

HI-FOG[®] Electric Pump Unit

Advanced control system, simplified mechanical design, optimized use of footprint, increased scalability with networking functionality. The HI-FOG[®] Electric Pump Unit (EPU) revolutionizes the pumping technology for the high-pressure water mist fire suppression segment.

Pump User Panel

The graphical user interface provides pump unit and system status indications such as pressure trend view, alarm list and help information, event history, maintenance reminders, and manual start and stop operations. The health and status of the system can be monitored at any individual pump unit user panel.

Control Cabinet

The embedded control system controls the pressure in all operating states and monitors the HI-FOG[®] system pressure continuously.

During activation, the control system runs only as many motors as needed to reach the working pressure. Pressure is optimized with an advanced software control and a frequency converter.

Electric Motors

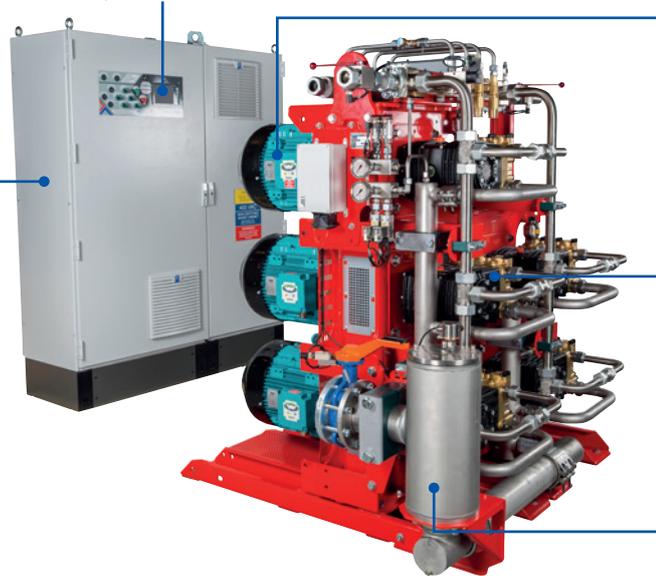
The high pressure pumps are connected to efficient and environmentally sustainable IE3 motors with 22.5 kW or 27 kW output. They are capable of operating at 50 or 60 hertz for a wide range of voltages.

High Pressure Pumps

Premium long life pumps ensure reliable operation at the required working pressure and flow.

Filter Unit

The fresh water filter is always supplied with bypass and monitoring ensuring continuous system operation.



Advanced controls

The embedded control system takes care of the closed loop pressure control and continuous HI-FOG[®] system pressure monitoring.

During activation, the control system ensures that the pump unit provides the optimal pressure and flow.

Pressure is optimized with an advanced software control and a frequency converter.

Excess water unloading is no longer needed in the operational mode, which simplifies the mechanical design.

Operational reliability

To promote operational reliability, the EPU incorporates many built-in redundancies.

Internal and external communication networks, embedded control system and system pressure monitoring are duplicated.

Each electric motor also has individual control circuits to ensure that the unit is able to operate even if one of the motors has a malfunction.

Networking functionality enables intelligent changeover of system control between the HI-FOG[®] EPUs.

The number of wear and tear components has been minimized for increased system reliability and simplified maintenance.



Discover more!

See HI-FOG[®] EPU animation on MarioffHI-FOG YouTube channel to learn more.





Optimized footprint

The HI-FOG® EPU consists of a modular pump frame and a separate control cabinet which can be scaled up from two to nine motors per unit.

The unique modular structure allows the pump frame and control cabinet to be installed separately which brings more flexibility to the pump room design.

All service points are easily accessible for safe and efficient maintenance. Service access is needed only from two sides so the pump frame can be installed against the wall.

Up to eight HI-FOG® EPU's can also be connected together through a tubing and communication network, operating as a single water distribution system.

Networking functionality provides more capacity which allows flexible design and system redundancy possibilities.

Furthermore the capacity and required pump size can be optimized through dual pressure functionality.

User-friendly interface

The pump user panel enables efficient and optimized maintenance activities by providing real-time status indications of the pump unit and the HI-FOG® system.

It shows pressure trend view, alarm and help information, event history and maintenance reminders. The user interface is easy to use and configurable in multiple languages.

Reliable two-way communication with self-diagnostics enables fast troubleshooting and optimized maintenance and service operations.



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