

ELECTRIC MOTORS 0,04kW - 7000kW

POWER OF EXPERIENCE  
 PROFESSIONAL APPROACH  
**DRIVING** PROFESSIONALITY  
 INTO **YOUR** ENERGY  
 ENERGY **BUSINESS**  
 CHALLENGING PROJECTS  
 MORE ENERGY  
 SOLID PARTNER  
 EXPERIENCE TOP QUALITY

INDIVIDUAL PROFESSIONAL APPROACH  
 ENERGY TOP QUALITY  
 A TURNED INTO  
 CE CONTINUOUS  
 SOLID PARTNER  
 MOST DEMANDING APPLICATIONS  
 EFFICIENT  
 POWER OF  
 INDIVIDUAL APPROACH PROFESSIONALITY

**Cantoni**®  
**GROUP**

Company Leaflet

**CANTONI GROUP IS THE WORLDWIDE LEADER IN MANUFACTURING AND SUPPLYING ELECTRIC MOTORS, BRAKES AND TOOLS**

**Cantoni Motor**, the International Sales Office and Headquarters, coordinates the sales and purchasing for the whole Cantoni Group.

The history of **Cantoni Motor** goes back to 1945 when **Elektrim Export Office** in Poland was created. Through the next years, many internal changes had occurred, the Office changed its name to Elektrim Motor, to become finally in the year 2000 – **Cantoni Motor S.A.** – a company with Italian ownership.



Cantoni Motor provides complete customer service, from offer submission until shipment, after-sales and full technical support. Thanks to the flexible organization, our technical and sales team is able to face all requirements of modern market and realize the most challenging projects.

As the Headquarters, the company not only coordinates the sales and purchasing of key materials for the production of electric motors in the Group, but also is responsible for marketing and promotion actions as well as for certification processes, trademarks and patents.



Cantoni Group produces and exports high quality industrial electric motors – **from 0,04 kW up to 7000 kW**, in standard and special executions.

Our motors are tough and reliable and operate in almost all industrial segments like marine, oil and gas, mining, chemical, power plants, paper mills, and in applications like pumps, fans, compressors, conveyors, etc.

Cantoni Group comprises the following manufacturing plants located in Poland:

- Besel, Celma Indukta and Emit (electric motors),
- Ema-Elfa (brakes),
- Fana, Fenes, Formit and Narmod (tools).

100% of Cantoni Group production is manufactured in Poland using high-quality materials and components originating in Poland and Europe.

All products manufactured by Cantoni Group factories meet international standards and requirements.

## BESEL



POWER RANGE: 0,04 kW – 2,2 kW  
FRAME SIZE: 56 – 80

### HISTORY:

- 1950 – foundation
- 1955 – launch of manufacturing of 3-phase induction motors
- 1966 – launch of manufacturing of 1-phase induction motors
- 1995 – acquisition by ELEKTRIM S.A.
- 2000 – became a part of Cantoni Group

The history of Fabryka Silników Elektrycznych Besel S.A. dates back to 1950s. Initially, the company provided repair and regeneration of electric motors for mining and agriculture. Currently, the main area of the company's activity is the production of squirrel cage induction motors within the range from 0,04 kW to 2,2 kW for the chemical, food, electromechanical industry and for the manufacture of fans and pumps.

The offer is constantly extended by new solutions such as energy efficient 1-phase and 3-phase motors, drive units based on reducers and frequency converters.

Since 2000, Besel has been a part of the Cantoni Group.

The high level of quality and durability of the motors is achieved due to experienced technical and engineering staff, innovative solutions and continuous technological development.

## CELMA INDUKTA



POWER RANGE: 0,37 kW – 250 kW  
FRAME SIZE: 90 – 315

### HISTORY:

- 1878 – foundation of Indukta in Bielsko-Biala
- 1920 – foundation of Celma in Cieszyn
- 1994/1996 – Indukta/Celma acquired by ELEKTRIM S.A.
- 1997/2000 – Indukta/Celma became a part of Cantoni Group
- 2011 – merger of two factories into Celma Indukta S.A.

