

We engineer dreams

# DISCRETE MANUFACTURING TO THE TOTAL PROPERTY OF THE PROPERTY O & PROCESS INDUSTRIES





#### **Industrial Gearboxes**

A series C series F series S series VF W series VF-EP/W-EP series **300M Series** 3/H series HDO series **HDP** series **HDPE** series

#### **Electric Motors**

**BN/M** series BE/ME series BX/MX series **BX Heavy Duty Series BSR** series







# A One-Stop shop for all your industrial applications

Every year, Bonfiglioli manufactures over 1.5 million products offering its customers fully integrated and solutions, ideal for a wide range of applications in over twenty industrial sectors.

The Discrete Manufacturing & Process Industries business unit offers gearboxes, geared motors and electric motors for any industrial applications. From fractional power to a few hundred Kw, our experts are able to address the most sophisticated requests for applications working in all conditions.

Thanks to over 60 years of experience by our customers'side, today we are able to anticipate their needs in more than twenty different industries, focusing on industrial processes and discrete manufacturing machineries such as packaging, food & beverage, mining, logistics and intralogistics.

#### Bonfiglioli also provides solutions for:





MOTION & ROBOTICS











# DISCRETE MANUFACTURING & PROCESS INDUSTRIES Solutions

# ALWAYS BY OUR CUSTOMER'S SIDE, ALL OVER THE WORLD



Our worldwide reach always puts us where our customers need us. We believe that deep understanding of application requirements — both technical and environmental — make the difference in providing the right products in a timely manner.









Bonfiglioli has globalized production over the years. Today, we operate 14 manufacturing plants around the world to serve customers in local markets more effectively. Our plants in Italy, Germany, USA, Brazil, India, China, Vietnam, and Slovakia form a truly efficient distribution network.

Excellence is our number one priority.

We use the latest technologies to optimize our daily production. Bonfiglioli is fully committed to a more sustainable workplace and supports various local initiatives.

All Bonfiglioli employee pay the utmost attention to even the smallest details, to ensure that our customers receive products with unrivalled quality.

# **CONFIGURE YOUR PRODUCT ON MOSAICO**



Mosaico is Bonfiglioli's e-business platform created to facilitate customers purchases and product configuration. Fully integrated with Bonfiglioli product database, it offers more flexibility to configure a solution and track orders.











# A complete e-business platform to be the master of your solutions

Mosaico guides customers, distributors and agents through the process of selecting the right product the right product for their specific needs and also gives support for design activities and orders' management. The system greatly accelerates the product selection and ordering process and also guarantees improved security and accuracy.

Thanks to web-based technology, customers can keep in touch with Bonfiglioli's technical service 24 hours a day, 365 days a year, from anywhere around the world. Registered customers have access to constantly updated technical specifications and drawings, specifically created for the exact product designation they need. This service provides users with on-line assistance to support them with:

- · Configure Bonfiglioli products
- · Download technical datas/drawings in 3D and 2D
- · Benefit from Bonfiglioli's help during products' selection

# INDUSTRY SPECIFIC SOLUTIONS

# CREATE SOLUTIONS DEDICATE TO DIVERSE INDUSTRIES



Bonfiglioli develops complete industrial solutions that are tailored to meet exact application requirements. Thanks to our decades of experience, we have the specific industry expertise to assist our customers with any kind of projects using tailormade solutions.



















#### Other sectors:

- Biogas
- · Rubber and plastics
- Metal processing
- · Access control
- · Commercial HVAC and refrigeration
- · Logistics and Stocking systems
- · Oil and gas
- · Power generation
- · Stone, clay and glass









# INDUSTRIAL GEARBOXES

# **HELICAL BEVEL GEARMOTORS & UNITS**



# **A Series**

The A Series combines high efficiency and reliability, low maintenance costs and a wide torque range. The right angle layout between INPUT and OUTPUT makes the A Series particularly compact. The gear set combination makes this right-angle product the most efficient and durable in Bonfiglioli's light- and medium-duty portfolio.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 4.9 ... 1,715

#### Mechanical rating

· 0.22 ...150 kW

#### Motors

- · Input with solid shaft
- · Input with e-motor coupling:
- M, ME, MX (compact asynchronous)
- BMD (servo permanent magnet)
- BSR (IEC reluctance)
- BN, BE, BX (IEC asynchronous)
- BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters
- Backstop

