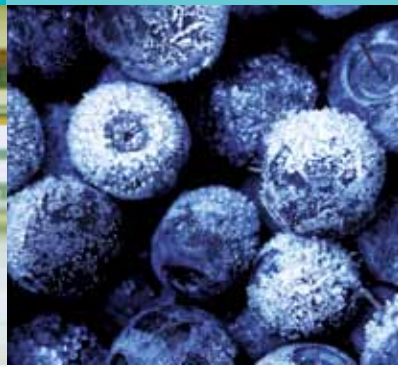


Condensing Unit Controller



Lodam Condensing Unit Controller

LMC340



Lodam Condensing Unit Controller

LMC340

Lodam Condensing Unit Controller enable you to gain total control of your condensing unit to deliver cooling to one or more evaporators – thereby optimizing your system to save energy, time and money. Our Lodam Condensing Unit Controller is designed for most condensing units.

Obvious benefits for you

- Energy and cost saving through intelligent capacity control via frequency inverter or on/off control
- Eco or low sound fan mode
- 1 year data log
- Full graphical color display with individual foils differentiates you from competitors
- Remote monitoring via web interface
- Weekly program with real time clock
- Easy installation
- Higher max. capacity of compressors using frequency inverters
- Refrigerant configurable - designed and ready for various refrigerants
- Use 2 compressors with unloaders for high capacity and intelligent capacity control

Ready to use controller kit

Lodam can offer PCB stand alone controllers, ready to use kit's or complete condensing unit box built solutions.

A Condensing unit kit from Lodam includes:

- 1 Pc Lodam condensing unit controller (LMC340)
- 1 Pc Optional board for extra I/O (LOM301)
- 1 Pc Lodam Ethernet Moduler (LOM320)
- 1 Pc Lodam full graphical color display (LUP200)
- 1 Pc Cabinet and foil for LUP200
- 1 Pc Connector kit for LMC340+LOM301
- 3 Pcs NTC temperatures sensors
- 2 Pcs Pressure sensors
- 2 Pcs Plug and cables for pressure sensors
- 1 Pc Access license to Lodam Multi Tool

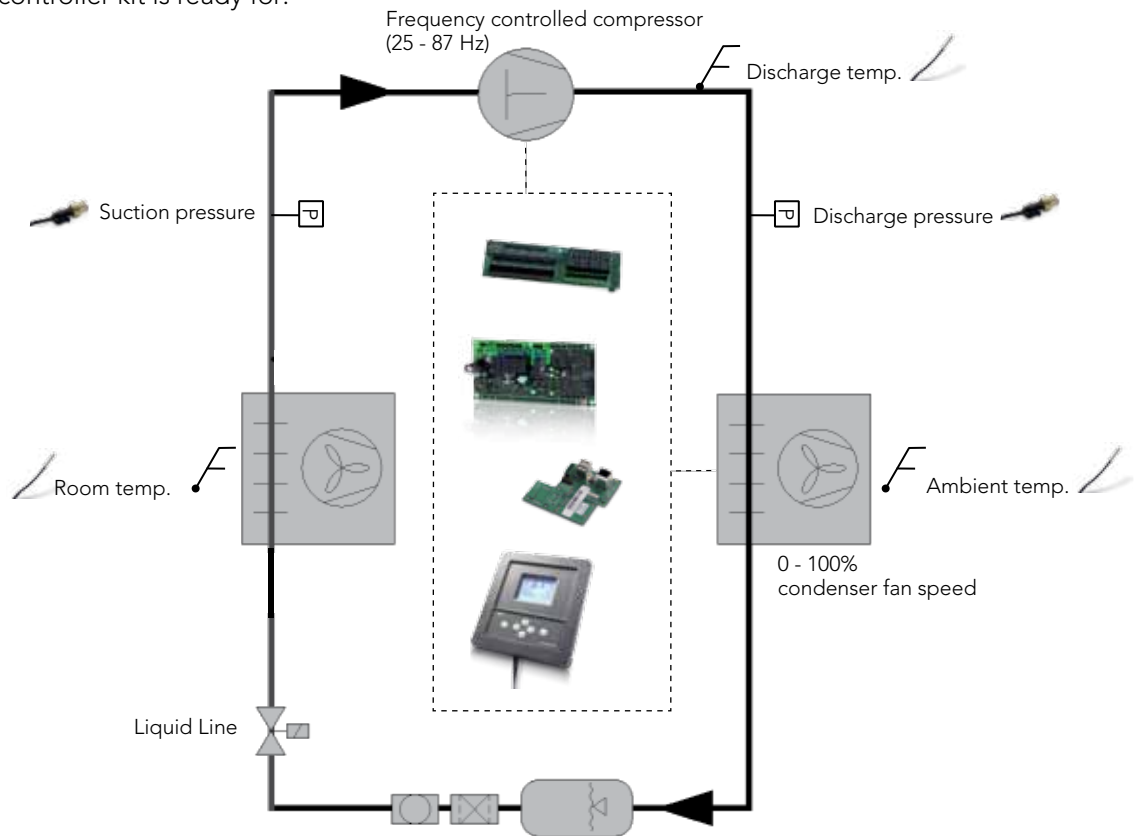
Unique user control

Lodam offers a state of the art setup, use and data access to condensing units with a full graphical display, LUP200 and Lodam Ethernet Module. A condensing unit with a Lodam Ethernet Module offers communication to users via a webserver, e-mail, USB and RS485.



Intelligent condensing unit control

Example of condensing unit application and the intelligent functionalities the easy plug-and-play Lodam Condensing Unit controller kit is ready for:



Technical specifications:

Control Modes	Suction pressure or room temperature
Compressor control	on/off, with frequency inverter or unloaders
Compressor protection	Compressor protection via temperature monitoring, oil level monitoring and safe pressure area operation
Unloader control	Two compressors each with an unloader are used for intelligent capacity control with standard compressors and high energy efficiency
Oil return	Increases compressor speed to ensure that oil is returned regularly with the refrigerant
Condenser control	on/off or stepless 0-100% control
Eco or low sound fan mode	Runs the fans most efficiently or with the lowest noise level
Force low sound fan mode	Providing the signal is active, the fans are kept in low sound mode to minimize the noise level
Heat recovery	Only use condenser fans if the capacity of heat exchanger is insufficient in condensing the refrigerant
Alarm system	Temperature, pressure, digital inputs and frequency inverter alarms are monitored displayed and stored including repetitive alarms
Interface to CTS	Existing CTS equipment receives a potential free signal if an alarm situation should arise
Easy customization	Display for easy customization with several layers of password protection and menu sections
Easy remote monitoring	Local monitoring via USB connection or remote via Ethernet connection local or via the Internet
Winter start	Ensure a start even if suction pressure does not indicate request for cooling
Week program	Different set points during the day and week for set point and condenser fan operation
1 year data logger	Good service, maintenance and documentation tool
Configurable digital inputs	Two digital inputs can be configured for: alternating set point, ensuring low sound, winter start or use of heat recovery



Lodam electronics

– a knowledge and network company

For more than 40 years Lodam has developed, produced and implemented customer tailored electronic solutions for climate controls.

Today the most important asset of Lodam is the 40 dedicated employees, who work in our modern facilities in Sønderborg, near the Danish-German border.

In 2007 Lodam became a member of the Bitzer Group, one of the world's largest groups within the Refrigeration and Air conditioning industry. The entrance in the Bitzer Group has strengthened the network and application knowledge access for Lodam to develop even more energy saving, reliable and innovative products to our partners. As our partner you can now also gain easier access to the Lodam solutions through the worldwide distribution and sales net, already established by the Bitzer Group.

Additional to the very high application knowledge within Lodam and the Bitzer group, Lodam is a dedicated member of multiple interest groups and committees. Lodam has for many years held close cooperation with the Danish Technological Institute for research and development projects.

We have also Ph.D. scientists attached in cooperation with different Universities, and Lodam was cofounder of KVCA - which is a group of companies and universities who share application knowledge and start up innovative R&D projects together. All these competence networks keeps Lodam in front of innovation - and the customer tailored climate control solutions to be offered in the future.