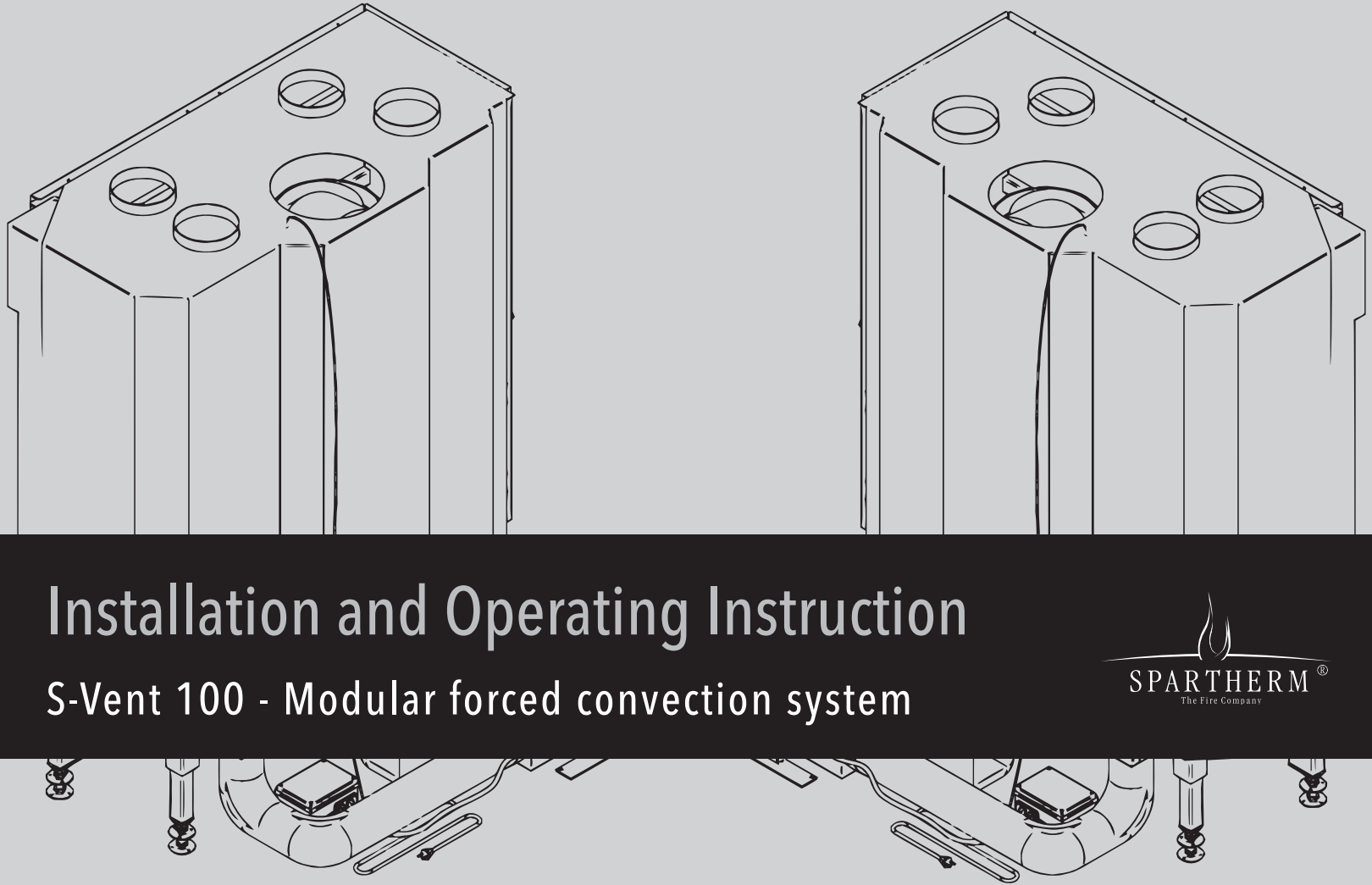


Installation and Operating Instruction

S-Vent 100 - Modular forced convection system

SPARTHERM®
The Fire Company

PREFACE – QUALITY PHILOSOPHY

You have chosen the fireplace insert accessory by SPARTHERM. Thank you very much for your trust in our company.

