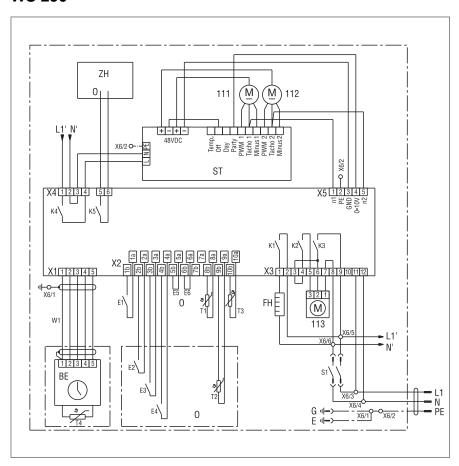
## **WIRING DIAGRAM**

# WS 250



### **WS 250**



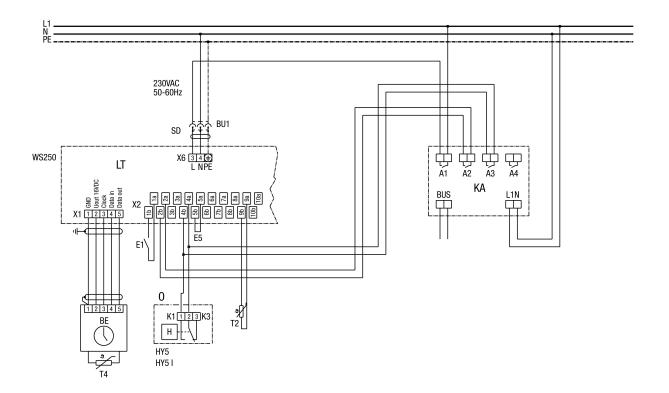
- E1 pressure sensor / filter
- E2 CO2 sensor / relay to be supplied by the customer ( potential-free contact)
- E3 air quality controller EAQ 10/1 (potential-free contact)
- E4 humidity sensor, hygrostat HY 5
- E5 auxiliary heater available, jumper (option) (for ext. auxiliary heating, bridge E5)
- E6 Select external temp. sensor T2, jumper (option) (for ext. T2 temp. sensor, bridge E6)
- T1 outside air temp. sensor
- T2 external temp. sensor (option)
- T3 outgoing air temp. sensor
- T4 room sensor for exhaust air
- $\ensuremath{\mathsf{K5}}$  switching contact for ext. auxiliary heater
- S1 safety switch / activated via front plate
- ZH external auxiliary heater (option)
- M1 supply air fan
- M2 exhaust air fan
- M3 bypass lamella servomotor
- ST circuit mains unit
- LT power unit
- FH anti-frost protection heating
- BE operator unit
- G housing
- E feeder
- O option

## **WIRING DIAGRAM**

# WS 250



#### WS 250 with KNX BUS



SD - socket

LT - power unit

E5 - wire E5 wire jumper

BE - operator unit

O - option

K1 - terminal 1 - dehumidify

K1 - terminal 3 - dehumidify

T4 - room sensor

T2 - alternative room sensor for operator unit. External temp. sensor "KTY81-110" / option

KA - KNX actuator to be supplied by the customer

BUS - KNX BUS

Set WS 250 to "man. Set fan level 1" on control unit.

KNX actuator programming:

Stage 0 = Switch off supply voltage (Stage 0 = A1)

Stage 1 = A1 ON, A2 OFF, A3 OFF

Stage 2 = A1 ON, A2 ON, A3 OFF (level 2 = A2)

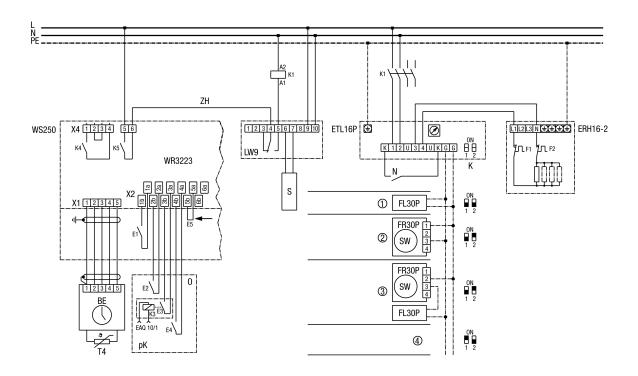
Stage 3 = A1 ON, A2 OFF, A3 ON (60 min. overrun) (level 3 = A3)

### **WIRING DIAGRAM**

# WS 250



### WS 250 with ERH 16-2 electrical air heater



E5 - wire jumper E5; available for external auxiliary heater

T4 - room sensor in the control unit of the WS 250. The heating requirement is determined by comparing the actual room temperature (T4) and the setpoint room temperature

LW 9 - air flow monitor in supply air channel

K1 - power contactor US 16

ETL 16 P - electronic temperature controller

FL 30 P - channel sensor in supply air channel

FR 30 P - room sensor with setpoint generator

ERH 16-2 - electrical air heaters

BE - operator unit

WR 3223 - power module

ZH - external auxiliary heater on/off

O - option

SW- setpoint

K - coding

N - night reduction

S - sensor

pK - E2-E4 potential-free contacts!

- ① Ext. channel sensor and internal setpoint generator in ETL16P
- 2 Ext. room sensor and external setpoint generator
- ③ Ext. channel sensor and external setpoint generator
- 4 Internal room sensor and internal setpoint generator in ETL16P