

Connected
Efficiency



CAREL



Heez

Efficiency and performance,
naturally connected

carel.com

Heez solution for best in class coolers

Connectivity is one of the main assets of this solution and has been implemented with the use of NFC and Bluetooth technology. Thanks to the development of cloud services and advanced configuration tools, the user experience has been considerably improved, from the production line through the cooler's working life.

No-compromise efficiency and performance

These are the main strengths of Heez, the result of continuous modulation of the variable-capacity rotary compressors (DC inverter), extremely high performance technology that CAREL has for the first time made available to the refrigerated merchandiser segment. DC rotary technology in fact ensures the highest energy performance due to the very wide range of modulation, as well as high reliability and stability, lower noise and more compact dimensions. Heez is therefore the response to the challenges that the industry will have to face in the near future in terms of reducing environmental

impact and running costs, while still guaranteeing the required performance. In fact it is fundamental for drinks and similar products to be at the ideal temperature for sale at all times, meaning rapid cooling when opening the store or the bottle cooler, or when restocking the cooler. In addition to guaranteeing such high performance, Heez can ensure results in terms of energy savings that easily exceed the current market benchmarks and indeed anticipate future standards, using a natural refrigerant - propane - to achieve true natural efficiency. Heez control solution can be applied to both glass door merchandisers and open front coolers.

Energy Consumption
0.85
kWh/day

EEI
-47%
compared with TOPTEN.eu
best cooler average
Energy Efficiency Index

HRR
-62%
5 h VS 13 h
Half Reload Recovery

EN16902 - 25°C - 60% rH - K2 class
397 l gross volume cooler

tested by
REAGENT



Efficiency

- **Self learning logic** for night and day conditions based on user habits
- Optimal regulation with **steady state and partial load management** by modulating devices
- **Ultimate algorithms** for dynamic setpoint, defrost detect and smart implementation



Performance

- Industry benchmark reduced **Pull Down and Half Reload** timings
- Stability control to ensure constantly **optimal product temperature**
- **Advanced defrost detection** to work always at optimal conditions



Reliability

- Advanced DC inverter compressor management with EEV synchronisation and protections
- No need of voltage stabiliser with DC inverter and extended input voltage range
- Smooth operation with reduced vibrations for lower mechanical stress



Heez user interface

- Extensive customisation options
- Backlight buttons and multicolour icons
- NFC and optional Bluetooth technology



EEV stepper valve

- Equipercentile continuous modulation
- Top performance during temperature pull down
- Compressor safety functions
- Enable smart logic



EC variable speed fans

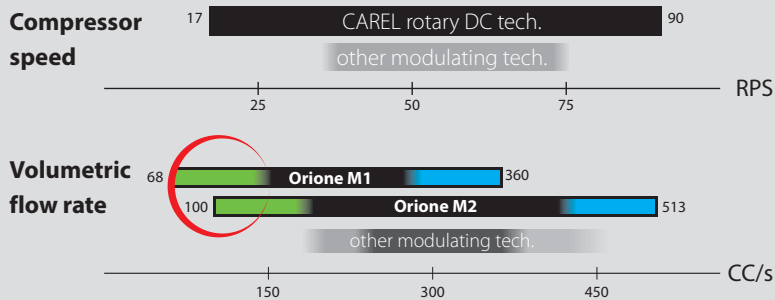
- High efficiency following compressor speed
- Top performance during temperature pull down
- Low noise



Heez controller

- All in one logic-I/O-DC inverter control solution
- Built in EEV driver
- Direct 310V DC bus and AC modulation for EC fans
- No need for voltage stabiliser with extended voltage range

Wide modulation range for efficiency and performance



R290 DC INVERTER ROTARY COMPRESSOR



Top efficiency

- Best in class EEL results with less ON/OFF cycles
- Stable operation to ensure optimal product temperature
- Smooth operation and reduced vibrations for higher reliability



Top performance

- Incredible pull down performance with high rotation speed
- Beverage temperature always in ideal conditions

