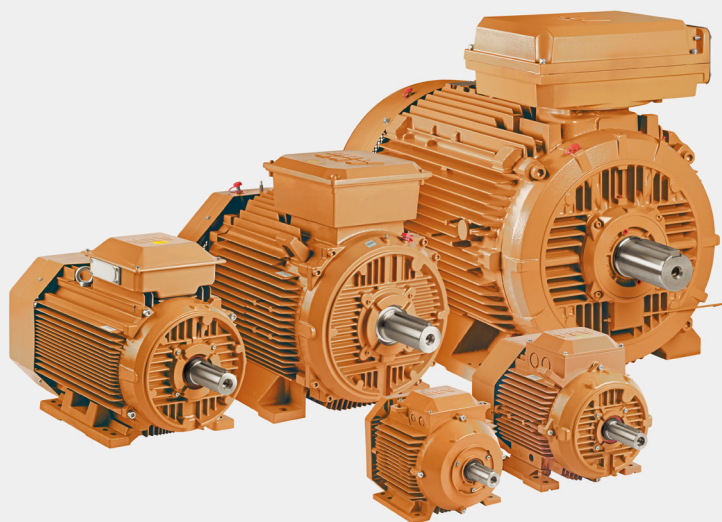


PRODUCT NOTE

Low voltage cast iron motors

For mining applications



ABB's cast iron mining motor range is based on the motor industry's best practices together with specific mining sector requirements covering efficiency, standards and environmental protection. The motors maximize productivity, improve performance and operational efficiency as well as enhance safety.

01 ABB low voltage mining motors are designed to meet the challenges in the mining and mineral sector.

Cast iron product offering

Output	from 0.55 to 1000 kW
Poles	from 2 to 8 ¹⁾
Frame size	IEC, from 80 to 450
Efficiency class	IE3
Available voltages	from 230 to 1000 V (DOL)

¹⁾ Higher pole numbers or two speed motors on request

Standard features

- Cast iron frame
- Metal fan (cast iron or steel depending on frame size)
- IP66
- Frame 160 and above equipped with labyrinth bearing seals
- RAL2011 (orange) surface color
- PTC type winding temperature detectors

Class F insulation with class B temperature rise. ABB's motors have a generous thermal margin and moderate class B winding temperature rise to ensure high efficiency as well as lower bearing temperatures, thus extending grease lifetime and lubrication interval.

All motors are suitable for any type of variable speed drive supply without filters*.

Terminal box side mounting adapter is available as a modification part. The adapter allows the main terminal box to be positioned on the right- or left-hand side of the motor frame. The adapter also provides a mounting point for additional auxiliary terminal boxes.

Recommended optional features depending on application:

- Roller bearing on the drive end for belt driven applications, option code 037
- Winding heaters for motors with extended stand-still periods, option codes 450 and 451
- Separate cast iron terminal boxes for instrumentation and heaters, option codes 567, 568, 380, 418
- Reinforced insulation for variable-speed drive supply with voltage above 600 V, option code 405
- Surface treatment upgrades to C4M, C5M and C5M-H, option codes 115, 754, 711

Hundreds of additional tailoring options also available. For variants and dimension drawings please see Process performance motor catalog.

* Up to supply voltage 500 V. From 500 V to 600 V standard insulation technology is applicable if cable length between motor and drive is 150 meters or more. Above 600 V special insulation for VSD duty is mandatory. Above 100 kW output bearing insulation is also required. Maximum voltage with VSD is 700 V.

