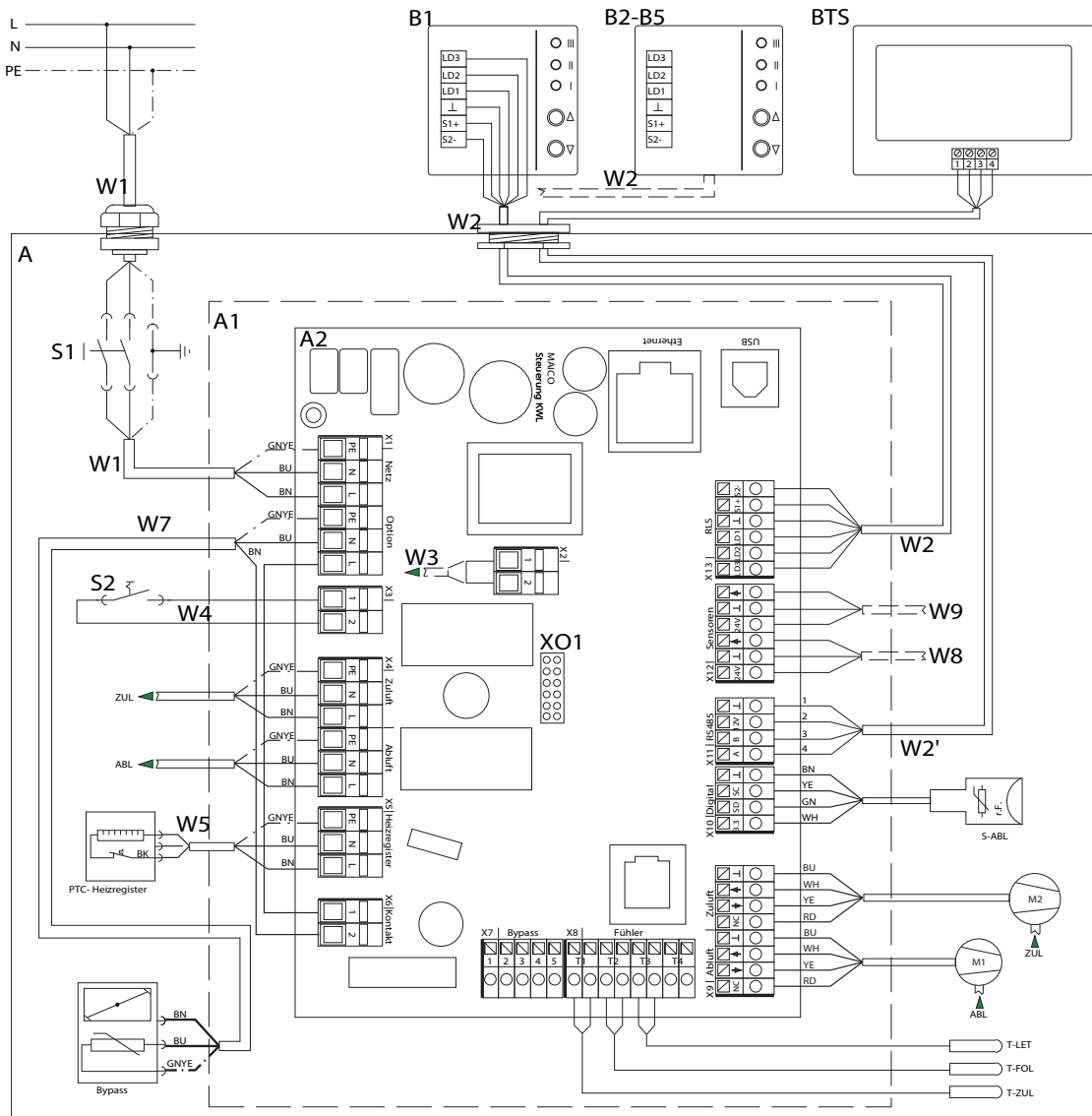


# WIRING DIAGRAM

## WS 170 KL



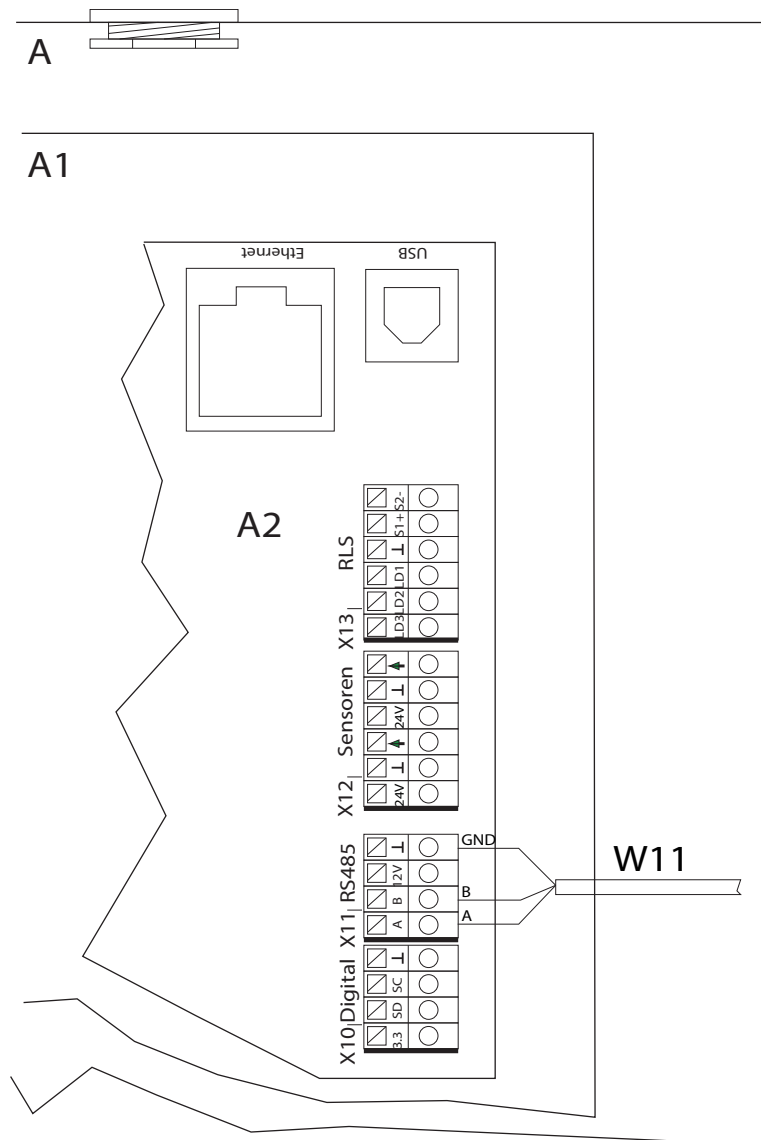
### WS 170 KBR / KBL / KBRET / KBLET wiring diagram



## WS 170 KL

- A - WS 170 / RB 170 ventilation unit
  - A1 - Electronic slide-in module
  - A2 - Controlled domestic ventilation unit control
  - B1- RLS 1 WR / RB-ZF4 single control unit
  - B2-B5 - Parallel connection max. 5 single control units
  - BTS - RLS T1 WS touchscreen control unit
  - W1 - 230 V AC connecting cable
  - W2 - Screened control cable for single control unit (provided by customer), e.g. LIYY 6 x 0.34 mm<sup>2</sup>
  - W2' - RLS T1 WS screened control cable (provided by customer), e.g. LIYY 4 x 0.34 mm<sup>2</sup>
  - W5 - Connecting cable for PTC heat register
  - W7 - Connecting cable for bypass motor
  - S1 - Unit switch
  - S2 - Door contact switch
  - M1 - Exhaust air/outgoing air fan
  - M2 - Outside air/supply air fan
  - T-LET - Temperature sensor for air inlet for outside air
  - T-FOL - Temperature sensor for outgoing air
  - T-ZUL - Temperature sensor for supply air
  - S-ABL - Combination sensor for exhaust air
  - Further connection options**
  - W2' - Connecting cable for RLS T1 WS or Modbus touchscreen control unit, e.g. LIYY 4 x 0.34 mm<sup>2</sup>
  - W3 - Connecting cable (provided by customer) for external safety device with potential-free contact 12 V/2 A
  - W4 - Connecting cable for door contact switch
  - W8 - Connecting cable (provided by customer) for external sensor 1
  - W9 - Connecting cable (provided by customer) for external sensor 2
  - X01 - Slot for optional communication plug-in module EnOcean/KNX
  - ZP1 - 230 VAC connecting terminals for switching the additional circuit boards
  - USB - USB service interface Ethernet network interface (LAN)
-

### WS 170 ventilation unit with RLS 1 WR room air control



A - WS 170 electronic slide-in module

A2 - Control circuit board: jumper 8 bridged (= factory setting)

B1 - 1. RLS 1 WR room air control

B2 - 2. RLS 1 WR room air control

W1 - 230 V AC connecting cable

W2' - Control cable for room air control

V - Distributor (supplied by the customer)

You can connect up to 5 RLS 1 WR room air controls to the ventilation unit. If several room air controls are used, no CO2 sensor may be connected.

