

Edge EVO 2.0 - EXC Hybrid

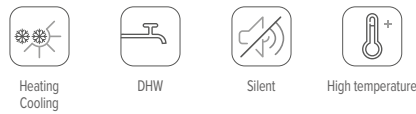
WiSAN-YME 1 S + GAS BOILER 2.1÷14.1

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

ENERGY SAVING



COMFORT



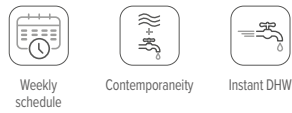
RELIABILITY



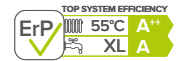
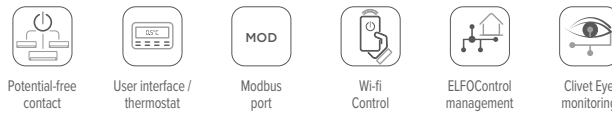
HEALTH



CONVENIENCE



MANAGEMENT AND CONNECTIVITY



HEAT PUMPS



- ✓ €/Switch function: the unit simulates the operating conditions of the two generators and uses either a heat pump or a boiler depending on savings
- ✓ Simultaneous production of DHW and cooling/heating
- ✓ It does not need to be coupled to a tank if DHW is produced by the boiler
- ✓ It uses renewable solar thermal energy by coupling to ELFOSun (can be connected to the boiler)
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl³ EVO included as standard

Without a thought

Edge EVO 2.0 - EXC Hybrid is the solution designed for upgrading old generators without having to alter the system. The system is in fact extremely versatile and able to adapt to whatever already exists: it simply replaces the generator that produces Heating and Domestic Hot Water, improving comfort and efficiency, but without much thought.



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
7. 3-way valve
8. Combustion/water exchanger
9. Electric fan

configurations

UNIT POWER SUPPLY (size 6.1÷8.1):

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

4-PIPE BOILER:

HYSO24	24kW boiler
HYSO24	34kW boiler
N.A.	75kW boiler
N.A.	115kW boiler

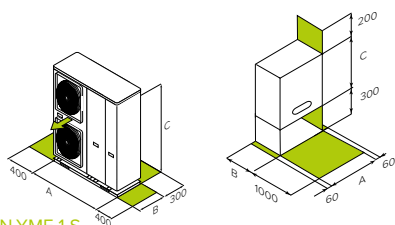
accessories

	KTFLX	Hose kit for connection to the chiller/heat pump		PCSX	Secondary circuit pump
	FDMX	Magnetic dirt separator filter		PCS2X	Oversized secondary circuit pump
	VAGX	System freeze protection kit in the absence of electricity		PRSX	DHW recirculation pump
	ACS200X	200-litre domestic hot water storage tank		KSDFX	Splitter for boiler smoke discharge
	ACS399X	300-litre domestic hot water storage tank		KCSAFX	Coaxial fitting for smoke discharge and intake (ø60/100)
	ACS500X	500-litre domestic hot water storage tank		KITKX	Coaxial system for adjustable smoke discharge and intake (ø 60/100)
	ACS1000X	1000-litre domestic hot water storage tank		KITAK50X	Coaxial system for adjustable smoke discharge and intake (ø 80/125)
	ACS10SX	1000L domestic hot water storage tank with double coil for solar thermal connection		KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	SCS08X	0.8 m² solar exchanger for flange installation (for ACS200X e ACS300X)		KTCGPLX	Kit to convert boiler from methane to LPG
	SCS12X	1.2 m² solar exchanger for flange installation (for ACS500X)		DTX	Thermostat-based drain pan
	QERAMX	Electrical panel for single-phase heater connection on DHW storage tank		APAVX	Kit of antivibration mounts for floor installation
	QERATX	Electrical panel for three-phase heater connection on DHW storage tank		AMMX	Kit of antivibration anti-seismic mounts for floor installation
	3DHWX	Three-way valve for domestic hot water		ASTFX	Kit of antivibration mounts for wall bracket installation
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)		KSIPX	Kit with wall fixing brackets
	KIR2HLX	2 zones: external kit, high temperature + low temperature (mixed)		HID-TCBX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	KIRHX	2 zones: external kit, high temperature		HID-TCNX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	DIX	1-litre circuit breaker		SWCX	Switch IoT to be combined with HID-TConnect, for managing the heat pump mode or switching the terminal units/radiant systems ON/OFF
	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			

