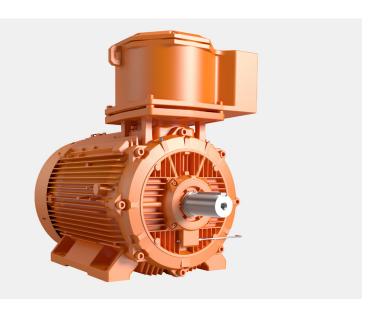


PRODUCT NOTE

## **Low voltage flameproof motors**For mining applications



ABB's Group I Ex d motors are based on its robust and proven M3 series Group II Ex d motor range. The IECEx and ATEX certified \* group I Ex d motors are tailored for demanding underground mining applications, thereby ensuring that your operations run smoothly and safely, around the clock, all year long.

01 Flameproof mining motors are an evolution of ABB's long-life explosive atmosphere range. The motors operate to the leatest IEC standard efficiency levels.

## Flameproof product offering

Output	from 0.55 to 410 kW
Ex marking	ExdIMb
Poles	from 2 to 8 <sup>1)</sup>
Frame size	IEC, from 80 to 450
Efficiency class	IE2 and IE3
Available voltages	from 190 to 1250 V (DOL)

 $<sup>^{1)}\,\</sup>mbox{Higher}$  pole numbers or two speed motors on request

## Standard features

- Cast iron frame
- Metal fan (cast iron or steel depending on frame size)
- IP66
- · Labyrinth type bearing seals
- C5-M category painting with RAL2011 (orange) surface color
- Stainless steel bolts, nipples, rating plate
- · Internal corrosion protection
- Space heater
- PTC type winding temperature detectors

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

## Recommended optional features depending on application:

- Roller bearing on the drive end for belt driven applications
- Available up to frame size 315 (Option code 037)
- Separate cast iron terminal boxes for instrumentation and heaters (Option codes 568, 380, 418)
- Reinforced insulation for variable speed drive supply with voltage above 500V (Option code 405)

Hundreds of additional tailoring options also available. For variants and dimension drawings please see Motors for explosive atmospheres catalog.

 $<sup>^{\</sup>star}$  Other regional and local certifications are available on request

<sup>\*\*</sup> Up to supply voltage 500 V. Above 500 V special insulation for VSD duty is mandatory. ABB shall be made aware of VSD use due to other additional features which may need to be applied on the motor. Such features are bearing insulation, VSD specific rating plate and surface temperature protection PTC detectors.