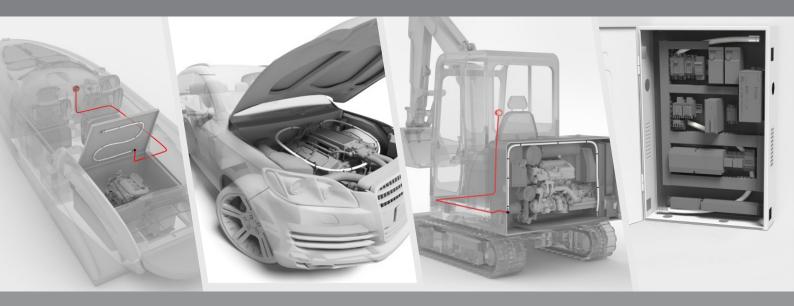
# **Automatic Fire** Suppression System



### T Series









Safe for people





Small & flexible









Cost-effective

# The System Operation

Designed to protect small enclosed spaces with greater risks of fire. Simple and easy to install, the BlazeCut T Series system operates automatically without any external power source. The extinguishing agent is stored in a tube, which also serves to apply extinguishing agent directly to the fire at its source. When a fire occurs, the combination of heat and internal pressure causes the tube to rupture, creating a nozzle, releasing the extinguishing agent.



System Installed



2. Fire Breakout



Fire Detection



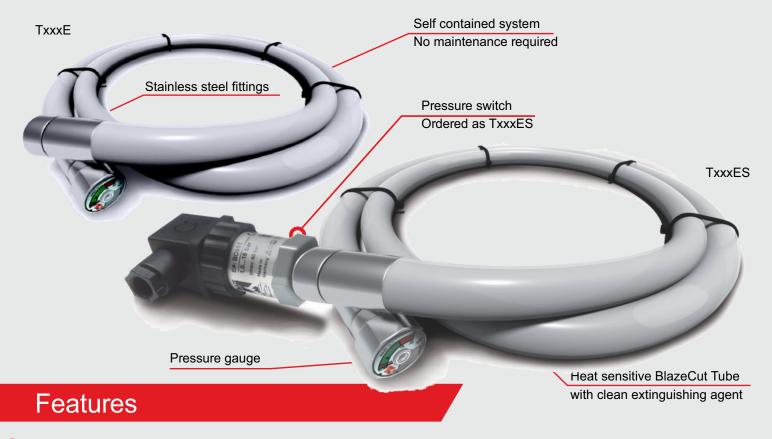
4. Extinguishing



5. Fire Quenched

# BlazeCut Technology

The T Series system consists of a heat sensitive BlazeCut Tube made of specialised plastic which is closed by a stainless steel fittings on each end. The BlazeCut Tube has both storage and detection function which means that the extinguishing agent is stored directly in the BlazeCut Tube and no additional storage device such as cylinder is needed.





Compact; small footprint of the BlazeCut Tube with A, B, C and electrical fires class rating can protect almost any space



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, zero maintenance beats the competition in cost-effectiveness



Optional pressure switch; and other additional components like signaling unit to perform further safety functions



Clean and effective extinguishing agent; world-wide known and accepted HFC gas (HFC-227ea) fire agent



No pressurisation needed; the system works by increasing pressure of the extinguishing agent when heated



Automatic operation; based on increased temperature: ideal for non-occupied spaces



Fully independent; TxxxE system is operational 24/7 without any power supply



Maintenance free; during entire working life means zero maintenance costs



Long working life; up to 10 years depending on the type of application



No harm; to protected enclosure when system discharged



Simple installation; system easily secured by cable ties or clamps



Pressure gauge; to monitor the system pressure at any time



Minimum operation temperatures; down to -40°C (-40°F)



Maximum operation temperature; up to 90°C (194°F)



# System Models and Technical Specifications

#### Sizing and Selection

Applications can be calculated by a simple process, measure the sealed enclosur wild that X Height x Depth in metres or feet and this will calculate your required volume in fror ft<sup>3</sup>. Then refer to the chart below for the maximum volume protected for electrical or engine applications to select the suitable T Series model.

