Edge EVO 2.0 - EXC

WiSAN-YME 1 S 2.1÷14.1

Air-to-water packaged monobloc heat pump for heating, cooling and domestic hot water production

ENERGY SAVING

- Solar integration (optional - DHW tank)
- Cascade
- Smart Grid ready
- €-Switch

COMFORT

- Heating Cooling
- DHW
- Silent
- High temperature

RELIABILITY

- Backup heater (optional)
- Eurovent
- Keymark

HEALTH

- Eco-friendly refrigerant
- Renewable energy

CONVENIENCE

- Weekly schedule
- Boiler integration

MANAGEMENT AND CONNECTIVITY

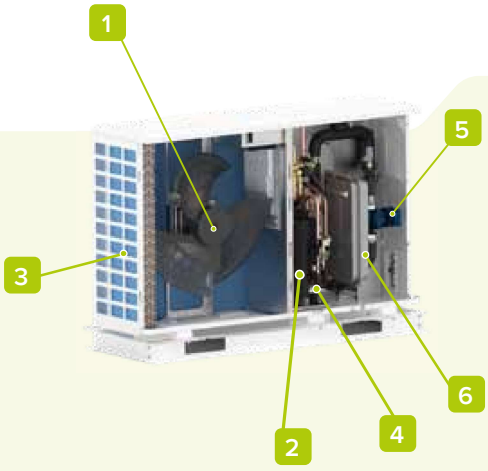
- Potential-free contact
- User interface/ thermostat
- Modbus port
- Wi-fi Control
- ELFOControl management
- Clivet Eye monitoring

ErP TOP SYSTEM EFFICIENCY 55°C A++ 35°C A+++

- ✓ Space saving: installed outdoors, no indoor unit is required
- ✓ Designed for harsh climates: excellent performance at low temperatures and optional 3 to 9kW auxiliary heaters
- ✓ High temperature distribution can be used: water up to 65°C
- ✓ Modular: combines up to 6 units in cascade for power up to 180kW
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl[3] EVO included as standard

Highly efficient even in winter

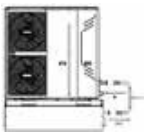
Edge EVO 2.0 - EXC is suitable for all climates and conditions. It is designed to be efficient and provide high temperature water even in harsh winters, down to -25°C: in particular, it can produce water at 60°C with the outdoor air down to -15°C.
For even tougher applications, an additional electric heater can be selected to ensure that there is no loss of performance even under the most extreme conditions.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank

accessories

	KTFLX	Hose kit for connection to the chiller/heat pump
	FDMX	Magnetic dirt separator filter
	VAGX	System freeze protection kit in the absence of electricity
	ACS200X	200-litre domestic hot water storage tank
	ACS399X	300-litre domestic hot water storage tank
	ACS500X	500-litre domestic hot water storage tank
	ACS1000X	1000-litre domestic hot water storage tank
	ACS10SX	1000L domestic hot water storage tank with double coil for solar thermal connection
	SCS08X	0.8 m² solar exchanger for flange installation *(for ACS200X e ACS300X)*
	SCS12X	1.2 m² solar exchanger for flange installation *(for ACS500X)*
	QERAMX	Electrical panel for single-phase heater connection on DHW storage tank
	QERATX	Electrical panel for three-phase heater connection on DHW storage tank
	3DHWX	Three-way valve for domestic hot water
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)
	KIRHX	2 zones: external kit, high temperature
	DIX	1-litre circuit breaker
	DI50X	50-litre circuit breaker (to exhaustion)
	DI22-50X	50L circuit breaker (2 pairs of supply connectors / 2 pairs of return connectors)
	DI100X	100-litre circuit breaker
	T1BX	Probe for auxiliary heating source T1B

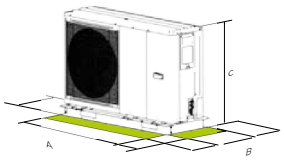
	TANKX	Buffer tank
	KTCAMX	Piping kit for the connection to the buffer tank on supply water side
	KTCARX	Piping kit for the connection to the buffer tank on return water side
	PCSX	Secondary circuit pump
	PCS2X	Oversized secondary circuit pump
	PRSX	DHW recirculation pump
	IBHMX	single-phase back-up electric heater (2/4/6kW)
	IBHTX	three-phase back-up electric heater (3/6/9kW)
	DTX	Auxiliary condensate collection tray
	APAVX	Kit of antivibration mounts for floor installation
	AMMX	Kit of antivibration anti-seismic mounts for floor installation
	ASTFX	Kit of antivibration mounts for wall bracket installation
	KSIPX	Kit with wall fixing brackets
	HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/OFF

configurations

UNIT POWER SUPPLY (size 6.1÷8.1):