In a world of excess and mass production, our company stands for the values expressed by our owner, Mr. Gerhard Manfred Rokossa:

„High technical quality combined with contemporary design, and service to the satisfaction of our customers so they will recommend us to others.“

We provide you with excellent products that will reach your customers‘ emotions and speak to feelings such as security and comfort. In order to be successful, we recommend that you read these installation instructions carefully in order to quickly become thoroughly familiar with the product. In addition to information on how to install the product, these instructions also contain important operating notes regarding fireplace insert safety and maintenance and give valuable tips and suggestions. If you have more questions or problems, please contact us directly. We are always grateful for your feedback.

We hope you enjoy installing our fireplace inserts and may your fire keep burning beautifully.

Your SPARTHERM Team

G.M. Rokossa



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1. SCOPE OF SUPPLY

The S-Vent 100 modular forced convection system is supplied in a folding box containing:

- Blower unit with air distributor
- Control unit with remote control
- Temperature sensor with approx. 2 metres connecting lead
- 4 pipe connections with 2 cover plates
- Flexible aluminium connecting tube (1m length)
- Connecting lead with mains plug 230 V
- Control unit - blower unit connecting lead
- Hardware (clamps and screws)
- Installation and operating manual

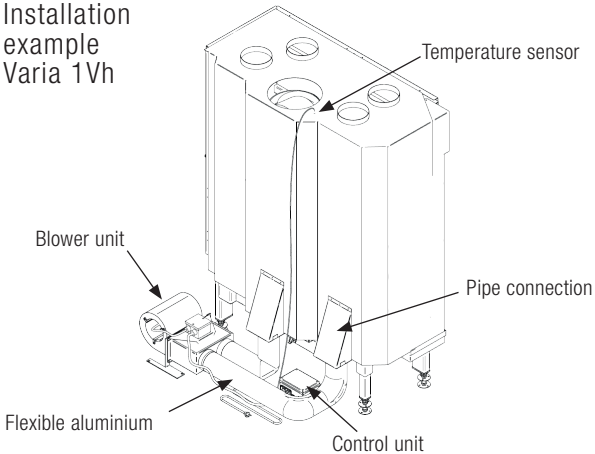
Weight approx. 10 kg including shipping packaging.

2. GENERAL INFORMATION

Before your fireplace is assembled and installed you should meet with the master chimney sweep responsible for such matters in your area. He will advise you on the building regulations and suitability of your chimney and will carry out the acceptance test on your fireplace insert.

The fireplace insert must be installed, connected to the chimney and operated in compliance with national and European standards, the relevant national and local guidelines and regulations and, in particular, the relevant Heating Regulation (FeuVO) of the Federal state (Germany) and the Technical Rules of the Stove and Hot Air Heating System Trade (TROL).

Installation example Varia 1Vh



2.1. TECHNICAL DATA

Control unit:

Model:	FC715 TiEmme
Supply voltage:	230V AC, 50Hz
Permissible connected load (blower):	max. 80 W
Switching stages:	I - III
Power consumption on standby:	approx. 1W
Protection class I:	Earthed conductor (PE)
Type of protection:	IP50
Fuse line side:	Fine-wire fuse F 2A / 250V

Blower:

Model:	DAE133D ebmpabst
Rated voltage:	230 V, 50 Hz
Max. power consumption:	73W
Nominal flow stage III:	320 m^3/h (without resistance)

Temperature sensor:

Model:	Resistance NTC (100kΩ /R25)

Lead lengths:

Mains connection with shockproof plug	approx. 3 metres
Blower connecting lead	approx. 2 metres
Temperature sensor lead	approx. 2 metres

Temperature sensor lead approx. 2 metres:

The flow depends on the resistance of the air system and therefore on the way the flexible aluminium connecting tubes are installed. The more bends in the air intake, the greater the resistance encountered by the blower when forcing the corresponding quantity of air through the system.