General	
Compressor	Orione M1 R290 DC INVERTER ROTARY
Electronic unit	Heez control solution with active PFC
Approvals	UL/EN60335-2-34, with annex AA, CCC UL/EN60730, full EMC compliance

Application	
Application	MBP / HBP
Evaporating temperature °C	-15 to +15
Voltage range / frequency V / Hz	115-127 V; 220-240 V - 50/60 Hz
Speed range rps / rpm	17 to 90 / 1020 to 5400
Cooling capacity range W	90-705

Performance data (including electronic unit)				
Speed	rps / rpm	30 / 1800	60 / 3600	90 / 5400
Cooling capacity	W	208	460	705
Power consumption	W	122	222	336
COP	W/W	1,70	2,07	2,10
Test condition	ASHRAE MBP - Evaporating temperature: -6,7°C; Condensing temperature: 54,4°C; Suction gas temperature: 35°C; Liquid temperature: 46,1; Ambient temperature: 35°C			



Easy & fast adoption



Low noise and vibrations



90% volumetric efficiency



Compact dimensions

MARKETING DEPT

SERVICE DEPT



COOLERS TRACKING



ACTIVITY & MANAGEMENT



BEVERAGES TEMPERATURE



TECHNICAL ANALYSIS



PREVENTIVE ALERTS



FIELD SUPPORT



ARMILLA

DATA Management Portal
for beverage companies

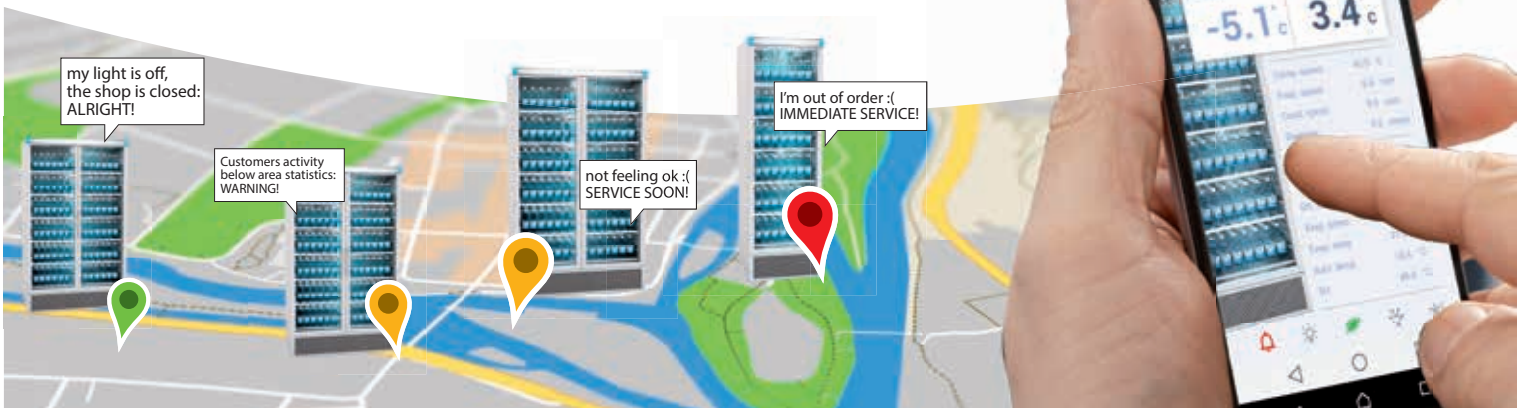
Armilla is the new portal dedicated to beverage companies and their partners. It is designed to optimise marketing analysis and technical service.

In Armilla, data are collected and presented with graphs and dashboards. The raw data are processed and transformed into useful warnings and information for making marketing and service decisions.



APPLICA

- Field connection and new user experience
- Dedicated app for easy and fast configuration;
 - Product documentation always updated and available;
 - Cloud service for flexible and powerful profiling and parameter list management;
 - Real time dashboard for cooler analysis and troubleshooting;
 - Easy access to direct functions;
 - Data logging for ARMILLA cloud services.



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