230M Power supply 230/1/50
400TN Power supply 400/3/50+N

dimensions and connections



For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Back: 300 mm
Right side: 500mm (2.1÷8.1) / 600mm (9.1÷14.1)
Left side: 500mm (2.1÷8.1) / 300mm (9.1÷14.1)
Front: 1000mm (2.1÷3.1) / 1500mm (5.1÷8.1) / 3000mm (9.1÷14.1)

Size (230M)			**2.1**	**3.1**	**4.1**	**5.1**	**6.1**	**7.1**	**8.1**
Dimensions	Length(A) x Height (C) x Depth(B)		1.295x792x429		1.385x945x526		1.385x945x526		
Weight		kg	121		148		170		
Refrigerant charge		type/GWP	R-32 / 675						
		kg	1,4				1,75		
		CO_2 tons	0,95				1,18		
External diameters	Water	inch	1"				1 1/4"		

Size (400TN)			**6.1**	**7.1**	**8.1**	**9.1**	**10.1**	**12.1**	**14.1**
Dimensions	Length(A) x Height (C) x Depth(B)		1.385x945x526			1.129x1.558x440			
Weight		kg	188			206			
Refrigerant charge		type/GWP				R-32 / 675			
		kg	1,75			5			
		CO_2 tons	1,18			3,4			
External diameters	Water	inch	1 1/4"			1 1/4"			

Size (230M)					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**4,20**	**6,35**	**8,40**	**10,00**	**12,10**	**14,50**	**15,90**
	COP		Nominal	-	5,10	4,95	5,15	4,95	4,95	4,60	4,50
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	4,70	6,00	7,00	8,00	10,00	12,00	13,10
	COP		Nominal	-	3,10	3,00	3,20	3,05	3,00	2,85	2,70
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	4,30	6,30	8,10	10,00	12,30	14,10	16,00
	COP		Nominal	-	3,80	3,70	3,85	3,75	3,70	3,60	3,50
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	**4,50**	**6,50**	**8,30**	**9,90**	**12,00**	**13,50**	**14,90**
	EER		Nominal	-	5,50	4,80	5,05	4,55	3,95	3,60	3,40
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	4,70	7,00	7,45	8,20	11,50	12,40	14,00
	EER		Nominal	-	3,45	3,00	3,35	3,25	2,75	2,50	2,50
Electrical power for meter sizing				kW	3,50	3,50	6,50	6,50	6,50	6,50	6,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**	**A++**
		Annual energy consumption		kWh/year	2.749	3.348	4.064	4.541	6.916	6.917	7.213
		SCOP		-	3,31	3,52	3,36	3,49	3,46	3,46	3,46
		ηs (seasonal output)		%	129	138	131	137	135	135	135
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**
		Annual energy consumption		kWh/year	2.354	2.849	3.223	3.649	5.156	5.157	6.011
		SCOP		-	4,85	4,95	5,21	5,19	4,81	4,81	4,72
		ηs (seasonal output)		%	191	195	205	205	189	189	186

Indoor unit					2.1	3.1	4.1	5.1	6.1	7.1	8.1
Power supply	Voltage/Frequency/Phases			V/Hz/n°				230/50/1			
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,22	0,33	0,36	0,39	0,55	0,59	0,67
Pump available pressure			Nominal	kPa	85,2	82,2	76,4	67,9	59,9	59,9	47,6
Minimum system water content				l		20				40	
Expansion tank capacity				l				8			
Sound power			Nominal	dB(A)	55	58	59	60	65	65	68
Sound pressure @1m			Nominal	dB(A)	41	44	45	45	50	50	53

Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C				30 / 65			
		Cooling	Minimum / Maximum	°C				5 / 25			
		DHW	Minimum / Maximum	°C				30 / 60			
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C				-25 / 35			
		Cooling	Minimum / Maximum	°C				-5 / 43			
		DHW	Minimum / Maximum	°C				-25 / 43			

