











### **DESCRIPTION**

TRIASMOKE DHA is an Automatic Smoke Curtain that in the case of fire, limits and controls the movement of smoke, with classification DH180.

The curtain is composed by: fiberglass fabric with polyurethane coating on both sides seamed with reinforced steel wire and fixed to a steel roller of 78mm of diameter; galvanized steel elements as headbox, side guides and bottom bar. All the system is driven by a 24Vdc tubular motor and controlled by an electronic board, TRIA's CRM (Control and Regulation for Motor) with special gravity fail safe system.

The control panel for automatic curtains (CBM), with nominal input voltage of 115Vac or 220Vac and output voltage of 24Vdc.

Uninterruptible Power Supply (UPS System) with autonomy up to 6 hours exists in all control panels.

Tested and approved according to the European Standard UNE EN 12101-1 and with CE Marking.





# **OPERATION**

The system can be activated by a SHEV, fire alarm contact, internal fire and smoke detection devices, or manual emergency buttons. In the event of a fire, the TRIA's Control Panel (CBM), receives the signal alarm, and the automatic curtain deploys automatically, with controlled and safe constant speed of descent even following total power loss on all curtains. If there is a false alarm the curtains return to stand-by position automatically after reset of alarm from main Fire Management Systems. In case of main power loss, the curtain will remain fully retracted up to 6 hours thanks to TRIA's battery back-up system.

### **FABRIC**

The fiberglass fabric resists up to 1100 °C. The polyure than e coating on both sides guarantees mechanical stability when handling the fabric not only in the sewing process but also during the installation. All seams are done with reinforced stainless steel wires with a coating of Kevlar.

#### **HEADBOX**

Galvanized Steel head-box 1,2mm thickness with different possibilities to adapt to different architectural spaces, and maintenance requirements. Dimensions of the head-box varies depending on width and height of the curtain.

### **SIDE GUIDES**

Galvanized Steel from 1,5 to 3mm thickness and different dimensions depending on width and height of the curtain.

# **ROLLER**

Galvanized Steel of 1,5mm thickness and 78mm diameter. Special slide system for fixing the fabric.

### **BOTTOM BAR**

Aluminum profile RAL 9003 white painted of 1,8mm thickness.

### **ELECTRIC MOTOR**

TRIA tubular motor 24Vdcc Maximum power: 24 W/18,5Nm

Maximum current: 3 A

Average linear speed: 0.10 m/s to 0.15 m/s

# CRM MOTOR REGULATION BOX

Polyester box IP56 with an electronic board inside to control the movement of the motor.

Dimensions (W x H x D): 120mm x 160mm x 75mm

# CBM CONTROL PANEL

Receives the signal alarm from Fire Management System and controls the movement of curtains. Visual and acoustic alert system.

**Dimensions (W x H x D):** from 300 x 230 x 140 mm to 400 x 400 x 210 mm

Input: 115 or 220 Vac 50Hz

Output: 24Vcc

Battery: 2 x 12Vcc 7,5 Ah rechargeable (up to 6 hours autonomy), 2 x 12Vcc 1.3 Ah

rechargeable (up to 1 hour autonomy) **Maximum capacity:** up to 12 motors.

# OPTIONAL EXTRAS

**RAL coating:** head-box, side guides, bottom bar and false ceiling extra accessories

Stainless steel elements: head-box, side guides, bottom bar, screws, rivets. Headbox: customized set-up for specific architectural or special operational False ceiling accessories: aluminum profile painted RAL 9003 to hide headbox over false ceiling..

CRM: customized board for high speed deployment.

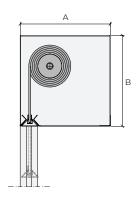
**CBM control panel:** special designs up to 48 motors in one control panel, additional information output, micro switches, communication with other devices, special battery backup, possibility of delaying curtain deployment.

**Escape button:** pushing this button the curtain goes up and the user can escape through the opening, the curtain deploys 30s later automatically.

Emergency button: pushing this button the curtain deploys immediately.

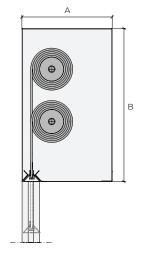
Note: other requirements and customized solutions on demand.

## **HEADBOX**



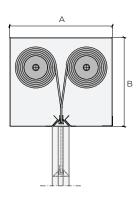
SINGLE ROLLER

A: 180-260mm B: 180-260mm



**MULTI ROLLER VERTICAL** 

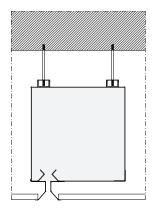
A: 190-270mm B: 300-500mm



MULTI ROLLER HORIZONTAL

A: 250-400mm B: 170-260mm

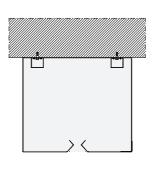
## **HEADBOX FIXING**



HANGING/FALSE CEILING

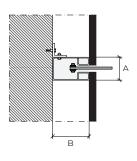


WALL



**TOP CEILING** 

# **SIDE GUIDES FIXING**



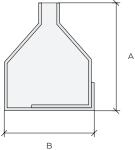
SIDE WALL

SCREW SIDE GUIDES

TUBE SIDE GUIDES



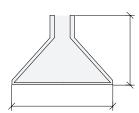
## **BOTTOM BAR**

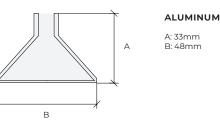


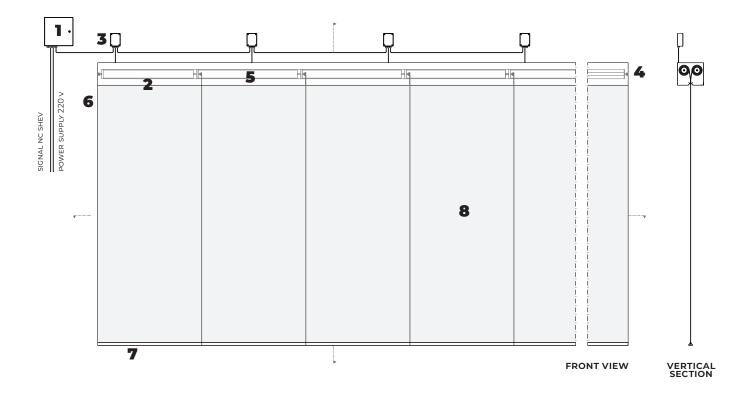
GALVANIZED

STEEL

A: 55mm B: 47mm







HORIZONTAL SECTION

- control panel CBM 1.
- TRIA tubular motor 24vdc
- CRM electronic control board
- galvanized steel head-box
- galvanized steel roller 5.
- galvanized steel side guides
- 7. galvanized steel or aluminum bottom bar
- smoke and fire resistant fabric