That makes it impossible to quote a firm value for the achievable flow in advance.

Measurements at nominal heat output (11 kW)

- Not in heating mode, at room temperature at blower stage III: 240 m^3/h
- In heating mode, without blower assistance: 240 m^3/h
- In heating mode, with blower stage III: 430 m^3/h

The total of the individual operating states is not reached in heating mode with the blower because the greater volume flow also increases the resistance in the convection air duct.

3. DESCRIPTION OF FUNCTION

The S-Vent 100 modular forced convection system boosts the natural convection in fireplace inserts with a convection air housing. This system enables up to 75% more convective heat to be generated and either released into the room or distributed to other rooms. The system can be used on any wood-burning fireplace inserts with a square or chamfered convection air housing. As the convection air housing is left open at the bottom, natural convection still takes place. Failure of the forced convection system, e.g. in the event of a power failure or blower fault, will not cause the fireplace insert to overheat.

4. INSTALLATION INSTRUCTIONS

These installation instructions apply only to the S-Vent 100 modular forced convection system. The instructions in the fireplace insert installation manual must be followed when installing the fireplace insert.

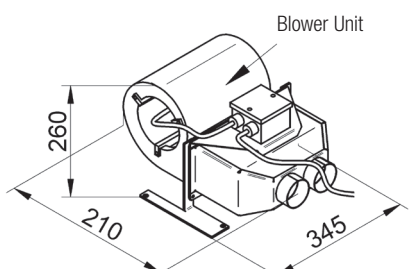
Please note:

- The S-Vent 100 modular forced convection system may only be operated in conjunction with a wood-burning fireplace insert.
- Gas-burning fireplace inserts must not be fitted with the S-Vent 100!
- The maximum ambient temperature for the electronic components (blower, control unit, etc.) is 60°C.
- The fireplace insert must be provided with a separate combustion air supply. This is essential to prevent the S-Vent 100 from creating negative pressure in the room or in the chimney.
- The entire electrical installation of the individual components must be done by an authorised specialist contractor. All work must be carried out in accordance with VDE regulations (e.g., VDE 0105, VDE 0116, VDE 0100, etc.) and the local electricity supplier's technical connection conditions.

- We recommend making the power supply via a switchable socket. The advantage of this is that the power to the system can easily be switched off during the summer season and for maintenance.

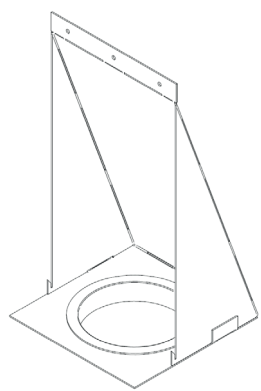
4.1. BLOWER UNIT

The blower unit is normally integrated with the fireplace and it should be installed such that access via an inspection port is possible at any time. The installation location should be selected so that the blower shaft is fastened horizontally with the integral legs on a firm base and secured against displacement. Alternatively, the blower can be housed in a nearby room (basement, etc.) near the fireplace. If the hot convection air is delivered to other rooms apart from the room where the fireplace is, pressure equalisation must be ensured between the room where the fireplace is and the rooms to which hot air is circulated.



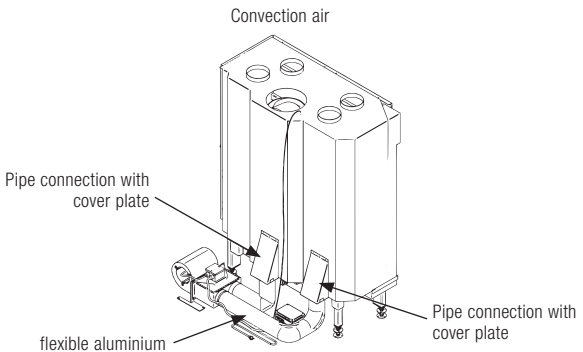
4.2. PIPE CONNECTIONS

The pipe connections should be fastened to the lower part of the convection air housing using the self-tapping screws supplied, with the injection port facing towards the unit. The pipe connections should be mounted such that air can freely enter the convection air housing. Do not install pipe connections underneath weight shafts, as correct functioning cannot be guaranteed. Attach the pipe connections on to the recesses in the convections air housing intended for this purpose.



