

Nidec
Global Appliance

Company Profile



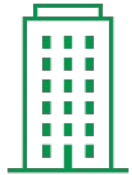
We are part of Nidec Corporation



Founded in 1973



HQ: Kyoto, Japan



340+
Companies



Mergers & Acquisitions (M&A) are the driving power behind growth.
So far, there have been over 60 M&As.



40+
Countries



\$1.5 B
Group Operating Profit (FY/2021)



110,000+
Employees Worldwide



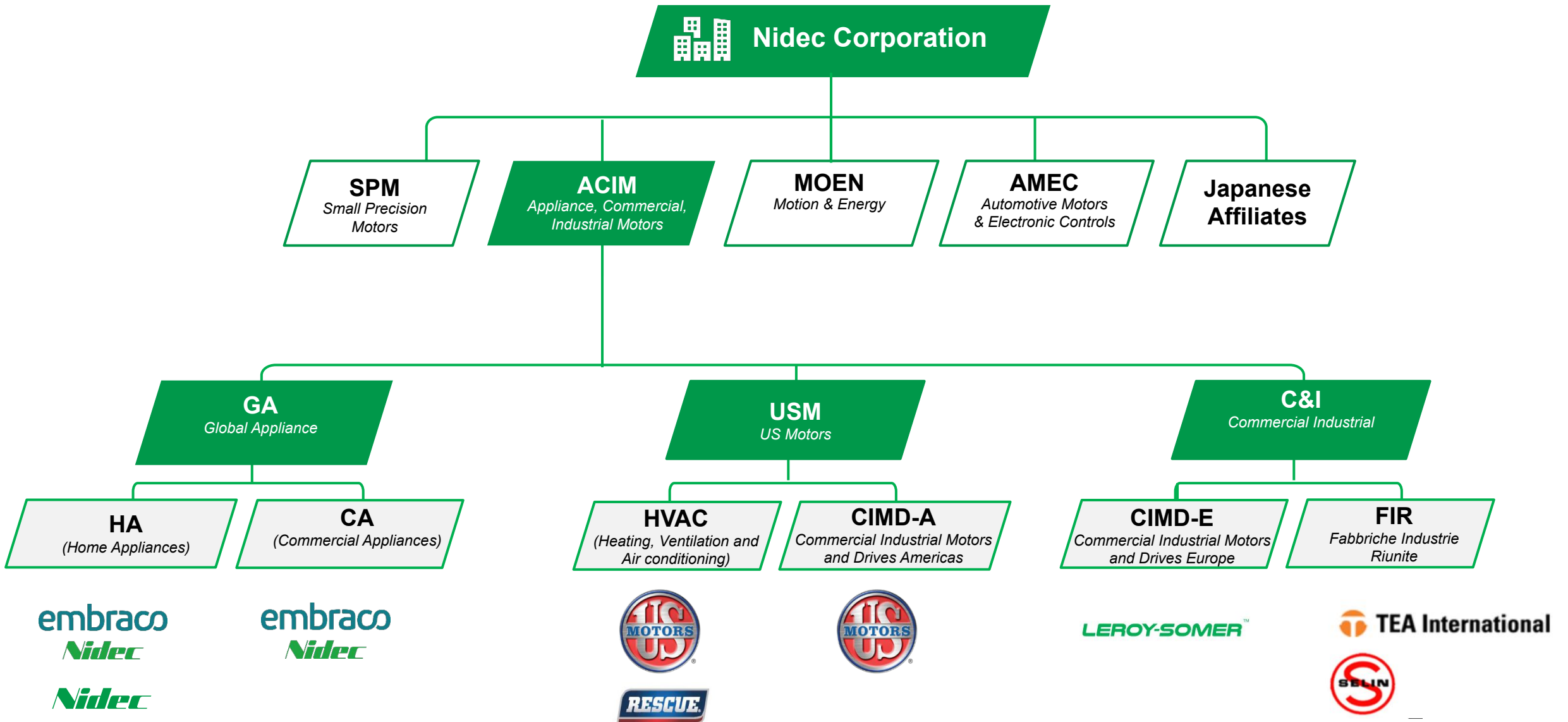
\$17.4 B
Group Turnover (FY/2021)



Shigenobu Nagamori

Founder, Chairman of
the Board at Kyoto HQ

Nidec Corporation and ACIM structure



A business unit focused on **Appliance, Commercial, Industrial Motors**



HQs: Pordenone (Italy) and Joinville (Brazil)



Present in **+25 countries** with **37 manufacturing sites**



Over 20.000 employees



3.3 B USD turnover (BP FY21)



NIDEC GLOBAL APPLIANCE

We are Nidec Global Appliance, a global partner for home and commercial appliances industries