Celma Indukta S.A. has been created by merging two prominent manufacturers of electric motors with over 100 years of tradition and experience: Fabryka Maszyn Elektrycznych Indukta (since 1878) and Fabryka Maszyn Elektrycznych Celma (since 1920). Celma Indukta is a part of the Cantoni Group. The main products are: general purpose 3-phase squirrel cage induction motors (in Standard, IE3 and IE4 efficiency class) used in many industrial branches, as well as special motors suitable for specific operating conditions e.g. in the mining, chemical, metallurgical or shipbuilding industries. The factory produces motors in the range from 0,37 kW up to 250 kW. Years of experience and history of Celma Indukta are crucial for Polish industry. For many years, motors have been tested in Celma Indukta's modern Laboratory certified ISO 17025 by CSA. In 2020, this Testing Laboratory obtained an Accreditation Certificate issued by the Polish Centre for Accreditation (PCA - Member of ILAC) allowing for accredited measurements of efficiency of 3-phase asynchronous electric motors in the power up to 500 kW.

## RESEARCH AND DEVELOPMENT CENTER

### WORLD CLASS PRECISION OF TESTING

The need to create the most advanced and innovative motor solutions resulted in creation of world class Research and Development Center in one of Cantoni Group factories, Emit S.A. in Zychlin, Poland.

The modern facility enables comprehensive tests of motors in the power range **from 50 kW to 6 MW** (with continuous power of 3 MW, overload capacity up to 4,6 MW and substitute test for motors up to 6 MW).

It allows to specify the electrical characteristics of machines and accurately determine their efficiency. Precise measurement of parameters is important for the optimization of the operations of electrical machines and the achievement of the potentially highest energy efficiency. The R&D Center, one of the most modern in Europe, is available to Emit's clients as well as to other interested parties.



# EMIT



POWER RANGE: 55 kW – 7000 kW  
FRAME SIZE: 355 – 1000

#### HISTORY:

1921 – foundation

1997 – acquisition by ELEKTRIM S.A.

2001 – received present name: Zakład Maszyn Elektrycznych Emit S.A.

2002 – became a part of Cantoni Group

The history of Zakład Maszyn Elektrycznych Emit S.A. goes back to 1921. Then, on the initiative of engineer Zygmunt Okoniewski – one of the „fathers” of the Polish electrical engineering industry, the Factory of Polish Electric Machines Brown Boveri S.A. was founded. For many years, the company was a pioneer in the field of electrical engineering in Poland.

Being a part of the Cantoni Group (since 2002), Emit remains a leading manufacturer of 3-phase electric motors and generators for high and low voltage, middle and big output (from 55 kW to 7000 kW). The basic production program consists of over 2500 types of electric machines. The factory also offers special versions of motors for submersible pumps, motors for combined cutter loaders, traction motors and many others. Emit is well-known for its comprehensive approach to customer requirements, which includes design, production and service.



# Elektrim

BECAME

# CANTONI MOTOR

Elektrim, the Polish Foreign Trade Company for Electrical Equipment Ltd. founded in 1945. Elektrim comprised i.e. of the Polish producers of electric motors and other Polish electrical engineering products. In the world markets, Elektrim had become a well-known and high quality brand. In 2000, the Elektrim Motor brand changed into Cantoni Motor brand, due to the acquisition of motor division by Italian Entrepreneur, Prof. Giampiero Cantoni. Thus, in years 1945–2000, our motors were sold to the international markets under brand Elektrim/Elektrim Motor. After that, we have implemented the period of double branding Elektrim and Cantoni, then rebranding solely to Cantoni Motor by Cantoni Group.

Since the year 2000, the original and genuine Elektrim motors are sold exclusively by the company Cantoni Motor (Headquarters and International Sales Office of Cantoni Group) directly or through the network of our long term partners.

# EMA-ELFA



TORQUE RANGE: 4 Nm – 5000 Nm

#### HISTORY:

1954 - foundation

1996 - acquisition by Indukta S.A.

1997 - received present name: Fabryka Aparatury Elektrycznej Ema-Elfa Sp. z o.o.