technical data

Size (230M)				2.1	3.1	4.1	5.1	6.1	7.1	8.1	
Heating (Heat pump)	Capacity	Water 35/30°C - Outdoor air 7°C	Nominal	kW	4,2	6,4	8,4	10,0	12,1	14,5	15,9
	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	4,7	6,0	7,0	8,0	10,0	12,0	13,1
	COP		Nominal	-	3,10	3,00	3,20	3,05	3,00	2,85	2,70
Boiler	Capacity	Water 45/40°C - Outdoor air 7°C	Nominal	kW	4,3	6,3	8,1	10,0	12,3	14,1	16,0
	COP		Nominal	-	3,80	3,70	3,85	3,75	3,70	3,60	3,50
	Nominal heating capacity (LHV)	Water 80/60°C	Nominal	kW	22,70	22,70	22,70	22,70	33,35	33,35	33,35
	Performance		Nominal	%	96,70	96,70	96,70	96,70	98,02	98,02	98,02
Cooling	Capacity	Water 18/23°C - Outdoor air 35°C	Nominal	kW	4,5	6,5	8,3	9,9	12,0	13,5	14,9
	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	4,7	7,0	7,5	8,2	11,5	12,4	14,0
	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	
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	
Boiler					24.4		34.4		75.2	115.2	
DHW (Boiler)	DWH power		Maximum	kW	22,70		33,35		72,83	110,69	
	DWH specific flow rate	Water with ΔT=30°C in 10 minutes	-	l/min	10,84		15,93		34,79	52,88	
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1				
Power input				W		78			216		
Sound power				dB(A)				52			
Seasonal efficiency Medium climate	DHW (Boiler)	Energy class		-	A	A			-	-	
		DHW profile		-	XL	XL			-	-	
Outdoor 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		Nominal	l/s	0,20	0,30	0,40	0,48	0,58	0,69	0,76	
Available pressure pump		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				dB(A)	55	58	59	60	65	65	68
Sound pressure @1m				dB(A)	41	44	45	45	50	50	53
Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	30 / 65						
		Boiler	Minimum / Maximum	°C	30 / 75						
	Cooling	-	Minimum / Maximum	°C	5 / 25						
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 35						
		Boiler	Minimum / Maximum	°C	-25 / 35						
	Cooling	-	Minimum / Maximum	°C	-5 / 43						
		Heat pump	Minimum / Maximum	°C	-25 / 43						
	DHW	Boiler	Minimum / Maximum	°C	-25 / 43						

dimensions and connections



GAS BOILER
Boiler

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

WiSAN-YME 1 S

Size (230M)				2.1	3.1	4.1	5.1	6.1	7.1	8.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm	1.295x792x429			1.385x945x526			
Weight	Heat pump		kg	121		148		170		
			type/GWP	R-32 / 675						
Refrigerant charge			kg	1,40			1,75			
			CO ₂ tons	0,95			1,18			
External diameters	Heat pump	Water	inch	1"			1 1/4"			

