CALLTRONIC

Technical Description
Operating Instructions
Installation Instructions

Eberspächer®

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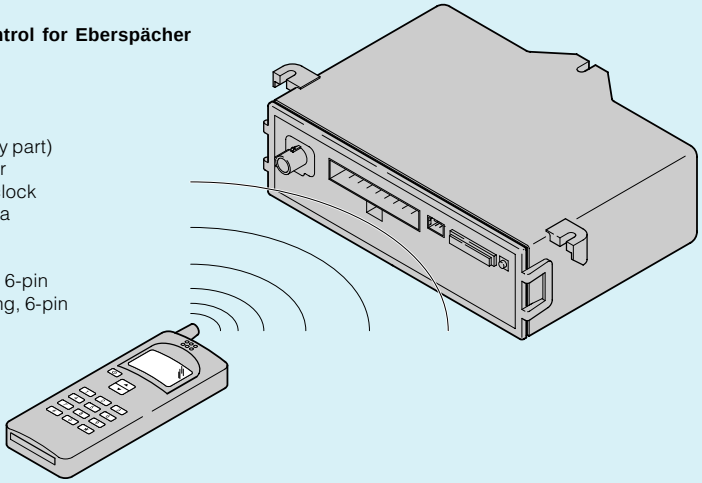
CALLTRONIC –
Telephonic remote control for Eberspächer auxiliary heating



Extent of delivery:
1 GSM module (stationary part)
1 set of cables for heater
1 set of cables for mini clock
1 GSM windshield antenna
incl. cleaning cloth
1 push-button
1 tab connector housing, 6-pin
1 push-on contact housing, 6-pin
6 Junior timer contacts
3 screws

A SIM card from a mobile phone network operator is required to operate the *CALLTRONIC*.

The mobile phone is not included in the extent of delivery!

Order number – *CALLTRONIC* 12 V:
22 1000 32 26 00

Additional components (Optional):
Mini clock
Order No. 22 1000 31 31 00

CE 0682

Subject to change

D
S
GB
F

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Circuit diagrams at the end of these instructions

Operating the *CALLTRONIC*

The *CALLTRONIC* is an operating element, to remotely operate the heater with a DTMF telephone or mobile phone via the GSM network from a distance. You can select between the heating and ventilation operating modes. The following setting times are available for the heating period: 10, 20, 30, 40, 50, 60, 90 and 120 minutes.
If preselected mode is required, a mini clock must be used instead of the push-button.

Hazard!

- Pacemakers and hearing aids can be negatively influenced.
- The SIM card and the SIM cardholder can be removed at any time – small children could swallow them.

Please note!

- When calling the *CALLTRONIC*, additional costs are incurred due to the telephone charges.
- The range depends on the network operator ("radio hole" – transmission gaps).
- It is important that the vehicle manufacturer's instructions and regulations for the installation and operation of a mobile phone or GSM module are observed and complied with.
- The *CALLTRONIC* can only be operated with an external GSM outdoor antenna in vehicles with a metalised windscreen.

General operating information

- The voice output has to be waited for before entering the numeric key, otherwise the function of the key will be ignored.
- The connection is terminated after 30 seconds without input.
- **Reset PIN:**
  If you have forgotten your PIN number for setting up the connection to the *CALLTRONIC*, you can reset it as follows:
  1. Sit in the vehicle.
  2. Switch off the heater if it is switched on.
  3. Phone the *CALLTRONIC* using the telephone.
  4. Use the push-button or the mini clock to switch the heater on following the voice output "Enter PIN" within 30 seconds. At the end of the 30 seconds, the heater must be switched on, otherwise the programme is aborted and the process has to be repeated.
  5. Wait until the voice output "PIN invalid".
  6. Voice output "Enter PIN".
  7. Enter the PIN number "0000".
  8. Voice output "Enter PIN".
  9. Enter the PIN number "0000" again.
  10. Voice output "PIN OK".
  11. Voice output "Input function".

  The PIN number "0000" is now stored for starting the device.
  You can change the PIN number at any time, as described in the table on Page 5.

The following 3 operating modes are available

Note:
If malfunctions occur in the heater during operation (e.g. due to a lack of fuel), these can be interrogated after the malfunction has occurred using Function 6 (where the diagnosis cable is connected). The malfunction is corrected with the aid of the operating instructions for the heater.

1. Stand-alone operation

The function keys 0 to 7 are active at the telephone (see the following table).
The push-button installed can be used to switch the heater on or off. If the heater is switched on using the push-button, the heating function is activated with a duration of 40 mins. The push-button also functions without a SIM card. The push-button flashes if an error occurs in the heater.

2. Combination with mini clock

The function keys 0 to 3 and 5 to 7 are active (see following table).
The functions of the function key 4 (Select operating mode) are taken over by the mini clock (see installation and operating instructions for the mini clock).
When switching on the heater via the mini clock, the operating mode last set with the mobile phone is always activated. If a malfunction occurs in the heater, the reading in the mini clock display changes between the time and "--".
If the *CALLTRONIC* is connected with the mobile phone, "--" appears in the mini-clock display.

3. Combination with *AIRTRONIC mini controller**

When combined with the *CALLTRONIC*, the mini controller only serves to specify the set value. Select heating mode at the mini controller. The red LED in the mini controller only serves as an operating display – not as an operating mode display – the operating mode is selected via the remote control.

Operating the heater via the numeric keys on the telephone

You first have to set up a connection between the telephone and the *CALLTRONIC*.

To do this, dial the **number assigned to you by your network operator.**

The *CALLTRONIC* signals the following text:

"Eberspächer heater – Input PIN".

Now enter the 4-digit PIN No.
(The PIN is set to 0000 in the works).

If the PIN No. is wrong, the following message appears:

"PIN invalid".

You now have the opportunity to enter the correct PIN No.

If the PIN No. is correct, the following message appears:

"PIN OK – Input command".

You can now enter your settings for the heater via the *CALLTRONIC*.

The following table on Pages 4 and 5 shows which functions are available to you.

Functions

a) Select heating / ventilation operating mode

Numeric key	Function	Voice output
0	Switch off operating mode (heating / ventilation)	Heater off – Input command
1	Activate heating mode	• Heater on – duration... minutes – Input command • Heater on (only for mini clock) – Input command
2	Activate ventilation mode	• Ventilation on – duration ... minutes – Input command • Ventilation on (only for mini clock) – Input command
3	Status check	• Heater on – duration ... minutes – Input command • Heater on (only for mini clock) – Input command • Ventilation on – duration ... minutes – Input command • Ventilation on (only for mini clock) – Input command • Heater off – Input command

b) Heating / ventilation running time

(If the mini clock is connected, the following function for numeric key 4 does not work)

