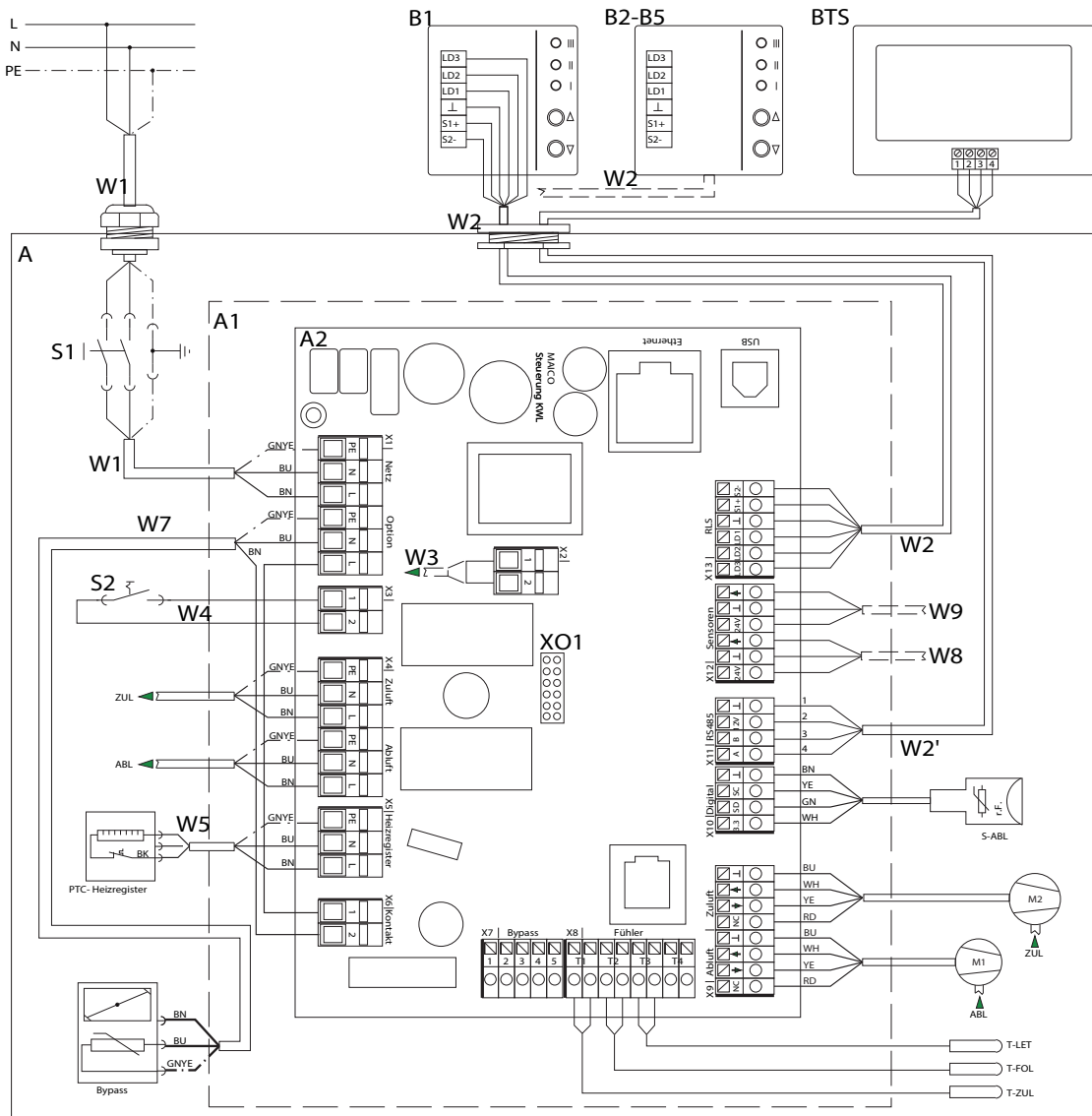


# WIRING DIAGRAM

## WS 170 KBRET



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



## WS 170 KBRET

A - WS 170 / RB 170 Ventilation unit

A1 - Electronics slide-in module

A2 - CDV control system

B1 - Standard control unit RLS 1 WR / RB-ZF4

B2-B5 – Parallel connection of max. 5 standard control units

BTS - Touchscreen control unit RLS T1 WS

W1 - Connection cable 230 VAC

W2 - Shielded control cable standard control unit (provided by customer), e.g. LIYY 6 x 0.34 mm<sup>2</sup>