RLS 1 WR room air control can also be connected to RLS D1 WR room air control.

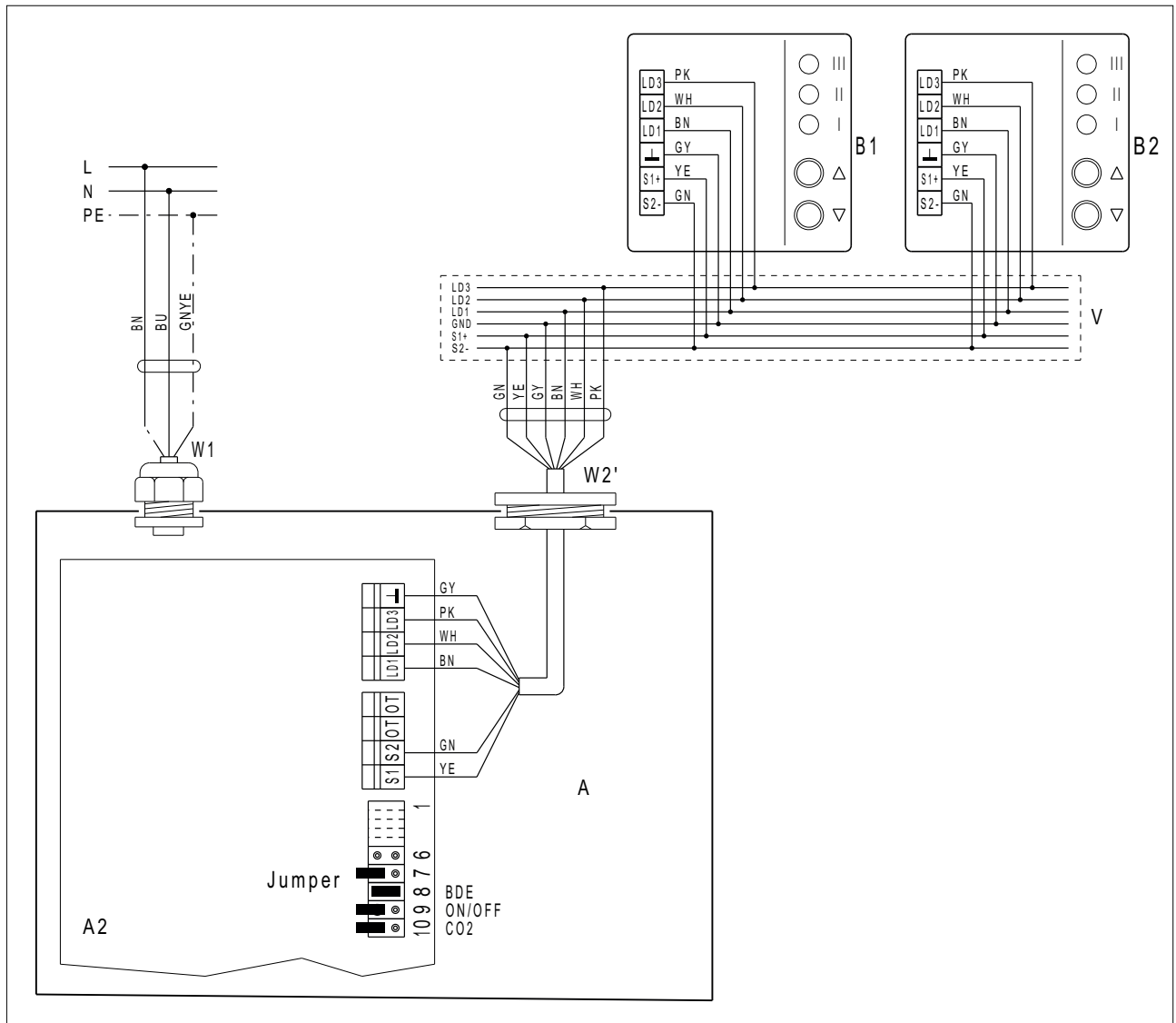
No need for distributor "V" if only one RLS 1 WR room air control is connected.

