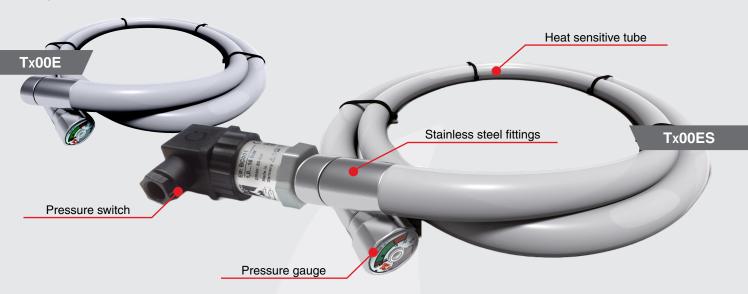
# Automatic Fire Suppression Systems



Smarter Solutions with Cutting-Edge Technology

### **BLAZECUT TECHNOLOGY**

The BlazeCut T Series system consists of a heat-sensitive tube made of specialised plastic and closed with stainless steel fittings on each end. The tube serves as both a fire detection network and a storage receptacle for the extinguishing agent, so no additional storage device, such as a cylinder, is needed.



#### SYSTEM OPERATION

The BlazeCut T Series system is designed to protect small enclosed or semi-enclosed spaces. The BlazeCut T Series system operates automatically without any external power source\*.

In case of fire, the tube ruptures, creating a nozzle closest to the fire source. The tube with a clean agent inside then releases the agent through that nozzle directly onto the fire.

\*Tx00E does not require external power source

Tx00ES and Tx00ES-E requires power for pressure switch operation







1. System Installed

2. Fire Detection



3. Extinguishing





#### **OPTIONAL COMPONENTS**

The T Series systems can be fitted with a pressure switch. This allows for the installation of additional components into the system. The pressure switch sends a signal to the BlazeCut alarm panel and/or to a wide range of audio-visual signalling devices for indoor and outdoor applications. A wide range of options is available to best fit the needs of each application.



The integrated pressure switch monitors the pressure and sends a signal if the pressure drops under a preset value or if the system discharges in the event of a fire. The system must be ordered with pressure switch. Available in standard (Tx00ES) and economical (Tx00ES-E) version.





The BlazeCut Alarm Panels AAP310 and AAP400 are simple and effective optional devices for monitoring system status and component functionality, with audible and visual fire signalling.



## System Features

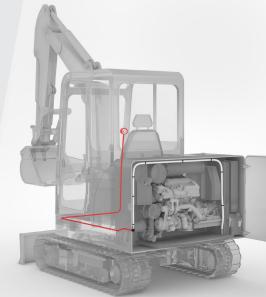
- Small & flexible: High flexibility of BlazeCut tube with A, B, C, and electrical firesclass rating can protect most spaces.
- ► No cylinder for storage required: The whole system can be placed inside the protected enclosure as there is no cylinder.
- Cost-effective: Long working life, automatic activation and zero maintenance beat the competition in cost-effectiveness.
- Optional pressure switch and other additional components like signalling unit to perform further safety functions
- Clean and effective extinguishing agent
- No pressurisation needed: The system works by increasing the pressure of the extinguishing agent when heated.
- Maintenance-free throughout the system's lifetime means zero maintenance costs
- Fully independent: System is operational 24/7 without any power supply.
- Long working life up to 10 years depending on the type of application
- ► Harmless upon discharge no damage caused to equipment inside or people's health outside the enclosure
- ► Automatic operation based on increased temperature ideal for unattended or out-of-sight spaces
- Pressure gauge constantly monitoring the system pressure can be checked at any time
- Simple installation no pressurisation required for installation

## Specification and Models

The required system parameters are easy to determine – simply by measuring the width, height, and depth of the enclosed space within the application, and by multiplying the measurements to calculate the volume of the enclosure to be protected. Then, to select the suitable system size & model, just refer to the chart below for the maximum volume protected in electrical or engine applications.

**Note:** The protected space should be enclosed with limited or no ventilation. The T Series system is not suitable for open areas. For application in vehicles, please refer to the application guide available on our website (www.blazecut.com).