Numeric key	Function	Voice output
4	Input duration Heating and Ventilation	• Input duration • Input invalid – Input command (Only if mini clock connected)
1	Select duration 10 mins.	Duration 10 minutes – Input command
2	Select duration 20 mins.	Duration 20 minutes – Input command
3	Select duration 30 mins.	Duration 30 minutes – Input command
4	Select duration 40 mins.	Duration 40 minutes – Input command
5	Select duration 50 mins.	Duration 50 minutes – Input command
6	Select duration 60 mins.	Duration 60 minutes – Input command
7	Select duration 90 mins.	Duration 90 minutes – Input command
8	Select duration 120 mins.	Duration 120 minutes – Input command
9	No function	Input invalid – Input command
0	No function	Input invalid – Input command

c) Special functions

Numeric key	Function	Voice output
5	The following language is selected by pressing Key 5. Repeat the function until the required language is announced.	
	Language selected: • German • Swedish • English • French	Input command (in the selected language)
The following function, numeric key 6, only applies for the trade appliances (retrofit) – diagnosis cable (blue / white) must be connected		
6	Enquire heater condition (Diagnosis analysis)	• Heater OK – Input command • Heater not OK – Input command • Input invalid – Input command (if diagnosis cable not connected)
7	Change PIN	Input new PIN
xxxx	Enter new PIN	Input new PIN
xxxx	Enter new PIN (for confirmation)	• PIN OK – Input command • Input invalid – Input command
8	No function	Input invalid – Input command
9	No function	Input invalid – Input command

Fault correction

If problems occur while you are using the *CALLTRONIC*, first try to find a solution in the following list.

If the problem continues, please contact an Eberspächer service workshop.

Problem	Possible cause	Possible corrective measure
No connection to the *CALLTRONIC*	No supply voltage	Check fuse and wiring
	Weak signal	Change location of the vehicle; check antenna
	Outside of the GSM supply area	Check the supply range of the network operator
	Network block set	Check network blocks
	Network overloaded	Call again later
	SIM card invalid	Call using another phone network operator
	SIM card incorrectly inserted	Ensure that the SIM card has been correctly inserted; the card holder must lock home
	SIM card contacts soiled	Clean the SIM card with a dry cloth
	SIM card with wrong number of volts	Only SIM cards with 3 volts possible
	SIM card damaged	Carry out a visual check; give SIM card back to network operator

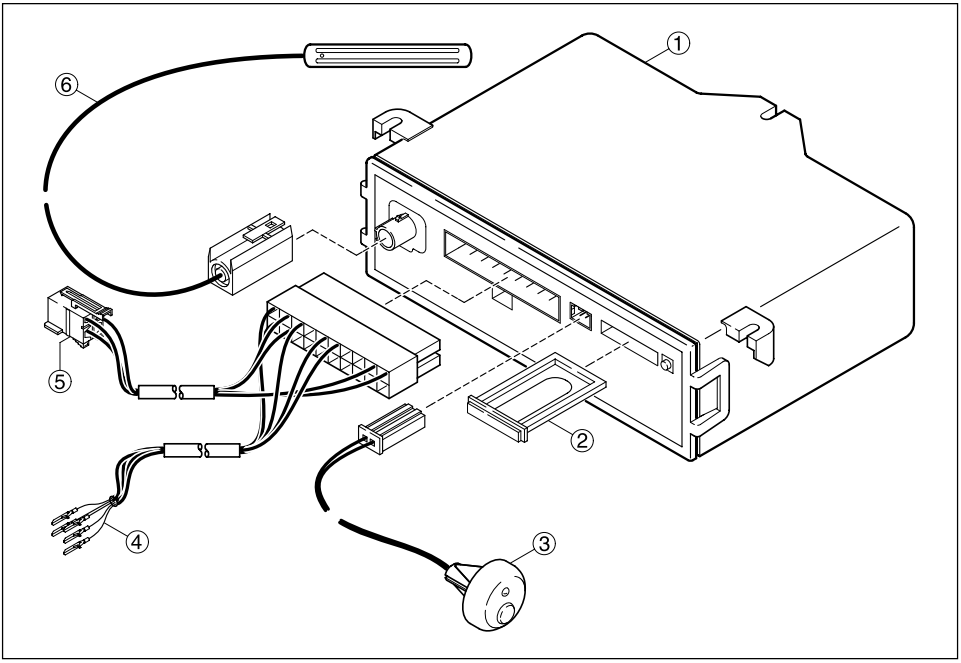
Installation Instructions

Installing the *CALLTRONIC*

The *CALLTRONIC* is only installed in the inside of the vehicle in accordance with the installation drawing. Wherever possible, the installation position should not be subjected to direct sunlight.

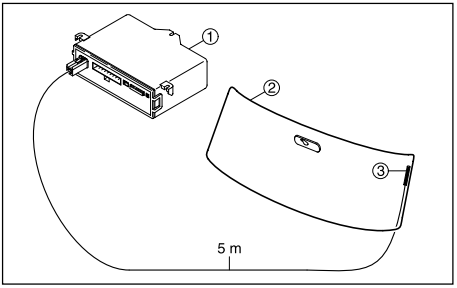
Please note!

- The SIM card should be able to be replaced even when installed.
- Please ensure that you observe and comply with the instructions and regulations of the vehicle manufacturer with respect to the installation and operation of a mobile phone or GSM module.



① *CALLTRONIC*
② SIM cardholder
③ Push-button with LED
④ Heater cable
⑤ Mini clock cable (optional)
⑥ GSM windscreen antenna

Attaching the windscreen antenna

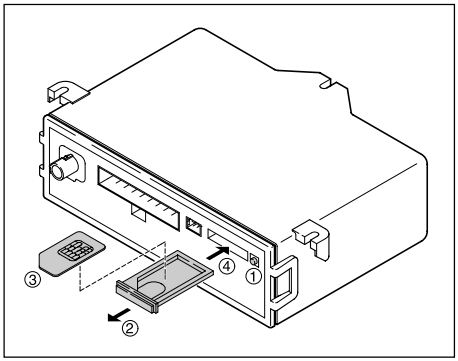


The windscreen antenna is attached to the inside of the windscreen or rear window.

Assembly:
Before sticking on the windscreen antenna ③, the relevant position on the screen ② should be cleaned using the enclosed cloth and should be dry.
Pull off the protective strip from the sticky tabs.
Install the antenna cable to the *CALLTRONIC* ① and connect.

Note:
Length of the antenna cable: 5 m.

Insert the SIM card



You must insert the SIM card before you can use the *CALLTRONIC*:

① To release the lock on the SIM cardholder, press the yellow button – the SIM cardholder springs out a bit.
② Pull out the SIM cardholder.
③ Insert SIM card with chip (contacts) facing upwards.
④ Re-insert the SIM cardholder in the appliance, until it locks into place.

Note:
Only SIM cards without a PIN and with 3-volt technology can be used.

Installation of the operating elements

Push-button
Fit the enclosed push-button in the view of the driver (Drill hole 10 mm, max. wall thickness 2.5 mm). Connect the cables in accordance with the circuit diagram.

Mini-clock (Option)
Install the mini clock (separate add-on) in accordance with the instructions supplied. Connect the cables in accordance with the circuit diagram.

Insert the fuse and check the function

The operating element must be connected and fully functioning before inserting the fuse.
Insert the *CALLTRONIC* (5 A) fuse and check the function of the *CALLTRONIC* after approx. 30 seconds (time until the GSM module has signed on to the network) with a telephone or mobile phone.

