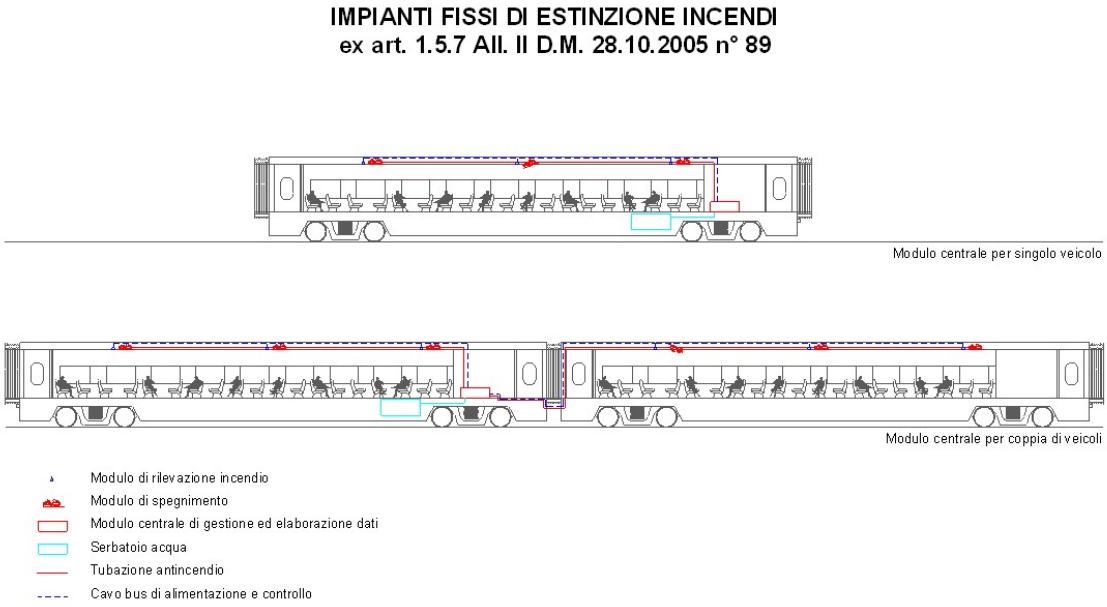
Automatic Fire Extinguishing System for Mobile Units VES Type with Electric Remote Controlled Monitors

Despite the great progresses in the modern vehicle construction and in particular in their internal furnishing (nowadays realized only with materials able to delay the fire development and with low emission of smoke and toxic vapours), theoretical analysis and experimental tests have proven that in many situations the time required to stop in a proper place the train with the vehicle involved in the fire can widely exceed the time during which people in the vehicle can tolerate the inside conditions on the base only of the above described passive measures.
The variable represented by the fire load of passengers' clothes and (especially) luggage can assume very different values in the different operating conditions and, of course, decreases safety.
For this reason inside the vehicle also active fire fighting measures are necessary and this need was acknowledged some years ago by regulations for many operating conditions.



The fire extinguishing system VES-SRA1 (**V**ehicle **E**xtinguishing **S**ystem) has been designed to be mounted on vehicles and mobile units and is able to work fully autonomously and automatically.
It consists of fire detection modules, a central module for data management and processing and fire extinguishing modules.
Each module has been designed and realized as integrated component that can be easily and quickly mounted, directly connected to the bus line for power supply and data transmission and (only for the extinguishing modules) to the fire extinguishing agent supply pipe.

The system has been designed to allow a fast and sure fire detection and, consequently, to provide a specific fire extinguishing intervention, that is completely harmless for people inside the protected areas and that, with the supply on board, can last at least 15 minutes.

Cacialanza & C.