4.3. FLEXIBLE ALUMINIUM TUBES

The flexible aluminium tube supplied should be divided into the necessary number of sections according to on-site conditions.



The pipe connections should be connected together with flexible aluminium tubes to form two separate trains. Starting from the blower unit, connect up two pipe connections using a separate flexible aluminium tube in each case.

4.4. CONTROL UNIT

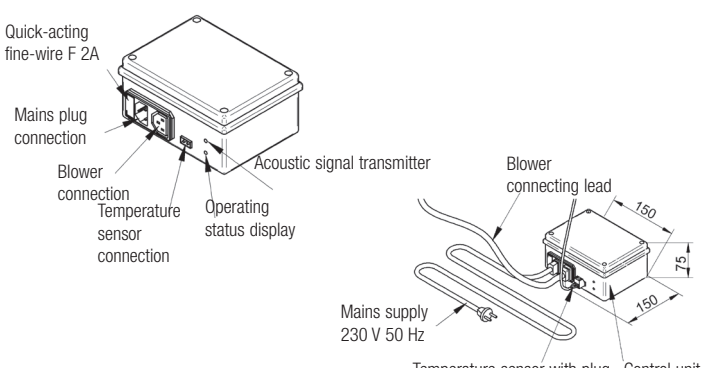
All the electronics are housed in the control unit housing. The control unit should be integrated into the fireplace covering such that accessibility is ensured. The maximum ambient temperature is 60°C. We recommend designing the covering so that the control unit is positioned near an air grille. That way, the operating status display can be checked at any time and accessibility is ensured. All the necessary components (mains plug, connecting lead to the blower, temperature sensor) are connected to this control unit.

4.5. TEMPERATURE SENSOR

The temperature sensor supplied should be integrated into the convection air housing in a suitable position. It should be borne in mind that the blower will be automatically switched on by the controller when the temperature reaches approx. 105°C, irrespective of the mode set. This is to prevent overheating of the convection air housing.

The sensor length is approx. 2 metres. We recommend installing it from above in the convection air housing cover, near the connecting piece in order to ensure the accessibility of the screw fittings for installation purposes.

The connecting lead to the temperature sensor must be routed outside the convection air housing. The lead can be lengthened to a maximum of 4 metres if necessary. The polarity of the lead is not relevant.



The following procedure is recommended:

- Drill a hole D=10 mm in the convection air housing.
- Insert fastening bolts
- Insert temperature sensor
- Screw the plug connection supplied on to the temperature sensor cable
- Connect the plug connection to the control unit.

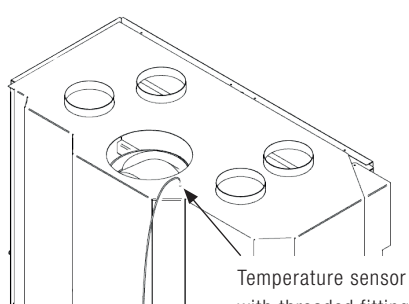
4.6. FIREPLACE COVER DESIGN

The fireplace covering should be designed such that approx. 600 m³/h circulating air can flow to the blower unit. The accessibility of the built-in components must be ensured at all times.

Important: All the convection air housing connecting pieces on the convection air housing must be fitted with flexible tubes D = 15 cm. This allows the convection air to be supplied to the room where the fireplace is or to other rooms via the flexible aluminium air ducts.

4.7. CUSTOMER INSTRUCTION

- The installer must instruct the operator in the functioning and operation of the S-Vent 100 forced convection system.



5. OPERATING INSTRUCTIONS

These operating instructions apply only to the S-Vent 100 modular forced convection system. The instructions in the fireplace insert operating manual must be followed when operating the fireplace insert.