2000 - became a part of Cantoni Group



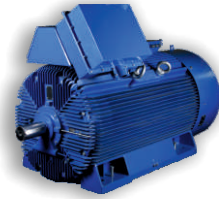




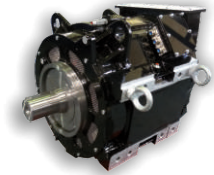
The company Fabryka Aparatury Elektrycznej Ema-Elfa Sp. z o.o. continues the successful production of wide range electrical apparatus since 1954. The factory has been a part of the Cantoni Group since 2000.

The company offers broad range of products such as electromagnetic AC/DC brakes (type HZg) used to brake the rotary motion of a motor shaft or a machine. In the portfolio, there are also self-locking systems, electromagnetic thrusters, powder clutches and brakes, steering buttons and sockets and many more.

The factory designed and introduced into production high-torque brakes up to 5000 Nm in several sizes and types.

Thanks to crucial technological development, Ema-Elfa launched the production of electromagnetic explosion-proof brakes of the NEX series, which have been further developed to series HEX.

# PRODUCT RANGE

<p>LOW VOLTAGE GENERAL PURPOSE 3-PHASE INDUCTION MOTORS</p>	<p>Three-phase motors with squirrel-cage rotor series (2)Sg(m), Sh, SIE-K</p> <p>HIGH (IE2), PREMIUM (IE3) and SUPER PREMIUM (IE4) efficiency motors</p>	<p>from 0,04kW up to 2200kW</p>	<p>for general purpose applications like pumps, fans, compressors; complying with the newest efficiency requirements</p>	
<p>GENERAL PURPOSE 1-PHASE INDUCTION MOTORS</p>	<p>Single-phase motors with squirrel-cage rotor series SEh, SEMh</p> <p>Single-phase motors PREMIUM (IE3) efficiency class, series 3SSIE</p>	<p>from 0,04kW up to 2,2kW</p>	<p>for general purpose applications like pumps, fans, compressors, woodworking machines, devices for food processing, concrete mixers etc.</p>	
<p>HIGH VOLTAGE INDUCTION MOTORS up to 11 kV</p>	<p>Three-phase squirrel-cage high voltage and high efficiency motors series Sh with cast-iron housing</p> <p>High voltage motors with module construction (steel/welded housing) series Sf (-E), Sfw, Sfr</p>	<p>from 160kW up to 7000kW</p>	<p>for general industrial use, drives used for own needs of power plants (pumps, fans, coal mills, conveyors)</p>	
<p>BRAKE MOTORS</p>	<p>Three-phase and single-phase brake motors with AC and DC brakes</p>	<p>from 0,04kW up to 200kW</p>	<p>for applications with high safety requirements or where immediate stopping of the drive is required e.g.: theatres, concert, halls, lifts, platforms, etc.</p>	
<p>MOTORS WITH FORCED VENTILATION</p>	<p>Three-phase induction motors with forced ventilation</p>	<p>from 0,06kW up to 2500kW</p>	<p>for variable frequency drives with very wide speed regulation</p>	
<p>EXPLOSION-PROOF MOTORS</p>	<p>Standard, HIGH (IE2) and PREMIUM (IE3) efficiency increased safety motors</p> <p>Standard, HIGH (IE2) and PREMIUM (IE3) efficiency flame-proof motors</p>	<p>from 0,06kW up to 22kW</p> <p>from 0,37kW up to 3200kW</p>	<p>adapted for operation in areas endangered by explosion (without methane)</p> <p>for applications in chemical and mining industry where explosive atmosphere of gases, vapours or dust can occur</p>	
<p>NEMA MOTORS</p>	<p>Low voltage NEMA motors SIE series (in compliance with the NEMA PREMIUM requirements)</p>	<p>from 1HP up to 350HP</p>	<p>for general industrial applications like pumps (including JM and JP), fans, compressors also for Hazardous Locations (Class I Div 2, Class II Div 2) with CSA certificate</p>	
<p>TRACTION MOTORS</p>	<p>Traction motors and traction generators</p>	<p>from 50kW up to 1500kW</p>	<p>various traction vehicles: trams (including low-deck trams), trolleybuses, subway and locomotives</p>	

and the whole range of electromagnetic brakes and releases ...