Range

They are the most effective and economical answer to needs of alternating current transmission. The three-phase motors are available, in accordance with the IEC international standards, from size 063 to 280 in the versions with flange B5, B14 and with feet B3. They can be supplied with single polarity (2, 4, 6; IE2 efficiency starting from size 080, IE3 from size 132), with continuous or alternating current brake, in a power range from 0.09 kW to 90 kW.

Three-phase electric motors TS/TH/TP

- Energy Efficiency according to IEC 60034-30:2008 Standard
- Unified dimensions and shaft height from 63 to 280
- Polarity: 2,4,6
- Nominal power and dimensions complying with standard IEC 72-1 from 0.09 to 90 kW
- Motors designed in accordance with the requirements of the family IEC 34 and with the harmonized EEC standards that derived from them
- External surface ventilation
- Cage rotor made of aluminium or aluminium cast alloy
- Aluminium casing up to size 160, cast iron from size 180
- Insulation class F
- Degree of protection standard IP55
- Available with feet B3 or with flange B5 or B14
- Polarity: 2,4,6
- Over-temperature compatible with class B
- PTC thermistors and bimetallic temperature probes from size 160 as standard

Three-phase brake electric motors TBS/TBH/TBP

- Unified dimensions and shaft height from 63 to 250
- Polarity: 2,4,6
- Nominal power and dimensions complying with standard IEC 72-1 from 0.09 to 55 kW
- Direct current FM brake and Alternating current MS brake
- Space-saving direct current ML brake
- Direct current FM-FM double brake
- Motors designed in accordance with the requirements of the family IEC 34 and with the harmonized EEC standards that derived from them
- External surface ventilation
- Cage rotor made of aluminium or aluminium cast alloy
- Aluminium casing up to size 160, cast iron from size 180
- Insulation class F
- Degree of protection standard IP54
- Available with feet B3 or with flange B5 or B14
- Over-temperature compatible with class B
- PTC thermistors and bimetallic temperature probes from size 160 as standard
Double polarity and double polarity brake motors **D/DB**

Double polarity (D and DB) available in accordance with the IEC international standards, from size 063 to 160 in the versions with flange B5, B14 and with feet B3. They can be supplied with double polarity (2-4, 2-8, 4-8 poles), and also with a direct current brake or alternate current brake.

- Available with feet B3 or with flange B5 or B14
- Insulation class F
- Polarity: 2/4, 2/8, 4/8
- Alternating current MS brake and direct current FM brake
- Over-temperature compatible with class B
- Ambient temperature + 40 °C
- Altitude < 1.000 m above sea level

High starting torque single-phase motor **S/HSE**

Single-phase and high starting torque single-phase motor (S and HSE), available in accordance with IEC international standards from size 063 to 100 in the versions with flange B5, B14 and with feet B3, with a power range from 0.12 kW to 2.2 kW.

- Unified dimensions and shaft height from 63 to 100
- Insulation class F
- Nominal power and dimensions complying with standard IEC 72-1 from 0.12 to 2.2 kW
- Polarity: 4
- Over-temperature compatible with class B
- Ambient temperature + 40 °C
- Altitude < 1.000 m above sea level
Options

- Single-phase and three-phase forced ventilation IC416
- Insulation class H
- IP56, IP65, IP66 protection degrees
- Thermal protections with standard temperature in class F and available also for class H:
  - 3 PTC thermistors with temperature class suitable for the insulation class
  - 3 bimetallic temperature probes with temperature class suitable for the insulation class
- Optional voltages
- Design B34, B35
- Fast connection
- Second shaft extension
- Rear hexagon
- Anti-condensation heaters 110V or 230V
- Incremental encoder and low resolution incremental encoder
- Rain cover
- Textile cover
- Aluminium fan
- Optional painting
- Certifications: ATEX, UL/CSA, EAC (ex GOST)

Accessories

Brakemotors

- Fly-wheel
- Release lever
- Micro switch to open/close brake or for brake wear
- Anti-lock braking system stainless steel ring
- Optional rectifiers:
  - for quick detachment SBR
  - for rapid braking RSD
  - for quick detachment and braking RRSD
Electrical Motors for aggressive environments

They are the most effective answer to needs of alternating current transmission in particularly aggressive environments. The three-phase motors are available, in accordance with the IEC international standards, from size 063 to 112 in the versions with flange B5, B14. They are available 4 poles electric motors with IE2 efficiency starting from size 080 and with FM brake in the case of self-braking motor.

**TSX-THX**

**TBSX-TBHX**

**Characteristics**

- MTV electric motor, three-phase 4 poles, sizes 063 ÷ 112
- B5 - B14 mounting position with corresponding vertical positions
- S1 duty
- Aluminum nameplate
- Screws AISI 316
- Tie rods AISI 316
- Shielded 2RS bearings
- Protection rating IP56
- Insulation Class F
- Cooling system IC411
- Motor fan suitable for aggressive environments
- Standard ambient conditions
- Available TSBX/TBHX Brake Motors Series for aggressive environments

**Options/Accessories**

- Motor in S2 limited duration duty without fan/fan cover and drive end shaft (real shield closed)
- Protection rating IP66
- Insulation Class H
- Low temperatures and high temperatures design options
- Anti condensation heaters, condensation draining holes
- Thermal cutouts and Thermistors F / H class
- Optional painting blue RAL 5010 or grey RAL 9006 or white RAL 9010
- Rain cover roof painted according to the motor
- UL and EAC (ex GOST) Certifications
Subsidiaries

Germany  France  Spain  United Kingdom  Denmark  USA  China  India

Italy  Australia  Benelux  Bulgaria  China  Finland  France  India  Ireland  Israel  Lithuania  Malaysia  Netherlands  Poland  Portugal  South Korea  Spain  Sweden  Thailand  Turkey  United Kingdom  Ukraine  USA