Please note!
The heater diagnosis cable (blue / white) must be connected for fault recognition (only for trade appliances – retrofit).
The operating element must be connected and fully functioning before inserting the fuse. The appliance detects whether a push-button or a mini-clock is connected when the voltage supply is applied for the first time. The *CALLTRONIC* does not accept subsequent changes.

Technical data

Working Voltage:	12 Volts
GSM Bands:	Dual Band EGSM900 GSM1800
GSM Class:	Small MS
Transmit Power:	Class 4 in EGSM900 Class 1 in GSM1800
Operating Temperature:	–20 °C to +50 °C
Storage Temperature:	–30 °C to +85 °C
Dimensions:	140 x 100 x 36 mm

Please note!
The *CALLTRONIC* must be connected in accordance with the circuit diagrams at the end of these instructions. **Note the type of heater!**

Circuit diagrams parts list

2.5.4 Switch on relay
2.5.9 Ventilation relay

3.1.11 Round operating device
3.1.17 *AIRTRONIC* mini controller
3.1.18 *CALLTRONIC* push-button

3.2.12 Time switch mini 12 / 24 volts
3.2.14 Time switch mini lighting (only 12 volts)

3.3.8 *CALLTRONIC* remote control

3.8.3 Antenna

a) Connecting the operating elements to the heater
- rt Plus supply, terminal 30
- ge Contact signal S+
- gr Actual temperature value
- ws rt Switch off theft warning system
- br Minus supply, terminal 31
- bl ws; bl Diagnosis
- gr rt Set temperature value
- br ws Sensor reference signal
- sw ws Switch on ventilation

z) Terminal 58 (lighting)

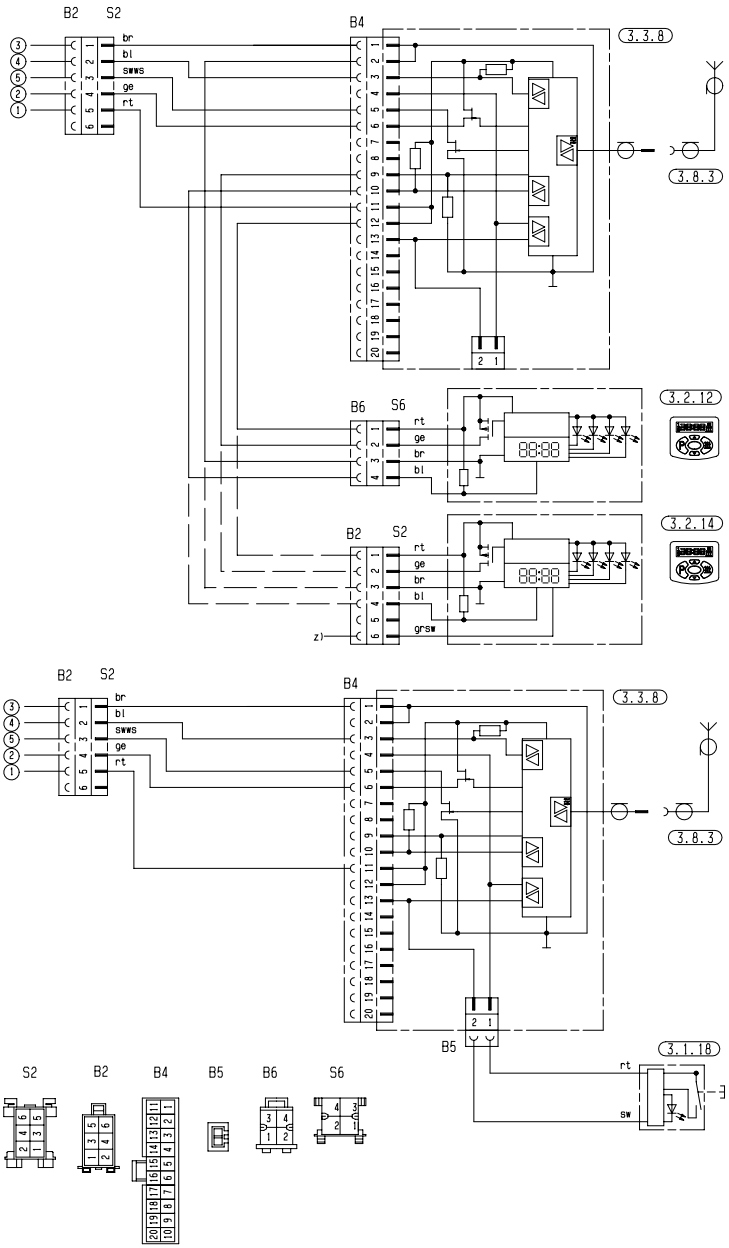
Insulate any cable ends not used.

The connectors and socket housing are shown from the cable entry side.