Size (400TN)					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Heating	Capacity	*Water 35/30°C - Outdoor air 7°C*	Nominal	kW	**12,10**	**14,50**	**15,90**	**18,00**	**22,00**	**26,00**	**30,00**
	COP		Nominal	-	4,95	4,60	4,50	4,70	4,40	4,08	3,91
	Capacity	*Water 35/30°C - Outdoor air -7°C*	Nominal	kW	10,00	12,00	13,10	18,00	21,00	22,00	23,00
	COP		Nominal	-	3,00	2,85	2,70	2,70	2,60	2,50	2,45
	Capacity	*Water 45/40°C - Outdoor air 7°C*	Nominal	kW	12,30	14,10	16,00	18,00	22,00	26,00	30,00
	COP		Nominal	-	3,70	3,60	3,50	3,50	3,40	3,10	2,90
Cooling	Capacity	*Water 18/23°C - Outdoor air 35°C*	Nominal	kW	**12,00**	**13,50**	**14,90**	**18,50**	**23,00**	**27,00**	**31,00**
	EER		Nominal	-	3,95	3,60	3,40	4,75	4,60	4,30	4,00
	Capacity	*Water 7/12°C - Outdoor air 35°C*	Nominal	kW	11,50	12,40	14,00	17,00	21,00	26,00	29,50
	EER		Nominal	-	2,75	2,50	2,50	3,05	2,95	2,70	2,55
Electrical power for meter sizing				kW	6,50	6,50	6,50	10,60	12,50	13,80	14,50
Seasonal efficiency Medium climate	Heating 55°C	Energy class		-	**A++**	**A++**	**A++**	**A++**	**A++**	**A+**	**A+**
		Annual energy consumption		kWh/year	7.214	7.894	7.895	11.396	14.363	17.116	19.552
		SCOP		-	3,46	3,41	3,41	3,21	3,23	3,16	3,14
		ηs (seasonal output)		%	135	133	133	125	126	123	123
	Heating 35°C	Energy class		-	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A++**
		Annual energy consumption		kWh/year	6.012	6.803	6.805	8.077	10.167	11.513	14.372
		SCOP		-	4,72	4,62	4,62	4,61	4,54	4,50	4,20
		ηs (seasonal output)		%	186	182	182	181	179	177	165

Outdoor unit					6.1	7.1	8.1	9.1	10.1	12.1	14.1
Power supply	Voltage/Frequency/Phases			V/Hz/n°				400/50/3+N			
Water flow-rate		*Water 35/30°C - Outdoor air 7°C*	Nominal	l/s	0,55	0,59	0,67	0,81	1,00	1,24	1,41
Pump available pressure			Nominal	kPa	47,6	33,1	33,1	101,9	94,6	78,8	59,4
Minimum system water content				l		40				60	
Expansion tank capacity				l				8			
Sound power			Nominal	dB(A)	65	65	68	70	72	74	77
Sound pressure @1m			Nominal	dB(A)	50	50	53	57	59	61	63

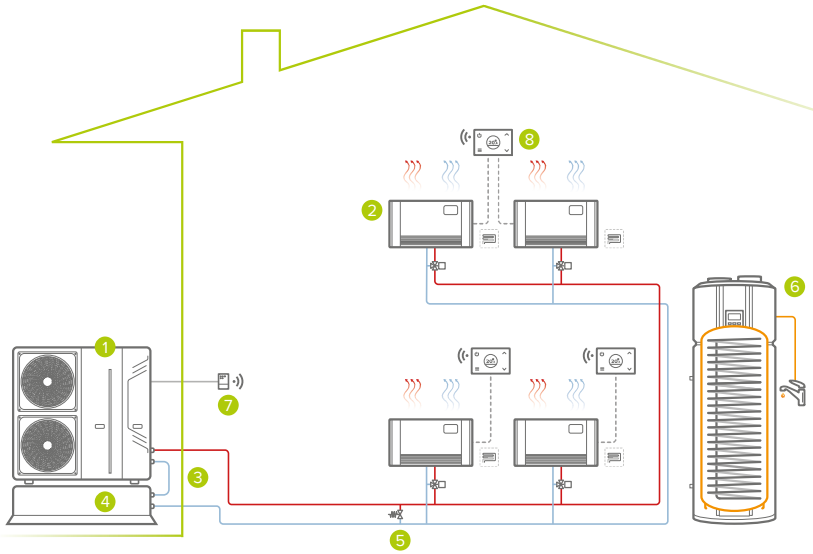
Operating range											
Water supply temperature		Heating	Minimum / Maximum	°C		30 / 65				30 / 60	
		Cooling	Minimum / Maximum	°C				5 / 25			
		DHW	Minimum / Maximum	°C				30 / 60			
Operating range (Outdoor air)		Heating	Minimum / Maximum	°C				-25 / 35			
		Cooling	Minimum / Maximum	°C		-5 / 43				-5 / 46	
		DHW	Minimum / Maximum	°C				-25 / 43			