W2' - Shielded control cable RLS T1 WS (provided by customer), e.g. LIYY 4 x 0.34 mm<sup>2</sup>

W4 - 230 V output for safety device (e.g. safety pressure monitor for fireplaces)

W5 - Connection duct for PTC heater

W7 - Bypass motor connection duct

S1 - Device switch

S2 - Door contact switch

M1 - Exhaust/outgoing air fan

M2 - Outside air/supply air fan

T-LET - Temperature sensor, air intake, outside air

T-FOL - Temperature sensor outgoing air

T-ZUL - Temperature sensor supply air

S-ABL - Combination sensor exhaust air

### Further connection options

W2' - Connection cable for touchscreen control unit, RLS T1 WS or Modbus, e.g. LIYY 4 x 0.34 mm<sup>2</sup>

W3 - Connection cable (to be supplied by the customer) for external safety device with potential-free contact 12 V/2 A

W4 - Connection cable door contact switch

W8 - Connection cable (provided by customer) for external sensors

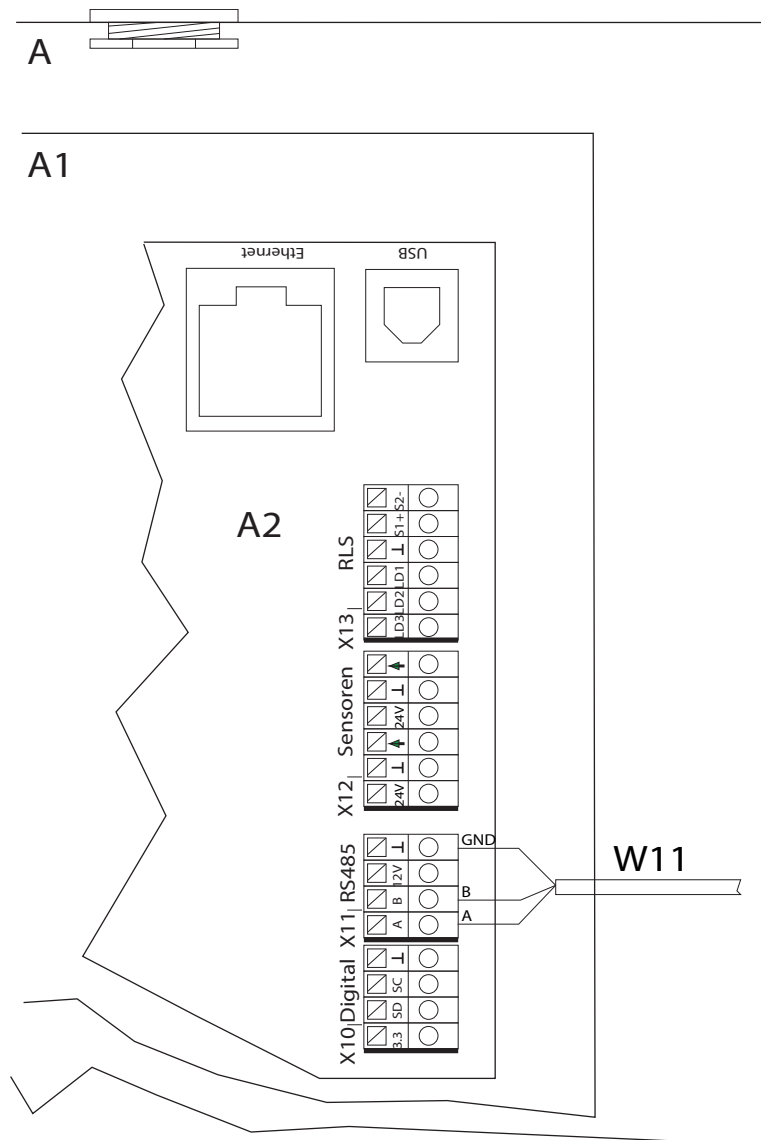
W9 - Connection cable (to be supplied by the customer) for external sensors

