



**ELSIB**

**Explosion-Proof Motors  
Series 4AZMV1**

**2014**

[www.elsib.ru](http://www.elsib.ru)



# Explosion-Proof Motors Series 4A3MB1 (4AZMV1)

## Function

Totally enclosed explosion-proof induction motors with squirrel-cage rotor series 4AZMV1 can be used to drive horizontal pumps in hazardous areas. Type and level of protection of the motors — 1ExdIIBT4. The motors are intended for continuous duty (S1) operation from 6000 V, 50 Hz mains supply.

## Field of use

Oil and oil products transportation, oil refinement, petrochemical industry, mining industry, and other applications with hazardous areas of any class.

## Operating conditions

- Ambient temperatures: from -40°C to +40°C
- Relative humidity: 75% at 15°C
- Allowed noise levels according to GOST 16372-93 (IEC 60034-9) for 1 class machines
- Allowed vibration levels complying with GOST 20815-93 (IEC 34-14)
- Ingress protection rating:
  - IP54 for motors;
  - IP54 for terminal boxes;
  - IP20 for external fan.

## Features

The motor consists of stator, rotor, end shields and units, high-voltage terminal box, implosion protection components, external fan and air-to-air cooler. End shield-mounted roller bearings have consistent lubrication. Squirrel-cage rotor windings are made from copper bars, short-circuited by copper end rings. Stator windings have class “F” thermosetting insulation.

Standard rotation is clockwise, counter-clockwise rotating motors can be manufactured at customer request. Rotor axis height is 450 mm, mounting dimensions correspond to those of motors BAO2 (VAO2).

The motors can be started directly from the mains supply and allow for two cold starts or one hot start with voltage on the motor terminals between 0.8 and 1.1 of rated voltage. Subsequent start can be performed after 3 hours. Motors allow for 5000 starts during their life time and can be used in variable-speed drive systems.



# Motor Designation

4 A 3 M B 1 - XXX/XXXX 2 Y 2,5

Series number

Motor type: Asynchronous

Cooling: 3 (Z) – closed-circuit

Operation: M (M) – motor for machinery with normal starting torque

Protection type: B (V) – totally enclosed explosion-proof motor

Modified

Rated power, kW

Rated voltage, V

Number of poles

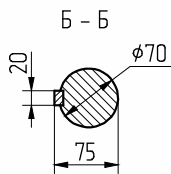
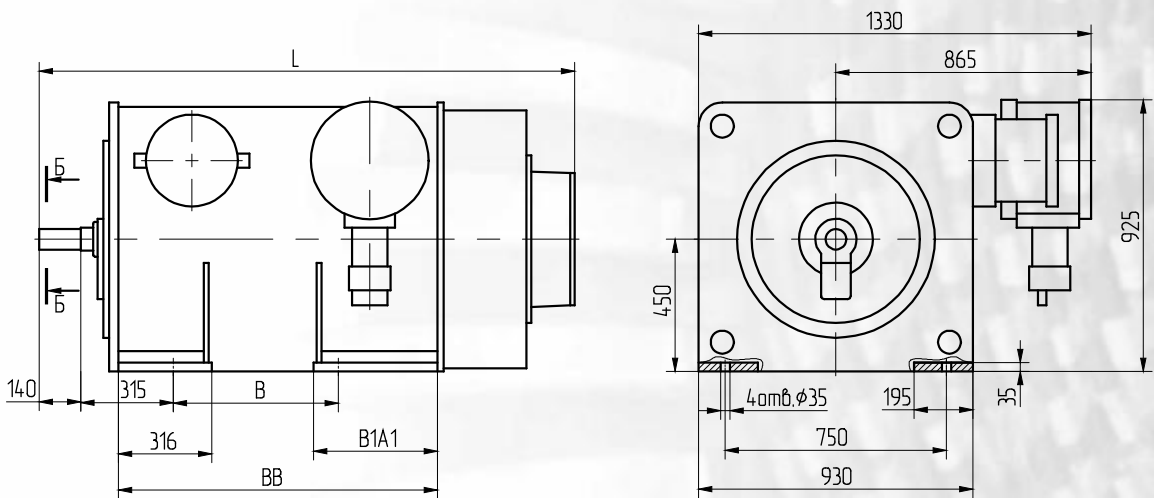
Climatic version: Y (U) – motor for moderate climate

Motor placement: 2,5 – motor can be used indoors and outdoors in an open shed



# Technical Data

	Power, kW	Voltage, V	Speed, rpm	Weight, kg	Stator current, A	Sliding, %	Efficiency, %	Power factor	Max. to nominal torque ratio	Starting to nominal torque ratio	Starting to nominal current ratio
4A3MB1-250/6000-2Y2,5	250	6000	2976	2330	28,5	0,8	93,8	0,9	2,5	0,85	6,6
4A3MB1-315/6000-2Y2,5	315	6000	2976	2440	35,7	0,8	94,3	0,9	2,7	1,00	7,0
4A3MB1-400/6000-2Y2,5	400	6000	2976	2575	45,1	0,8	94,8	0,9	2,6	1,00	7,0



Motor type	B	BB	B1A1	L
4A3MB1 250-6000-2 Y2,5	560	1090	420	1815
4A3MB1 315-6000-2 Y2,5	710	1148	336	1875
4A3MB1 400-6000-2 Y2,5	710	1228	420	1955







**ELSIB**

630088, Russia

Novosibirsk

ul. Sibiriakov-Gvardeitsev, 56

[www.elsib.ru](http://www.elsib.ru)

Electric Motor Sales Group:

Tel. +7 (383) 298-91-17

Fax +7 (383) 227-81-57

e-mail: [sales@elsib.ru](mailto:sales@elsib.ru)