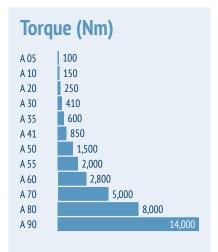
## Main options

- Surface protection up to C5
- Reinforced bearings
- · Reduced backlash
- Torque arm
- · Fluoroelastomer oil seals
- Double oil seasonal input
- Taconite seals

# Key benefits

- Minimized mounting space
- Reduced installation space and wide output speed selection range
- · Reduced standard backlash
- · Highly dynamic, energy-saving solution
- · Wide output speed selection range
- Gearboxes can operate safely in explosive environments

- · Right-angle input-output
- · Compact motor coupling
- Forced gears-shafts coupling
- Servomotor coupling
- Wide ratio range (4 stages)
- Atex gearbox for explosive environments 2G/2D





## **IN-LINE GEARMOTORS & UNITS**



# **C** Series

The C Series is designed for the requirements of standard tasks in the industrial environment. These series achieve first-rate reliability, efficiency, robustness, and a wide output torque range. The extremely wide range of gear ratios, achieved through 2-, 3- or 4-stage versions, allows the customer to adapt the C Series to every application and to find the perfect match for output speed requirements.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 2.6 ... 1,481

## Mechanical rating

· 0.09 ... 213 kW

#### Motors

- · Input with solid shaft
- Input with e-motor coupling:
- M, ME, MX (compact asynchronous)
- BMD (servo permanent magnet)
- BSR (IEC reluctance)
- BN, BE, BX (IEC asynchronous)
- BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters
- Backstop

## Main options

- Surface protection up to C5
- · Double oil seals
- Fluor Elastomer Seals
- · Reduced Backlash

## Key benefits

- · Cost-effective solution
- Minimized mounting space
- Easy maintenance
- Operation in a high-temperature environment
- · High resistance to external hits
- Pure coaxial torque transmission

- Space-optimized design
- Compact motor coupling
- Unibox housing
- · Forced gear-shafts coupling
- Servomotor coupling
- · Wide ratio range (4 stages)
- Atex- gearbox for explosive environments 2G/2D





# HELICAL PARALLEL-SHAFT GEARMOTORS & UNITS



# **F** Series

The F Series is an outstanding solution for customers looking for a drive that can maximize mounting flexibility. Thanks to the housing's lateral holes, the F Series can also be side mounted directly into the machine, in addition to all the conventional mounting positions. This gearmotor guarantees elevated efficiency, reliability and low-noise operation. High torque density, a range of wide gear ratios and a compact design complete the F Series' characteristics.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 6.4 ... 2,099

#### Mechanical rating

· 0.09 ... 123 kW

#### **Motors**

- · Input with solid shaft
- · Input with e-motor coupling:
- M, ME, MX (compact asynchronous)
- BMD (servo permanent magnet)
- BSR (IEC reluctance)
- BN, BE, BX (IEC asynchronous)
- BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters
- Backstop

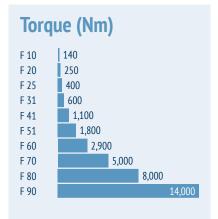
#### Main options

- Backstop
- · Reduced backlash
- · Lateral holes for side mounting
- Torque arm (with anti-vibrating bushings)

# Key benefits

- · Cost-effective solution
- Minimized mounting space
- Robustness
- · Reduced standard backlash
- Highly dynamic, energy-saving solution

- · Lateral holes for side mounting
- Space-optimized design
- · Compact motor coupling
- Unibox housing
- · Forced gearshaft coupling
- Servomotor coupling
- Wide ratio range (4 Stages)
- Atex gearbox for explosive environments 2G/2D





# **HELICAL SINGLE-STAGE**



# **S** Series

The S Series design makes this gearmotor particularly effective for pump, fan and blower applications. To meet the needs of customers in these sectors, the S Series is also available in the foot or flange versions and can be completed with a wide range of electric motors entirely manufactured by Bonfiglioli. Asynchronous motors both IEC and compact (B-BE-BX/M-ME-MX), servomotors (BMD) and reluctance motors (BSR) can be coupled with the S Series. With the breadth of its portfolio, Bonfiglioli provides customers with an outstanding balance of efficiency, dynamics and cost effectiveness.

