

# AMFE AUTOMATIC MINI FIRE EXTINGUISHER

## BUILT - IN SECURITY

**AMFE** (Automatic Miniature Fire Extinguisher) Reliably Protects Devices And Equipment In Industry, Household And Consumer Electronics Such As Cabinets, Home Appliances, Televisions, Etc. Against The Dangers Of Fire. The AMFE Detects And Extinguishes The Fire Inside The Device, Preventing The Spread Of A Fire.

## AMFE VARIANTS



### S-AMFE / AMFE with Sensor Connections

The AMFE Not Only Releases The Extinguishing Gas But Also Signals That It Has. In Installations Where Accessibility Is Limited, The Amfe Can Be Connected To A Monitoring System By Two Connectors For Reading A Signal. Permanently Controlling If The Amfe Has Been Initiated (E.g. Line Control Through A Plc Or Monitoring Device) Allows For Precise Knowledge About The Status Of Whether And Where A Fire Might Have Started In An Otherwise Hard To Reach Installation. The S - AMFE Is Rated For Typical Plc Signals Of 24v/48v And 1000ma. The Connectors Are Standardized (6,3mm Blade Terminals), But Customizations Are Possible



### R-AMFE / AMFE which Can Additionally be Triggered Remotely

The R-AMFE Works Like A Conventional Amfe, Releasing The Extinguishing Gas When The Thermobulb Bursts After The Activation Temperature Has Been Reached By Heat (As In A Sprinkler). Additionally, The R-amfe Can Be Remotely Triggered By Activating A Current Signal Into The R-amfe Causing A Fast And Precise Increase Of The Heat At The Bulb, Ultimately Resulting In A Burst Of The Thermobulb Assembled And Release Of The Extinguishing Gas. R-AMFE Can Also Work Much Faster Than A Traditional Amfe If Controlled By A Monitoring Device Which Also Reads E.g. Smoke Detector Signals And, Upon The Early Detection Of Smoke, Initiates The Signal To Release The R-AMFE Even Before Significant Enough Heat Buildup. The Applied Current Defines The Time Until The R-AMFE Is Initiated. As Application Requirements For The R-AMFE Are Customer Specific, Consulting The Manufacturer Is Required To Define Electrical And Mechanical Details To Guaranty Reliable And Sufficient Operation.



### THE FUNCTION

Due To Rising Heat In A Fire Scenario The Pressure Inside The Glass Bulb Increases. After The Predetermined Operating Temperature Of The Heat Sensitive Glass Bulb Is Reached, The Glass Bulb Bursts Into Small Fragments And Triggers A Mechanism That Releases The Gas From The Cylinder. The Extinguishing Medium Is Released Through The Holes In The Outlet Body And Extinguishes The Fire When The Fire Is Still In An Early Stage. The Quick Operation And The Effective Extinguishing Of The Fire Prevents Further Expansion Of The Fire And Helps Keeping Damage Small.

### THE FUNCTION

- The Advantages At A Glance
- Easy To Use
- Maintenance - Free
- Easy To Install (Retrofittable)
- Variety Of Customer Specific Operating & Releasing Temperatures Available
- No Water Being Used (Gas)
- Scalable
- Robust And Shock Tolerant
- Usable In Various Applications (Home, Industry, Automotive, Etc.)
- Mechanical Release; No Electric Power Supply Required
- Release Mechanism: Qualified In The Automotive And Sprinkler Industry



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## THE CHALLENGE

Washing Machines, Televisions Or Industrial Power Supplies – Fires In Technical Devices Are A Continuously Increasing Serious Threat. And Not Only At Homes, Damages Caused By Fires Are Increasing. There Is Also A Significant Risk Of Fire In The Industry And Automotive Sector. Another Example Are Highly Valued Collections Which Are Subject To Persistent Fire Hazard. The Challenge Is To Automatically, Energy-supply Independently, Detect And Extinguishing Fires Already In The Early Stage Stage, Consequently Providing More Safety. A System Is Needed, That Can Extinguish These Fires Reliably, Fast And Easily At Any Time And Without External Resources Inside A Housing.