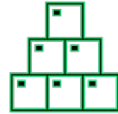
HQs: Joinville (Brazil) and Pordenone (Italy)



12,000 employees



12 manufacturing plants and **4** business offices across 9 countries



Annual production capacity of **80 million** motors and compressors



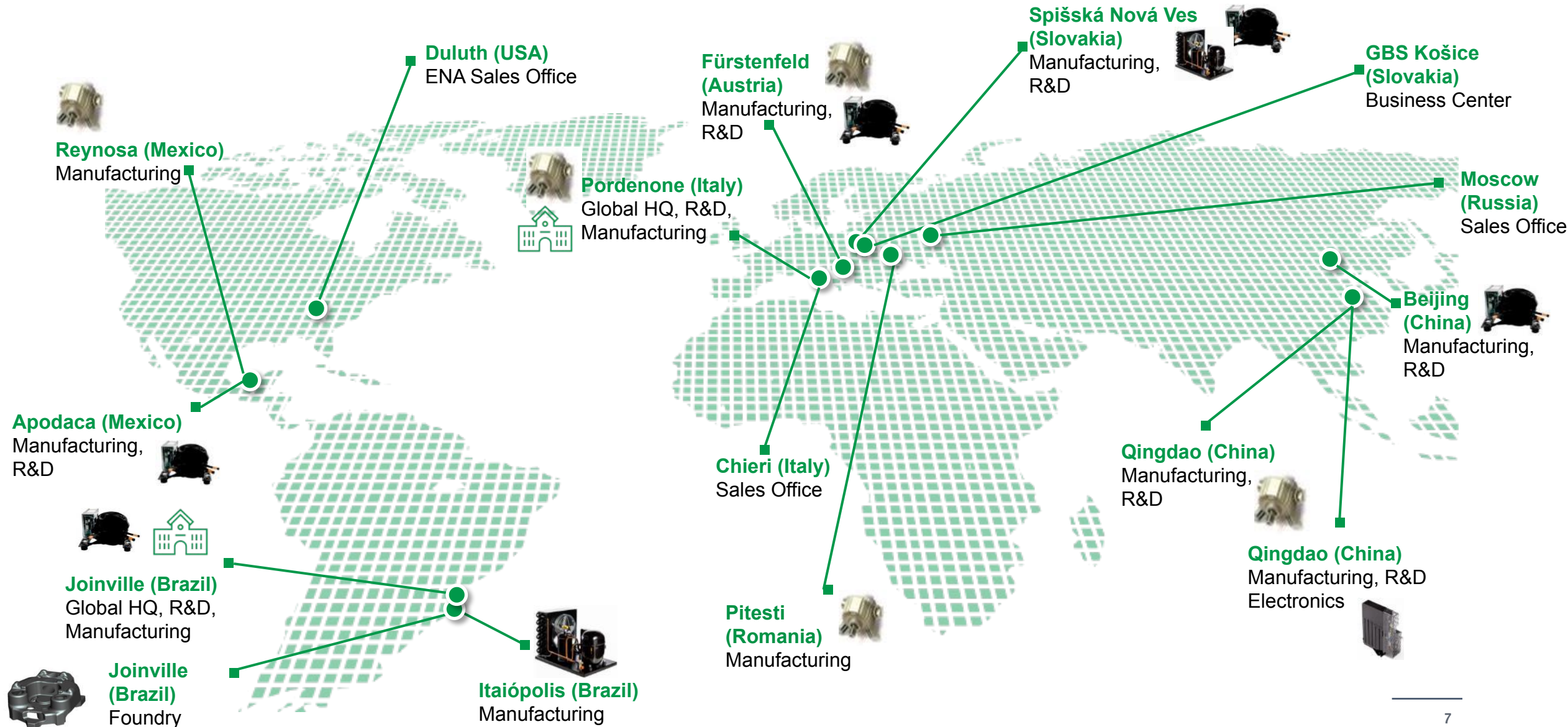
7 R&D Centers worldwide and **500+** engineers



90 countries served by our products



GA Global Presence



Our purpose: Why we exist

To give life to essential appliances, turning people's day-to-day lives into healthier and more comfortable experiences.

Our 2025 vision: What we aim for

To be the leading partner in Home & Commercial Appliances.

Our culture: How we do it everyday

Challenge cost & grow for the future

Collaborate without barriers

Act with agility & correctness

Innovate ourselves for differentiation

Be active learners & developers



Energy efficiency

Technology that enables **reduction of energy consumption.**



Natural Refrigerants

Portfolio designed to deliver the best in class performance, under the safest conditions with Natural Refrigerants.