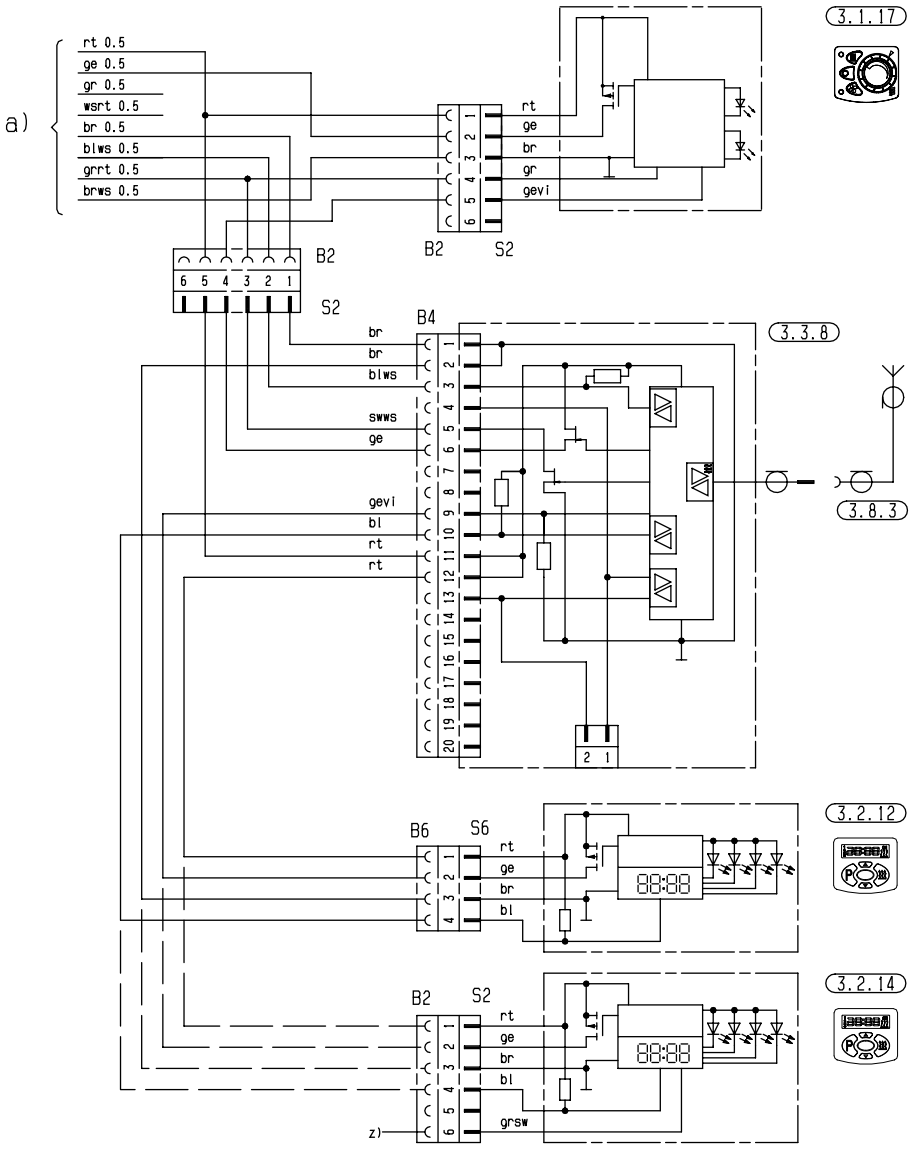
Cable colours

sw = black
ws = white
rt = red
ge = yellow
gn = green
vi = violet
br = brown
gr = grey
bl = blue
li = lilac

***HYDRONIC* B 4 W, B 5 W, D 4 W, D 5 W**



***AIRTRONIC* – 1**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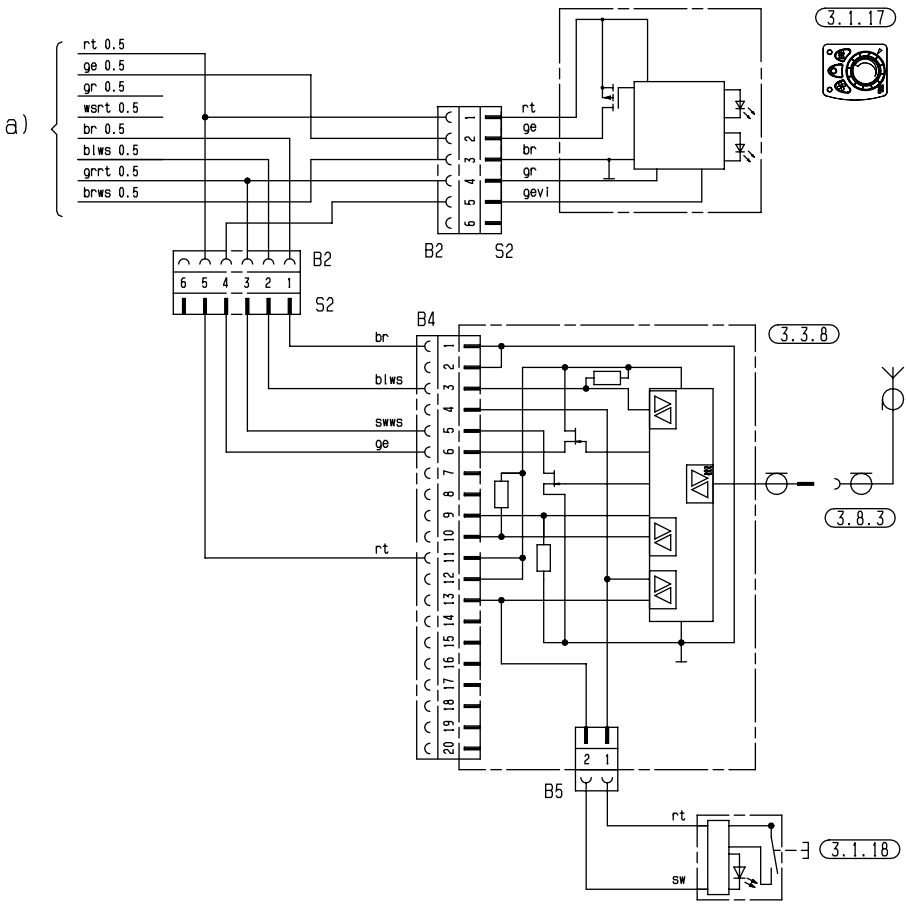
gr 0.5
wsrt 0.5
br 0.5
blws 0.5
grrt 0.5
brws 0.5
B2
S2
rt
ge
br
gr
gevi
3.1.17
B4
br
br
blws
swws
ge
gevi
bl
rt
rt
3.3.8
3.8.3
B6
S6
rt
ge
br
bl
3.2.12
B2
S2
rt
ge
br
bl
grsw
z)
3.2.14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rt
3.8.3
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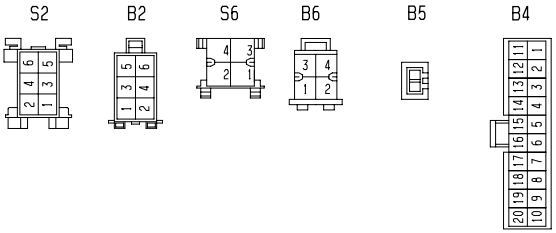
rt
sw
3.1.18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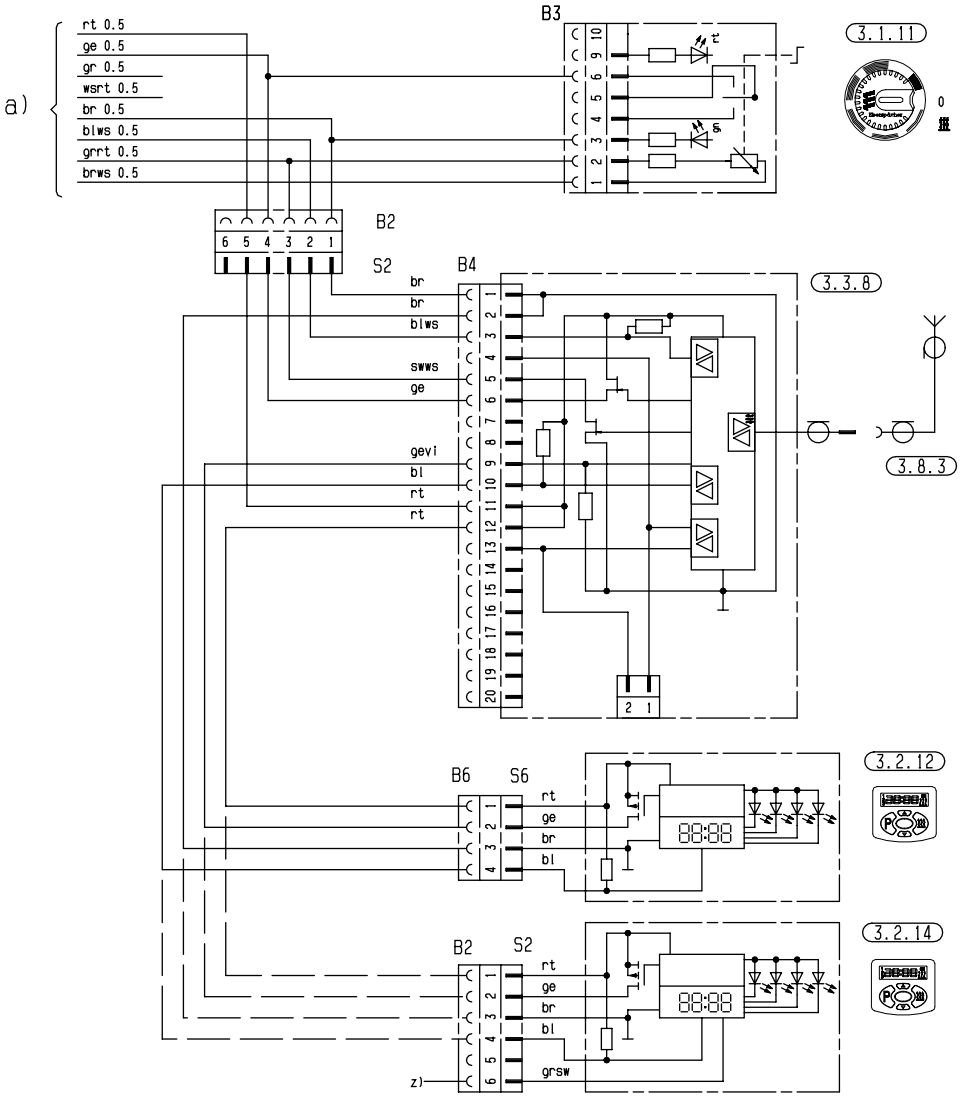
S6
B6
B5
B4

