



Alfa Laval ICM

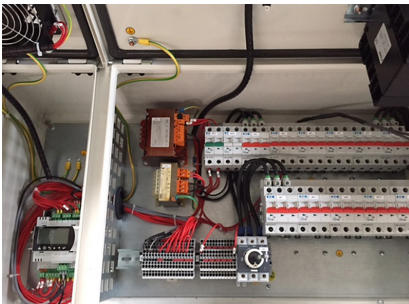
EC fan management system

General information & application

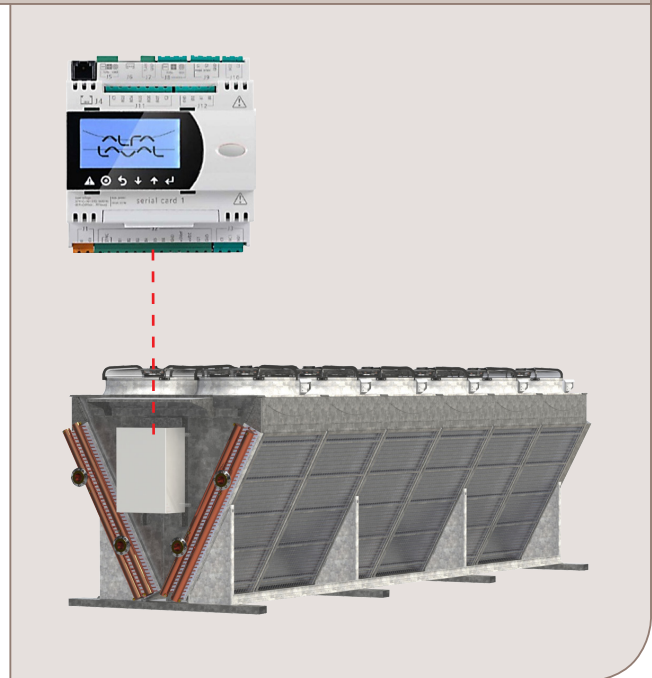
Alfa Laval ICM is a full control EC fan management system for air cooled condensers and liquid coolers. All benefits of EC technology (energy efficiency, precise fan speed regulation, sound reduction etc.) are now combined in a simple Alfa Laval interface controller, able to communicate with external devices via various supervision systems.

Features

- Power supply 400 +/- 10%/50-60/3
- Application temperatures from -30°C to +55°C
- Protection Class IP54
- Complies to LVD and EMC directives
- Metal casing with separate compartments for the controller and for aux & main power supply.



- All switchboards equipped with circuit breakers (CB) instead of fuses, a built-in cooling fan and an automatic thermostat operated electrical heating system.
- Opening panel fitted with hydraulic dampers.
- Serial Modbus communication (0-10V, temperature probe and/or pressure probe) with all fans. Internal bus system, ready to be connected to any supervision network.
- ICM allows air cooled condensers or liquid coolers to function stand-alone or fully controlled via Modbus.
- Functions like double speed setting, scheduler, reverse fan rotation mode, variable setpoint etc. can be enabled from the control display.



Alfa Laval ICM - EC fan management system

- 50 alarms (!) can be seen from the control display. No alarms limit when using the supervision network.
- ICM communicates with fan motors from all main fan suppliers without additional interfaces.
- For multi fan row units, it is optional to have independent fan motor management per fan row.

Benefits

- ICM control devices are factory preset.
- Limited item range serves all applications, so easy part selection for refits.
- Quick fan replacement procedure thanks to intelligent fan addressing and setting.
- All working parameters & fan alarms can be seen from the control display.

Retrofit

ICM controllers are an important component for unit retrofits. Older units equipped with AC fans can be retrofitted with energy efficient EC fans which are managed/connected via Modbus with ICM.

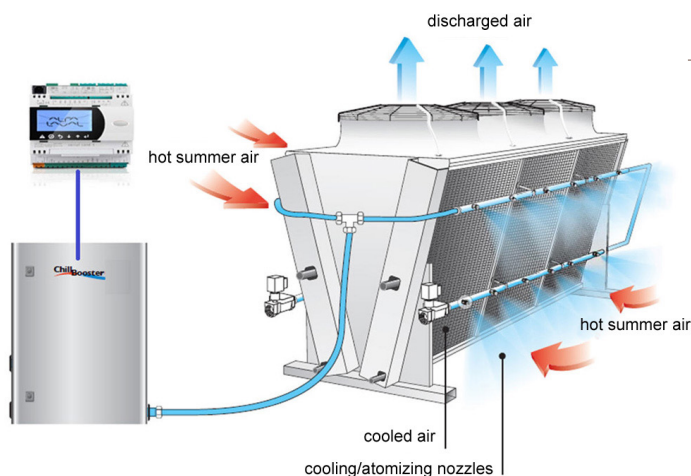
The use of an ICM device will also reduce fan replacement time. By simply activating the "restore" procedure, the ICM controller will automatically detect and define all required fan settings.

Selection

ICM controllers can be selected with Alfa Laval air heat exchanger selection software or via the Alfa Laval Anytime eBusiness platform.

Spray water systems

Alfa Laval ICM does not only leverage the full potential of EC fan motors, but can also manage a complete spray water system to face up to peak loads. Please contact Alfa Laval to select the proper spray water system.



Application

ICM controller cabinets can be used for the following AlfaBlue and Alfa-V aircooled condenser and dry cooler models.

Part / item nr.	Applicable for	Nr. of fans
41009693SP	AlfaBlue BCM/BNM/BDM AlfaBlue BCD/BND/BDD Alfa-V ACV/ANV Alfa-V VDD/VDDY	Up to 8
41009694SP	AlfaBlue BCD/BND/BDD Alfa-V ACV/ANV Alfa-V VDD/VDDY	10
41009695SP	AlfaBlue BCD/BND/BDD Alfa-V ACV/ANV Alfa-V VDD/VDDY	12
41009696SP	Alfa-V ACV/ANV Alfa-V VDD/VDDY	14
41009697SP	Alfa-V ACV/ANV Alfa-V VDD/VDDY	16
41009698SP	Alfa-V ACV/ANV Alfa-V VDD/VDDY	18

Certification

The Alfa Laval quality system is in accordance with ISO 9001 and ISO 14001. All ICM controllers are manufactured according to CE regulations. Alfa Laval ICM has been developed in close cooperation with leading fan suppliers.



How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com