Miniaturization

Size reduction combined with embedded technology.

We are differentiated by a **deep expertise in Research & Development**, capable of **delivering technology and innovation** that anticipates trends in the appliances segments.



We foster innovation through our **7 Research & Development Centers** spread through 4 different continents



Our partnership with universities all over the world allows us to develop innovative solutions and always have a fresh approach



Our R&D works together with **application engineers across the globe** to guarantee the ideal match between Nidec components and the customer application



Nidec Global Appliance has over **1,050 valid patents.**

BUSINESS SEGMENTS AND BRANDS



Home Appliances

Solutions for Refrigerators
Washing Machines,
Dishwashers and Dryers.

Commercial Appliances

Compressors and Condensing
Units for Refrigerators and
Cooling Systems.



HOME APPLIANCES

Solutions for Home Appliances

Nidec
Global Appliance

Nidec

Motors for washing machines,
dryers and dishwashers.

embraco
Nidec

Compressors for refrigerators.





Recognized as energy-efficient and reliable, we develop core components for:



- **Washing machines**
- **Dryers**
- **Dishwashers**

We are differentiated by our co-development methodology, delivering technologies that are fit for the exact purpose of the customer.



Complete Portfolio for Washing Machines, Dryers and Dishwashers

Nidec motors meets a variety of customer's requirements in terms of size, weight, low noise, efficiency, design and technology.

- Experts in the **OEM process**;
- Deep understanding of demands, characteristics and regulations of **different markets**;
- R&D area with sophisticated **testing and analysis** capabilities;
- Rapid **sample delivery**;
- **Tailored solutions**.



Washing Machine motors to attend a wide range of market specifications

Our range for Washers covers the requirements for all Regions and type of Appliance. Available also as IMAC (Integrated Motor and Control).



HAWM
Horizontal axis washing machine



VAWM
Vertical axis washing machine



Universal



CIM



CIM - IMAC



BPM



BPM - IMAC



DD



DDM



DDM gear drive



PSC

Different technologies for different needs



DRY
Tumble
dryer



PSC



Split-Phase



BPM



BPM - IMAC

A truly global presence and highly advanced R&D

Integration of heater on motor pumps as well as electronic drive on our range of high efficient BPM solutions provides additional value to Nidec offer.

DW
Dishwashers



PSC
pump



PSC & integrated
heater



BPM pump -
IMAC

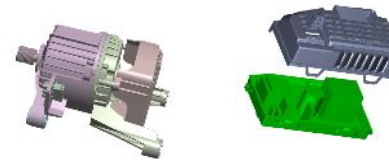


BPM
& integrated heater

Count on our
competence
in electronic
drives.



WM drives



- Client dedicated communication HW/SW
- Proprietary unbalance control algorithm
- Potted



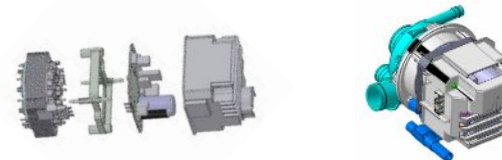
Dryer motor drives



- Suitable for “explosive gas applications” environment (e.g. R290 – propane - in heat pump dryers)



Dishwasher drives





Solutions for Home Appliances



High-quality and high-performance



Efficiency through constant innovation



Low noise



More internal cabinet space



Cost Competitive



An innovative and efficient portfolio



Fixed Speed

- **Reliability:** Product life extension
- **Efficiency** and robustness



DELTA



ES



EM



EG

Variable Speed

- **Highest efficiency** standards
- World class **low noise**
- Precise **temperature control**



FMS



FMX



VES



VEM



VEG

Future: high performance with simplification

- Global platforms
- Standardization to cover all applications range.



ES



FMS

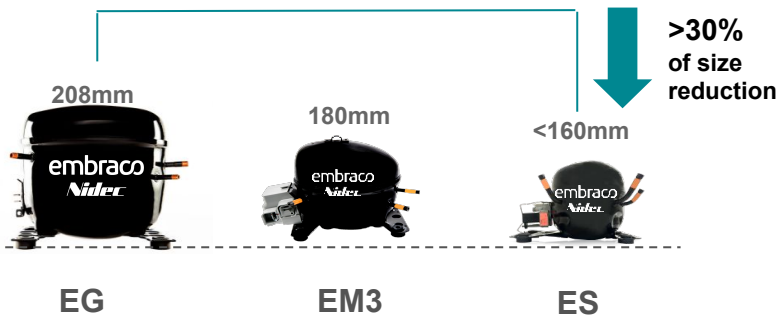


VES

Best Seller

Fixed speed portfolio is differentiated by low noise, reliability and high efficiency levels

