









# **FOOD INDUSTRY**

**Drive systems** 



As a worldwide specialist in drive systems, industrial processes and generators, Emerson Industrial Automation has supported its customers' evolving needs for more than 80 years.

**E**merson Industrial Automation electric motors, gearboxes, geared motors and electronic drives are designed to operate together, always with the aim of meeting the needs of users.

**B**ecause the various industrial sectors served by Emerson Industrial Automation face different problems, a specific structure has been put in place for special markets such as the automotive industry, the oil industry, the environment and **the food industry**.

Using its experience and close relationships with the various players in the industrial supply chain (machine manufacturers, design offices, consultancies, users, etc), Emerson Industrial Automation supports its customers' development on a daily basis with:

- local advice
- technical improvements
- technological innovations
- shorter lead times





470 sales and service outlets worldwide

## THE FOOD INDUSTRY APPROACH

Drive systems used in the food industry have to withstand extremely difficult constraints and must, without fail, be able to cope with the demands of the ambient conditions:

- FREQUENT WASHING
- MIGH-PRESSURE CLEANING
- PERMANENT HUMIDITY
  - CONTACT WITH AGGRESSIVE LIQUIDS
- HYGIENE
- RELIABILITY
- SAFETY
- MAINTENANCE



# FOOD INDUSTRY SYSTEM

Drive systems customised to suit the conditions of use

### VERY HARSH ATMOSPHERE

- Machines subjected to frequent high-pressure cleaning
- Environment with heavy condensation and food splashes
- Use of disinfectant and detergent products



### HARSH ATMOSPHERE

- Machines subjected to frequent low-pressure cleaning
- Use of disinfectant and detergent products



## **NORMAL ATMOSPHERE**

Machines subjected to liquid splashes and dust in a normal environment



## FOOD INDUSTRY SERVICE

Services associated with the supply of drive systems

- HELP WITH PRODUCT SELECTION
- LOCAL SERVICE PARTNERS
- RECOMMENDATIONS FOR ASSEMBLY AND SERVICING
- ON-SITE SERVICES
- APPROVED TRAINING CENTRE





# VERY HARSH

### IP56 / IP66 tests

Conforming to standard IEC 60034-5

#### KP tests

Increased resistance to knocks on the paintwork

## NOT VENTILATED CAST IRON MOTORS IC 410



## **GEARED MOTORS**

## **MULTIBLOC IAW**



For maximum ease of assembly and disassembly

**Sealing cartridge:** Allows high-pressure cleaning and ensures the coupling with the client shaft is protected from corrosion







Supplied with carton of grease

# **ATMOSPHERE**

Saline mist Withstand 600 hours (in accordance with ISO 9227) KP tests
High-pressure cleaning with
water at 80°C, up to 130 bar,
in all directions

- 0.25 to 4 kW, S1
- Stainless steel screws and tie rods
- Special anti-corrosion surface protection
- RAL 9010 finish
- Variable speed at constant torque in S1 duty (5 to 50 Hz)

#### **Options**

- Stainless steel shaft
- Metal cable gland
- Winding with epoxy coating





## **COMPABLOC IAW**



- Cast iron geared motors
- Retention zones eliminated
- Blanking of machining holes
- RAL 9010 finish
- Special anti-corrosion surface protection
- Variable speed at constant torque in S1 duty (5 to 50 HZ)

#### **Options**

- H1 edible oil
- Compabloc IAW: stainless steel gearbox shaft









# HARSH AT

Impact resistance tests

conforming to standard EN 50102

IP55 to conforming IEC 60034

## **VENTILATED ALPAX MOTORS WITH OR WITHOUT BRAKE**



**Shield**: Seals, deflectors and sealed bearings **Terminal box with enhanced dust and damp protection**:
Special seal, screws and cable gland



- Stainless steel screws, tie rods and nameplate
- RAL 9010 finish
- Variable speed at constant torque in S1 duty (25 to 50 Hz)

## **GEARED MOTORS**

## **MULTIBLOC IA**



Hollow hub with helical grooves: For maximum ease of assembly and disassembly



**Sealing cartridge (optional)**: Allows high-pressure cleaning and protects the coupling with the client shaft from corrosion



Supplied with carton of grease

## **DECENTRALISED ELECTRONICS**

### **PROXIDRIVE**



IP66 sealed design: Locked weatherproof seals, stainless steel cable gland support plate



- Drive without cabinet
- Designed without any retention zones
- Conforming to hygiene regulations
- Materials resistant to aggressive liquids
- Easy to install

# MOSPHERE

### ests of to standard 5

# Enhanced dust and damp protection

under little the team

### FCR brake



- Same finish as the motor
- Brake and cover treated on inside and outside
- Anti-corrosion protection and anti-stick treatment on the brake armature

#### **Options**

- Stainless steel shaft and cover
- Metal cable gland
- Winding with epoxy coating





### **COMPABLOC IA**



- Retention zones eliminated
- Blanking of machining holes
- RAL 9010 finish
- Variable speed at constant torque in S1 duty (25 to 50 Hz)

#### **Options**

- H1 edible oil
- Multibloc IA: sealing cartridge





### **VARMECA**



- Same finish as the motor
- Drive in the terminal box
- Moulded IP65 electronics
- Numerous options
- Easy, complete parameter setting





# NORMAL

Products designed to operate together

Modular, complementary ranges

## **MOTORS**

## Standard or controlled applications









# **GEARED MOTORS**

## Right angle drive







## **ELECTRONICS**

## Centralised or decentralised variable speed drives







# **ATMOSPHERE**

Guaranteed performance

Conformity with international regulations

## With or without brake

## Fixed or variable speed











## Axial output



Helical gears





vo geared motors with low backlash















# FOOD INDUSTRY SERVICE

Services associated with the supply of drive systems

## SERVICE PARTNERS

470 sales and service outlets worldwide





Technical advice
Product sales
On-site support
Repairs
Modernisation

### **ON-SITE SERVICES**

### **Equipment installation and removal**

#### **Maintenance contracts**

- preventive
- predictive
- conditional

#### **Performance monitoring**

- vibrational analysis, network analysis
- motor, balancing measurements
- LASER alignment, thermal analysis, ultrasound



# FOOD INDUSTRY SERVICE

Services associated with the supply of drive systems

### FOOD INDUSTRY SYSTEM SELECTION GUIDE



**Product description** 

Selection charts

**Electrical characteristics** 

**Dimensions** 

**Delivery Time chart** 

### **ONLINE**

FOOD INDUSTRY SYSTEM selection guide

Configurator: 3D views, product data sheets, etc.

Catalogue for Industry

Commissioning and maintenance manuals

Recommendations for assembly



### TRAINING



### Training provided on site or at the CFE

(Leroy-Somer Training Centre)

Training in installation

Training in operation and maintenance of drive systems





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