AIRTRONIC – 2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3.8.3
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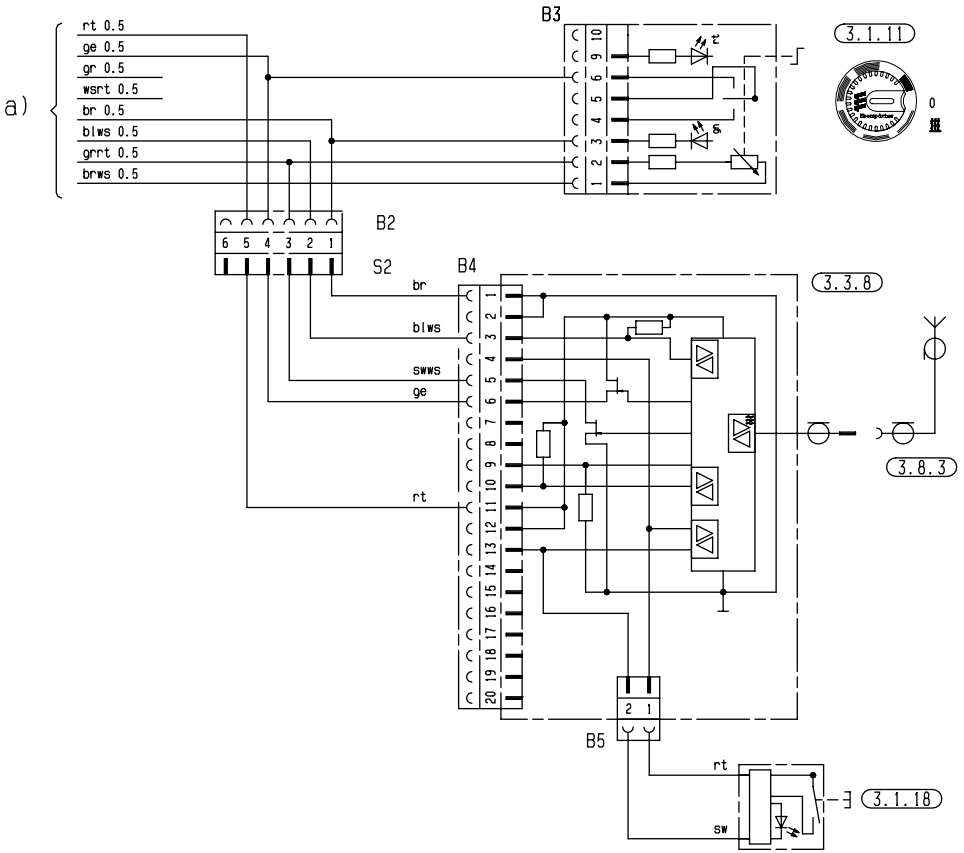
3.2.14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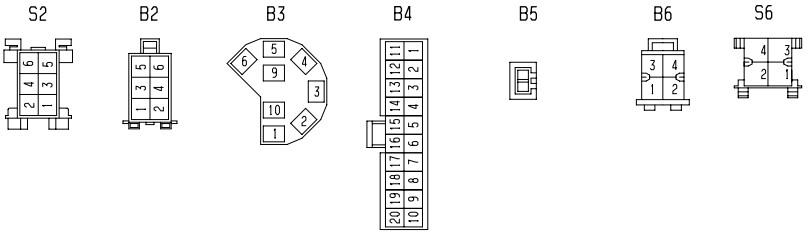
rt
sw
3.1.18


