat water stored in a hot water cylinder for hot water taps, baths and showers.

The Haier Air to Water Heat Pump range uses free renewable energy from the outside air as a heat source for space heating and providing domestic hot water. This energy efficient and environmentally friendly solution substantially reduces energy consumption, running cost and CO₂ emissions in heating compared to conventional oil and gas boilers.

The system draws energy from the outside air to create a high efficiency solution for your needs, with efficiencies of over 3:1 for power input

How does an air source heat pump work?

Heat from the air is absorbed into a fluid. This fluid then passes through a heat exchanger into the heat pump, which raises the temperature and then transfers that heat to water.

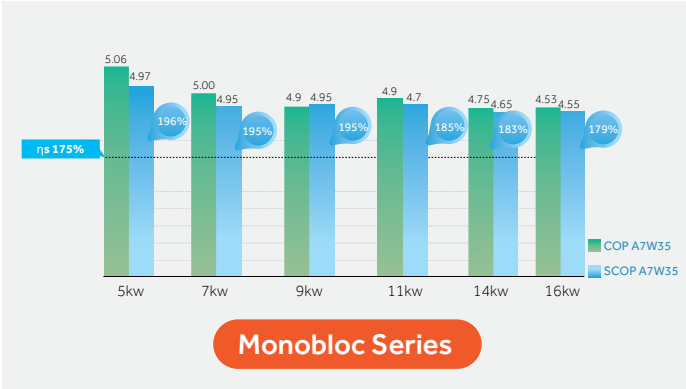
MONOBLOC		
Type	R290 A2W GT Series	R32 A2W
Advantages	Water connection indoor to outdoor	
Max. leaving water temperature (°C)	80	60
HIGH EFFICIENCY		
Refrigerant (GWP)	R290 (3)	R32 (675)
Energy Class at 35°C/7°C	A+++	A+++
Energy Class at 55°C/7°C	A+++	A++
Min. Ambient Temp. at Heating (°C)	-25	-25
Sound Power dB	55	60
ULTIMATE COMFORT		
2 Zone Control	●	●
Fast DHW	●	●
Quiet Mode	●	●
Turbo Mode	●	●
Climate Curve	●	●
Sterilisation	●	●
Auto Mode	●	●
HIGH RELIABILITY		
Floor Drying	●	●
Anti-Freezing	●	●
Anti-rust and Corrosion of Water Pump	●	●
INTELLIGENCE		
Smart Grid	●	●
Modbus	●	●
Energy Monitoring	●	
WiFi	hOn integrated	Optional
Holiday Mode	●	●
Scheduling Programs	●	●
DHW Tank Solar Thermal Control	●	●
Auxiliary Heating Source	●	●
Pool Heating	●	●
Bivalence Control	●	●
Cascade Control	●	●
SUPER CONVENIENCE		
Selection Software	Yes	No
Standardised indoor to outdoor wiring	Yes (P+Q)	No
SD Card Slot	Yes	No
Error History	●	●
Parameters Check	●	●

HIGH EFFICIENCY



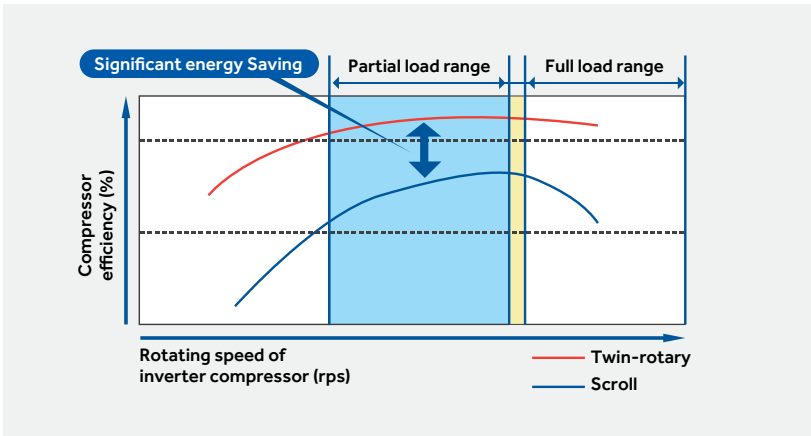
EFFICIENCY R32

The Gen II A2W HP Monobloc has an impressive energy class of A+++. A SCOP of 4.97 and a COP of 5.06 can be reached when the leaving water temperature is 35°C.



FULL DC INVERTER TECHNOLOGY R290 R32

Our heat pumps adopt a full DC inverter twin-rotary compressor which has a smaller size and higher efficiency compared with a scroll compressor. The minimal friction of the compressor and the reduction in running vibration enables us to deliver high efficiency and low noise coming from the compressor.