Note: the enclosure should be enclosed or have minimal ventilation. The T Series system is not suitable for open areas. For vehicle applications please refer to our application guide that can be found online at www.BlazeCut.com

| Model* | Maximum Volume<br>Electrical Fires**<br>@ 20°C (68°F) | Maximum Volume<br>Engine Fires**<br>@ 20°C (68°F) | Amount of Agent                     | System Length       | Operation<br>Temperature         | Activation<br>Temperature  |
|--------|---|---|-------------------------------------|---------------------|----------------------------------|----------------------------|
| T025E  | 0.09 m³<br>3.18 ft³                                   | 0.09 m³<br>3.18 ft³                               | 0.05 kg ± 2 g<br>0.11 lb ± 0.07 oz  | 28 cm<br>11.02 in   | -40°C to +90°C<br>-40°F to 194°F | 105°C ± 3°C<br>221°F ± 5°F |
| T050E  | 0.18 m³<br>6.36 ft³                                   | 0.14 m³<br>4.94 ft³                               | 0.10 kg ± 2 g<br>0.22 lb ± 0.07 oz  | 53 cm<br>20.87 in   |                                  |                            |
| T100E  | 0.46 m³<br>16.24 ft³                                  | 0.35 m³<br>12.36 ft³                              | 0.25 kg ± 5 g<br>0.55 lb ± 0.17 oz  | 113 cm<br>44.48 in  |                                  |                            |
| T200E  | 0.91 m³<br>32.14 ft³                                  | 0.69 m³<br>24.37 ft³                              | 0.50 kg ± 5 g<br>1.10 lb ± 0.17 oz  | 215 cm<br>84.64 in  |                                  |                            |
| T300E  | 1.37 m³<br>48.38 ft³                                  | 1.04 m³<br>36.73 ft³                              | 0.75 kg ± 10 g<br>1.65 lb ± 0.35 oz | 319 cm<br>125.59 in |                                  |                            |
| T400E  | 1.82 m³<br>64.27 ft³                                  | 1.39 m³<br>49.09 ft³                              | 1.00 kg ± 10 g<br>2.20 lb ± 0.35 oz | 422 cm<br>166.14 in |                                  |                            |
| T500E  | 2.28 m³<br>80.52 ft³                                  | 1.73 m³<br>61.09 ft³                              | 1.25 kg ± 10 g<br>2.76 lb ± 0.35 oz | 526 cm<br>207.09 in |                                  |                            |
| T600E  | 2.73 m³<br>96.41 ft³                                  | 2.08 m³<br>73.45 ft³                              | 1.50 kg ± 10 g<br>3.31 lb ± 0.35 oz | 630 cm<br>248.03 in |                                  |                            |
| T025ES | 0.09 m³<br>3.18 ft³                                   | 0.09 m³<br>3.18 ft³                               | 0.05 kg ± 2 g<br>0.11 lb ± 0.07 oz  | 35 cm<br>13.78 in   | -20°C to +80°C<br>-4°F to 176°F  | 100°C ± 2°C<br>212°F ± 4°F |
| T050ES | 0.18 m <sup>3</sup><br>6.36 ft <sup>3</sup>           | 0.14 m <sup>3</sup><br>4.94 ft <sup>3</sup>       | 0.10 kg ± 2 g<br>0.22 lb ± 0.07 oz  | 60 cm<br>23.62 in   |                                  |                            |
| T100ES | 0.46 m³<br>16.24 ft³                                  | 0.35 m³<br>12.36 ft³                              | 0.25 kg ± 5 g<br>0.55 lb ± 0.17 oz  | 120 cm<br>47.24 in  |                                  |                            |
| T200ES | 0.91 m³<br>32.14 ft³                                  | 0.69 m³<br>24.37 ft³                              | 0.50 kg ± 5 g<br>1.10 lb ± 0.17 oz  | 222 cm<br>87.40 in  |                                  |                            |
| T300ES | 1.37 m³<br>48.38 ft³                                  | 1.04 m³<br>36.73 ft³                              | 0.75 kg ± 10 g<br>1.65 lb ± 0.35 oz | 326 cm<br>128.34 in |                                  |                            |
| T400ES | 1.82 m³<br>64.27 ft³                                  | 1.39 m³<br>49.09 ft³                              | 1.00 kg ± 10 g<br>2.20 lb ± 0.35 oz | 429 cm<br>168.89 in |                                  |                            |
| T500ES | 2.28 m³<br>80.52 ft³                                  | 1.73 m³<br>61.09 ft³                              | 1.25 kg ± 10 g<br>2.76 lb ± 0.35 oz | 533 cm<br>209.84 in |                                  |                            |
| T600ES | 2.73 m³<br>96.41 ft³                                  | 2.08 m³<br>73.45 ft³                              | 1.50 kg ± 10 g<br>3.31 lb ± 0.35 oz | 637 cm<br>250.79 in |                                  |                            |

