

# EXPLOSION-PROOF ELECTRO-MOTORS TYPE 3SGf

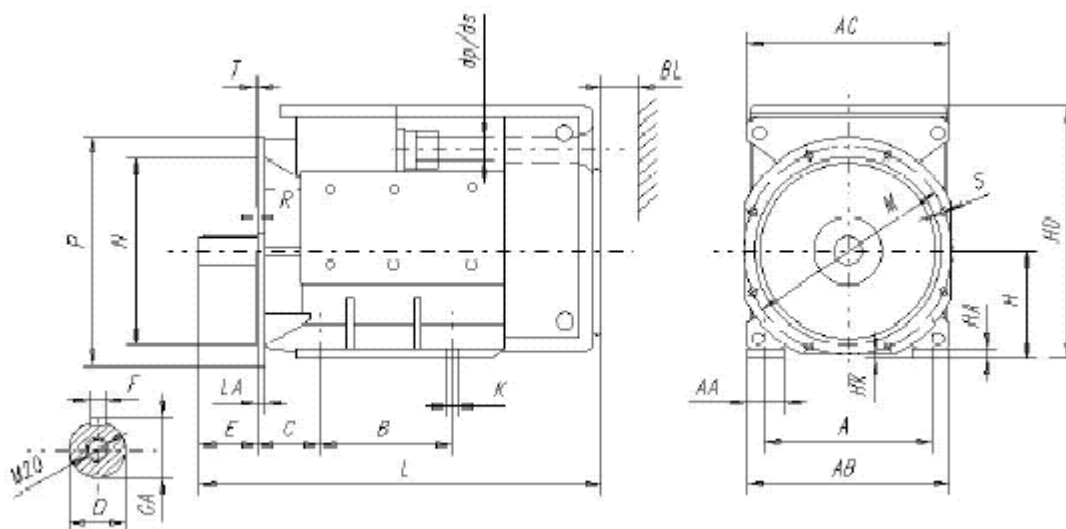
The motor is determined for mines with explosion hazard of methane and coal-dust. It serves as a driving unit for mining machines, especially for conveyors.



## Technical Parameters:

|                       |                                                                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Voltage rating        | 500 V or 1000 V                                                                                                                     |
| Power line            | 55, 90, 132 kW (pro 2p=4),                                                                                                          |
| Frequency             | 50Hz                                                                                                                                |
| Insulation class      | F                                                                                                                                   |
| Covering              | IP 56                                                                                                                               |
| Ambient temperature   | from $-20^{\circ}\text{C}$ to $+40^{\circ}\text{C}$                                                                                 |
| Connecting box        | 2 cable-bushings<br>3 power clamps, 4 auxiliary clamps, ending element CK1<br>bushings and clamps modified for mining copper cables |
| Thermal protection    | bi-metals or thermistors in front-side of winding and in bearings                                                                   |
| Shape                 | IM2001, footer- flanged                                                                                                             |
| Equipment complies to | I M2 EExd I                                                                                                                         |
| Test type             | KDB 04ATEX050X                                                                                                                      |

## Main Dimensions:



## Dimensions:

| Mechanical Size | A   | B   | C   | Shaft end       |     |    |      | H                   | HA | K  | Flange |       |                 |     |       |   |   |
|-----------------|-----|-----|-----|-----------------|-----|----|------|---------------------|----|----|--------|-------|-----------------|-----|-------|---|---|
|                 |     |     |     | D <sub>k6</sub> | E   | F  | GA   |                     |    |    | LA     | M±0,4 | N <sub>j6</sub> | P   | S     |   | R |
|                 |     |     |     |                 |     |    |      |                     |    |    |        |       |                 | Φ   | Počet |   |   |
| 250M            | 406 | 349 | 168 | 65              | 140 | 18 | 69   | 250 <sub>-0,5</sub> | 15 | 24 | 18     | 500   | 450             | 550 | 18    | 8 | 0 |
| 280M            | 457 | 419 | 190 | 65              | 140 | 20 | 79,5 | 280 <sub>-1</sub>   | 20 | 24 | 20     | 500   | 450             | 550 | 18    | 8 | 0 |
|                 |     |     |     | 75              |     |    |      |                     |    |    |        |       |                 |     |       |   |   |
| 315M            | 508 | 457 | 216 | 80              | 170 | 22 | 85   | 315 <sub>-1</sub>   | 25 | 28 | 22     | 600   | 550             | 660 | 22    | 8 | 0 |

| Mechanical Size | AA  | AB  | AC  | HD  | L    | BL | T | HK | dp    |
|-----------------|-----|-----|-----|-----|------|----|---|----|-------|
| 250M            | 90  | 490 | 492 | 600 | 970  | 45 | 5 | 2  | 38÷43 |
| 280M            | 100 | 550 | 560 | 685 | 1100 | 45 | 5 | 20 | 44÷49 |
| 315M            | 100 | 610 | 610 | 745 | 1190 | 50 | 6 | 10 | 52÷55 |

## Operation Parameters:

| Mechanical Size | Rated power | Speed    | Efficiency | Power factor | Rated current        |                      |                     |                     | Moment | Weight |
|-----------------|-------------|----------|------------|--------------|----------------------|----------------------|---------------------|---------------------|--------|--------|
|                 | [kW]        | [r.p.m.] | [%]        | cosφ         | [A] <sub>1140V</sub> | [A] <sub>1000V</sub> | [A] <sub>660V</sub> | [A] <sub>500V</sub> | [Nm]   | [kg]   |
| 250M2A          | 45          | 2962     | 93,3       | 0,89         | 27,5                 | 31,3                 | 47,5                | 63                  | 145    | 525    |
| 250M2B          | 75          | 2955     | 94,7       | 0,90         | 44,5                 | 51,0                 | 77,0                | 102,0               | 242    | 580    |
| 280M2           | 90          | 2970     | 94,0       | 0,92         | 53,0                 | 60,0                 | 91,0                | 120,0               | 289    | 800    |
| 250M4           | 55          | 1475     | 93,0       | 0,87         | 34,5                 | 39,0                 | 59,0                | 78,0                | 357    | 585    |
| 280M4           | 90          | 1480     | 94,0       | 0,87         | 56,0                 | 64,0                 | 96,0                | 127,0               | 582    | 815    |
| 315M4           | 132         | 1480     | 94,5       | 0,90         | 79,0                 | 90,0                 | 136,0               | 179,0               | 853    | 1060   |
| 250M6           | 45          | 980      | 92,0       | 0,88         | 28,0                 | 32,0                 | 48,5                | 64,0                | 439    | 575    |