S2
B2
B3
B4
B5
B6
S6

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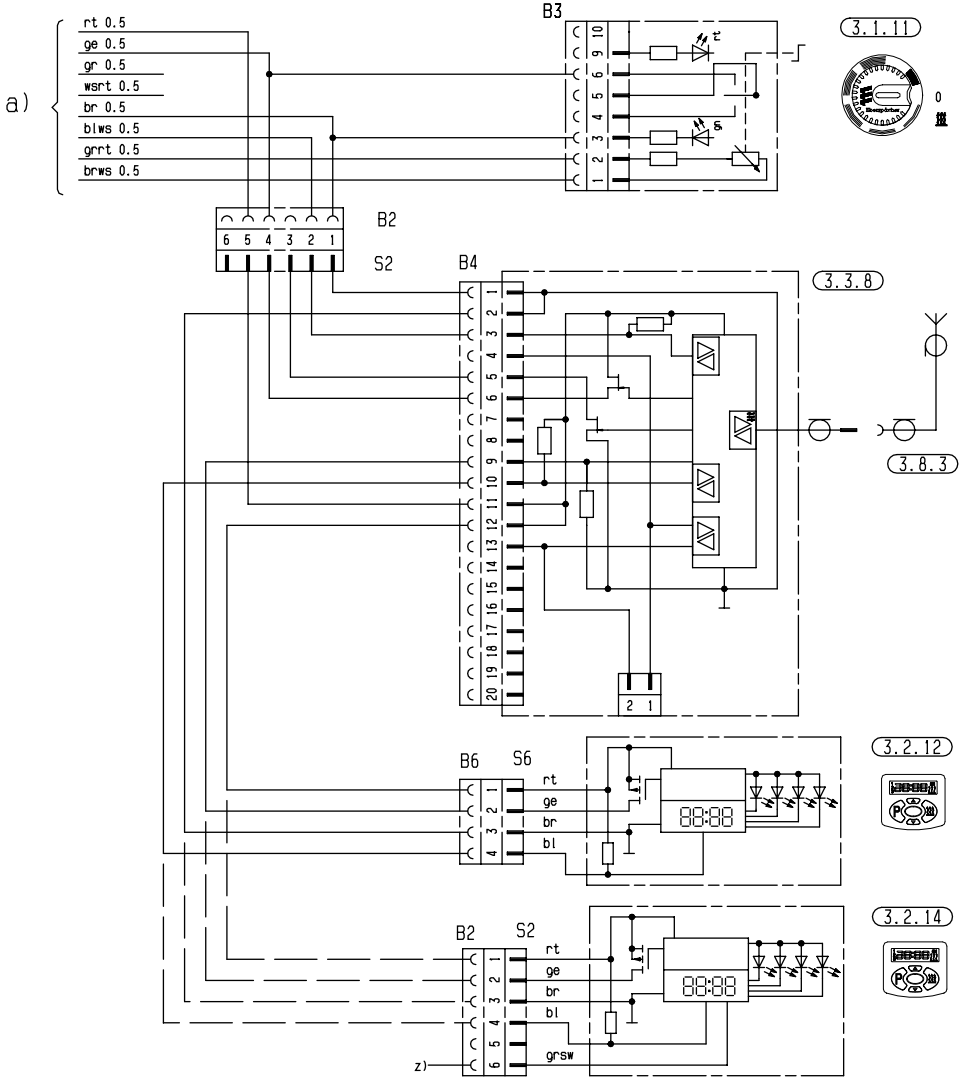
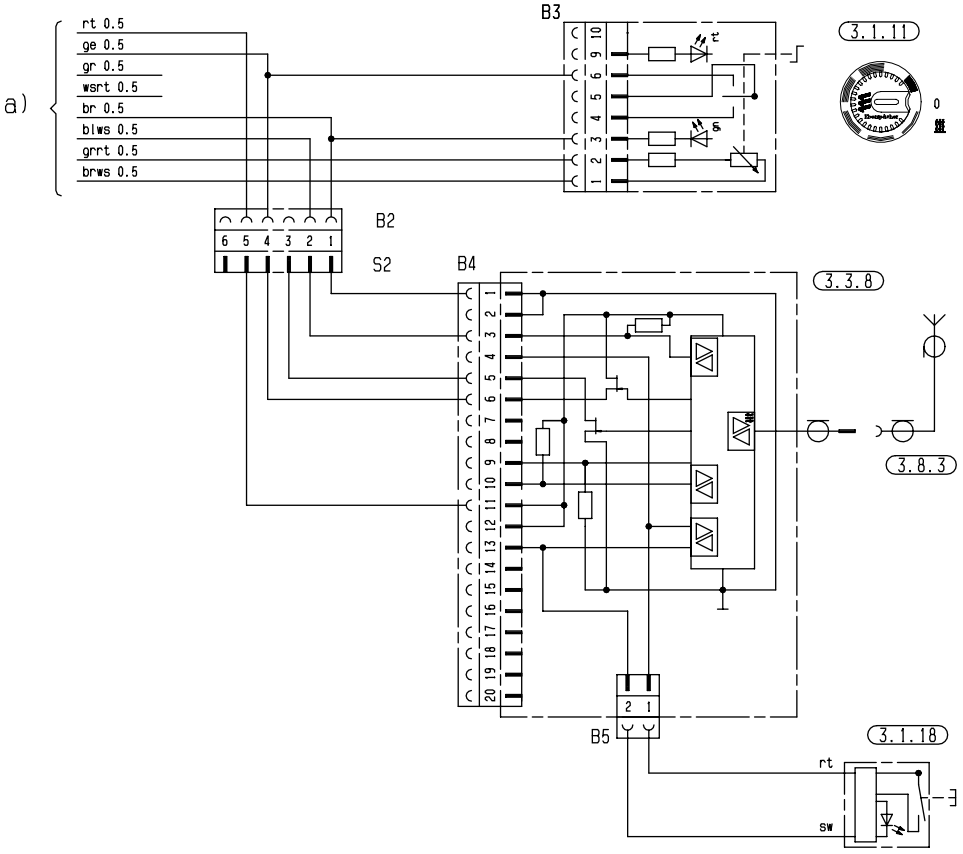
B 3 L P *compact*, B 3 L C *compact*, D 3 L P *compact*, D 3 L C *compact*

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3.1.11
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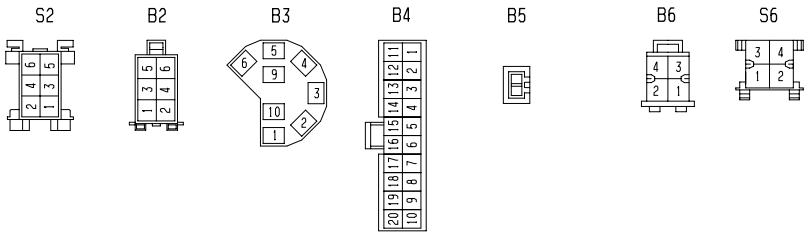
3.1.18
rt
sw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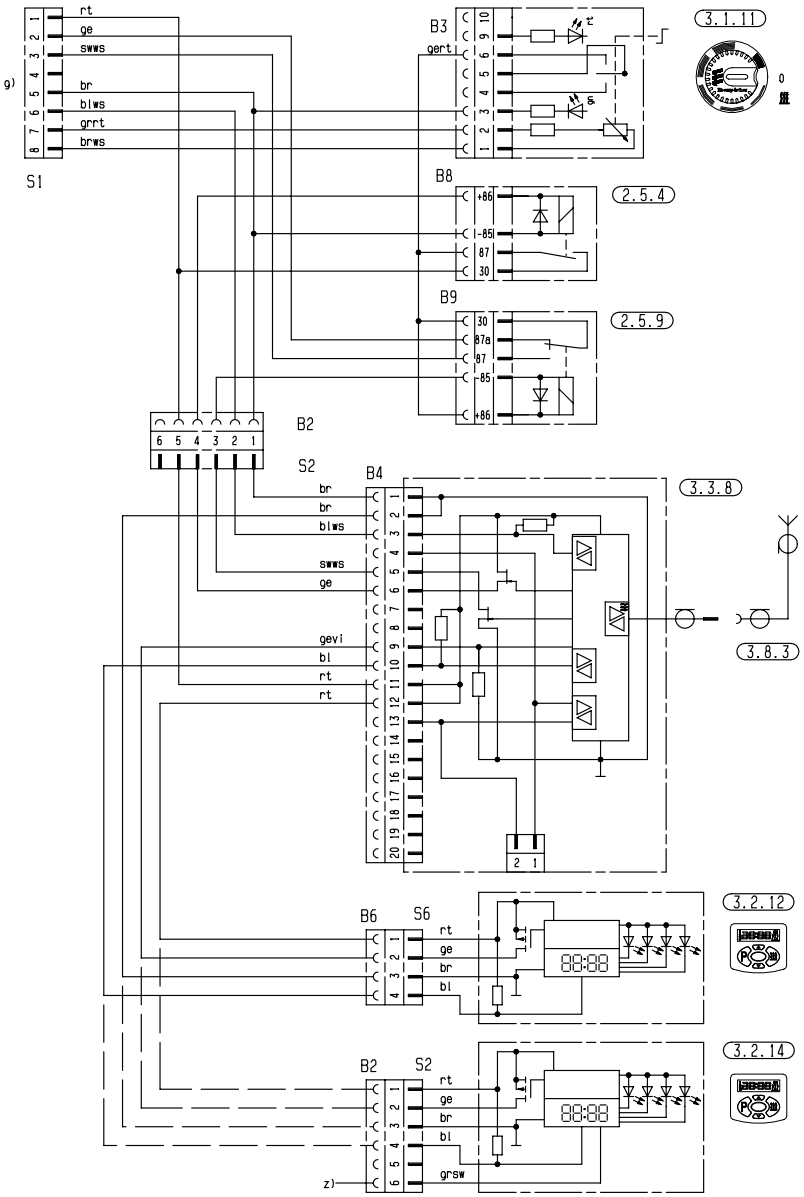
B6
S6