5.1. DESCRIPTION OF FUNCTION

The system is operated via a separate radio remote control. Readiness for operation is indicated by an operating status display on the control unit, which shows a red light.
Note: The modes set via the radio remote control and the set speeds and temperatures are preserved even if the mains power is switched off.

5.2. MODES

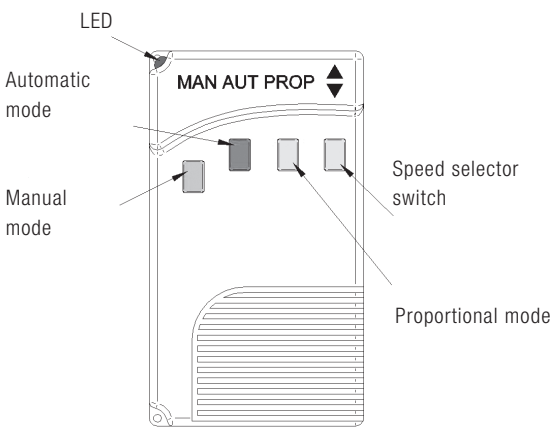
All the functions of the S-Vent 100 forced convection system are controlled via the radio remote control supplied with the system. There is no need for operator intervention via the control unit while the system is operating. The LED indicates transmission of the command.

The following modes can be selected: ‘manual’, ‘automatic’ or ‘proportional’.

5.2.1. MANUAL MODE

Description: In this mode the operator selects the blower speed via the remote control. The integral temperature sensor is not active. The desired blower speed can be selected via the ▲▼button.

Pressing the MAN (blue) button on the remote control enables Manual mode. This is acknowledged by the control unit with a ‘long audible signal’.



Press the ▲▼ button to cycle through the blower speeds.

Button ▲▼	Audible Signal	Blower
first press	one short	Stage 1
second press	two short	Stage 2
third press	three short	Stage 3
fourth press	two short	Stage 2
fifth press	one short	Stage 1
sixth press	one **long**	off

The next time the▲▼button is pressed, the blower will start up again on Stage 1.

Note: Even in manual mode, the blower will switch on automatically when the sensor temperature reaches approx. 105°C (switch-off temperature approx. 100°C). This function cannot be disabled. Its purpose is to prevent overheating of the convection air housing.

5.2.2. AUTOMATIC MODE

Description: In this mode, when the switch-on temperature is reached the blower runs automatically at the preset speed. The speed can be adjusted via the ▲▼ button (as in Manual mode). The blower switches off again when the temperature falls below the switch-on temperature.

Pressing the **AUT (orange)** button on the remote control enables Automatic mode. This is acknowledged by the control unit with a ‘long audible signal’. The switch-on temperature is factory-set to approx. 45°C. See Section „6.2. Setting the Switch-on Temperature“.

5.2.3. PROPORTIONAL MODE

Description: In this mode too, when the preset sensor temperature is reached the blower runs automatically. The speed is selected automatically according to the measured temperature. The blower switches off again when the temperature falls below the switch-on temperature.

Pressing the PROP (yellow) button on the remote control enables Proportional mode. This is acknowledged by the control unit with a 'long audible signal'.

6. MAINTENANCE

The S-Vent 100 modular forced convection system is maintenance-free by design.

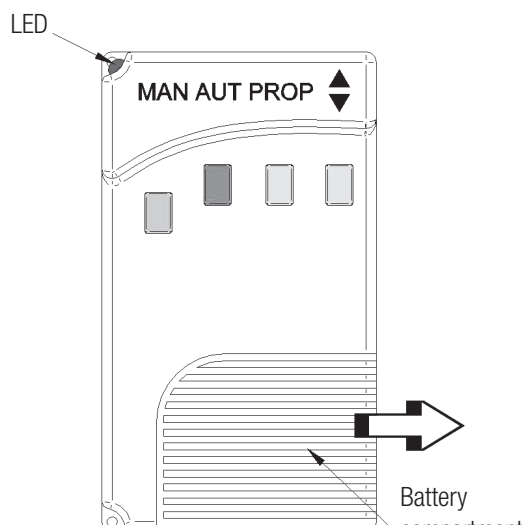
6.1. BATTERY REPLACEMENT

The battery should be replaced if the red LED on the remote control fails to light up when the button is pressed or if no receiver reactions occur. To replace the battery, slide the battery compartment cover sideways to access the battery underneath. The battery must always be replaced by an equivalent type A23 12V battery.