PRELIMINARY DATA

Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

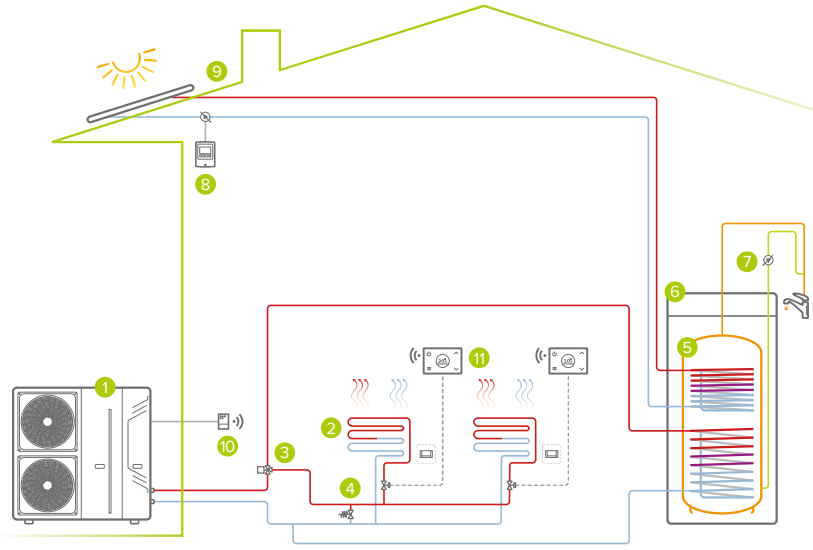
system diagrams



Single area system: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. system inertial storage connection kit (optional)
4. system inertial storage (optional)
5. bypass*
6. DHW heat pump - AQUA
7. SwitchConnect Wi-Fi receiver (optional)
8. HID-TConnect Wi-Fi chronothermostat (optional)