Platform Evolution



LOW GWP SOLUTIONS: FOR 25 YEARS, THE PIONEER IN ANTICIPATING FUTURE CHALLENGES



Fixed Speed

Energy efficiency

30 – 40%* increase over recent years

Best Seller

Years of expertise and non-stop evolution in more than 500M compressors sold



Efficiency and temperature stability for refrigeration

Variable Speed



Lowest energy consumption due to inverter technology, up to 45%* lower energy consumption



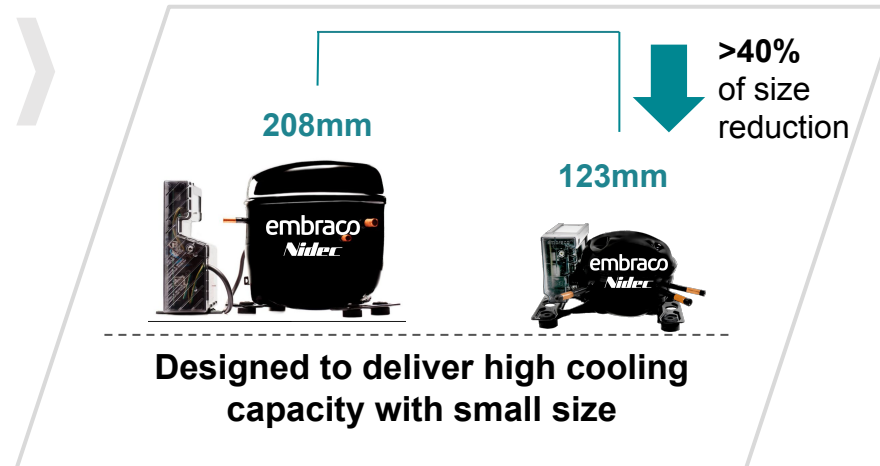
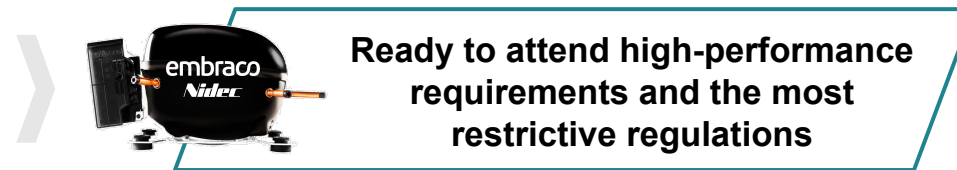
Miniaturization: Platforms that are small on size, but large on its application range



Fast Cooling: Target temperature reached faster, ensuring better food preservation



Low noise



LOW GWP SOLUTIONS

**in comparison to the conventional compressor. Efficiency indexes based on internal tests.*

COMMERCIAL APPLIANCES



Solutions for Commercial Appliances



Naturally Efficient: ultra low GWP and better performance.



Energy efficiency: robust portfolio with low energy consumption



Innovation: tailor-made solutions for the system needs.



