

Components of the VARIO-C System

The Wiring Diagram 24 volts 841 801 180 0
 12 volts 841 801 220 0

If you are not familiar with reading electrical circuit diagrams, a short description:

When viewing the wiring diagram the direction of vehicle travel is from left to right, to prevent unnecessary cross-wiring. At the extreme right of the diagram can be found the ISO 7638 connection.

Sensor Connections

The sensors are always connected diagonally, i.e. top left and bottom right (viewed across the free portion of the cover plate with the LED). It is, however, immaterial whether you plug the brown or the black lead of the sensor extension to the left or the right of the corner. The connections of a sensor must never be opposite each other.

On the red (RD) plate, the sensors for right and left are interchangeable without this resulting in a fault. It is, however, advisable to get used to using the ports marked with a "1" for the right side of the vehicle; this simplifies any fault location.

The blue and yellow base connector should never have sensor 2 connected if sensor 1 is not used.

ABS Valve Connections

N. B.	The inlet and outlet connections must be made in the following way:
EV —	INLET valve is always connected with the BROWN wire of the solenoid cable.
AV —	OUTLET valve is always connected with the BLUE wire of the solenoid cable

The contacts for the ABS valves can be found on the upper half of the blue, yellow and red base connectors. Each base connector can accept one three-pin valve connector (correspondingly colour-coded), the contacts

on the base connector are arranged in a group of three, two of which have already been discussed above, the other is the earth (ground) connection to which the green/yellow wire of the valve cable is connected.

There are NO configurations in which the colored plates have a sensor connected but no valve.

The left-hand side of the diagram shows the wiring arrangement for stop-lamp power supply, wire of 2.5mm section should be used for this application. More about this can be found on page 31.

Beneath this on the diagram you can see the wiring arrangement for mixed-power supply.

The relay shown fulfills two requirements;

- it switches the ECU automatically to ISO power whenever this supply is available,
- the coil current through the relay is also the ABS current through the Info-module in the towing vehicle.

The connection of the "External Warning Lamp" (in Europe for example it is green) is a legal requirement in Europe and other countries, it is connected to contact 30 of the relay and contact 1 or 2 of the power base connector on the ECU (white).

There are specific wiring diagrams available for individual system arrangements.

System	24 Volt	12 Volt
4S/3M	841 801 181 0	841 801 221 0
4S/2M	841 801 182 0	841 801 222 0
2S/2M	841 801 183 0	841 801 223 0
2S/1M	841 801 184 0	841 801 224 0

These are abbreviated versions of the "full" version shown opposite and are available through the WABCO dealer network.

Differences between VARIO-C1 and -C2 / -C plus

The only difference lies in the diagnostic part of the supply plate.

In all VARIO-C2 versions (... 031 0 to ... 052 0), the speed signal is emitted via pin 8 which is not used in VARIO-C1 versions (see page 50, "v-signal").

With the exception of the ... 051 0 version (see page 13), pin 7 is a second warning lamp output with a special feature. If there is more than one VARIO-C2 ECU behind a towing vehicle (special vehicles, 2- or 3 trailer operation),

the warning lamp of the towing vehicle will always come on in the event of a fault since one of the ECUs has switched pin 5 to earth / negative.

The warning light output, i.e. pin 7, is only switched to negative by the ECU affected by a fault.

A 2 watt lamp connected to pin 7 (e.g. mounted directly on the housing) indicates, as you walk past the trailer combination, which ECU has caused the warning lamp in the motor vehicle to light up.