6.2. SETTING THE SWITCH-ON TEMPERATURE

The switch-on temperature (factory-set to approx. 45°C) for the **Automatic** and **Proportional** modes can be altered as follows:

1. Turn off the power to the control unit (remove mains plug).
2. Press any button on the manual transmitter, hold it down and turn the power to the control unit back on.
3. Control unit responds with several short beeps and one long beep. The switch-on temperature can now be set in 5°C increments within a range of approx. 40°C to approx. 80°C.
4. Press the PROP button to set a lower value. Press the ▲▼button to set a higher value. The set temperature value is indicated audibly by a corresponding number of beeps (1 beep for 40°C; 9 beeps for 80°C).
5. Press the **MAN** button to save the set switch-on temperature.



6.3. SETTING THE RADIO FREQUENCY

It may be advisable to alter the transmission frequency via DIP switches in certain circumstances (e.g., if several remote controls all transmitting in the 434 MHz range are in use). Proceed as follows to set the frequency:

1. Turn off the power to the control unit for at least 30 seconds (remove mains plug).
2. Remove remote control battery compartment cover.
3. Use a pointed implement to set the DIP switches as required.
4. Close the battery compartment cover.
5. Turn the power to the control unit back on.
6. Press any button on the remote control to transmit the new frequency to the control unit. Hold down the button for about 5 seconds when doing this.
7. The control unit acknowledges the change with a short audible signal.

7. CLEANING

Clean the convection inlet slots in the fireplace covering, the blower intake aperture and the hot-air ducts at regular intervals before and during the heating season. Deposits (dust, etc.) may make the room dirty.

8. USER GUIDE

Problem	Solution
The operating status display on the control unit does not light up.	• Switch on at main switch or insert plug into socket. **Or call in a specialist:** • Check the fine-wire fuse and replace if necessary (F2A / 250V).
Control unit does **not** respond to commands from the remote control.	• Replace remote control battery (LED on remote control must light up when button is pressed). • Switch on at main switch or insert plug into socket. The red operating status display on the control unit **must** light up). • Set the correct radio frequency.
The blower does **not** start in Automatic mode.	• Switch on at main switch or insert plug into socket. The red LED must light up. • Check switch-on temperature and reduce it if necessary. **Or call in a specialist:** • Check temperature sensor connections. • Check temperature sensor and replace if necessary.
Blower does **not** start up, or it shuts down after a time. But the operating status display is lit.	• Blower safety shutdown because of the temperature. • Remove deposits from air grille, apertures and blower.
Blower starts up automatically in **Manual** mod	• Convection air housing temperature is higher than 105°C (see Section „5.2.1. Manual Mode“)

For other problems please contact your stove installer. Only manufacturer's original spare parts should be used.

9. GENERAL WARRANTY TERMS AND CONDITIONS

9.1. SCOPE OF APPLICATION

These General Warranty Terms and Conditions apply to the relationship between the manufacturer, Spartherm Feuerungstechnik GmbH, and the dealer/intermediary. They are not the same as the contract and warranty terms and conditions which the dealer/intermediary passes on or may pass on to its customers in a particular case.

9.2. GENERAL INFORMATION

This quality manufactured product is state of the art. The materials used were meticulously selected and are constantly checked, as is our production process. Setting up or installing this product requires specialized knowledge. Our products may therefore only be installed and commissioned by specialized firms and in compliance with statutory regulations as amended.

