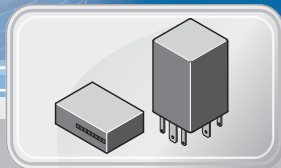


TECHNICAL DESCRIPTION / INSTALLATION INSTRUCTIONS

BLOWER CONTROL BOX



THE TECHNICAL DESCRIPTION, INSTALLATION AND OPERATING INSTRUCTIONS APPLY TO THE BLOWER CONTROL BOX WITH THE FOLLOWING ORDER NO.:

24 0352 00 00 00

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1 INTRODUCTION

CONCEPT OF THIS MANUAL

This manual aims to support the service company installing the control box and to provide the user with all important information about the unit.

The manual has been divided into 7 chapters to make it easier to find the corresponding information quickly.

1 INTRODUCTION

Here you will find important introductory information about installation of the control box and about the structure of the manual.

2 PRODUCT INFORMATION

Here you will find information on technical data and the control box scope of supply.

3 INSTALLATION AND ELECTRICAL CONNECTION

Here you will find important information and instructions referring to installation and the electrical connection of the control box.

4 AREA OF USE / FUNCTIONAL DESCRIPTION

Here you will find information about the operation, function and settings of the control box.

5 ENVIRONMENT

Here you will find information about the certification and disposal of the control box.

SPECIAL TEXT STRUCTURE, PRESENTATION AND PICTURE SYMBOLS

Special text formats and picture symbols are used in these instructions to emphasise different situations and subjects. Please refer to the following examples for their meanings and appropriate action.

SPECIAL TEXT FORMATS AND PRESENTATIONS

- This dot (▪) indicates a list, which is introduced by a heading.
 - If an indented dash (–) follows a “dot”, this list is a sub-section of the black dot.

Underlined blue text denotes a cross-reference, which can be clicked in the PDF format. The part of the document named in the text is then displayed.

PICTURE SYMBOLS



REGULATION!

This information indicates a statutory regulation. Failure to comply with this regulation results in expiry of the type-approval for the heater and exclusion of any guarantee and liability claims against Eberspächer Climate Control Systems GmbH & Co. KG.



DANGER!

This information points out a potential serious or fatal danger. Ignoring this information can result in severe injuries.

- ➔ This arrow indicates the appropriate precaution to take to avert the danger.

1 INTRODUCTION



ATTENTION!

This information points out a dangerous situation for a person and / or the product. Failure to comply with this information can result in personal injuries and / or damage to the unit.

➔ This arrow indicates the appropriate precaution to take to avert the danger.



PLEASE NOTE!

These remarks contain recommendations for use and useful tips for the operation, installation and repair of the heater.

IMPORTANT INFORMATION BEFORE STARTING WORK

PLEASE READ FIRST

Before you start to install the control box, please ensure you read through this manual carefully. The manual contains important information, which you require for the installation.

RANGE OF APPLICATION

The control box is intended for installation in the HVAC system (Heating, Ventilation and Air-Conditioning system) of M and N class vehicles.

INTENDED USE

The control box is solely for controlling the vehicle's own blower in motor vehicles.



ATTENTION!

Use, operation and deployment of the control box outside the range indicated by the manufacturer can cause considerable damage.

➔ Only use the control box for the stipulated purpose and in the approved area of use.



STATUTORY REGULATIONS

The Federal Motor Transport Authority has issued an approval for a component with an official type-approval marking – noted on the nameplate.



PLEASE NOTE!

- Compliance with the statutory regulations, the additional regulations and the safety instructions is prerequisite for guarantee and liability claims.
- Failure to comply with the statutory regulations and safety instructions and incorrect repairs, even if original spare parts are used, make the guarantee null and void and exclude any liability whatsoever of Eberspächer Climate Control Systems GmbH & Co. KG.
- Installation of the control box in special vehicles must comply with the regulations applying to such vehicles.
- Other installation requirements are given in the relevant sections of this manual.

1 INTRODUCTION

HAZARD INFORMATION AND SAFETY INSTRUCTIONS FOR INSTALLATION AND OPERATION



DANGER!

Risk of injuries!

- Disconnect the vehicle battery before starting any kind of work.

- When carrying out electric welding on the vehicle, the positive cable at the battery should be disconnected and connected to ground to protect the electronic components.

- Defective fuses may only be replaced by fuses with the specified fuse rating.



ATTENTION!

SAFETY INSTRUCTIONS FOR INSTALLATION AND OPERATION!

- The control box may only be installed by a JE partner authorised by the manufacturer according to the instructions in this manual and any special installation recommendations.
- Repairs by non-authorised third-parties and / or with non-original spare parts are dangerous and therefore not allowed. They result in expiry of the type-approval of the control box; consequently, when installed in motor vehicles they can cause expiry of the vehicle operating licence.
- The following measures are not allowed:
 - Use of third-party components not approved by Eberspächer Climate Control Systems GmbH & Co. KG.
 - Nonconformities in installation or operation from the statutory regulations, safety instructions or specifications relevant to safe operation as stated in the installation instructions and operating instructions. This applies in particular to the electrical wiring, fuel supply, combustion air system and exhaust system.
- Only original accessories and original spare parts may be used for installation or repairs.