D 5 L C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g)
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B9
2.5.9
B2
S2
B4
3.3.8
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br
blws
swws
ge
gevi
bl
rt
rt
3.8.3
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B2
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ge
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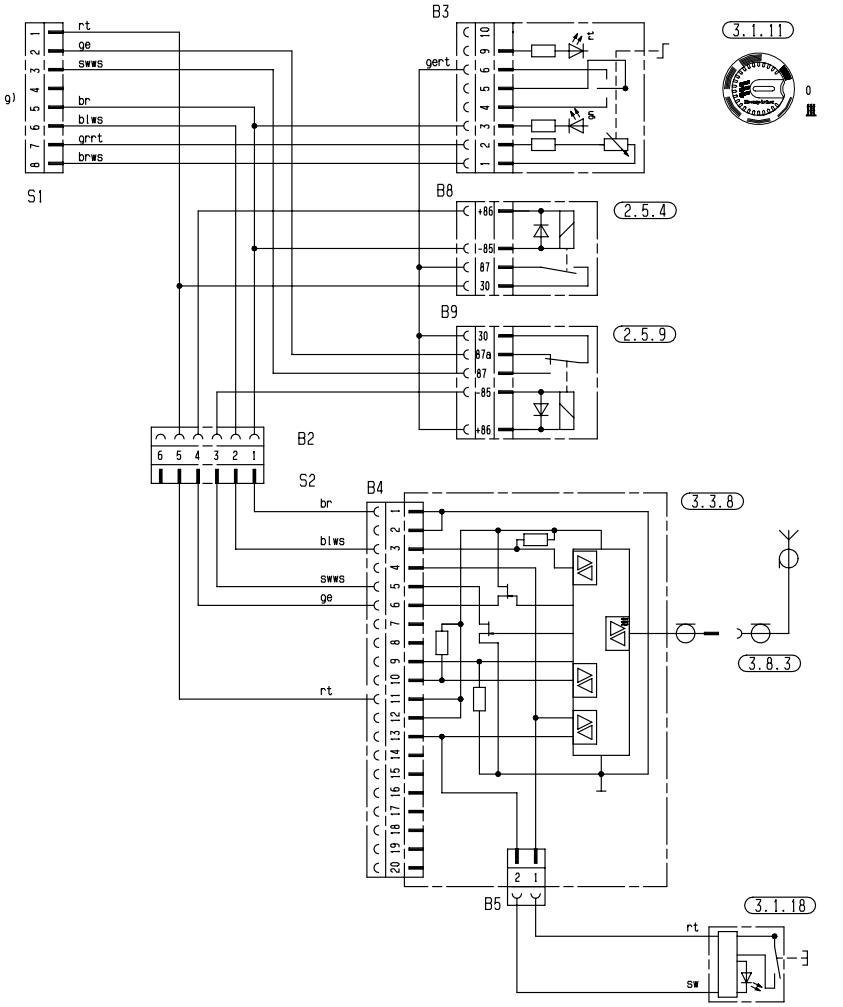
bl
grsw
z)