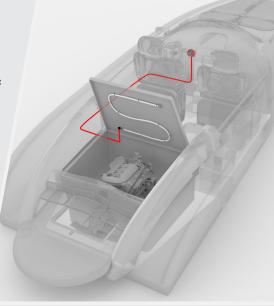
Model	Maximum Volume protected at 20°C Electrical Fires**	Maximum Volume protected at 20°C Engine Fires**	Amount of Agent	System Length	Operation Temperature	Activation Temperature
T025E	0.09 m <sup>3</sup>	0.09 m <sup>3</sup>	0.05 kg ± 2 g	28 cm	-40°C to +90°C	105°C ± 3°C
T050E	0.18 m <sup>3</sup>	0.14 m <sup>3</sup>	0.10 kg ± 2 g	53 cm		
T100E	0.46 m <sup>3</sup>	0.35 m <sup>3</sup>	0.25 kg ± 5 g	113 cm		
T200E	0.91 m <sup>3</sup>	0.69 m <sup>3</sup>	0.50 kg ± 5 g	215 cm		
T300E	1,37 m <sup>3</sup>	1,04 m <sup>3</sup>	0.75 kg ± 10 g	319 cm		
T400E	1.82 m <sup>3</sup>	1.39 m <sup>3</sup>	1.00 kg ± 10 g	422 cm		
T500E	2.28 m <sup>3</sup>	1.73 m <sup>3</sup>	1.25 kg ± 10 g	526 cm		
T600E	2.73 m <sup>3</sup>	2.08 m <sup>3</sup>	1.50 kg ± 10 g	630 cm		
T025ES	0.09 m <sup>3</sup>	0.09 m <sup>3</sup>	0.05 kg ± 2 g	35 cm	-20°C to +80°C	100°C ± 2°C
T050ES	0.18 m <sup>3</sup>	0.14 m <sup>3</sup>	0.10 kg ± 2 g	60 cm		
T100ES	0.46 m <sup>3</sup>	0.35 m <sup>3</sup>	0.25 kg ± 5 g	120 cm		
T200ES	0.91 m <sup>3</sup>	0.69 m <sup>3</sup>	0.50 kg ± 5 g	222 cm		
T300ES	1,37 m <sup>3</sup>	1,04 m <sup>3</sup>	0.75 kg ± 10 g	326 cm		
T400ES	1.82 m <sup>3</sup>	1.39 m <sup>3</sup>	1.00 kg ± 10 g	429 cm		
T500ES	2.28 m <sup>3</sup>	1.73 m <sup>3</sup>	1.25 kg ± 10 g	533 cm		
T600ES	2.73 m <sup>3</sup>	2.08 m <sup>3</sup>	1.50 kg ± 10 g	637 cm		



\*\* Calculated at a 7% (Electrical Fires) and 9% (Engine Fires) design concentration and an ambient temperature of 20°C for the enclosure. Please note the coverage potential will be reduced in lower temperatures. Please contact your local BlazeCut agent for further information.

## **Typical Applications**

- Marine inboard and outboard engines (including jet skis)
- Engine compartments of road vehicles (cars, SUVs, 4x4s, vans, minibuses, classic cars, etc.)
- Engine compartments of other vehicles (motorized carts, snowmobiles, ride-on mowers, etc.)
- Mobile Machinery (small to medium-size forklifts, excavators, skid steer loaders, sweepers, cranes, etc.)
- Electrical switchboards (fuse boxes, electrical supply sources, battery compartments, car batteries, inductors, MCC cabinets)
- Other enclosed applications (network installations, servers, audio-video equipment, ATMs, electric fuel bowsers, 3D printers, etc.)



#### **EXTINGUISHING AGENT**

**HFC-227ea** is a clean extinguishing agent used in the BlazeCut T Series for volume fire suppression. The agent siphons heat from the fire, alters the chemical chain reaction of burning, slows and stops the whole process, effectively extinguishing the fire.

It is not toxic or poisonous and has no carcinogenic or mutagenic effects, so it is safe for people. It is the agent of choice in protecting enclosures for advantages, such as:

- A, B, C, and electrical fires
- Electrically non-conductive
- Non-corrosive
- Resistant to high-temperature and low-temperature changes
- Siphons heat
- Leaves no residue
- ► No clean-up necessary
- No damage to the equipment
- Zero ozone-depleting potential







The information contained in this brochure is believed to be accurate at the time of publication. If you have any queries regarding the contents of this brochure, please contact BlazeCut. BR-TSHFC-2312-EN

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