#### Gear ratios

· 1.4 ... 13.1

## Mechanical rating

· 0.09 ... 11.6 kW

#### **Motors**

- · Input with solid shaft
- Input with e-motor coupling:
- M, ME, MX (compact asynchronous)
- BSR (IEC reluctance)
- BN, BE, BX (IEC asynchronous)
- BS (IEC single phase)

## Motor options

- Thermistors and thermostat sensors
- · Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters

# Main options

- · Double oil seals
- Fluoroelastomer seals
- Reduced backlash
- Up to C5 surface protection

## Key benefits

- Minimized mounting space
- Robustness
- · Reduced standard backlash
- Highly dynamic, energy-saving solution
- Wide output speed selection range
- · Gearboxes can operate safely in explosive environments

- · Essential design
- · Compact motor coupling
- Unibox housing
- · Forced gearshaft coupling
- Servomotor coupling





## **UNIVERSAL WORM GEARMOTORS & UNITS**



# **VF/W Series**

The VF/W Series succeeds in combining uncompromising quality with state-of-the-art technology and cost-effectiveness. The wide choice of mounting options allows for completely flexible shaft configurations and motor interfaces, all offered as standard. Thanks to several patented manufacturing techniques, Bonfiglioli's VF/W Series stands out for its long operating life and reliability.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 7 - 300 ... 2,300

#### Mechanical rating

· 0.04 ...75 kW

#### Motors

- · Input with solid shaft
- · Input with e-motor coupling:
  - M, ME, MX (compact asynchronous)
  - BN, BE, BX (IEC asynchronous)
  - BSR (IEC reluctance)
  - BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- · Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters
- Backstop

## Main options

- Up to C5 Surface protection
- Short flange & reinforced bearings
- Torque arm
- · Fluoroelastomer oil seals

## Key benefits

- · Cost-effective solution
- · Low noise
- High peak load capacity
- Minimized mounting space
- Long operating life
- High reliability
- Many possible configurations
- Wide output speed/torque selection range
- Reduced installation space and wide output speed selection range

- Consolidated worm technology
- Compact design
- · High quality standards
- Patented manufacturing techniques
- Wide range of options/versions
- · Pre-stage version
- Atex gearbox for explosive environments 2G/2D





# EHNANCED PROTECTION WORM GEARMOTORS & UNITS



# **VF/W-EP Series**

The VF/W-EP Series is designed to meet the requirements of the food & beverage and pharma & chemical industries and, more generally, to ensure risk-free operation in harsh environments. This version of the gearmotor is manufactured with improved sealing, enhanced corrosion protection and paint suitable for accidental food contact as the standard option. All these features work together to meet the highest hygienic requirements and to greatly increase gearmotor cleanability and operating lifetime in harsh and humid environments.

#### Gear ratios

· 7 ... 300

# Degree of protection

• IP 56 as standard

# Mechanical rating

· 0,12 ... 4 kW

#### Motors

- · Input with solid shaft
- · Input with e-motor coupling:
- BN, BE, BX (IEC asynchronous)
- M, ME, MX (compact asynchronous)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- · Anti-condensation heaters
- Backstop

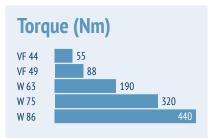
# Main options

- H1 food-grade lubricant
- Wash-down duty double lip oil seals with stainless frame
- Fluoroelastomer rings on output shaft with inner stainless steel loading spring
- FDA and NSF registered paintings for food contact zones
- Up to C5M surface protection

# Key benefits

- No dust ingress and protected against water jets
- Minimized environmental contamination
- Mounting flexibility
- Food zone compliant (FDA & NSF)
- Suitable for humid environment
- Anti-rust
- · Easy to wash

- Tropicalized
- · Condensation drain holes
- Stainless-steel nameplate & bolts
- Fully sealed gearbox
- Stainless-steel output
- Stainless-steel nameplates and bolts
- Food grade lubricant and coatings
- Special seals
- Pierced gearbox housing





