

# Certificate of Compliance

Certificate Number **080607 - E308806**  
Report Reference **E308806, May 31, 2007**  
Issue Date **2007 June 8**

Page 1 of 2



*Issued to:* **VULCANIC TRIATHERM GMBH**  
FLURSTR 9  
96515 SONNEBERG GERMANY

*This is to certify that representative samples of*

**Sheathed Heating Elements**



Model F, f/b DP, GP, CA, DA, DL, D0, CD, DD or DN f/b electrical rating in watts and volts.

*Have been investigated by Underwriters Laboratories Inc.® (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated on this Certificate..*

*Standard(s) for Safety:* **UL 1030 - Sheathed Heating Elements**  
**CSA C22.2 No. 72-M1984 - Heater Elements**

*Additional Information:* **See Addendum for Ratings**

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:  may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada:  and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

**Look for the UL Recognized Component Mark on the product**

Issued by: *Thomas Suessner*  
**Thomas Suessner, Engineer Sr Project**

Reviewed by: *Guido Bonardi*  
**Guido Bonardi, Mgr CAS I**

UL International Germany GmbH

UL International Germany GmbH

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.  
For questions in Germany, you may call +49 0 6102 369 0.

# Certificate of Compliance

Certificate Number **080607 - E308806**  
Report Reference **E308806, May 31, 2007**  
Issue Date **2007 June 8**

Page 2 of 2



This is to verify that representative samples of the product as specified on this certificate were tested according to the current UR, cUR requirements.

#### PHYSICAL CHARACTERISTICS AND ELECTRICAL RATINGS:

Cat. Number	FDP, FGP	FCA, FDA, FDL, FDO	FCD, FDD, FDN
Minimum Sheath Diameter (mm)	10.2	8.5	6.5
Minimum bending radius (mm) relation to tube center	15	14	13
Maximum W/cm <sup>2</sup>	6.8	6.1	7.0
Maximum Sheath Temperature °C	927	927	927
Operating Medium	Forced air	Forced air	Forced air
Maximum V	480	277	277
Wall thickness mm	0.6	0.5	0.5
Marking	A	A	A

Issued by: *Thomas Suessner*  
**Thomas Suessner, Engineer Sr Project**

UL International Germany GmbH

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL/UL International Germany GmbH

Reviewed by: *Guido Bonardi*  
**Guido Bonardi, Mgr CAS I**

UL International Germany GmbH