A+ HOT WATER ERP CLASS R290

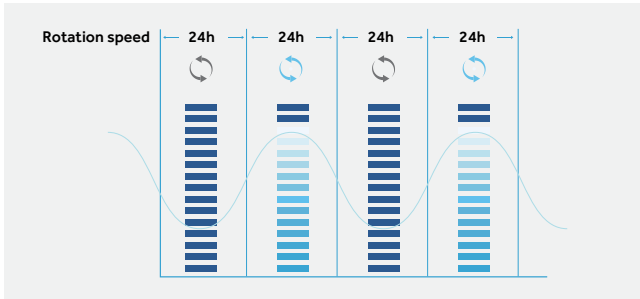


HIGH RELIABILITY

DRY

ANTI-RUST AND CORROSION R290 R32

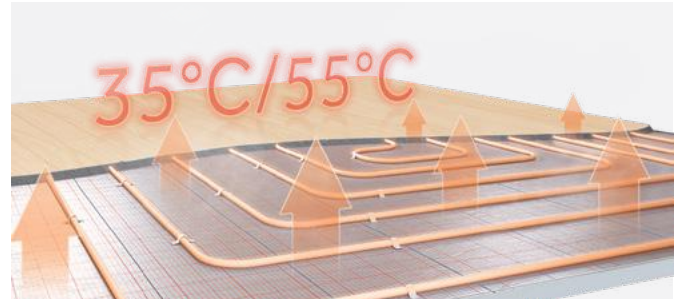
The HE and GT series heat pump has anti-corrosion function. The water pump will automatically run for 60s within 24h, as the following curve shows.



DRY

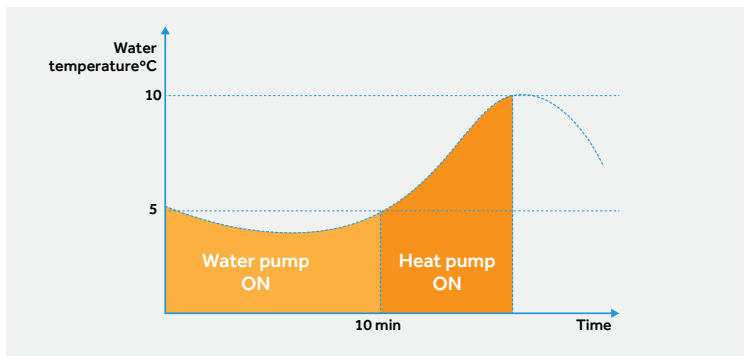
FLOOR DRYING R290

With the Wi-Fi controller you can check the running state of heat and allows you to have flexibility and control of your heat pump, with access to multiple functions.



ANTI-FREEZING R290 R32

The HE series adopts an anti-freezing logic: The water pump will turn on when the water temperature is below 5°C, when the water temperature is below 5°C for more than 10 minutes, the heat pump is turned on.



SUPER CONVENIENCE



CHECK ERROR INFORMATION R290 R32

If errors occur, the service engineer can not only check the current errors, but also the historical error records, which is convenient for fast troubleshooting.



CHECK SYSTEM PARAMETERS R290 R32

Many important parameters about the system can be accessed through the 'System Status' function, including the system parameters, indoor and outdoor units parameters. These parameters are helpful to diagnose the system.



ULTIMATE COMFORT



2-ZONE CONTROL R290 R32

When there are different room temperature requirements, two zone temperature control through separate heating or cooling circuits is possible. Adjust and maintain two different water temperatures to achieve intelligent control and saving energy.



FAST DHW R290 R32

When Fast DHW is activated, the backup heater or auxiliary heating source will be turned on at the same time, in combination with the heat pump. In order to reach DHW setting point as soon as possible, the outdoor ambient temperature and compressor running time will not affect this operation.



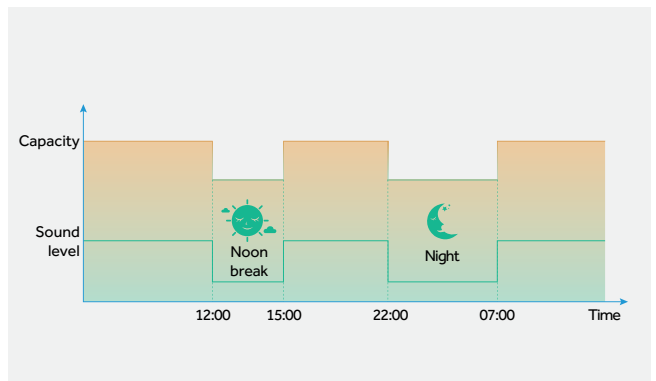
MAX.60/80°C HOT WATER R290 R32

High leaving water temperature of 60°C (R32) or 80°C (R290) is guaranteed without using a backup heater when the outdoor temperature is higher than -15°C.



QUIET MODE R290 R32

The Quiet Mode can work together with the timer function. To guarantee low sound levels during quiet periods such as night time.



TURBO MODE R290 R32

Increase the working speed of the compressor and fan motor to reach chosen temperature faster.



