

Desmon scientific



CAREL

Success story

Desmon chooses iJS for maximum reliability

A successful synergy for storing medicines and vaccines

For its latest refrigerated cabinet intended for scientific and medical applications, Desmon, a European leader in the production of refrigerated equipment for the medical and food service sectors, has chosen CAREL's iJS, part of the iJ platform, due to its features such as temperature recording, dedicated alarms, connectivity, battery backup module and extensive certification possibilities.



Where

Nusco (AV)

What

Refrigerator for storing medicines/ vaccines

Cabinet construction: Desmon S.p.A.
(Electronics)

Control solutions: CAREL INDUSTRIES
S.p.A.

Why

- Maximum reliability of the system for storing critical contents;
- Backup battery;
- Advanced connectivity with NFC and Bluetooth;
- "NSF/ANSI 456" for vaccine storage.



DESMON S.p.A. was founded in 1994 as a manufacturer of professional refrigerated equipment for the medical and food service sectors.

Since 2015 it has been part of Middleby Corporation, a world leader company in the food service equipment sector.

100% of the refrigerated equipment produced by DESMON is made in its two factories covering approximately 25,000 m² in Nusco.

Desmon refrigerated cabinet for vaccine storage and the specific needs of scientific applications

Desmon S.p.A. is an Italian company that since 1994 has been a European reference in the production of professional refrigerated equipment for the medical and food service sectors.

Thanks to its collaboration with CAREL, Desmon has designed a new line of medical-scientific products for storing medicines and vaccines.

The Desmon range of professional refrigerators is specifically designed to guarantee the correct storage conditions for healthcare products, heat-sensitive biological materials and all types of medicines, based on the specifications of the pharmaceutical companies.

These types of refrigeration units are usually installed in pharmacies, drug stores and hospitals.

The scientific applications addressed by Desmon specifically require the refrigeration units to be equipped with components to make them highly reliable and able to record product storage temperatures.

Indeed, the regulations in force for scientific/medical applications require monitoring and recording of the minimum and maximum temperatures reached by the refrigeration unit: this is necessary to ensure that, even in the event of a power outage (blackout), the products continue to be stored in an optimal range.

The needs also vary depending on the market, and for the US market specific certification is required: NSF/ANSI 456.

This certification was another essential requirement for the development of the new Desmon product line, and decisive in their choice of the CAREL solution.

The CAREL solution

In the scenario described above, Desmon's needs are fully met by the CAREL iJ controller platform and specifically the iJS for scientific applications, a solution designed to meet the demands of the medical market.

The main features of iJS are:

- **Temperature recording and dedicated alarms**

In scientific applications, to ensure the contents of the refrigeration units are stored in the specified conditions, it is crucial to record and report all situations in which the temperature is outside of the compliance limits, so as to have full control of any abnormal situations. To simplify operations as much as possible, iJS comes with a dedicated keypad that allows the operator to intuitively record temperatures.

- **Battery backup module to ensure operation even during blackouts** iJS connects to a backup battery management module in the event of a power outages. Direct connection to the battery avoids the need to use a mini UPS. The aim is to be able to continue to monitor the temperature inside the cabinets.



• Connectivity and reports via app

With the new iJS range, users can also interact using a dedicated app, via local NFC and Bluetooth® connectivity. CAREL offers:

- the APPLICA app for technical personnel responsible for maintenance and commissioning;
- the CONTROLLA app for end users, who can view and download temperature reports to ensure maximum data traceability.