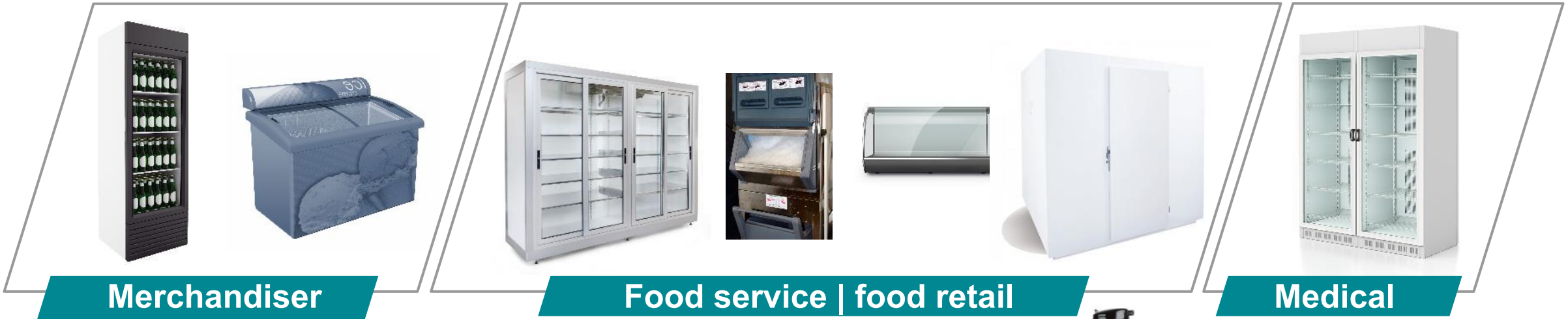
Reliability: product life extension



High-quality and high performance



Embraco portfolio for commercial refrigeration



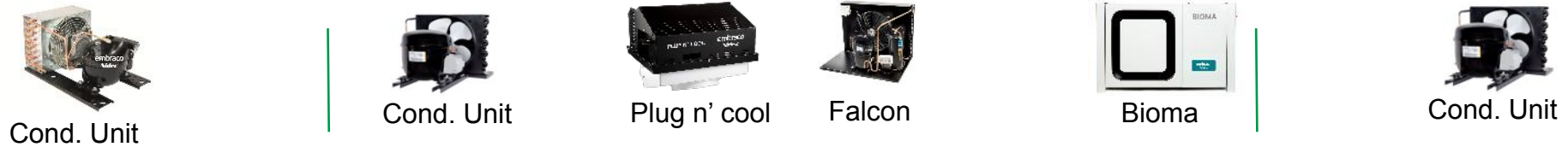
Fixed Speed



Variable Speed



Condensing Units / systems



RECIPROCATING: 2-38CC | SCROLL: 2-13HP AVAILABLE FOR LBP, MBP, HBP APPLICATIONS

BIOMA

Easy maintenance, fast installation and easy cleaning for refrigeration professionals.



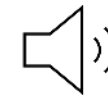
embraco
Nidec

Designed for cold rooms and outdoor applications

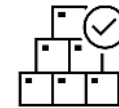


Up to **50% of noise reduction** versus next best alternative

Urban areas of the European market require a product that is:



Silent



Stackable

Smart design with **three access doors**



Plug n' Cool

Easy maintenance for cold storage

A complete plug in (self-contained) solution designed for food retail, differentiated by a low total cost of ownership



embraco
Nidec

Perfect fit
for reach in



Accelerates the installation process in 70%*



Energy efficient: it reduces energy consumption by 30%*



Modular design, it's great for small family business as well as large wholesalers



LOW GWP SOLUTION: for 25 year, the pioneer in anticipate market trends

**Efficiency indexes based on customer inputs.*

Condensing Units

Reliable portfolio of cooling solutions

LESS COMPLEXITY: complete pre-assembled high pressure side solution simplifies production process and maintenance.



Covering multiple applications



Cold room



Display cases



Standard portfolio covering a wide range of applications. Embraco also has customization capabilities.



Optimized condenser-compressor design leading to improved performance and reliability.



With options approved for natural refrigerants use

All components rely on Embraco quality.

FMF series

The most efficient compressor for the commercial segment.

The variable speed technology keeps the temperature stable and modulates the capacity, according to the application demand.



Ideal for supermarkets and special applications



Reach-in



Medical refrigeration



Reduces energy consumption by up to 40 % in comparison to fixed (on-off) compressor



High temperature stability



Low noise

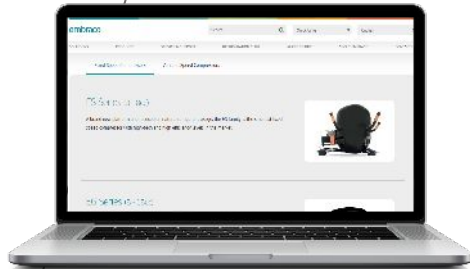


Dual-voltage (110V-220V / 50-60Hz).



Designed to operate with natural refrigerants (R290)

Website



www.embraco.com

Website in 11 languages:
focused on product application.

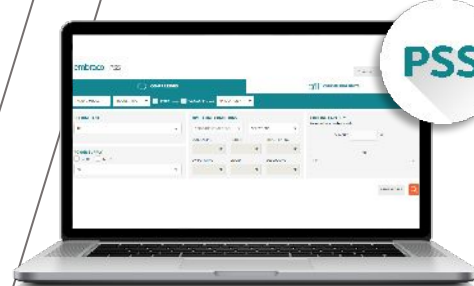
Technical Blog for refrigeration market



<http://refrigerationclub.com/>

Refrigeration Club:
educational and technical content

Product Selector Software



<http://products.embraco.com/>

Product Selector (PSS):
online catalog

Embraco Toolbox App



Audience:
Free tool for installers
Main content:
7 features / 10 languages available for Android and iOS.

Social Media channels



**For an in-depth look about
our company and solutions,
follow our pages:**



Nidec

Global Appliance