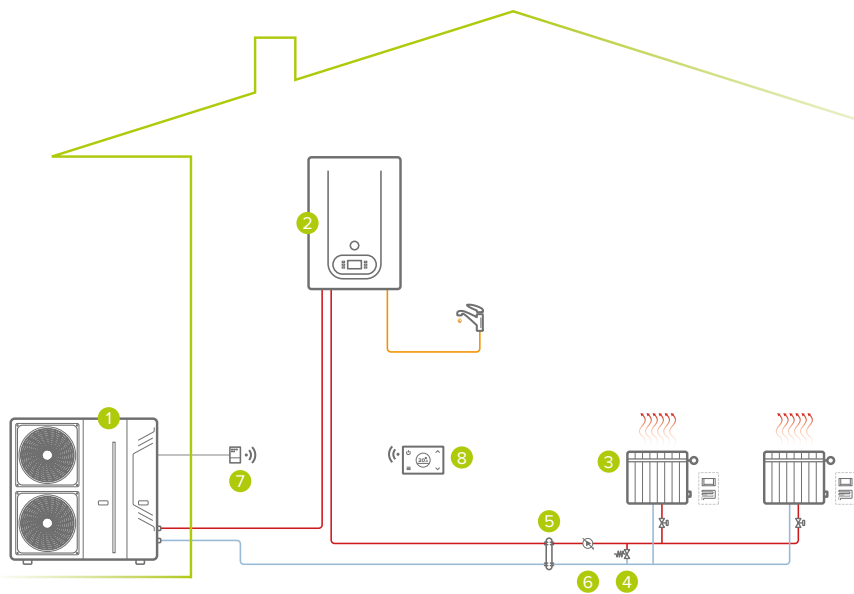
Size (400TN)				6.1	7.1	8.1	9.1	10.1	12.1	14.1	
Heating (Heat pump)	Capacity	Water 35/30°C - Outdoor air 7°C	Nominal	kW	12,1	14,5	15,9	18,0	22,0	26,0	30,0
	COP		-	4,95	4,60	4,50	4,70	4,40	4,08	3,91	
	Capacity	Water 35/30°C - Outdoor air -7°C	Nominal	kW	10,0	12,0	13,1	18,0	21,0	22,0	23,0
	COP		-	3,00	2,85	2,70	2,70	2,60	2,50	2,45	
Boiler	Capacity	Water 45/40°C - Outdoor air 7°C	Nominal	kW	12,3	14,1	16,0	18,0	22,0	26,0	30,0
	COP		-	3,70	3,60	3,50	3,50	3,40	3,10	2,90	
Boiler	Nominal heating capacity (LHV)	Water 80/60°C	Nominal	kW	33,35	33,35	33,35	72,83	72,83	72,83	72,83
	Performance		Nominal	%	98,02	98,02	98,02	97,30	97,30	97,30	97,30
Cooling	Capacity	Water 18/23°C - Outdoor air 35°C	Nominal	kW	12,0	13,5	14,9	18,5	23,0	27,0	31,0
	EER		-	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	11,5	12,4	14,0	17,0	21,0	26,0	29,5
	EER		-	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+	A+
		Annual energy consumption	kWh/year	7.214	7.894	7.895	11.396	14.363	17.116	19.552	
	ηs (seasonal output)	SCOP	-	3,46	3,41	3,41	3,21	3,23	3,16	3,14	
		Energy class	%	135	133	133	125	126	123	123	
	Heating 35°C	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		
	Boiler					24.4		34.4		75.2	115.2
DHW (Boiler)	DWH power		Maximum	kW	22,70		33,35		72,83	110,69	
	DWH specific flow rate	Water with ΔT=30°C in 10 minutes	-	l/min	10,84		15,93		34,79	52,88	
Power supply	Voltage/Frequency/Phases			V/Hz/n°			230/50/1				
Power input				W		78			216		
Sound power				dB(A)			52				
Seasonal efficiency Medium climate	DHW (Boiler)	Energy class	-	A		A		-		-	
		DHW profile	-	XL		XL		-		-	
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			Nominal	l/s	0,58	0,69	0,76	0,86	1,05	1,24	1,43
Available pressure pump			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				dB(A)	65	65	68	70	72	74	77
Sound pressure @1m				dB(A)	50	50	53	57	59	61	63
Operating range											
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C		30 / 65			30 / 60		
		Boiler	Minimum / Maximum	°C			30 / 75				
	Cooling	-	Minimum / Maximum	°C			5 / 25				
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C				-25 / 35			
		Boiler	Minimum / Maximum	°C				-25 / 35			
	Cooling	-	Minimum / Maximum	°C		-5 / 43			-5 / 46		
		Heat pump	Minimum / Maximum	°C				-25 / 43			
	DHW	Boiler	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)

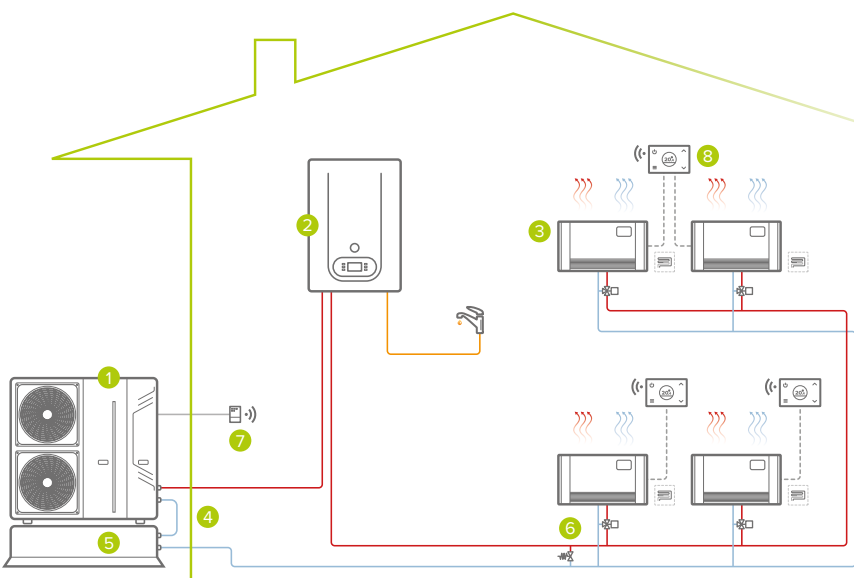
Size (400TN)				6.1	7.1	8.1	9.1	10.1	12.1	14.1
Dimensions	Heat pump	Length(A) x Height(C) x Depth(B)	mm	1.385x945x526			1.129x558x440			
Weight	Heat pump		kg	188			206			
			type/GWP				R-32 / 675			
Refrigerant charge			kg	1,75			5			
			CO ₂ tons	1,18			3,4			
External diameters	Heat pump	Water	inch				1 1/4"			
Boiler					24.4	34.4	75.2	115.2		
Dimensions		Length(A) x Height(C) x Depth(B)	mm	410x642x307		410x642x330		670x642x485		
Weight			kg	35		44		67		79
		Water	inch	3/4"				1 1/2"		
External diameters		Water (DHW)	inch	1/2"						
		Gas	inch	3/4"				1"		
		Intake air	mm			80				
		Exhaust gas	mm			80				