# INDUSTRIAL PLANETARY GEARMOTORS & UNITS



# **300M Series**

Bonfiglioli's 300M Series is an outstanding solution for all heavy-duty applications where compactness is not an option. Thanks to its modular design, the 300M Series can be customized to match an extremely wide range of applications. Bonfiglioli's expertise in planetary technology ensures high-quality product design and manufacturing procedures. The 300 Series operates without unwanted downtime even in the harshest environments. This planetary gearbox achieves top-class flexibility thanks to several outputs, as well as input configurations available for all 20 sizes.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 3.4 ... 2,916

## Mechanical rating

• up to 1,050 kW

#### **Motors**

- · Input with solid shaft
- · Input with e-motor coupling:
- M, ME, MX (compact asynchronous)
- BN, BE, BX (IEC asynchronous)
- BSR (IEC reluctance)
- BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- · Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensate heaters
- Backstop

## Main options

- In line/right angle version
- · Independent cooling unit
- · Patented integrated cooling solution
- · Taconite seals
- ATEX certification for explosive environments

# Key benefits

- High torque density
- Extreme speed reduction and high output torque
- Low maintenance cost
- Extremely customizable
- Flexibility
- Usable in explosive environments

# Key features

- Highly transmissible torque/weight ratio
- Combined version (HD, A, W/VF series)
- High quality standards
- High shock resistance
- Wide range of options and accessories
- Electric and hydraulic motor compatible
- · Built-in cooling fan
- ATEX version 2G/2D

#### **Torque (Nm)** 300 1,250 301 2,460 303 2,970 304 3,960 305 5,800 10,840 307 15,680 309 23,240 310M 33,460 311M 49,210 313M 60,940 314M 80,640 315M 100,800 134,390 316M 317M 207,490 318M 297,550 319 471,190 655,740 321 323 890,310 325 1 286 000

# COMBINED PLANETARY/HELICAL BEVEL HEAVY DUTY GEAR UNITS



# **3/H Series**

The Bonfiglioli 3/H Series combines the high torque density of planetary gear units with the robustness and high-speed operation of the helical bevel heavy-duty products. This configuration can provide great power transmission in a very compact space, thanks to its angular layout. The 3/H Series can also come with a set of features such as hydraulic couplings or cooling circuits, adapted according to customers' needs.

#### Gear ratios

· 89.1... 1,070

## Mechanical rating

· 0,12 ... 4 kW

#### Motors

- Input with solid shaft
- Input with e-motor coupling:
  - M, ME, MX (compact asynchronous)
  - BN, BE, BX (IEC asynchronous)
  - BSR (IEC reluctance)
  - BS (IEC single phase)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- · Anti-condensation heaters
- Backstop

# Main options

- Auxiliary thermal devices
- Forced lubrication
- Backstop devices
- Torque arm
- Base plates
- Fluid couplings
- Shoe brakes

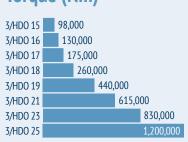
# Key benefits

- High continuous transmissible torque and power
- Suitable for all heavy-duty applications
- High shock resistance
- High reliability
- Easy maintenance
- · Highly customizable

## **Key features**

- Highest transmissible torque in the Bonfiglioli portfolio
- Designed to ensure the longest service intervals
- Modular design
- Wide range of available options
- Several available cooling systems
- Easy integration with base plates

# Torque (Nm)





# **HELICAL BEVEL HEAVY DUTY GEAR UNITS**



#### **HDO Series**

When high torque, robustness, reliability and long-operating life are required, Bonfiglioli's HDO Series is the best possible option. Thanks to high-quality materials and an optimized design, the HD Series can operate in the harshest environments, as well as in explosive atmospheres, with low maintenance costs and long service intervals. The HDO Series can also be fully customized thanks to an extremely broad portfolio of options and accessories.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 5.6 ... 490

#### **Motors**

- · Input with solid shaft
- Input with e-motor coupling:
- BN, BE, BX (IEC asynchronous)
- BSR (IEC reluctance)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensation heaters

## Main options

- · Fan cooling, cooling coil, oil heater
- · External cooling unit
- Backstop
- Forced lubrication
- Temperature and oil level sensors
- Drywell
- · Taconite seals
- ATEX certification for explosive environments

#### Key benefits

- · Highly transmissible power
- Robustness
- Mounting flexibility
- Reliability
- Usable in explosive environments