B3
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S2
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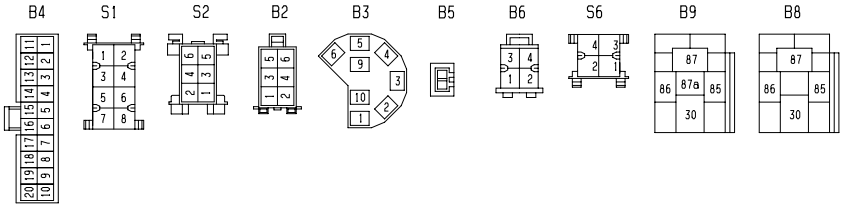
3.1.18
sw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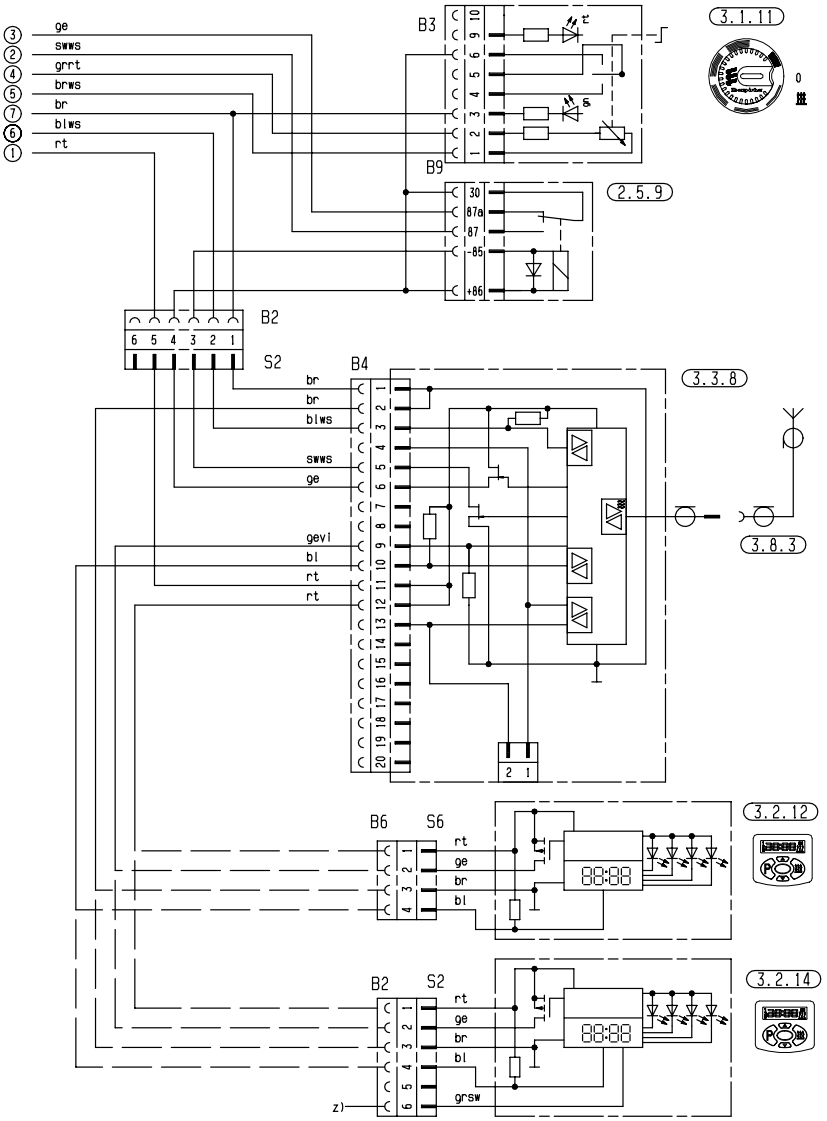
D 8 L C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brws
br
blws
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S2
B4
B6
S6
3.1.11
2.5.9
3.3.8
3.8.3
3.2.12
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30
87a
87
-85
+86
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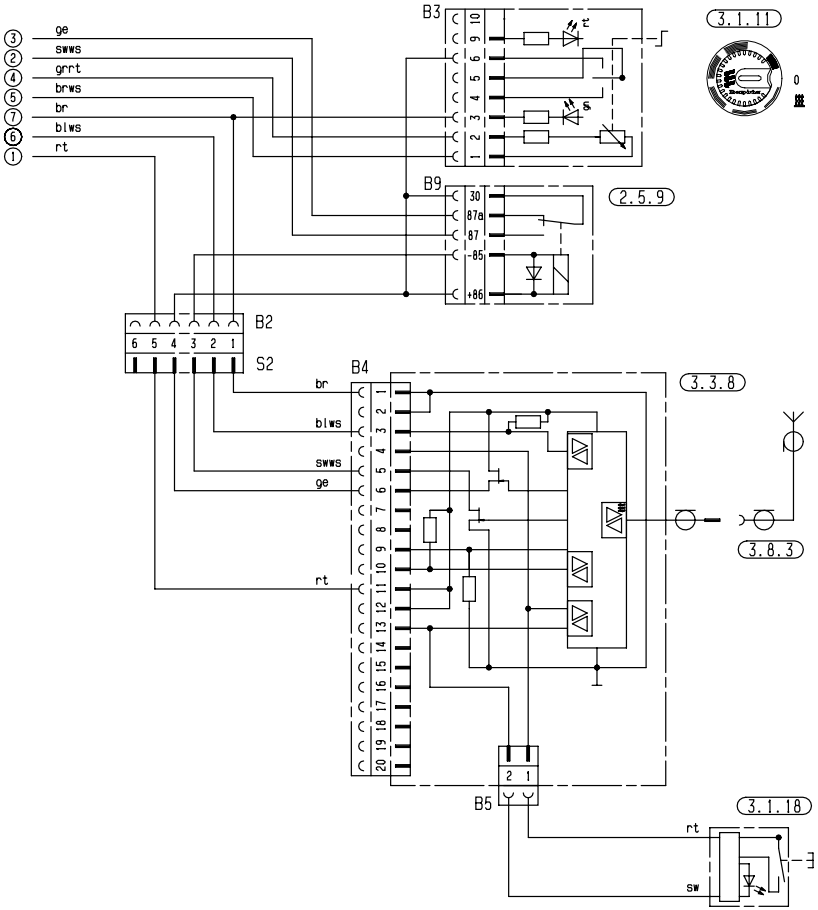
blws
swws
gevi
bl
grsw
z)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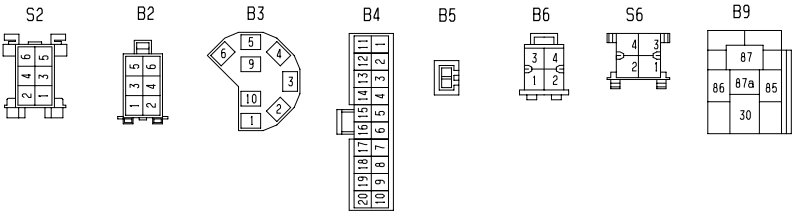
3.1.18
sw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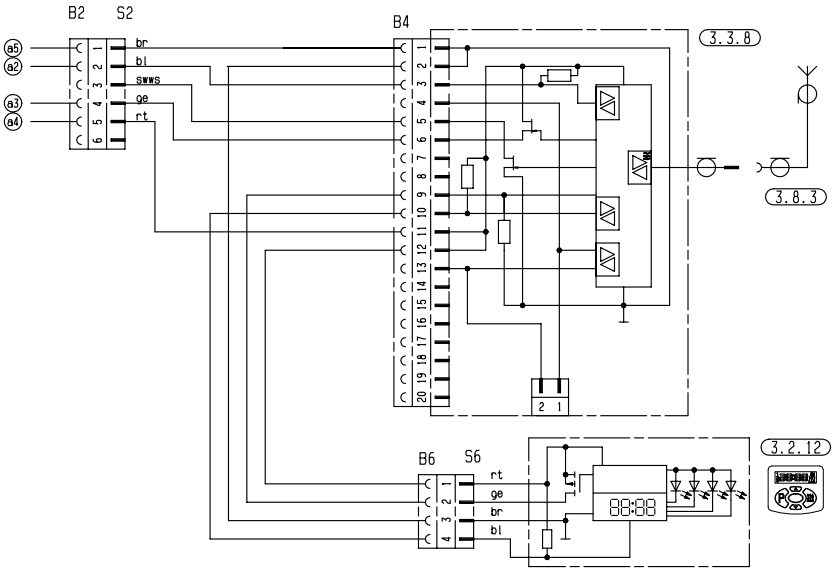
B9

***HYDRONIC* 10**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S2
B4
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3.8.3
B6
S6
3.2.12
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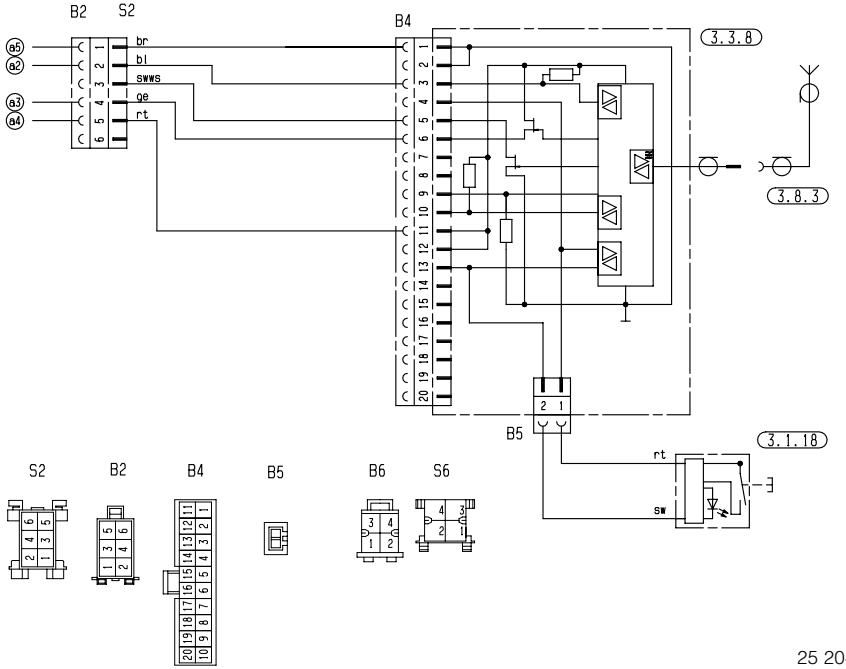
bl
sws
ge
rt


B2
S2
B4
3.3.8
3.8.3
B5
3.1.18
rt
sw
br
bl
sws
ge

S2
B2
B4
B5
B6
S6