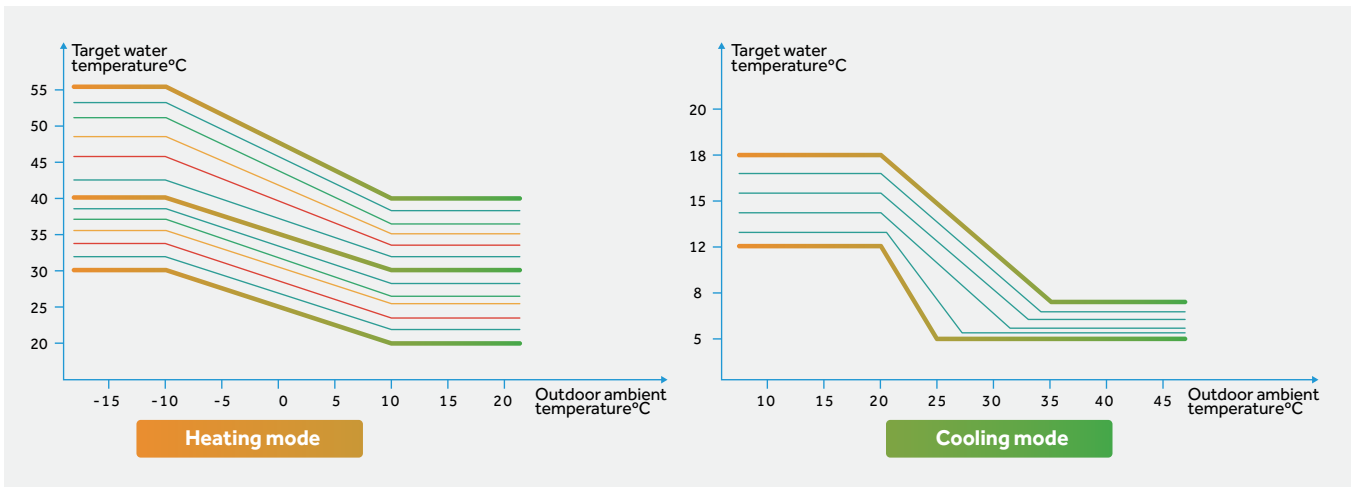
AUTO MODE R290 R32

In Auto mode, the cooling and heating mode is automatically managed according to the outdoor ambient temperature. There is no need to manually set the heat pump operating mode, which is very convenient for the users.



CLIMATE CURVES R290 R32

Both heating and cooling water temperatures are optimally configured when considering outdoor temperature, both in comfort and efficiency terms. The Climate curve configuration allows the system to adapt to outdoor temperature fluctuation with different temperature profiles tailored for each user's preferences.



STERILISATION R290 ALL-IN-ONE ONLY

Users can directly turn on the sterilisation function, and set the date and time on the controller. The water of the domestic water tank can be automatically heated to 75°C to kill legionella at fixed periods. During the process of sterilisation, the controller screen will display the icon to remind users that the system is sterilisation mode.

Note: Only when the electric heater in the domestic water tank is controlled by Haier unit.

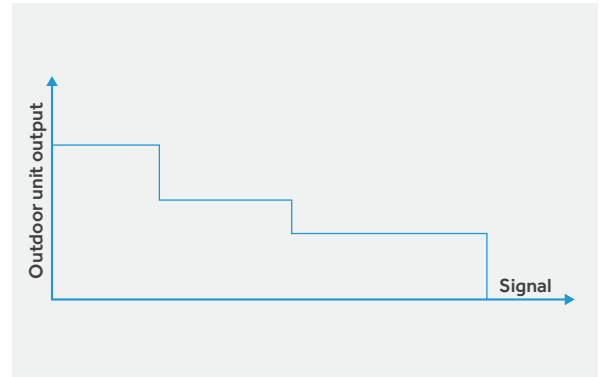


INTELLIGENCE



SMART GRID R290 R32

Based on the signal from power grid company, the outdoor unit will adjust the capacity output.



MODBUS R290 R32

The unit integrates the MODBUS RTU communication protocol, it can be connected to 3rd party BMS or BAS directly, no additional Modbus gateway is needed.



SCHEDULING PROGRAMS R290 R32

Users can create scheduled programs, including naming the programs, timer on/off operation, mode selection, leaving temperature setting and the frequency. Once the scheduled program is set, the system will run according the pre-set program automatically.

Scheduling Programs				
	0:00	8:00	17:30	24:00
Mon	ON	OFF	ON	
Tues	ON	OFF	ON	
Weds	ON	OFF	ON	
Thurs	ON	OFF	ON	
Fri	ON	OFF	ON	
Sat		ON		
Sun		ON		



hOn WIFI R290 R32

With Haier's integrated hOn Wi-Fi, you can check the running state of heat pump allowing you to have complete flexibility and control.



DHW TANK SOLAR THERMAL CONTROL R290 R32

Control the solar thermal function of the tank for heating domestic hot water.



AUXILIARY HEATING SOURCE R290 R32

Control the solar thermal function of the tank for heating domestic hot water.



POOL HEATING R290 R32

Provides control to manage the temperature of the pool water.



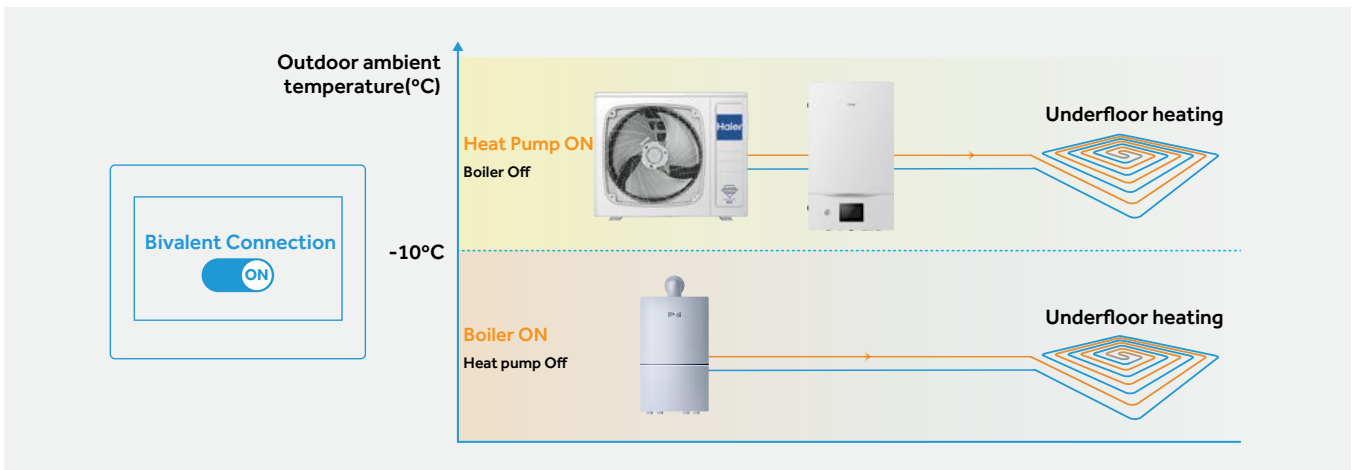
SMART VACATION R290 R32

In smart vacation mode, the heat pump will work at its minimal requirement to save energy and costs while you are away.