## Key features

- Spheroidal cast iron housing
- I/O shaft planarity and gearbox symmetry
- Wide range of options and accessories
- High design standards
- Atex gearbox for explosive environments 2G/2D

#### **Torque (Nm)** HDO 71 8,990 HDO 81 14,740 HDO 91 21,610 HDO 95 23,200 HDO 100 28,210 HDO 110 31,790 HDO 120 41,250 HDO 125 49,240 69,570 HDO 130 87,060 HDO 140 117,200 HDO 150 147,070 HDO 160 HDO 170 HDO 180



# HELICAL PARALLEL SHAFT HEAVY DUTY GEAR UNITS



## **HDP Series**

When high torque, robustness, reliability and long-operating life are required, Bonfiglioli's HDP Series is the best possible option. Thanks to high-quality materials and an optimized design, the HD Series can operate in the harshest environments, as well as in explosive atmospheres, with low maintenance costs and long service intervals. The HDP Series can also be fully customized thanks to an extremely broad portfolio of options and accessories.



ATEX GEARBOX AVAILABLE

#### Gear ratios

· 7.1 ... 500

#### **Motors**

- · Input with solid shaft
- Input with e-motor coupling:
- BN, BE, BX (IEC asynchronous)
- BSR (IEC reluctance)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensation heaters

## Main options

- · Fan cooling, cooling coil, oil heater
- · External cooling unit
- Backstop
- Forced lubrication
- Temperature and oil level sensors
- Drvwell
- · Taconite seals

#### Key benefits

- · High transmissible power
- Robustness
- Mounting Flexibility
- · High customization level
- Reliability

## Key features

- Spheroidal Cast Iron Housing
- I/O Shaft planarity and gearbox symmetry
- Wide range of options and accessories
- · High standards design
- Atex- gearbox for explosive environments 2G/2D

#### **Torque (Nm)** HDP 60 5,190 HDP 70 7,080 HDP 80 12,600 HDP 90 17,900 HDP 100 28,210 HDP 110 31,790 HDP 120 41,250 49,240 HDP 125 69,570 HDP 130 HDP 140 87,060 117,200 HDP 150 147,070 HDP 160 HDP 170 HDP 180



# HELICAL PARALLEL SHAFT HEAVY DUTY GEAR UNITS



#### **HDPE Series**

This product is dedicated to the extruder market and provides high customization of output and gear ratio combinations to fulfill our customers' needs. This gear unit provides a robust nodular cast iron gear case suitable for high loads and specific heavy duty thrust bearing sourced exclusively from primary brands. This solution also allows easy machine integration thanks to a universal mounting gearbox case (customized screw interface can be provided too) and can come with an auxiliary thermal aid device (cooling coil, oil to water heat exchanger), and oil temperature and level sensors to easily monitor its functioning.

#### Gear ratios

· 7.1 ... 125

#### **Motors**

- · Input with solid shaft
- Input with e-motor coupling:
- BN, BE, BX (IEC asynchronous)
- BSR (IEC reluctance)

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensation heaters

## Main options

- Auxiliary thermal aid device (cooling coil, oil to water heat exchanger)
- Fluoroelastomer compound oil seals on I/O shaft
- · Oil temperature and level sensors

# Key benefits

- Easy machine integration thanks to universal mounting gearbox case (customized screw interface can also be provided)
- · Suitable for high loads
- Adaptability to customers requirements

- Dedicated design for single screw extruder drive;
- Robust nodular cast-iron gear case
- Specific heavy duty thrust bearing sourced exclusively from primary brands
- · Auxiliary thermal aid device
- Thrust bearing case designed to lodge a wide range of bearings





# **ELECTRIC MOTORS**

# **ASYNCHRONOUS IEI THREE PHASE MOTOR**



# **BN/M Series**

The IEC-normalized BN motors comply with all the applicable international standards, including the EMC and LV Directives. They are available in the 0.06 - 30 kW range in the foot and the flange mounting version, the latter in both the IM B5 and the IM B14 configuration. Single and multi-speed versions available with generally three brake options offered, one DC and two AC supply, lending further flexibility to the system. Lastly, all motors are inverter duty.

