ETSH12E / ETSHB12E / ETSX12E / ETSXB12E

NOTES to go through before starting the unit

X1M : Main terminal
X6M : BUH Power supply terminal
X12M : Field wiring terminal for AC
X15M : Field wiring terminal for DC
—— —— —— : Earth wiring
– – – – – – : Field supply
① : Several wiring possibilities

: Option
: Wiring depending on model
: Not mounted in switch box
: PCB

Backup heater power supply
- ☐ 3V (1N~, 230V, 3kW)
- ☐ 6V3 (1N~, 230V, 6kW)
- ☐ 6WN/9WN (3N~, 400V, 6/9kW)

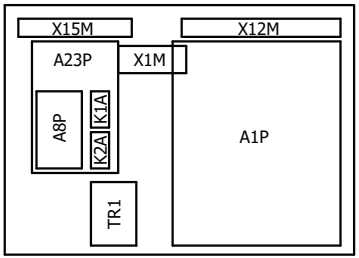
User installed options:
- ☐ Backup heater
- ☐ Remote user interface
- ☐ Ext. indoor thermistor
- ☐ Ext. outdoor thermistor
- ☐ Demand PCB
- ☐ Smartgrid kit
- ☐ WLAN adapter module
- ☐ WLAN cartridge
- ☐ BZ mixing kit

Main LWT:
- ☐ ON/OFF thermostat (wired)
- ☐ ON/OFF thermostat (wireless)
  - ☐ Ext. thermistor
- ☐ Heat pump convector

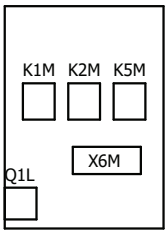
Add LWT:
- ☐ ON/OFF thermostat (wired)
- ☐ ON/OFF thermostat (wireless)
  - ☐ Ext. thermistor
- ☐ Heat pump convector

POSITION IN SWITCH BOX

SWB1



SWB2



LEGEND

Part n°		Description
A1P		main PCB
A2P	*	On/OFF thermostat (PC=power circuit)
A3P	*	heat pump convector
A8P	*	demand PCB
A9P		status indicator
A11P		MMI PCB
A14P	*	user interface PCB
A15P	*	receiver PCB (wireless On/OFF thermostat)
A20P	*	WLAN module
A23P		hydro extension PCB
A30P	*	BZ mixing kit PCB
B2L		flow sensor
B1PW		water pressure sensor
DS1 (A8P)	*	dipswitch
E1H	*	backup heater element (1 kW)
E2H	*	backup heater element (2 kW)
E*P (A9P)		indication LED
F1B	#	overcurrent fuse backup heater
F1T	*	thermal fuse backup heater
F2B	#	overcurrent fuse main
FU1 (A1P)		fuse (T 5 A 250 V for PCB)
FU1 (A23P)		fuse (3.15 A 250 V for PCB)
K1A, K2A	*	high voltage smartgrid relay
K1M, K2M	*	contactor backup heater
K5M	*	safety contactor BUH
K* (A23P)		relay on PCB
K*R (A*P)		relay on PCB
M1P		main supply pump
M1S		DHW tank mixing 3 way valve
M2P	#	domestic hot water pump
M2S		bypass mixing 3 way valve
M4S	*	shut-off valve

Part n°		Description
P1M		MMI display
PC (A15P)	*	power circuit
Q1L	*	thermal protector backup heater
Q4L	#	safety thermostat
Q*DI	#	earth leakage circuit breaker
R1H (A2P)	*	humidity sensor
R1T (A1P)		outlet water heat exchanger thermistor
R1T (A2P)	*	ambient sensor On/OFF thermostat
R1T (A14P)	*	ambient sensor user interface
R2T (A1P)		outlet backup heater thermistor
R2T (A2P)	*	external sensor (floor or ambient)
R5T, R8T		domestic hot water thermistor
R6T	*	external indoor or outdoor ambient thermistor
R7T		mixed leaving water thermistor
S1L		flow switch
S1S	#	preferential kWh rate PS contact
S2S	#	electrical meter pulse input 1
S3S	#	electrical meter pulse input 2
S4S	#	smart grid feed-in contact
S6S-S9S	*	digital power limitation inputs
S10S-S11S	#	low voltage smartgrid contact
S12S	#	gas meter input
S13S	#	solar input
SW1~2 (A11P)		turn buttons
SW3~5 (A11P)		push button
TR1		power supply transformer
X*, X*A, X*H*, X*Y		connector
X*M		terminal strip

* : optional #: field supply