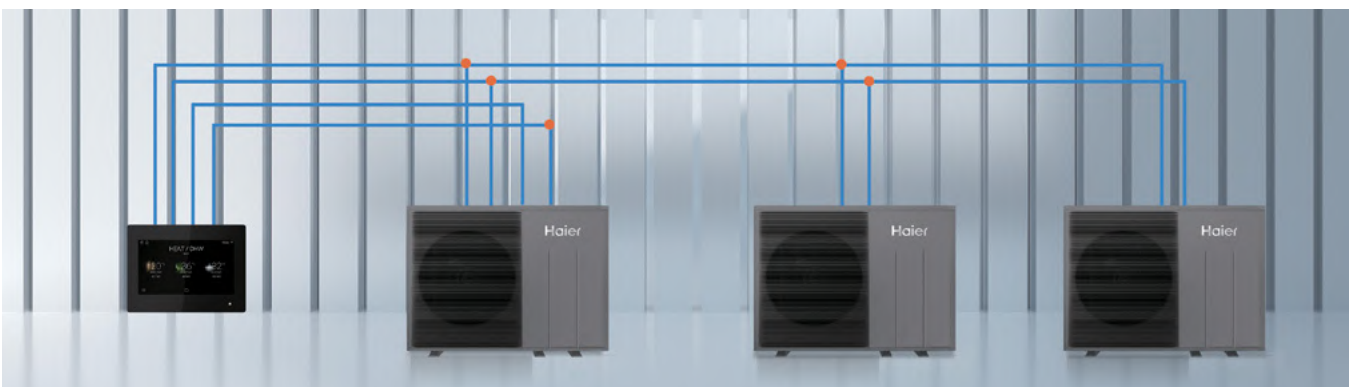
BIVALENT CONTROL R290 R32

When the system is combined with a boiler, the 'bivalent connection' can be set by the controller. When bivalent connection is turned on, the heat pump will have full control of all aspects of the system and will run the boiler when required, depending on system design and settings. When bivalent connection is turned off, both boiler and heat pump conduct automatic control.



CASCADE CONTROL R290 R32

Max 8 units & can be combined in one system to suitable for larger capacity demands.





**R290 A2W
HEAT PUMP**

MONOBLOC GT R290 NEW 2024



AW042MUGHA
AW062MUGHA
AW082MUGHA
AW102MUGHA



ATW-A03



HW-WA101DBT
(standard)

Product Data			Monobloc 4kW-1Ph	Monobloc 6kW-1Ph	Monobloc 8kW-1Ph	Monobloc 10kW-1Ph
Model			AW042MUGHA	AW062MUGHA	AW082MUGHA	AW102MUGHA
Heating (LWT 35°C / OAT 7°C)	Capacity	kW	4.00	6.00	8.00	10.00
	Power input	kW	0.73	1.12	1.50	1.96
	COP	-	5.50	5.35	5.35	5.10
Heating (LWT 55°C / OAT 7°C)	Capacity	kW	4.00	6.00	8.00	10.00
	Power input	kW	1.19	1.82	2.35	3.13
	COP	-	3.35	3.30	3.40	3.20
Space heating Average climate water outlet 35°C	SCOP	-	5.10	5.10	5.20	5.10
	ns	%	201	201	205	201
	Energy class	-	A+++	A+++	A+++	A+++
Space heating Average climate water outlet 55°C	SCOP	-	3.85	3.83	3.85	3.83
	ns	%	151	150	151	150
	Energy class	-	A+++	A+++	A+++	A+++
Cooling (LWT 18°C / OAT 35°C)	Capacity	kW	4.00	6.00	7.50	9.50
	Power input	kW	0.79	1.20	1.58	2.21
	EER	-	5.05	5.00	4.75	4.30
Cooling (LWT 7°C / OAT 35°C)	Capacity	kW	3.50	5.00	6.80	8.50
	Power input	kW	0.95	1.37	1.97	2.62
	EER	-	3.70	3.65	3.45	3.25
Outdoor operating temperature range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	10 ~ 48	10 ~ 48	10 ~ 48	10 ~ 48
	DHW	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43
Leaving water temperature range	Heating	°C	20-80	20-80	20-80	20-80
	Cooling	°C	5-25	5-25	5-25	5-25
Storage temperature range(tank)	DHW	°C	25-75	25-75	25-75	25-75
Water piping connection	Inlet/Outlet	inch	R 1/R 1	R 1/R 1	R 1/R 1	R 1/R 1
Expansion tank	L		4.5	4.5	4.5	4.5
Compressor	Quantity	-	1	1	1	1
	Type	-	DC inverter twin rotary			
Refrigerant	Type	-	R290			
	Charge/CO2 Eq.	kg/t	0.8/2.4	0.8/2.4	0.9/2.7	0.9/2.7
Net dimension	(HxWxD)	mm	790 × 1250 × 380	790 × 1250 × 380	790 × 1250 × 380	790 × 1250 × 380
Packing dimension	(HxWxD)	mm	1022 × 1395 × 595	1022 × 1395 × 595	1022 × 1395 × 595	1022 × 1395 × 595
Net/Gross weight	kg		94/127	94/127	106/139	106/139
Sound Pressure level*(1)		dB(A)	44	47	48	49
Sound power level*(1)		dB	55	58	59	60
Power supply		V/-/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Max. running current		A	13.5	13.5	18.6	18.6
Recommended circuit breaker		A	16.0	16.0	20.0	20.0
Accessory	Wired controller	-	HW-WA101DBT (Standard)			
	PCB Box	-	ATW-A03 (Standard)			
	Filter	-	Y-type (Standard)			