## Degree of protection

- Standard IP55
- Standard for brake motors IP54

## Conformity

- Efficiency IEC 60034-30:2008
- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive - 2006/95/EC

## Power supply

- @50 Hz: 230/400, 290/500, 400/690
- · @60 Hz: 230/460, 330/575, 265/460, 460/800

# Mounting options

• IM B3, IM B5, IM B14

## Brake types

· AC & DC brakes

## Brake-related options

- · Manual release lever
- · Soft-start flywheel
- Capacitive filter
- Brake separate power supply
- Brake functionality check (microswitch)

#### Motors

· 3 phase asynchronous

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensate heaters
- Up to IP65 protection

# Key benefits

- · Reduced operating cost
- Energy saving
- Compliant with all the MEPS
- Complete solution (gearbox and motor)
- Control flexibility
- Flexibility
- Global motor

## Key features

- Compact version
- Inverter duty ready
- Multiple-speed motors
- Certified motor (DOE, NRCan, CCC, etc.)

#### Power (kW) 0.06 BN 56A BN 56B 0.09 BN 63A 0.12 BN 63B 0.18 BN 63C 0.25 BN 71A 0.25 BN 71B 0.37 BN 71C 0.55 BN 80A 0.55 BN 80B 0.75 BN 80C 1.1 BN 90S 1.1 BN 90LA 1.5 BN 90LB 1.85 BN 100LA 2.2 BN 112M BN 132S BN 132MA BN 132MB **BN 160MR** BN 160M 11 **BN 160L** BN 180M **BN 180L BN 200L**



# **ASYNCHRONOUS IE2 THREE PHASE MOTOR**



# **BE/ME Series**

The IEC-normalized BE motors comply with IEC 60034-30:2008 (efficiency classes) and all the applicable international standards, including the EMC and LV Directives.

They are available in the 0.75 - 22 kW range in the foot and the flange mounting version, the latter in both the IM B5 and the IM B14 configuration.

Lastly, all motors are inverter duty.

## Degree of protection

· Standard IP55

# Conformity

- Efficiency IEC 60034-30:2008
- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive - 2006/95/EC

# Power supply

- @50 Hz: 230/400, 290/500, 400/690
- @60 Hz: 230/460, 330/575, 265/460, 460/800

# Mounting options

• IM B3, IM B5, IM B14

#### Motors

· 3 phase asynchronous

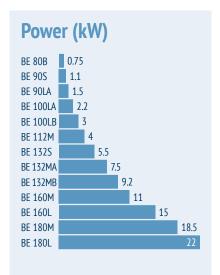
## Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensate heaters
- Up to IP65 protection

## Key benefits

- Reduced operating cost
- Energy saving
- · Compliant to all the MEPS
- Complete (Gearbox + Motor)
   Solution
- Control flexibility
- Global motor (can be utilized in most of the markets)

- Compact version
- Inverter duty ready
- Multiple speeds motors
- Certified motor (DOE, NRCan, CCC...)





# **ASYNCHRONOUS IE3 THREE PHASE MOTOR**



# **BX/MX Series**

The release of the new BX/MX motors is a further expression of our regard for the environment.

The BX/MX motors fulfil IE3 efficiency class requirements, according to the international standard IEC 60034-30. The "X" of the new BX/MX motors stands for "excellence" in efficiency, being IE3 the top efficiency rating currently formalized by global standards.

Lastly, all motors are inverter duty and generally 3 brakes options are offered.

## Degree of protection

- · Standard IP55
- Standard for brake motors IP54

# Conformity

- Efficiency IEC 60034-30:2008
- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive - 2006/95/EC

# Power supply

- @50 Hz: 230/400, 290/500, 400/690
- @60 Hz: 230/460, 330/575, 265/460, 460/800

# Mounting options

• IM B3, IM B5, IM B14

## Brake types

· AC & DC brakes

#### Brake-related options

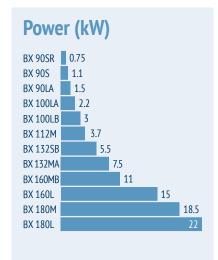
- · Manual release lever
- · Soft-start flywheel
- Capacitive filter
- Brake separate power supply
- Brake functionality check (microswitch)

#### **Motors**

· 3 phase asynchronous

# Motor options

- Thermistors and thermostat sensors
- Independent forced cooling
- Incremental, sin/cos absolute single/multi-turn encoders
- Tropicalization
- Anti-condensate heaters
- · Up to IP65 protection





# **ASYNCHRONOUS IE3 THREE PHASE MOTOR**



# **BX Heavy Duty Series**

BX Heavy Duty asynchronous motors are manufactured to exceed the requirements of the most demanding industrial applications. Bonfiglioli Heavy Duty Asynchronous motors, indeed, comes with a best in class set of features: cast iron frame, C3 corrosion protection, regreasable bearings, and Shock Pulse Measurement predisposition as standard on all sizes, are only few of the characteristics that makes these motors the most suitable also in the harshest environments.

