MX 1230 Marine & MX 200 Marine clean agent fire suppression systems

GAS EXTINGUISHING SYSTEMS

CHEMICAL EXTINGUISHING

Effective – speedy and careful

At sea, safety requirements for ships are of the utmost importance. This also applies to fire protection measures. After all, in the event of fire, rapid escape is usually impossible and the prompt arrival of help from outside cannot be expected.

In light of the various types of fire risks which exist on board ships, specific solutions are necessary for the space or object to be protected in order to ensure optimal fire protection on board.

Areas that deserve special attention include machine rooms and rooms with electrical and electronic devices, such as control rooms and switch cabinets. In the event of a fire, the failure of machines or devices on board a ship at sea can have fatal consequences. In such risk areas, fire suppression systems must put out fires quickly and residue-free, in order to ensure that sensitive equipment is not damaged.

A perfect solution are the MX 1230 Marine and MX 200 Marine clean agent fire suppression systems, which meet the demanding requirements on board a ship and are fully certified with many major marine sector approvals (e.g. DNVGL, ABS, LR, MED).

The systems utilise the approved fire suppression agents Novec™ 1230 or HFC-227ea: neither fire suppression agent is corrosive or electrically conductive, or causes any damage to sensitive parts through short circuits or residues.

Fire suppression agents

Novec™ 1230 is used in the MX 1230 suppression system. Novec™ 1230 is the latest clean agent and is environmentally friendly and safe to persons. Of both fire suppression agents, Novec™ 1230 possesses a larger safety margin between the design and a hazardous concentration.

HFC-227ea is used in the MX 200 Marine clean agent fire suppression system. It is the most common clean agent and world wide available.

Unique
The 50-bar system pressure is a new standard for clean agent fire suppression on ships:

- at most 30% smaller nominal pipe width and consequently less weight and space required
- cylinder displacement from machinery space – consequently no redundancy required
- more fire suppression agent per cylinder but we have also the standard pressure system with 25 bar and 42 bar system pressure. The pressure system will be choosen acc. to the requirements on board.

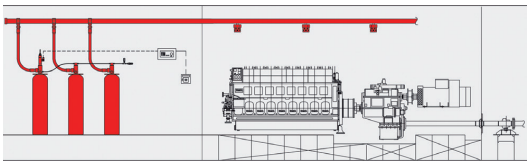
Effectiveness
The fire suppression systems are characterised by their rapid fire suppression. The common flooding time is maximum 10 seconds. This minimises the possible damage and prevents the spreading of flames to other nearby areas.

Space & weight
Both clean agents are extremely effective: the fire suppression is effective at a design concentration of 5.5 resp. 8.7 % per vol. – consequently less space for storage is required.

Personal safety
Releasing the fire suppression systems does not present any danger to people. Both fire suppression agents are completely safe for use in occupied spaces due to their large safety margin between the design and a hazardous concentration.

Respect for the environment
Neither fire suppression agent possesses ozone depletion potential. However, the Novec™ 1230 fire suppression agent is categorized as more environmentally friendly based on its extremely low greenhouse potential (GWP = 1).

Flexibility
Flexibility in pipe routing and the wide range of fire suppression agent cylinder sizes ensure that the system can be individually adapted to the room to be protected and the space available for installation.



System lay-out
The main components of MX 1230 Marine and MX 200 Marine clean agent fire suppression systems are the fire suppression agent supply with a pipe network and discharge nozzle.

Advantages of the MX 1230 Marine & MX 200 Marine clean agent fire suppression systems

The fire suppression systems have been developed especially for machine rooms and areas with electronic and electrical risks on ships.

- Unique: 50-bar system pressure
- Rapid flooding and suppression (<10 seconds)
- No consequential damage caused thanks to residue-free and clean fire suppression
- Weight and space saving installation
- Easy to refill, worldwide available agents
- Environmentally friendly and safe for use in occupied areas
- Approved for many major marine applications (e.g. DNVGL, ABS, LR, MED)

Photo Credits:
Cover picture: © Martin Bockhacker, Bremen
© noris network, AG Nürnberg
Page 2: © Martin Bockhacker, Bremen

Minimax Fire Solutions
International GmbH
Im Weddern 25
23858 Reinfeld
Germany
+49 4533 7884-0
marine@minimax.de

Editor:
Minimax GmbH
Industriestrasse 10/12
23840 Bad Oldesloe
Germany
+49 4531 803-0
www.minimax.com

M50e/09.17/1/07.18/HA/WK · Printed in Germany · Subject to technical modifications