<sup>\*</sup>Letter "S" in model designation stands for an integrated pressure switch that allows connection of a signaling device of to perform a shutdown operation at time of agent discharge. TxxxE does not require power.

\*\* Calculated design concentration 7% (Electrical Fires) and 9% (Engine Fires) and an ambient temperature of 20°C (68°F) for the enclosure.

### **Optional Components**

The unique construction of the T Series system allows you to connect to the optional pressure switch which monitors the pressure inside the BlazeCut Tube. Once the system is discharged the pressure switch sends a signal to a signaling unit or to an external device to perform other safety operations (e.g. disconnect the power or shut down the engine).



**Pressure Switch** 

The integrated pressure switch monitors the pressure and sends a signal in case the pressure drops under a pre-set value or the system discharges in the event of a fire. System must be ordered with pressure switch TxxxES



Alarm Panel

The compact Audio-optical TAP200 dash mounted alarm panel for applications in vehicles, machines or boats. Features OK", "FAUL", "FIRE LED's, 85dB fire alarm buzzer, 9-36v operation, IP65, Ø50mm and a fault monitoring system.





Signaling Unit

Simple and cost effective audio and/or visual signaling device for indoor and outdoor applications. Large range of options available to suit your needs.

Please note if a lower temperature is present the coverage potential will be reduced, please contact your local BlazeCut agent for further information.

# **Typical Applications**

Engine compartment of on-road vehicles (e.g. cars, vans, SUVs, classic cars, performance cars, 4x4's)

Engine compartment of other vehicles (e.g. quads, ride-on mowers, golf carts, farming & agricultural equipment etc.)

Mobile Machinery (forklifts, excavators, skid steer, loaders, cranes, small generators, lighting towers etc.)

Electrical switchboards, fuse boxes, battery compartments, MCC cabinet, electrical charging stations etc.

IT servers, telecommunication cabinets, vending machines, ATM's, electric fuel bowsers etc.

3D printers, laser cutter, audio visual equipment and many more.....



# **Extinguishing Agent**

BlazeCut T Series system uses liquefied gas, HFC-227ea fire extinguishing agent. The extinguishing agent is a world-wide known and accepted gaseous clean agent used for total flooding fire suppression applications with very high effectivity, zero ozone depletion potential and safe to people. It is the agent of choice for protection of enclosures with advantages such as:

Electrically non conductive

Non corrosive

Resistant to temperature changes

Leaves no residue

Does not damage equipment or objects

Zero ozone depleting potential

HFC-227ea Extinguishing Agent is UL Recognized and FM Approved



HFC-227ea is UL Recognised and FM Approved and is an environmentally preferred substitute for Halon 1301.

Fire Types



Ordinary combustibles (creating flames)



Flammable liquids



Burning gases



Energised electrical equipment

#### **Contact Details**



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