## Degree of protection

· Standard IP55 also for Brakemotors

## Conformity

- Efficiency IEC 60034-30:2008
- Low Voltage Directive 2006/95/EC
- Electromegnetic Compatibility Directive - 2006/95/EC

# Power supply

- @50 Hz: 400/690, 380/660
- · @60 Hz: 460, 440/760

# Mounting options

• IM B3, IM B5, IM B35

#### Certifications

· CE, CEL, UL, NBR, EECA

#### Motors

· 3 phase asynchronous

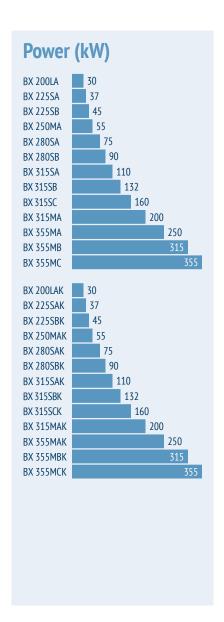
#### Motor options

- Thermistors and thermostat sensors
- · Indipendent forced cooling
- Heavy Duty Encoders
- Tropicalization
- Anti-Condensate Heaters
- · Up to IP56 protection

# Key benefits

- Robustness
- · Long lifetime
- · Wide power range
- Energy saving
- · Compliant to all the MEPS
- Complete (Gearbox+Motor)
   Solution
- Control flexibility
- Global motor (can be utilized in most of the markets)

- · Cast Iron Housing
- Inverter duty ready
- SPM Measurement
- Predisposition
- Certified motor (DOE, NRCan, CCC...)





# SYNCHRONOUS RELUCTANCE MOTOR



## **BSR Series**

The reluctance motor guarantees a sustainable ecological solution which decreases the total environmental impacl thanks to the absence of magnets and increased efficiency. Reduced operating costs allow a fast return. This product benefits from the proven simplicity and reliability of induction motors and the higher efficiency of synchronous motors.

#### Sizes

- High efficiency package
   71C ... 132 MB
- High output package
   71C ... 132 MB

## Rated motor power

- High efficiency package 0.37 ... 9.2 kW
- High output package 0.55 ... 18.5 kW

# Power supply

• 400 Vac

## Degree of protection

- · Standard IP55
- · IP56 (optional)

## Motor mounting

· B3; B5; B14

# Main options

- Thermal protection
- · Silicon sensor KTY 84-130
- Thermistor PTC 150
- Platinum sensor PT1000
- Forced ventilation
- Power supply 1 phase 230V (frame 71-100) 3-400V Y (frame 112-132)
- · Double extended shaft
- External mechanical protection
- · Rotor balancing grade B

# Key features

- Highly accurate sensorless control technology
- Compact, economical & ecofriendly
- · High dynamic response
- Energy savings
- High reliability
- High performance solution

Both Bonfiglioli packages are IES2 according to the International Efficiency of Systems (IES) classification for the drive and motor combination (IEC 61800-9-2).



# **OUR GLOBAL PRESENCE**

Thanks to an international network of closely interconnected commercial and production sites, we can guarantee the same high standards of Bonfiglioli quality anywhere at any given time. We know that our direct presence in local markets is the key to long-lasting success, so our family includes 20 production sites, 26 commercial sites and more than 550 distributors around the world.

Our organization is always close by, offering complete and efficient solutions and supporting our customers with dedicated services, co-engineering and after-sales assistance.

**20**PRODUCTION SITES

26
COMMERCIAL SITES



550
DISTRIBUTORS

~4.700
PEOPLE

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We have a relentless commitment to excellence, innovation & sustainability. Our team creates, distributes and services world-class power transmission & drive solutions to keep the world in motion.

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