R290



A+++/A+++



Max. 80°C
hot water



Climate Curve



2 Zone Control



Auto Mode



Smart Grid



Modbus



DHW Tank
Solar Control



Pool Heating



Anti-freezing

Note: *(1)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017(A7/W35)

MONOBLOC GT R290 NEW 2024



AW122MXGHA
AW142MXGHA
AW162MXGHA

AW12NMXGHA
AW14NMXGHA
AW16NMXGHA

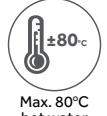


ATW-A03



HW-WA101DBT
(standard)

Product Data			Monobloc 12kW-1Ph	Monobloc 14kW-1Ph	Monobloc 16kW-1Ph	Monobloc 12kW-3Ph	Monobloc 14kW-3Ph	Monobloc 16kW-3Ph
Model			AW122MXGHA	AW142MXGHA	AW162MXGHA	AW12NMXGHA	AW14NMXGHA	AW16NMXGHA
Heating (LWT 35°C / OAT 7°C)	Capacity	kW	12.00	14.00	16.00	12.00	14.00	16.00
	Power input	kW	2.35	2.83	3.23	2.35	2.83	3.23
	COP	-	5.10	4.95	4.95	5.10	4.95	4.95
Heating (LWT 55°C / OAT 7°C)	Capacity	kW	11.50	13.50	15.50	11.50	13.50	15.50
	Power input	kW	3.48	4.22	5.08	3.48	4.22	5.08
	COP	-	3.30	3.20	3.05	3.30	3.20	3.05
Space heating Average climate water outlet 35°C	SCOP	-	4.82	4.80	4.80	4.82	4.80	4.80
	ns	%	190	189	189	190	189	189
	Energy class	-	A+++	A+++	A+++	A+++	A+++	A+++
Space heating Average climate water outlet 55°C	SCOP	-	3.85	3.83	3.85	3.85	3.83	3.85
	ns	%	151	150	151	151	150	151
	Energy class	-	A+++	A+++	A+++	A+++	A+++	A+++
Cooling (LWT 18°C / OAT 35°C)	Capacity	kW	11.50	13.50	15.50	11.50	13.50	15.50
	Power input	kW	2.56	3.14	3.88	2.56	3.14	3.88
	EER	-	4.50	4.30	4.00	4.50	4.30	4.00
Cooling (LWT 7°C / OAT 35°C)	Capacity	kW	10.00	12.00	14.00	10.00	12.00	14.00
	Power input	kW	2.99	3.75	4.52	2.99	3.75	4.52
	EER	-	3.35	3.20	3.10	3.35	3.20	3.10
Outdoor operating temperature range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	10 ~ 48	10 ~ 48	10 ~ 48	10 ~ 48	10 ~ 48	10 ~ 48
	DHW	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43
Leaving water temperature range	Heating	°C	20-80	20-80	20-80	20-80	20-80	20-80
	Cooling	°C	5-25	5-25	5-25	5-25	5-25	5-25
Storage temperature range(tank)	DHW	°C	25-75	25-75	25-75	25-75	25-75	25-75
Water piping connection	Inlet/Outlet	inch	R 1/R 1	R 1/R 1	R 1/R 1	R 1/R 1	R 1/R 1	R 1/R 1
Expansion tank	L		8	8	8	8	8	8
Compressor	Quantity	-	1	1	1	1	1	1
	Type	-	DC inverter twin rotary					
Refrigerant	Type	-	R290					
	Charge/CO2 Eq.	kg/t	1.05/3.15	1.05/3.15	1.25/3.75	1.05/3.15	1.05/3.15	1.25/3.75
Net dimension	(HxWxD)	mm	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460
Packing dimension	(HxWxD)	mm	1112 × 1526 × 675	1112 × 1526 × 675	1112 × 1526 × 675	1112 × 1526 × 675	1112 × 1526 × 675	1112 × 1526 × 675
Net/Gross weight	kg		127/165	127/165	136/174	142/180	142/180	151/189
Sound Pressure level*(1)	dB(A)		52	53	55	52	53	55
Sound power level*(1)	dB		63	64	66	63	64	66
Power supply	V/-/Hz		220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Max. running current	A		30.6	30.6	34.8	10.2	10.2	11.6
Recommended circuit breaker	A		32.0	32.0	40.0	16.0	16.0	16.0
Accessory	Wired controller	-	HW-WA101DBT (Standard)					
	PCB Box	-	ATW-A03 (Standard)					
	Filter	-	Y-type (Standard)					



Note: *(1)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017(A7/W35)