ACCIDENT PREVENTION

General accident prevention regulations and the corresponding workshop and operating safety instructions are to be observed.

2 PRODUCT INFORMATION

TECHNICAL DATA – BLOWER CONTROL BOX

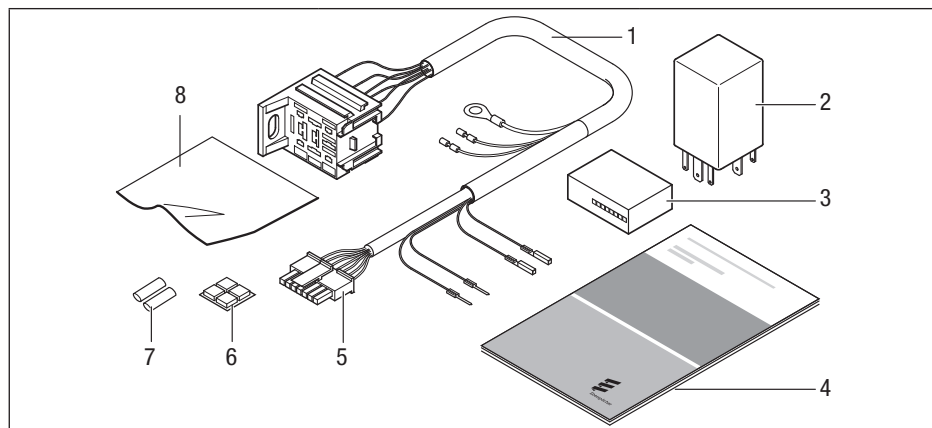
Rated voltage	12 volt / 24 volt
Operating current	≤ 1 mA
Operating voltage	9 volt – 30 volt
Output signal	1 × 2A
Allowable temperature range	– 40 °C to +85 °C
Dimensions (without contacts)	L: 30 mm, W: 30 mm, H: 40 mm

TECHNICAL DATA – CAN GATEWAY

Rated voltage	12 volt
Operating voltage	12 volt
Operating current	≤ 20 mA
Output signal	2 × changeover contacts
Allowable temperature range	– 40 °C to +85 °C
Dimensions	L: 40 mm, W: 25 mm, H: 15 mm

SCOPE OF SUPPLY

Order No. 24 0352 00 00 00



- | | | | | | |
|---|----------------------------------|---|---|---|------------------------|
| 1 | Lead harness with plug-in socket | 4 | Technical Description and installation instructions | 6 | Adhesive pads |
| 2 | Blower control box | 5 | 7-pin connector | 7 | Heat-shrink sleeve (2) |
| 3 | CAN gateway | | | 8 | Cleaning cloth |

3 INSTALLATION AND ELECTRICAL CONNECTION

INSTALLING THE CONTROL BOX

The blower control box and the CAN gateway must be installed inside the vehicle; the preferred location is under the dashboard.

Fix the plug-in socket of the lead harness in place with a self-tapping screw or cable tape and then plug the blower control box into the plug-in base.

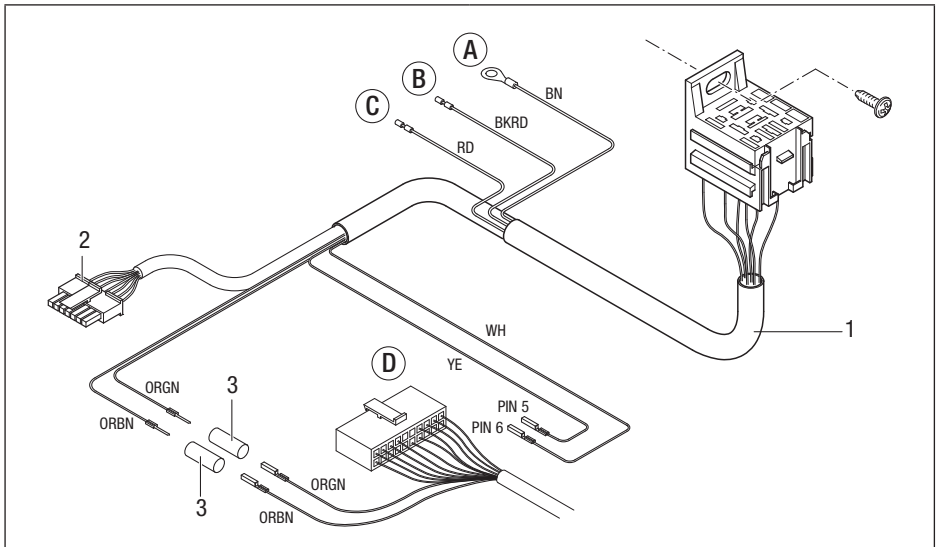
Before fixing the CAN gateway, use the cleaning cloth supplied to clean the mounting surface.