AUTOMATIC FIRE EXTINGUISHER



AUTOMATIC FIRE EXTINGUISHER WITH SENSORS AND MANUAL ACTIVATION



ERP CODE	CODE	PRODUCT DESCRIPTION
0128126	MBK18-APM-NVC24	CYLINDER AMFE 24ml NOVEC 1230 - VOLUME PROTECTION (Class A: 0.06m <sup>3</sup> Class B: 0.04m <sup>3</sup> )
0128127	MBK18-APM-NVC72	CYLINDER AMFE 72ml NOVEC 1230 - VOLUME PROTECTION (Class A: 0.19m <sup>3</sup> Class B: 0.14m <sup>3</sup> )
0128128	MBK18-APM-NVC120	CYLINDER AMFE 120ml NOVEC 1230 - VOLUME PROTECTION (Class A: 0.32m <sup>3</sup> Class B: 0.23m <sup>3</sup> )
0128118	MBK18-APM-NVC241	CYLINDER AMFE 241ml NOVEC 1230 - VOLUME PROTECTION (Class A: 0.64m <sup>3</sup> Class B: 0.46m <sup>3</sup> )
0128129	MBK18-APM-NVC360	CYLINDER AMFE 360ml NOVEC 1230 - VOLUME PROTECTION (Class A: 0.96m <sup>3</sup> Class B: 0.69m <sup>3</sup> )
0128130	MBK18-APM-NVC603	CYLINDER AMFE 603ml NOVEC 1230 - VOLUME PROTECTION (Class A: 1.61m <sup>3</sup> Class B: 1.15m <sup>3</sup> )
0141150	MBK16-APM-SPR68	NOZZLE AMFE SPRINKLER TYPE 68°C
0149074	MBK16-APM-SPR79	NOZZLE AMFE SPRINKLER TYPE 79°C
0149080	MBK16-APM-SPR93	NOZZLE AMFE SPRINKLER TYPE 93°C
0149081	MBK16-APM-SPRD68	NOZZLE AMFE SPRINKLER TYPE 68°C WITH SENSORS
0149082	MBK16-APM-SPRD79	NOZZLE AMFE SPRINKLER TYPE 79°C WITH SENSORS
0149083	MBK16-APM-SPRD93	NOZZLE AMFE SPRINKLER TYPE 93°C WITH SENSORS
0149084	MBK16-APM-RPRD68	NOZZLE AMFE SPRINKLER TYPE 68°C WITH SENSORS AND MANUAL ACTIVATION
0149085	MBK16-APM-RPRD79	NOZZLE AMFE SPRINKLER TYPE 79°C WITH SENSORS AND MANUAL ACTIVATION
0149086	MBK16-APM-RPRD93	NOZZLE AMFE SPRINKLER TYPE 93°C WITH SENSORS AND MANUAL ACTIVATION
0149087	MBK18-APM-NVC24-BRACKET	BRACKET FOR INSTALLATION OF 24 ML NOVEC AMFE
0149088	MBK18-APM-NVC72-BRACKET	BRACKET FOR INSTALLATION OF 72 ML NOVEC AMFE
0149089	MBK18-APM-NVC120-BRACKET	BRACKET FOR INSTALLATION OF 120 ML NOVEC AMFE
0149090	MBK18-APM-NVC241-BRACKET	BRACKET FOR INSTALLATION OF 241 ML NOVEC AMFE
0149091	MBK18-APM-NVC360-BRACKET	BRACKET FOR INSTALLATION OF 360 ML NOVEC AMFE
0149092	MBK18-APM-NVC603-BRACKET	BRACKET FOR INSTALLATION OF 603 ML NOVEC AMFE

FOR CLASS A TYPE OF FIRE THE CALCULATION HAVE BEEN MADE ACCORDING TO NFPA2001 (4.2% CONCENTRATION) STANDARD  
FOR CLASS B TYPE OF FIRE THE CALCULATION HAVE BEEN MADE ACCORDING TO NFPA2001 (5.9% CONCENTRATION) STANDARD