9.3. WARRANTY PERIOD

The General Warranty Terms and Conditions apply only within the Federal Republic of Germany, and European Union The warranty period and scope of the warranty in accordance with these terms and conditions shall apply apart from the statutory guarantee, which remains unaffected. Spartherm Feuerungstechnik GmbH gives a 5-year warranty for

- Basic body, fireplace inserts
- Basic body, stoves
- Basic body, fireplace cassettes
- Basic body, fireplace doors

Spartherm Feuerungstechnik GmbH gives a 24-month warranty on elevating mechanisms, operating devices such as handles, adjustment levers, shock absorbers, electronic and electrical components such as exhausters, governors, original spare parts, all purchased parts and safety devices. Spartherm Feuerungstechnik GmbH gives a 6-month warranty on wearing parts around the fire, such as fireclay bricks, vermiculite, fire grates, seals and glass ceramics.

9.4. REQUIREMENT OF EFFECTIVENESS FOR THE WARRANTY

The warranty period starts on the date of delivery to the dealer/intermediary. This must be verified from a document such as an invoice with the dealer/intermediary's confirmation of delivery. The warranty certificate relating to the product must be produced by the claimant when making a warranty claim. If such proof is not produced Spartherm Feuerungstechnik GmbH shall not be obliged to honour the warranty.

9.5. WARRANTY EXCLUSIONS

The warranty does not cover:

- Wear and tear to the product
- Fireclay bricks vermiculite: These are natural products subjected to expansion and contraction during the heating process. This may create cracks. For as long as the linings remain in position in the fire chamber and do not break up, they remain fully functional.
- the surfaces: Discoloration of the enammel or galvanized surfaces caused by thermal stress or overload.
- the elevating mechanism: If the installation instructions are not correctly followed, resulting in overheating of the pulleys and bearings.
- the seals: Reduced sealing due to thermal stress and hardening.

- the glass ceramics: Soiling caused by soot or burnt-in residues of burnt materials as well as visibly changed colour or other aspects due to thermal stress.
- Improper transport and/or incorrect storage
- Improper handling of fragile components such as glass and ceramics
- Improper handling and/or use
- Lack of maintenance
- Incorrect installation or connection of the unit
- Non-observance of the installation and operating instructions
- Technical modifications to the unit by third parties

9.6. DEFECT REMEDIATION/REPAIRS

Notwithstanding the statutory guarantee, which shall take precedence over our warranty during the statutory guarantee periods, within the scope of our warranty we will remedy free of charge all defects demonstrably due to a material fault or manufacturing error, provided that the other terms and conditions of this warranty undertaking are observed. In accordance with this warranty undertaking Spartherm Feuerungstechnik GmbH reserves the right either to rectify the defect or to replace the unit free of charge. Remediation of defects shall take precedence. This warranty undertaking expressly does not cover further compensation exceeding the statutory guarantee.

9.7. EXTENSION OF WARRANTY

In the case of performance in accordance with the terms of the warranty, whether remediation of defects or replacement of a unit, the warranty period shall be extended in respect of the replacement unit/components.

9.8. SPARE PARTS

No spare parts other than those produced or recommended by the manufacturer shall be used.

9.9. LIABILITY

Damage and compensation claims not based on a defective unit supplied by Spartherm Feuerungstechnik GmbH are excluded and are not covered by the warranty undertaking. This does not apply to statutory warranty claims arising in a particular case.

9.10. NOTE

Your specialist dealer/contractor will gladly advise and assist you in matters not covered by our warranty terms and conditions and undertakings. We particularly advise you to have your fireplace insert/stove serviced regularly by a stove fitter.

Technical data subject to change errors and omissions excepted.

10. LABEL

ebmpapst

ebm-papst Mulfingen GmbH & Co. KG · Postfach 1161 · D-74671 Mulfingen

Konformitätserklärung zur Niederspannungsrichtlinie 2006/95/EG
Declaration Of Conformity About Low Voltage Directive 2006/95/EG

Identifikationsnr. / Identification no.: **462** Seite / Page 1

Hersteller : ebm-papst Mulfingen GmbH & Co. KG, Bachmühle 2, 74673 Mulfingen
Manufacturer :

Teilenummer: **D4E 133-DH01-J4**
Part Number:

Erklärung / Declaration:

Hiermit erklären wir, daß die oben genannte Einbaukomponente bei bestimmungsgemäßer Verwendung auf Grund ihrer Bauart, sowie in der von uns in Verkehr gebrachten Ausführung der EG-Richtlinie

2006/95/EG, einschließlich deren Änderungen entspricht.