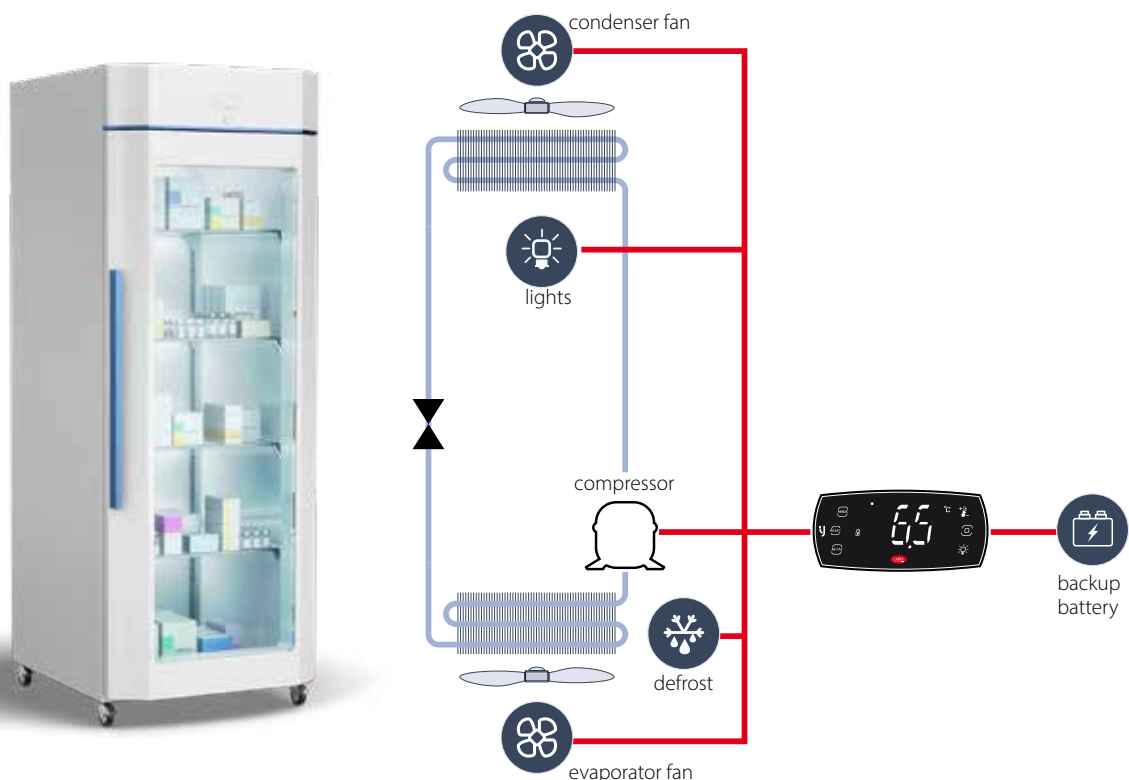
Desmon specified the Bluetooth® option as standard, recognising the considerable value in proposing CONTROLLA: the app in fact allows quick access to and exporting of the temperature log, saved in the controller's internal memory, simplifying interaction with the unit.



• Certifications

The iJ platform, including iJS, was developed with all major product certifications for the European and American markets, specifically CE and UL certification. The iJ platform also comes with a CB Report, a document that simplifies certification at a more local level. Finally, compatibility is guaranteed in applications that use flammable refrigerants, by compliance with the IEC/EN/UL 60335 standard.

Example of a system diagram and loads managed by iJS



Conclusions

CAREL, in collaboration with Desmon, has once again demonstrated expertise and a spirit of innovation in the scientific market, through the adoption of the most innovative technologies, standing out for the high reliability of its products, so as to best support customers, and proving to be a strategic partner for the technological proposals offered.

The Technical Director of Desmon S.p.a., Ciriaco De Santis, stated: *"The choice of the CAREL iJS platform has proven to be ideal for guaranteeing the quality standards of our products and above all of our new line of refrigerated cabinets for the storage of medicines and vaccines, the design of which, as always, was focused on detail and functionality. Our collaboration with CAREL has been a success, thanks to the commitment of our respective engineering teams, making the products even more effective and reliable. Finally, the possibility of offering the solution to multiple markets, thanks to the wide range of certifications available, was further decisive in choosing iJS."*



Headquarters

CAREL INDUSTRIES HQs
Via dell'Industria, 11
35020 Brugine - Padova (Italy)
carel@carel.com



Arion S.r.l.

Sede operativa:
Via Pizzo Camino, 28
24060 Chiuduno (BG) - Italy
www.arionsensors.com

HygroMatik GmbH

Lise-Meitner-Straße 3
24558 Henstedt-Ulzburg - Germany
www.hygromatik.com

RECUPERATOR

Via Valfurva 13
20027 Rescaldina (MI) - Italy
www.recuperator.eu

C.R.C. S.r.l.

Via Selva di Pescarola 12/9
40131 Bologna - Italy
info@crc-srl.net
www.carel.com

Klingenburg GmbH

Brüsseler Str. 77
45968 Gladbeck - Germany
www.klingenburg.de

Sauber

Via Don Doride Bertoldi, 51
46047 Porto Mantovano (MN) - Italy
www.sauberservizi.it

Authorized distributor

ENGINIA S.r.l.

Viale Lombardia, 78
20056 Trezzo Sull'Adda (MI) - Italy
www.enginiasrl.com

Klingenburg International Sp. z o.o.

ul. Metalowców 5
PL-58-100 Świdnica, Poland
www.klingenburg.pl

Senva

1825 NW 167th Pl, Beaverton,
OR 97006, Stati Uniti
www.senvainc.com

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