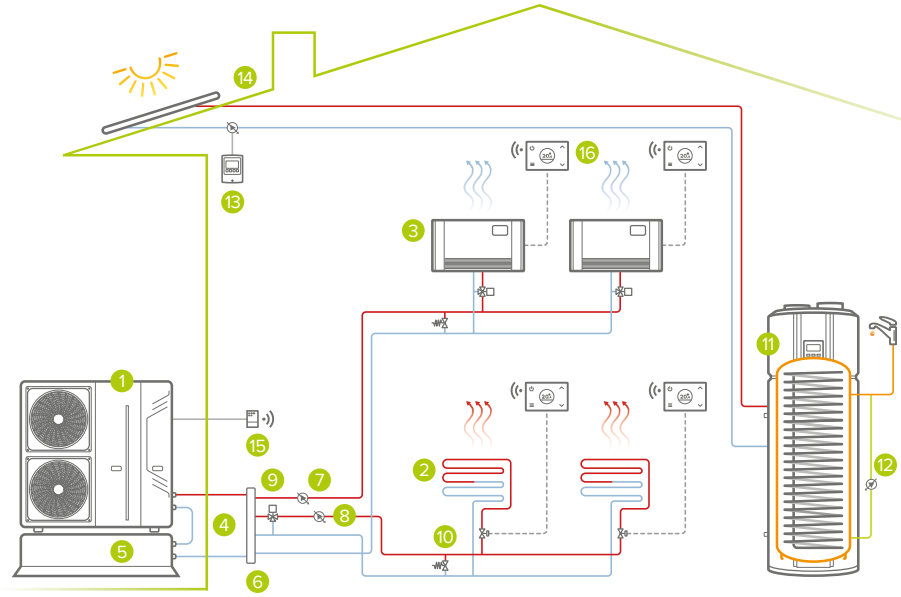
*from external supply



Single area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating/cooling area (fan coils / radiant)
3. 3-way switching valve (optional)
4. bypass*
5. DHW tank with solar predisposition (optional)
6. boiler kit connection QERAX (optional)
7. DHW recirculation pump*
8. solar circulation kit (optional)
9. ELFOSun solar thermal (optional)
10. SwitchConnect Wi-Fi receiver (optional)
11. HID-TConnect Wi-Fi chronothermostat (optional)

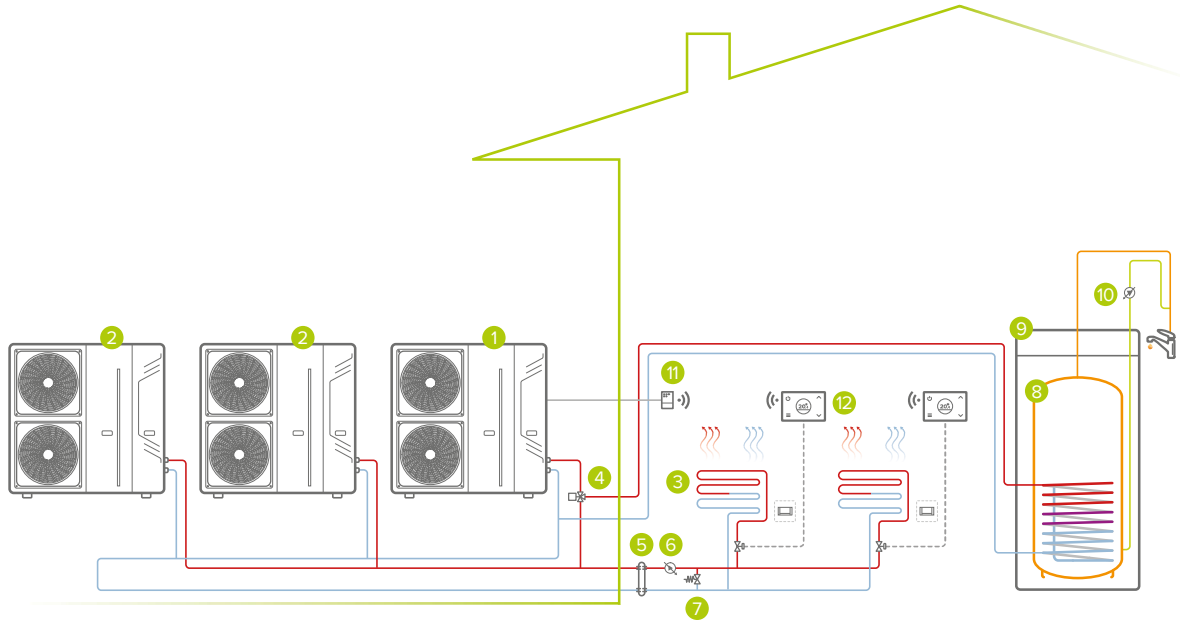
*from external supply



Two-area system with solar thermal: heating/cooling/DHW

1. outdoor unit
2. heating area (radiant)
3. cooling area (fan coils)
4. system inertial storage connection kit (optional)
5. system inertial storage (optional)
6. circuit breaker (optional)
7. high temperature secondary circuit pump*
8. low temeprature secondary circuit pump*
9. 3-way mechanical mixing valve*
10. bypass*
11. DHW heat pump with solar predisposition - AQUA
12. DHW recirculation pump*
13. solar circulation kit (optional)
14. ELFOSun solar thermal (optional)
15. SwitchConnect Wi-Fi receiver (optional)
16. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



Single area system: heating/cooling/DHW

1. outdoor unit (Master)
2. outdoor unit (Slave)
3. heating/cooling area (fan coils / radiant)
4. 3-way switching valve (optional)
5. hydraulic separator (optional)
6. secondary circuit pump*
7. bypass*
8. DHW tank (optional)
9. boiler kit connection QERAX (optional)
10. DHW recirculation pump*
11. SwitchConnect Wi-Fi receiver (optional)
12. HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply