

LMS

Inverter Monoblock



Introducing

LMS - Inverter Monoblock for refrigeration

Daikin's latest innovation for commercial refrigeration – a propane monoblock, specially designed for small and medium-sized cold rooms, suitable for a very wide range of applications like HoReCa., supermarkets, food industry, logistics, hospitals, data centers, etc.

Our propane monoblock system is an eco-friendly and cost-effective alternative to traditional refrigeration systems. Propane, as a natural refrigerant with zero ozone depletion potential and a low global warming potential, makes it a sustainable and responsible choice for businesses that want to reduce their environmental impact.

In addition to its environmental benefits, our propane monoblock system is also highly efficient, delivering fast and consistent cooling performance while consuming less energy than other refrigeration systems. This means

lower operating costs and higher energy savings for your restaurant.

Our team of experts has designed and tested this propane monoblock system to ensure its safety and reliability. We understand the unique needs of the cold rooms industry and have tailored our solution to meet those needs.

If you're looking for a reliable, energy-efficient, and sustainable refrigeration solution for your cold room, look no further than our propane monoblock system.

Why Propane is the ideal solution for your cold room?



› **Environmental Benefits:** Propane is a natural refrigerant with a very low global warming potential and zero ozone depletion potential. This means that it does not contribute to the depletion of the ozone layer or global warming, making it an eco-friendly and sustainable choice for businesses that want to reduce their environmental impact.



› **Cost Savings:** Since propane is a readily available and affordable refrigerant, businesses can save money on the cost of refrigeration by using propane-based systems. Additionally, propane-based systems have lower maintenance costs and longer lifespans than other refrigeration systems, reducing the need for frequent repairs and replacements.



› **Energy Efficiency:** Propane-based refrigeration systems are highly efficient, delivering fast and consistent cooling performance while consuming less energy than other refrigeration systems. This can result in significant cost savings for businesses, especially those that require constant refrigeration for their products.



› **Safety:** Propane-based refrigeration systems are designed with safety in mind. These systems have built-in safety features such as automatic shutoff valves and leak detection sensors, which can prevent accidents and minimize the risk of fires or explosions.

In summary, the added value of using propane for refrigeration includes environmental sustainability, energy efficiency, cost savings, and safety. As a natural and efficient refrigerant, propane is a smart choice for businesses that want to reduce their environmental impact, save money, and ensure the safety of their employees and customers.

Why LMS-Inverter monoblock is the best choice for your cold room?

With LMS-Inverter monoblock, all the components of the refrigeration cycle, including the compressor, condenser, and evaporator, are housed in a single unit. When it comes to cold rooms, there are several benefits to use this plug-and-play system, including:



› **Easy Installation:** LMS-Inverter monoblock is easy to install compared to other refrigeration systems, which often require a separate compressor and condenser unit. This can result in faster installation times and lower installation costs.



› **Space Saving:** Since all the components of the refrigeration system are housed in a single unit, LMS-Inverter monoblock takes up less space in the cold room. This can be especially beneficial for smaller cold rooms where space is limited.



› **Energy Efficiency:** LMS-Inverter monoblock can be more energy-efficient than other refrigeration systems because it has fewer connections and less refrigerant piping, which reduces the risk of refrigerant leaks and energy losses.



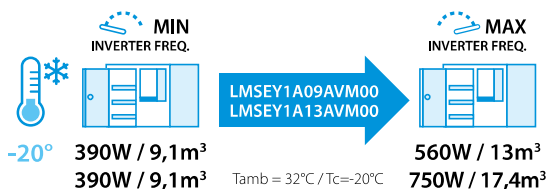
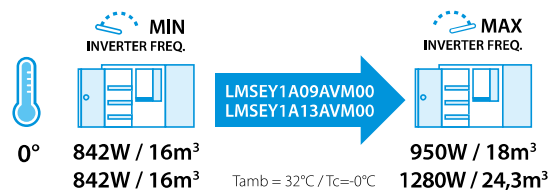
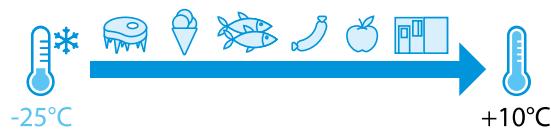
› **Lower Maintenance:** LMS-Inverter monoblock has fewer components than other refrigeration systems, which means there are fewer parts that can fail or require maintenance. This can result in lower maintenance costs and less downtime for your cold room.



› **Improved Performance:** LMS-Inverter monoblock is designed to work optimally as a single unit, which can result in improved performance and better temperature control in the cold room.

LMS-Inverter monoblock is a smart choice for businesses that want an efficient and reliable refrigeration solution for their cold room.





Preliminary data (T.B.C.) | Volumes for insulation thickness = 100mm

Multiple monoblocks, up to 10 pieces in a master-slave configuration (1 master + 9 slaves), can be installed within one cold room to satisfy the cooling needs.



Standard equipment

- › Inverter driven hermetic reciprocating compressor
- › 50/60 Hz power supply
- › CE Certified
- › Filter dryer
- › Condenser fan ON/OFF controlled by temperature probe
- › Electronic expansion valve
- › Condensate evaporation tray
- › Hot gas defrost
- › Popane refrigerant charge → 150gr
- › Electronic control board
- › Electrical switchboard with protection fuses
- › Fixed calibration HP switch with automatic reset
- › 5 m cable for power supply
- › 2 m cold room lighting cable (light bulb and bulb as option)
- › 5 m micro-switch door cable (Microswitch as option)
- › 5m cable for door heater

Model		LMSEY1A09AVM00 LMSEY1A13AVM00
Power supply	[V/Ph/Hz]	230/1/50-60
Compressor		Hermetic + inverter
Compressor displacement	[cc]	1 x 14,7
Refrigerating circuits		1
Expansion device		EEV
Defrost		Hot gas
Condenser fan	[nr x mm]	1 x 230
Condenser airflow ¹	[m³/h]	555
Evaporator fan	[nr x mm]	1 x 230
Evaporator airflow ¹	[m³/h]	597
Evaporator airthrow ²	[m]	9,6
Operating sound pressure ³	[dBA]	39,4
Unit weight	[kg]	52
Refrigerant weight (each circuit)	[kg]	0,15
Cold room temperature range	[*C]	+10 ÷ -25
Max ambient temperature	[*C]	45°C
Standards for cooling capacity determination ⁴		EN 17432

1. According to EN ISO 5801
2. According to CECOMAF GT 6-001 (final velocity = 0,25 m/s)
3. According to UNI EN ISO 3746
4. EN 17432: "Packaged refrigerating units for walk-in cold rooms - Classification, performance and energy consumption testing"

An all-new user experience and ensuring simple configuration.

DAIKIN USER is the new App that allows end users of refrigerating systems to interact with the latest generation electronic controllers equipped with Bluetooth technology.

It has been developed to be unique: rather than different versions for each device, there is just one App for all compatible current and future devices.

With a simple and intuitive interface and only using a smartphone, **DAIKIN USER** revolutionises and simplifies the use of refrigerating units, through the use of a mobile device, without the need for PCs, serial converters and optional terminals.

Functions and parameters are managed via profiles so as to ensure the correct access level based on the type of user.



The main features are:

- › Simple and intuitive multilingual interface
- › No new technology or experience needed: smartphones and apps are commonly used by most of the world's population
- › Wireless connectivity with the devices via Bluetooth, avoiding the need for additional wiring in the field
- › Control of temperatures read-out
- › HACCP data recording
- › Up-to-date documentation relating to the connected controller

Mobile app
soon available on



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EN ISO 5801
ISO 3746
EN 17432

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