MONOBLOC GT R290 NEW 2024

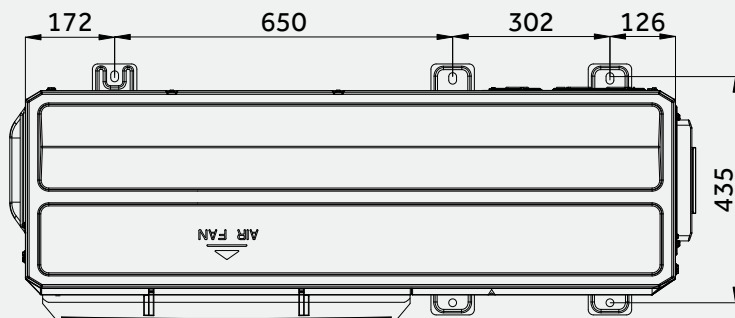
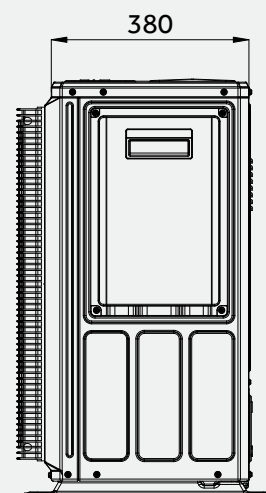
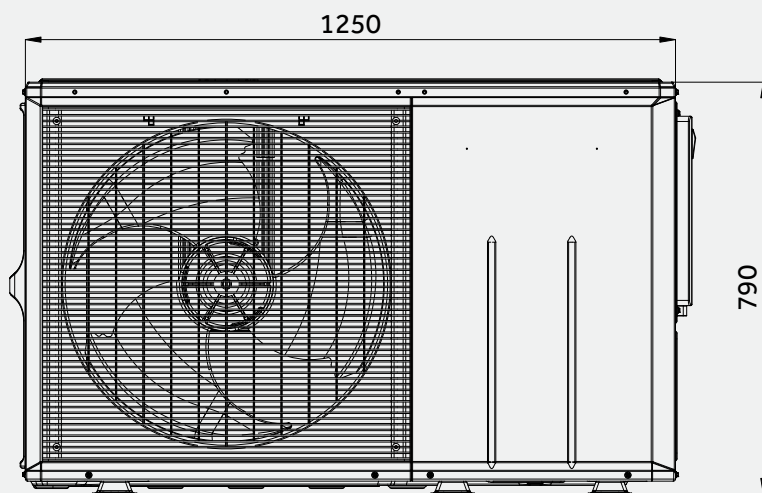
MONO GT

AW042MUGHA

AW062MUGHA

AW082MUGHA

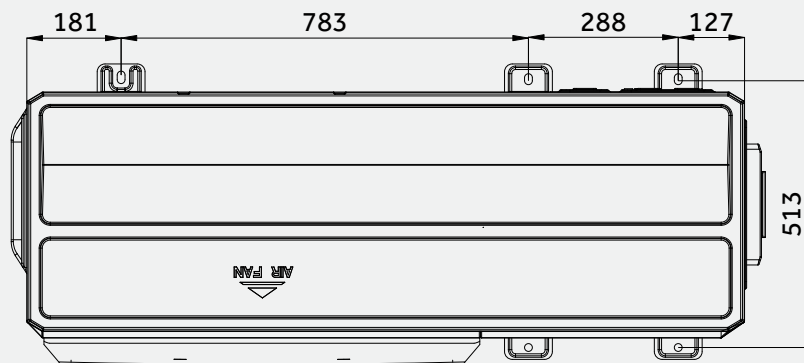
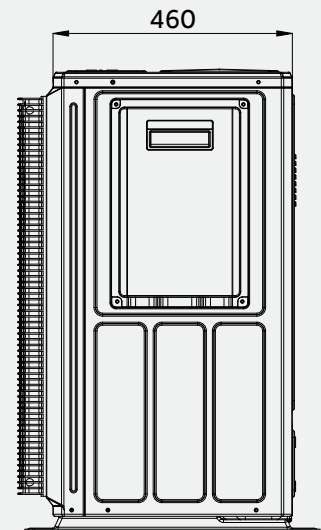
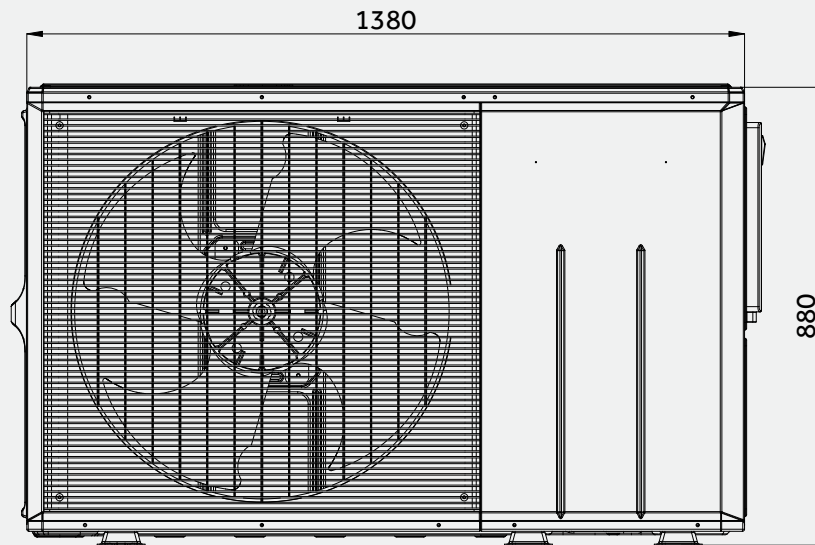
AW102MUGHA