Herewith we declare that built-in components listed above, on condition of application as defined by ebm-papst Mulfingen GmbH & Co. KG, due to its construction and as offered to the customer, comply with requirements of european directive

2006/95/EG including its amendments.

Auflistung der Normen, mit denen Konformität bescheinigt wird:
List of standards conformity is declared to:

EN 60335-1:2002+A11:2004+A1:2004+A12:2006 **Sicherheit elektr. Geräte für den Hausgebrauch und ähnliche Zwecke / Household and similar electrical appliances – Safety -**

IP-Schutz: **Einbaulage: Welle horizontal !** (Fitting position: shaft horizontal !)
Schutzart: IP 44 (protection category: IP 44)

Ausstellungsdatum / Date of issue: **Mulfingen, den 27.März 2008**

i. V.
Dr. Jürgen Schöne
Hauptabteilungsleiter Strömungstechnik

Form 1161

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · 74673 Mulfingen · Phone: +49 (0) 7938/81-0 · Fax: +49 (0) 7938/81-110 · www.ebmpapst.com · info1@de.ebmpapst.com
Kommanditgesellschaft · Sitz Mulfingen · Amtsgericht Stuttgart · HRA 690344 · Vorsitzender des Beirats: Gerhard Sturm
Komplementär: Elektrobau Mulfingen GmbH · Sitz Mulfingen · Amtsgericht Stuttgart · HRB 590142
Geschäftsleitung: Hans-Jochen Bässler (Vorsitzender), Thomas Borst, Dr. Bruno Lindl, Thomas Philippiak, Thomas Wagner · USt-id Nr.: DE 145270934
Bankverbindung: Volksbank Hohenlohe · Konto 1 566026 · BLZ 620 918 00 · S.W.I.F.T.-Code: GENO DE S1VHL · IBAN: DE91 6209 1800 0001 8880 05
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TiEmme elettronica s.a.s.
Register office: Via tuderte, 30
Head office: Zona Industriale
06055 Marsciano (PG) Italy
tel/fax +39 075.8743.905
www.tiemmeelettronica.it

TiEmme elettronica

Electronic Applications
Temperature Controller

DECLARATION OF CONFORMITY CE

CE

FIRM: **TiEmme elettronica** s.a.s. di Scortecci Giancarlo & C.

Register Office: Via tuderte, 30

Head Office: Zona Industriale

06055 Marsciano (PG) Italy

Declares that the product:

TEMPERATURE CONTROLLER FC715

Series:	FC
Model:	FC715 complete of: • MAIN BOARD IN BOX • RADIO CONTROL • AIR PROBE • LINE POWER CABLE • FAN CONNECTION CABLE
Power Supply:	230 Vac 50 Hz
Protection Fuse	F 2A
Thermal Protection on the Transformer:	125°C with automatic reset
Functioning Temperature:	0 ÷ 40°C
Load Maximun Power:	200 W
Load Maximum Current:	0,85 A

- Is in conformity with the community lines CEE 89/336 and CEE 73/23 also with the last modifications, and with the national relative legislation

Declares also that
- The following harmonised rules has been applied:

  - ☐ CEI EN 60730-1
  - ☐ CEI EN 60730-2-1
  - ☐ CEI EN 60730-2-5
  - ☐ ETZI EN 301 489-1

Marsciano 01-01-2008

TiEmme elettronica s.a.s.

FC715_dce_UK Rev. 1

NOTES

SPARTHERM

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Торговая марка № 1 для Вашего дома

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IT Il vostro rivenditore specializzato | E Sus comercios especializados
NL Uw vakhandelaar | PL Państwa sprzedawca | РУС Ваш дилер

SPARTHERM ®
The Fire Company

Spartherm Feuerungstechnik GmbH · Maschweg 38 · 49324 Melle / Germany
Phone +49 5422 9441-0 · Fax +49 5422 9441-14 · www.spartherm.com

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