Use the adhesive pads to fix the CAN gateway on or in the immediate vicinity of the air conditioning control.

PLEASE NOTE!

- When installing the plug-in socket ensure you leave enough space to install and dismantle the blower control box.
- Vehicle parts behind the mounting surface must not be damaged when fixing the plug-in socket with a self-tapping screw.

ELECTRICAL CONNECTION



- 1 Blower control box lead harness with plug-in socket
- 2 7-pin connector
- 3 Heat-shrink sleeve

- A Ground connection (BN)
- B Connection to the heater lead harness (BKRD cable)
- C Connection to the heater lead harness (RD cable)
- D Connection to the 20-pin connector, Pin 5 and 6 of the air conditioning control

3 INSTALLATION AND ELECTRICAL CONNECTION

- Connect the “Ground (A)” connection in a suitable place inside the vehicle.
- Use a butt-type connector to connect the “Heater connection (B)” to the BKR D cable of the heater cable loom.
- Use a butt-type connector to connect the “Heater connection (C)” to the RD cable of the heater cable loom.
- At the 20-pin connector (D) of the air conditioning control, unpin the ORGN cable in chamber 5 (Pin 5) and the ORBN cable in chamber 6 (Pin 6).
- Connect the disconnected ORGN and ORBN cables with the cables of the same colour of the “CAN gateway lead harness (2)” and insulate with a heat-shrink sleeve (3).
- Connect the 7-pin connector of the blower control box lead harness to the CAN gateway.
- Connect the YE cable “Blower control box lead harness” in chamber 5 (Pin 5) of the 20-pin connector of the air conditioning control (D) and connect the WH cable in chamber 6 (Pin 6).
- Use cable tape to fix the blower control box lead harness onto the vehicle.

CABLE COLOURS

RD	red	GR	grey	BK	black
BU	blue	YE	yellow	GN	green
WH	white	VT	violet	BN	brown
OR	orange				

SETTING THE CODING SWITCH

The blower control box has a coding switch with settings from 0 to 9 for selecting the vehicle and its air conditioning.

The vehicle-specific setting is described in the corresponding installation suggestion.

At present the blower control box can be used in various vehicle types or models of the brands: VW, Seat and Skoda (MQB platform).

4 AREA OF USE / FUNCTIONAL DESCRIPTION

HOW THE BLOWER CONTROL BOX WORKS

The blower control box controls the vehicle blower and air system dampers for the operation of parking heaters in motor vehicles.

This enables optimum heating of the vehicle interior, independent of the air conditioning control's settings.

FUNCTIONAL DESCRIPTION OF THE BLOWER CONTROL BOX

The blower control box is activated when parking heating begins.

The vehicle blower motor is switched on automatically, the temperature setting is set to "Warm" and the air system dampers are set to "Defrost (Def)".

If, during parking heating, the vehicle is unlocked, or a door or window is opened or closed, the blower control box transfers control of the heating to the vehicle. The air conditioning control and the vehicle blower are switched off.

If the blower control box does not receive any further signals from the vehicle within approx. 10 seconds and heating mode is still active the control box takes on control of the blower once again.

The vehicle blower motor is switched on again, the temperature setting is set to "Warm" and the air system dampers are set to "Defrost (Def)".

If the vehicle is started during parking heating the blower control box transfers control to the air conditioning control, the air conditioning settings switch to the original settings and can be adjusted as usual to the user's personal preferences.

5 ENVIRONMENT

CERTIFICATION

The high quality of the Eberspächer products is the key to our success.

To guarantee this quality, we have organised all work processes in the company along the lines of quality management (QM).

Even so, we still carry out a large number of activities for continual improvement of product quality in order to keep pace with the constantly growing requirements of our customers.

All the steps necessary for quality assurance are stipulated in international standards. This quality is to be considered in a comprehensive sense. It concerns products, processes and customer - supplier relationships.

Officially approved public experts assess the system and the corresponding certification company awards a certificate.

Eberspächer Climate Control Systems GmbH & Co. KG has already qualified for the following standards:

**QUALITY MANAGEMENT IN ACCORDANCE WITH
EN ISO 9001:2008 AND ISO/TS 16949:2009**

**ENVIRONMENTAL MANAGEMENT SYSTEM IN
ACCORDANCE WITH
EN ISO 14001:2004**

DISPOSAL

DISPOSAL OF MATERIALS

Old devices, defective components and packaging material can all be separated and sorted into pure-grade fractions so that all parts can be disposed of in an environmentally friendly way or their materials can be recycled.

Electric motors, control boxes and sensors (e.g. temperature sensors) are deemed to be "electronic scrap".

PACKAGING

Keep the packaging in case components have to be returned.

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