X01 - Slot for optional EnOcean/KNX communication plug-in module

ZP1 – 230 VAC Connection terminals for wiring 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.

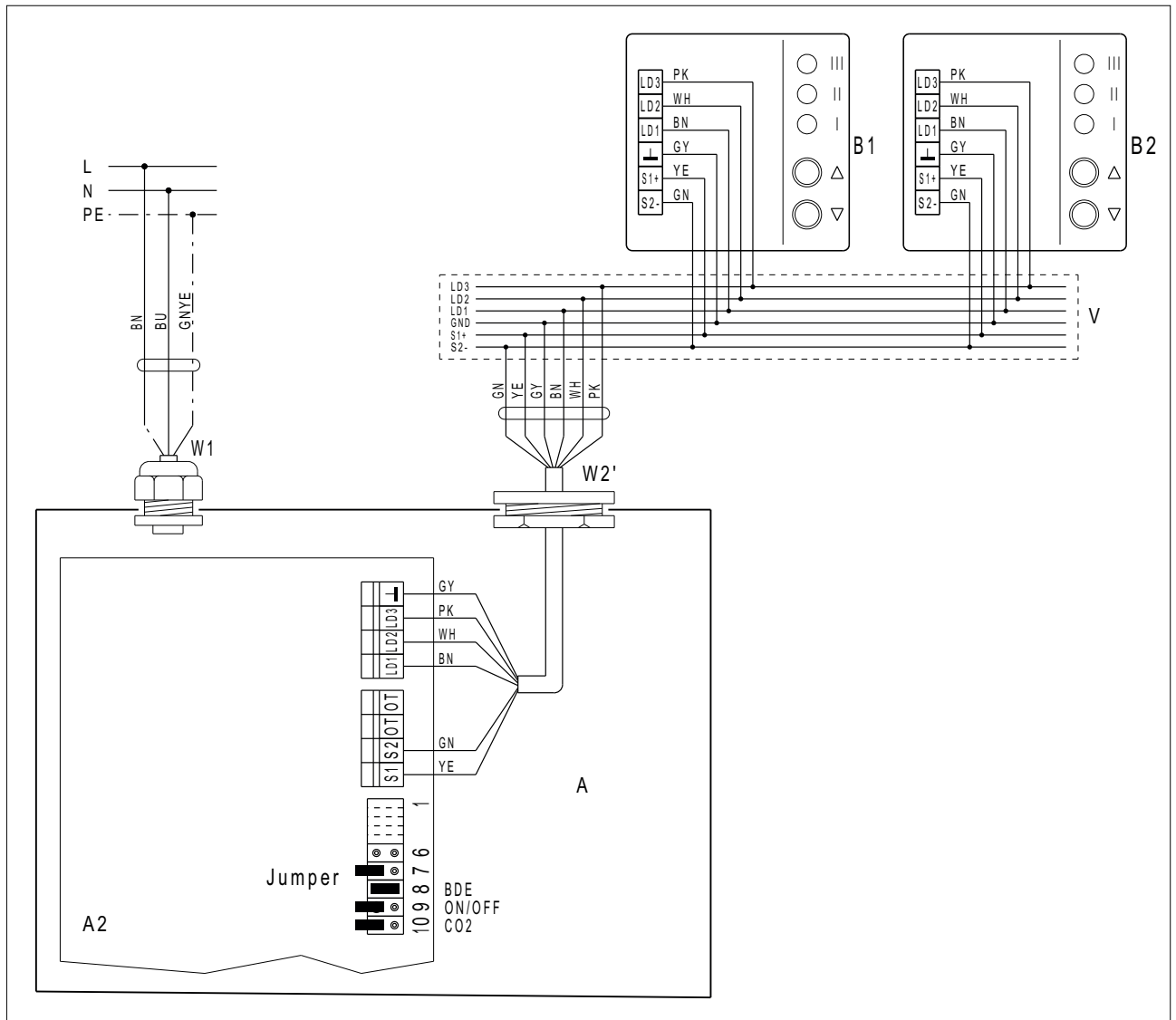
No need for distributor "V" if only one RLS 1 WR room air control is connected.