MONOBLOC GT R290 NEW 2024

MONO GT

AW122MXGHA
AW142MXGHA
AW162MXGHA
AW12NMXGHA
AW14NMXGHA
AW16NMXGHA



Haier

R32 A2W HEAT PUMP



MONOBLOC HE R32



AW052MUCHA
AW072MUCHA
AW092MUCHA



AW112MXCHA



ATW-A02
(optional)



HW-WA101DBT
(standard)

Model			AW052MUCHA	AW072MUCHA	AW092MUCHA	AW112MXCHA
Heating (LWT 35°C / OAT 7°C)	Capacity	kW	5.00	7.00	9.00	11.00
	Power input	kW	0.99	1.40	1.84	2.24
	COP	-	5.06	5.00	4.90	4.90
Heating (LWT 55°C / OAT 7°C)	Capacity	kW	5.00	7.00	8.50	10.50
	Power input	kW	1.69	2.41	3.09	3.50
	COP	-	2.95	2.90	2.75	3.00
Space heating Average climate water outlet 35°C	SCOP	-	4.97	4.95	4.95	4.70
	ns	%	196	195	195	185
	Energy class	-	A+++	A+++	A+++	A+++
Space heating Average climate water outlet 55°C	SCOP	-	3.52	3.38	3.34	3.40
	ns	%	138	132	131	133
	Energy class	-	A++	A++	A++	A++
Cooling (LWT 18°C / OAT 35°C)	Capacity	kW	5.00	7.00	8.00	10.00
	Power input	kW	1.02	1.44	1.86	2.27
	EER	-	4.90	4.85	4.30	4.40
Cooling (LWT 7°C / OAT 35°C)	Capacity	kW	5.00	7.00	8.00	10.00
	Power input	kW	1.56	2.19	2.76	3.23
	EER	-	3.20	3.20	2.90	3.10
Outdoor operating temperature range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	10-48	10-48	10-48	10-48
Leaving water temperature range	Heating	°C	25 ~ 60	25 ~ 60	25 ~ 60	25 ~ 60
	Cooling	°C	5-25	5-25	5-25	5-25
Water flow rate		L/min	14.3	20.1	25.8	31.5
Water piping connection	inlet/outlet	inch	R 1	R 1	R 1	R 1
Compressor	Quantity	-	1	1	1	1
	Type	-	DC inverter twin rotar			
Refrigerant	Type	-	R32			
	Charge/CO2 Eq.	kg/t	1.3/0.88	1.3/0.88	1.4/0.95	1.8/1.22
Net dimension	(WxHxD)	mm	790×1250×380	790×1250×380	790×1250×380	880×1380×460
Packing dimension	(WxHxD)	mm	1022x1395x550	1022x1395x550	1022x1395x550	1112x1526x630
Net/Gross weight		kg	81/109	81/109	85/113	108/148
Sound power level		dB	60	61	62	63
Power supply		V/-/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Max. running current		A	12	12	16	20
Recommended circuit breaker		A	16	16	20	25
Accessory	Wired controller	-	HW-WA101DBT (standard)			
	PCB Box	-	ATW-A02 (Optional)			
	Filter	-	Standard			



R32



A+++/A++



Max. 60°C
hot water



Climate Curve



2 Zone Control



Auto Mode



Smart Grid



Modbus



DHW Tank
Solar Control



Pool Heating



Anti-freezing

Note: 1. According to EN14511, EN14825 (EU) and No 811/2013(EU).
2. LWT: Leaving water temperature; OAT: Outdoor air temperature.
3. Sound level values are measured at a semi-anechoic room. And the sound power level values are based on measurement of EN2102-1 under conditions of EN14825.
4. PCB box is needed when using solar thermal function and pool heating function.
5. The above data may be changed without notice for future improvement on quality and performance.

MONOBLOC HE R32



AW142(N)MXCHA
AW162(N)MXCHA
AW11NMXCHA
AW14NMXCHA
AW16NMXCHA



ATW-A02
(optional)



HW-WA101DBT
(standard)

