## 1. Description

#### 1.1 What is BI-Thermic

BI-Thermic is the brand name for heatable glass from BGT Bischoff Glastechnik. This glass is a tempered glass, which is used in the automotive area, or as laminated safety glass, and which can simultaneously unite other multifunctional properties such as walk-on or attack-prevention properties. The laminated safety glass consists of BI-Tensit tempered glass or BI-Hestral semitempered glass. In the civil engineering area this product can be further processed into heatable insulating glass.

#### 1.2 Version

#### BI-Thermic with conductor loop

On the surface of the glass a conductor loop with suitable geometry is attached. In this it is possible to meet the requirements of the customer and hence to provide the conductor loop in the corresponding thickness and with the appropriate connection. When a voltage is applied the conductor heats up and with it the whole glass pane.

## 1.3 Connected voltage

Both a.c. as well as d.c. voltages are suitable as the connected voltage. The contact voltage of 60V for d. c. and 25V for a. c. voltages must not be exceeded. The standard supply is a 12V or 24V d. c. voltage. Please enquire in the event of alternative voltages.

#### 1.4 Electrical connection

- with cable
- with spade terminals

#### 1.5 Function

BI-Thermic is a glass, whose surface can be heated and which thus prevents the formation of condensation. BI-Thermic should only be switched on as necessary for which we recommend a thermally-controlled regulating system.

### 1.6 Product liability

We wish to point out as a precaution that according to the application and the method of installation of heated glass, temperature radiation may occur.

#### 2. Technical data

# 2.1 Types of product

BI-Thermic can be installed as tempered glass. It is also possible to manufacture a laminated glass combination (walk-on glass, attack-resistant glazing), as well as an insulating glass combination (increased heat, noise and solar insulation.

#### 2.2 Dimensions

Min. pane size: 300 x 400 mm Max. pane size: 1400 x 1400 mm (Larger dimensions upon request)

# 3. Applications

# 3.1 Tempered glass with conductor loop

- Cars
- HGVs
- Buses
- Snow fighting vehicles
- Military vehicles
- Rail vehicles
- Ships
- Cranes
- Large capacity excavators
- Fork lift trucks
- Thermal containers for food etc.

# 3.2 Laminated safety glass or insulating glass with conductor loop

- Lighthouses
- Signal-boxes
- Airports
- Large kitchens
- Aquaria
- Shop windows
- Greenhouses
- Conservatories
- Roof glazing

# 3.3 Both versions according to use

- Cold-storage chambersRefrigerated display cases
- Drilling platforms
- Protective glass for optical monitoring equipment

The use should always be checked out for each individual case.