# Automatic fire suppression system



PLEASURE BOATS - SMALL VEHICLES - MACHINES - ELECTRICAL CABINETS

#### **T Series**





ndependent of power



Long Durabi**l**ity



Non-toxic Safe for people



Automatic activation



Small & flexible



Installation



Leaves no residu



Maintenance free



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.



1. System Installed



2. Fire Breakout



3. Fire Detection



4. Extinguishing



5. Fire Quenched

# System models and technical specifications

#### Sizing and Selection

Applications can be calculated by a simple process, measure the sealed enclosures **Width x Height x Depth** in metres or feet and this will calculate your required volume in m³ or ft³. Then refer to the chart above to select the suitable length. Note: the enclosure should be enclosed or have minimal vents. T Series is not suitable for open areas. For vehicle applications please refer to our vehicle application guide that can be found online at www.blazecut.com

Model	Volume protected at 20°C (68°F) Electrical Fires**	Volume protected at 20°C (68°F) Engine Fires**	Amount of agent	System Length	Operation Temperature	Activation Temperature	Activation Pressure
T100E	0.46 m³	0.35 m <sup>3</sup>	0.25 kg ± 5 g	113 cm	-40°C to +90°C	105°C ± 3°C	24 bar ± 1 bar
	16.24 ft³	12.36 ft <sup>3</sup>	0.55 lb ± 0.17 oz	44,48 in	-40°F to +194°F	(221°F ± 37°F)	(348 psi ± 14 psi)
T200E	0.91 m³	0.69 m <sup>3</sup>	0.50 kg ± 5 g	215 cm	-40°C to +90°C	105°C ± 3°C	24 bar ± 1 bar
	32.14 ft³	24.37 ft <sup>3</sup>	1.10 lb ± 0.17 oz	84.64 in	-40°F to +194°F	(221°F ± 37°F)	(348 psi ± 14 psi)
T300E	1.37 m³	1,04 m <sup>3</sup>	0.75 kg ± 10 g	319 cm	-40°C to +90°C	105°C ± 3°C	24 bar ± 1 bar
	48.38 ft³	36,73 ft <sup>3</sup>	1.65 lb ± 0.35 oz	125.59 in	-40°F to +194°F	(221°F ± 37°F)	(348 psi ± 14 psi)
T400E	1.82 m <sup>3</sup>	1,39 m <sup>3</sup>	1.00 kg ± 10 g	422 cm	-40°C to +90°C	105°C ± 3°C	24 bar ± 1 bar
	64.27 ft <sup>3</sup>	49.09 ft <sup>3</sup>	2.20 lb ± 0.35 oz	166.14 in	-40°F to +194°F	(221°F ± 37°F)	(348 psi ± 14 psi)
T100ES	0.46 m <sup>3</sup>	0.35 m³	0.25 kg ± 5 g	120 cm	-20°C to +80°C	100°C ± 2°C	25 bar ± 1 bar
	16.24 ft <sup>3</sup>	12.36 ft³	0.55 lb ± 0.17 oz	47,24 in	-4°F to +176°F	(212°F ± 36°F)	(363 psi ± 14 psi)
T200ES	0.91 m³	0.69 m <sup>3</sup>	0.50 kg ± 5 g	222 cm	-20°C to +80°C	100°C ± 2°C	25 bar ± 1 bar
	32.14 ft³	24.37 ft <sup>3</sup>	1.10 lb ± 0.17 oz	87.40 in	-4°F to +176°F	(212°F ± 36°F)	(363 psi ± 14 psi)
T300ES	1.37 m³	1.04 m³	0.75 kg ± 10 g	326 cm	-20°C to +80°C	100°C ± 2°C	25 bar ± 1 bar
	48.38 ft³	36.73 ft³	1.65 lb ± 0.35 oz	128.34 in	-4°F to +176°F	(212°F ± 36°F)	(363 psi ± 14 psi)
T400ES	1.82 m³	1,39 m³	1.00 kg ± 10 g	429 cm	-20°C to +80°C	100°C ± 2°C	25 bar ± 1 bar
	64.27 ft³	49,09 ft³	2.20 lb ± 0.35 oz	168,89 in	-4°F to +176°F	(212°F ± 36°F)	(363 psi ± 14 psi)

<sup>\*</sup>Additional sizes available for commercial quantities please contact your local BlazeCut agent. Letter "S" in model designation stands for an integrated pressure switch that allows connection of signaling devices or to perform a shutdown operation at agent discharge. Tx00E does not require power.

\*\* Calculated at a 7% (Electrical Fires) and 9% (Engine Fires) design concentration and an ambient temperature of 20°C (68°F) for the enclosure. Please note if a lower temperature is present the coverage potential will be reduced, please contact your local BlazeCut agent for further information.

## Optional components

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 Tx00ES



Alarm Panel

Compact Audio-optical TAP200 dash mounted alarm panel for applications in vehicles, machines or boats. Features "OK", "FAULT", "FIRE" LED, 85dB fire alarm buzzer, 9-36v operation, IP65, Ø 50mm.



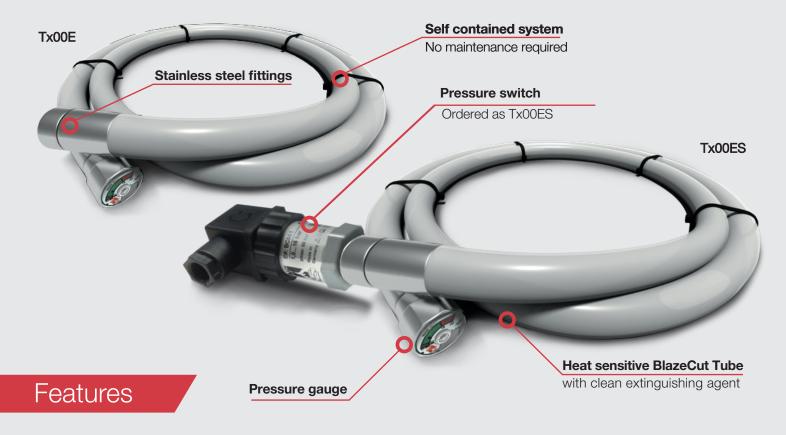


Signaling Unit

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

# 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.





Small & flexible: high flexibility of BlazeCut Tube with A, B, C and electrical fires class rating can protect almost any space Cost-effective: long working life, automatic activation, zero maintenance beats the competition in cost-effectiveness



No cylinder for storage required: the whole system can be placed inside the protected enclosure as there is no cylinder



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 or spaces out of sight



Fully independent: Tx00E system is operational 24/7 without any power supply



**Maintenancefree:** during entire working life = zero maintenance costs



**Long working life:** 5 - 10 years depending on the type of application



No harm to protected enclosure and people when discharged



**Simple installation:** no pressurisation required for installation



Pressure gauge to monitor the system pressure at any time



Minimum operation temperatures: down to -40°C



Maximum operation temperature: up to 90°C



# 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 is UL Recognised and FM Approved and is an environmentally preferred substitute for Halon 1301.

# Fire Class Rating



ccating flames)



**CLASS B:** flammable liquids



CLASS C: burning gases



#### Contact details

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