Model			AW142MXCHA	AW162MXCHA	AW11NMXCHA	AW14NMXCHA	AW16NMXCHA
Heating (LWT 35°C / OAT 7°C)	Capacity	kW	14.00	16.00	11.00	14.00	16.00
	Power input	kW	2.95	3.53	2.24	2.95	3.53
	COP	-	4.75	4.53	4.90	4.75	4.53
Heating (LWT 55°C / OAT 7°C)	Capacity	kW	13.50	15.20	10.50	13.50	15.20
	Power input	kW	4.82	5.53	3.33	4.82	5.53
	COP	-	2.80	2.75	3.00	2.80	2.75
Space heating Average climate water outlet 35°C	SCOP	-	4.65	4.55	4.70	4.65	4.55
	ns	%	183	179	185	183	179
	Energy class	-	A+++	A+++	A+++	A+++	A+++
Space heating Average climate water outlet 55°C	SCOP	-	3.45	3.40	3.40	3.45	3.40
	ns	%	135	133	133	135	133
	Energy class	-	A++	A++	A++	A++	A++
Cooling (LWT 18°C / OAT 35°C)	Capacity	kW	13.50	15.20	10.00	13.50	15.20
	Power input	kW	3.14	3.80	2.27	3.14	3.80
	EER	-	4.30	4.00	4.40	4.30	4.00
Cooling (LWT 7°C / OAT 35°C)	Capacity	kW	12.00	14.00	10.00	12.00	14.00
	Power input	kW	4.21	5.28	3.23	4.21	5.28
	EER	-	2.85	2.65	3.10	2.85	2.65
Outdoor operating temperature range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	10-48	10-48	10-48	10-48	10-48
Leaving water temperature range	Heating	°C	25 ~ 60	25 ~ 60	25 ~ 60	25 ~ 60	25 ~ 60
	Cooling	°C	5~25	5~25	5~25	5~25	5~25
Water flow rate		L/min	40.1	45.9	31.5	40.1	45.9
Water piping connection	inlet/outlet	inch	R 1	R 1	R 1	R 1	R 1
Compressor	Quantity	-	1	1	1	1	1
	Type	-	DC inverter twin rotar				
Refrigerant	Type	-	R32				
	Charge/CO2 Eq.	kg/t	2.5/1.6	2.5/1.69	1.8/1.22	2.5/1.69	2.5/1.69
Net dimension	(WxHxD)	mm	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460	880 × 1380 × 460
Packing dimension	(WxHxD)	mm	1112 × 1526 × 630	1112 × 1526 × 630	1112 × 1526 × 630	1112 × 1526 × 630	1112 × 1526 × 630
Net/Gross weight		kg	117/157	117/157	108/148	117/157	117/157
Sound power level		dB	65	65	63	65	65
Power supply		V/-/Hz	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Max. running current		A	32	32	10	12	12
Recommended circuit breaker		A	40	40	16	16	16
Accessory	Wired controller	-	HW-WA101DBT (standard)				
	PCB Box	-	ATW-A02 (Optional)				
	Filter	-	Standard				

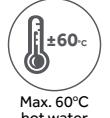
Note: 1. According to EN14511, EN14825 (EU) and No 811/2013(EU).
2. LWT: Leaving water temperature; OAT: Outdoor air temperature.
3. Sound level values are measured at a semi-anechoic room. And the sound power level values are based on measurement of EN2102-1 under conditions of EN14825.
4. PCB box is needed when using solar thermal function and pool heating function.
5. The above data may be changed without notice for future improvement on quality and performance.



R32



A+++/A++



Max. 60°C hot water



Climate Curve



2 Zone Control



Auto Mode



Smart Grid



Modbus



DHW Tank Solar Control



Pool Heating



Anti-freezing

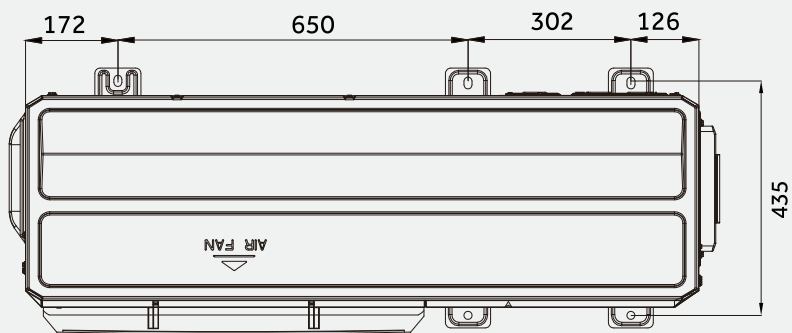
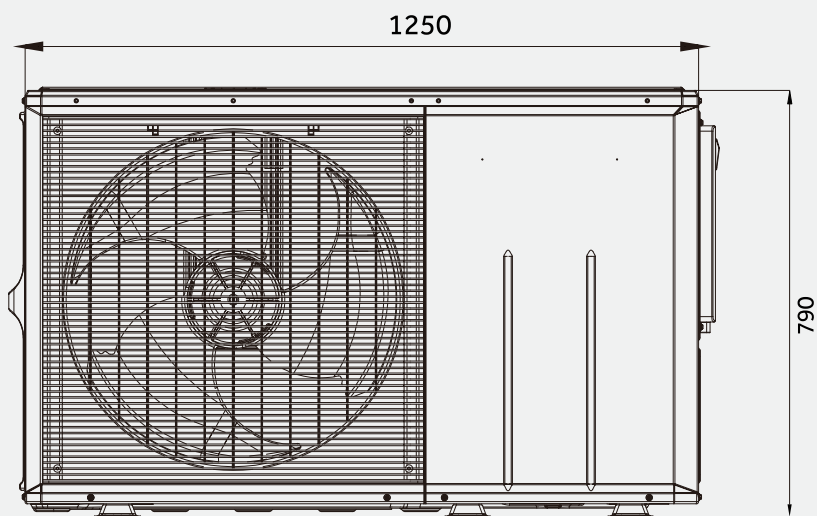
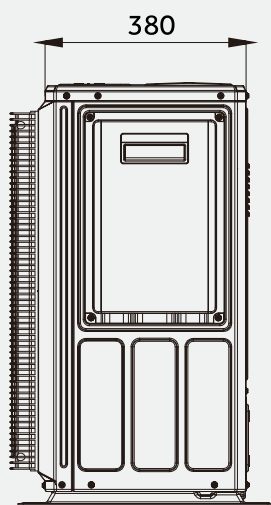
MONOBLOC HE R32

MONO HE

AW052MUCHA

AW072MUCHA

AW092MUCHA



MONOBLOC HE R32

MONO HE

AW112MXCHA
AW142(N)MXCHA
AW162(N)MXCHA

AW11NMXCHA
AW14NMXCHA
AW16NMXCHA