# WIRING DIAGRAM

## WS 170 KBRET



### 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

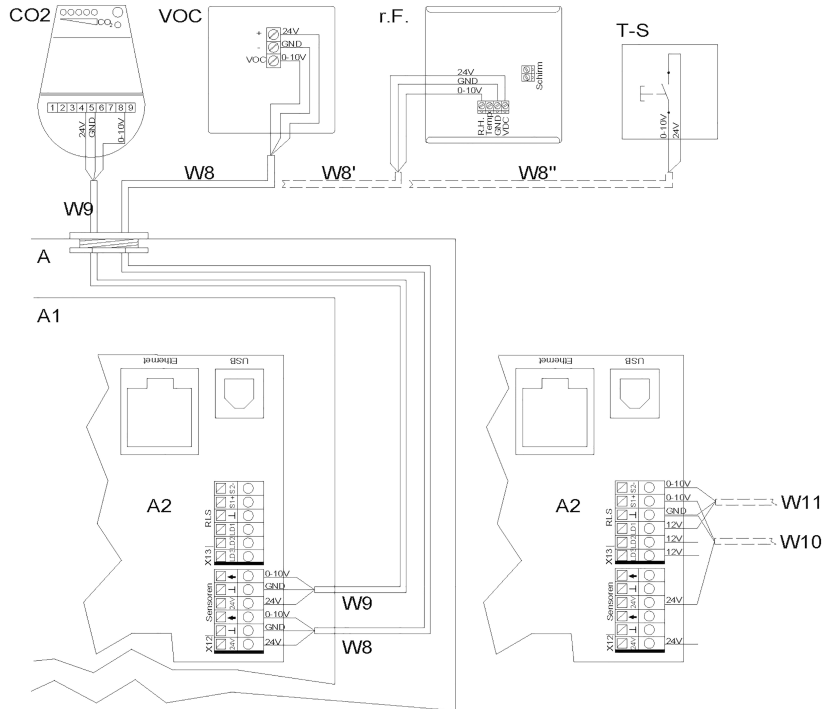
V - Distributor (supplied by the customer)

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 sensors to WS 170 KBR / KBL / KBRET / KBLET



A - Ventilation unit

A1 - Electronics slide-in module

A2 - CDV control system

CO2 - CO2 sensor (accessory)

VOC - Air quality controller (accessory)

r. h. - Humidity sensor (accessory)

T-S - Push button for intermittent ventilation / external potential-free contact

W8 – Connection cable (to be supplied by the customer) for external VOC sensor, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

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

W8'' - Connection cable (to be supplied by the customer) for external push button/potential-free contact (function: intermittent ventilation/sensor type = digital), e.g. LIYY 2 x 0.5 mm<sup>2</sup>

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

W11 - Connection cable (to be supplied by the customer) for external sensor 4, e.g. LIYY 3 x 0.5 mm<sup>2</sup>

The sensor inputs of the control system are freely configurable..

The inputs are not fixed to a specific sensor type.

At commissioning of a sensor, the sensor input on the control system must be activated and the sensor type specified

# Commissioning and maintenance instructions.

At deactivation of RLS 1 WR (parameter standard control unit

(inactive) Connection of up to 4 sensors is possible on the control unit.

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