# WIRING DIAGRAM

## WS 170 KL



### WS 170 ventilation unit with RLS 1 WR room air control



A - WS 170 electronic slide-in module

A2 - Control circuit board: jumper 8 bridged (= factory setting)

B1 - 1. RLS 1 WR room air control

B2 - 2. RLS 1 WR room air control

W1 - 230 V AC connecting cable

W2' - Control cable for room air control

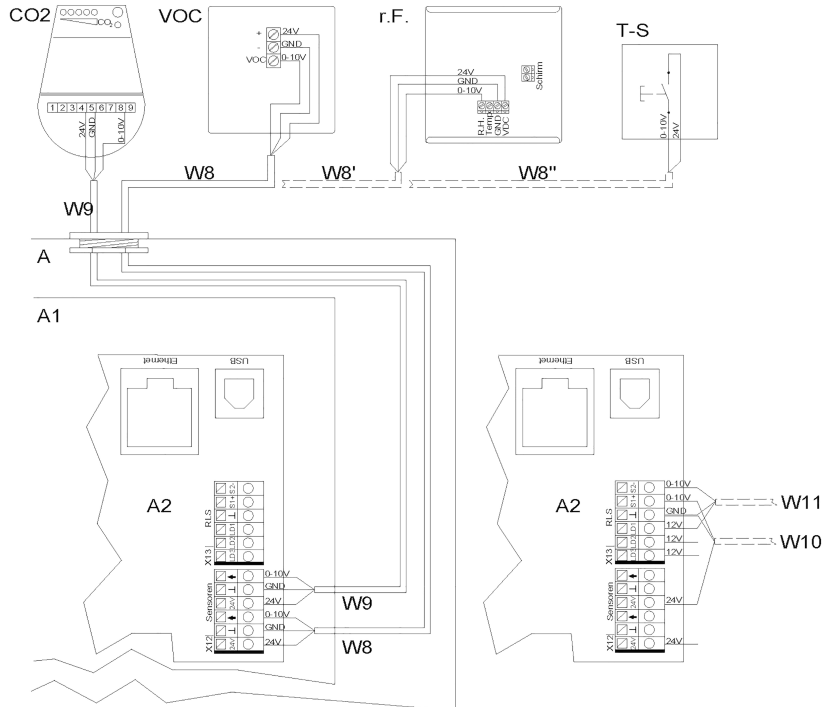
V - Distributor (supplied by the customer)

You can connect up to 5 RLS 1 WR room air controls to the ventilation unit. If several room air controls are used, no CO2 sensor may be connected.

RLS 1 WR room air control can also be connected to RLS D1 WR room air control.

No need for distributor "V" if only one RLS 1 WR room air control is connected.

### Connection of sensors to WS 170 KBR / KBL / KBRET / KBLET



A - Ventilation unit

A1 - Electronic slide-in module

A2 - Controlled domestic ventilation unit control

CO2 - CO2-sensor (# accessories)

VOC - Air quality controller (# accessories)

r.h. - Humidity sensor (# accessories)

T-S - Intermittent ventilation button / external potential-free contact

W8 - Connecting cable (provided by customer) for external VOC sensor, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

W8' - Connecting cable (provided by customer) for external r.h. sensor 1, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

W8'' - Connecting cable (provided by customer) external pushbutton / potential-free contact (function – intermittent ventilation/sensor type = digital), e.g. LIYY 2 x 0.5 mm<sup>2</sup>

W9 - Connecting cable (provided by customer) external CO2 sensor 2, e.g. LIYY 3 x 0.5 mm<sup>2</sup> W10 - Connecting cable (provided by customer) external sensor 3, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

W11 - Connecting cable (provided by customer) for external sensor 4, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

The control's sensor inputs can be freely parametrised.

The inputs are not defined for a particular sensor type.

When commissioning a sensor, the sensor input on the control must be activated and the sensor type specified #

Commissioning and maintenance instructions.

If the RLS 1 WR is deactivated (parameters – single control unit inactive) on the controller, a connection of up to four sensors is possible.

The power supply to sensors 3 + 4 can be ensured via terminals LD1, LD2, LD3 (all 12 VDC) or with double assignment, via the 24 VDC supply of sensor connections.