**Single area system:
heating/DHW**

- 1 outdoor unit
- 2 boiler
- 3 heating area (radiator / fan coils / radiant)
- 4 bypass*
- 5 hydraulic separator (optional)
- 6 secondary circuit pump*
- 7 SwitchConnect Wi-Fi receiver (optional)
- 8 HID-TConnect Wi-Fi chronothermostat (optional)

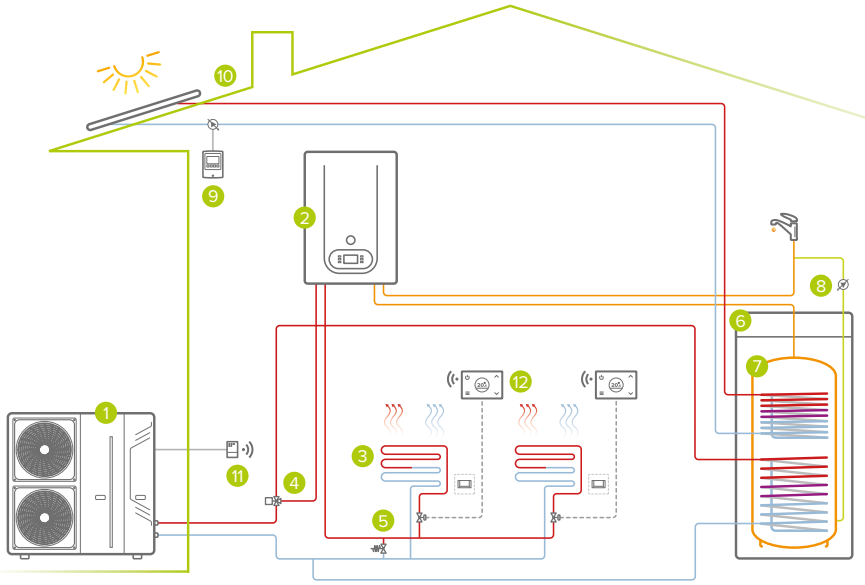
*from external supply



**Single area system:
heating/cooling/DHW**

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

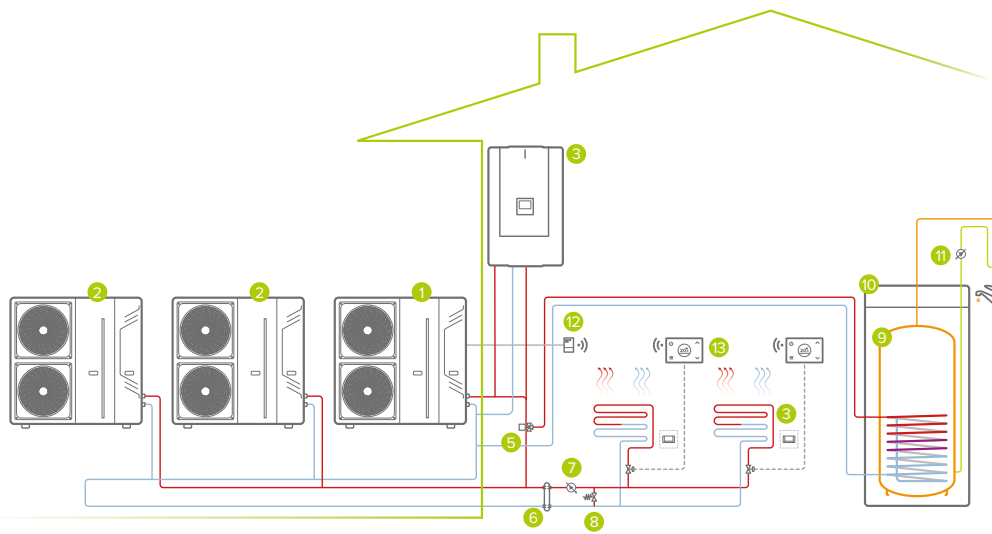
*from external supply



**Single area system:
heating/cooling/DHW**

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

*from external supply



Single area system: heating/cooling/DHW

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

*from external supply