

Supplement No: 5

(1) EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

(3) EU – Type Examination Certificate Number: IEP 16 ATEX 0433X

(4) Product: Miksan mark; mono/three-phase asynchronous motors, type 56, 63, 71, 80, 90, 100, 112, 132

(5) Firm Name: MIKSAN Motor Sanayi ve Ticaret A.Ş.

(6) Firm Address: BOSB Bakır ve Pirinç Sanayicileri Sitesi Menekşe Cad. No:1
Beylikdüzü – Büyükçekmece Istanbul-TURKEY

(7) This product and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr: IEP.Rp.Ex.10-988-8 date 19.10.2021.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014

(10) If the sign “ X “ is placed after the certificate number, it indicates that the product is subject to Specified Conditions of Safe Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

II 2G Ex db IIC T4 Gb
II 2D Ex tb IIIC T120 °C Db , IP 65II 2G Ex db IIB T4 Gb
II 2D Ex tb IIIC T120 °C Db , IP 55

Responsible Person:

Nurettin Terzioglu
Head of Certification Body

Supplement Date of Issue: 05.11.2021





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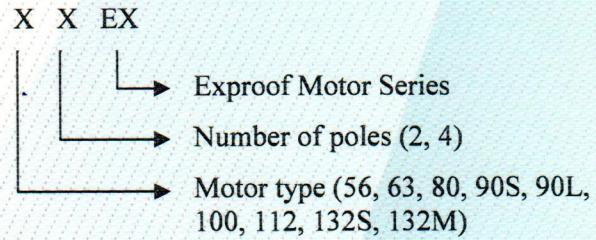
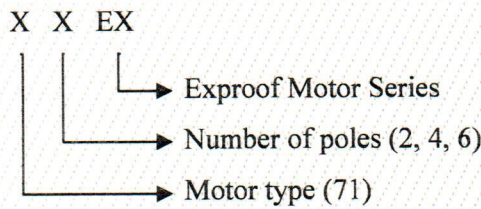
(13) Schedule

(14) Certificate Nr: **IEP 16 ATEX 0433X**

(15) Description of Equipment;

The motors of 56, 63, 71, 80, 90, 100, 112 and 132 consist of an enclosure made from Aluminum. The shaft is equipped with ball bearings. Together with the end shields the shaft forms a flameproof joint at the drive. Connection is by means of terminal box designed to flameproof enclosure db type of protection. Separately certified cable entry fittings provide for power input. The permissible ambient temperature range is - 30 °C to + 40 °C. Temperature class range can be controlled by temperature sensor. Parts used in motors are available in 7-page table 3/6/9/12/14/15/18 and date 18.05.2017, 11.12.2019 and 19.01.2021. Motor user manual consists of 4 pages and date 01.07.2021.

(16) Motor Code System;



(17) Special Conditions for Safe Use: 56, 63, 71, 80, 90, 100, 112 and 132 types mono/three-phase asynchronous motors installation details are in the manual.

(18) Essential Health and Safety Requirements:

18.1 This certificate is in the contents of standards that mentioned in item [9]. It has been accepted that the 56, 63, 71, 80, 90, 100, 112 and 132 type mono/three-phase asynchronous motors are manufactured according to the producer instructions and the standards mentioned above.

18.2 Installation and the operation of the 56, 63, 71, 80, 90, 100, 112 and 132 types mono/three-phase asynchronous motors have to be executed according to manufacturer manual.

(19) List of Documentation:

Additional reports;

IP protection degree and explosion test report number are TSE – 324070 / 12-16

IP protection degree and explosion test report number are TSE – 314878 / 10-16

IP protection degree and explosion test report number are TSE – 358343 / 09-17

IP protection degree and explosion test report number are TSE – 421939 / 07-18

IP protection degree and explosion test report number are TSE – 528647 / 05-20

IP protection degree and explosion test report number are TSE – 631969 / 09-21

IEP-MIKSAN test reports; total 57 pages

Responsible Person:

Nurettin Terzioglu

Head of Certification Body



IEP Uluslararası Enerji Petrol Güzetim, Sertifikasyon ve Teknik Hizmetler Organizasyon Ticaret Limited Sirketi

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(20) Schedule and Certificate Nr: IEP 16 ATEX 0433X

| Type/Poles | Speed (rpm) [50/60 Hz] | Power (kW) [50/60 Hz] | Voltage /Frequency (V/Hz) |
|------------|------------------------|-----------------------|--|
| 56 / 2p | 2815 / 3370 | 0,09 / 0,11 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 56 / 2p | 2835 / 3395 | 0,12 / 0,14 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 56 / 2p | 2800 / 3355 | 0,18 / 0,22 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 56 / 4p | 1375 / 1650 | 0,06 / 0,07 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 56 / 4p | 1350 / 1610 | 0,09 / 0,11 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 56 / 4p | 1350 / 1620 | 0,12 / 0,14 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 2p | 2785 / 3345 | 0,18 / 0,22 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 2p | 2755 / 3310 | 0,25 / 0,30 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 2p | 2760 / 3315 | 0,37 / 0,44 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 4p | 1380 / 1660 | 0,12 / 0,14 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 4p | 1330 / 1600 | 0,25 / 0,30 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 63 / 4p | 1320 / 1585 | 0,25 / 0,30 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 2p | 2790 / 3350 | 0,37 / 0,44 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 2p | 2760 / 3310 | 0,55 / 0,66 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 4p | 1420 / 1705 | 0,25 / 0,30 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 4p | 1425 / 1710 | 0,37 / 0,44 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 6p | 924 / 1110 | 0,18 / 0,22 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 71 / 6p | 922 / 1105 | 0,25 / 0,30 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 80 / 2p | 2800 / 3360 | 0,75 / 0,90 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 80 / 2p | 2790 / 3350 | 1,1 / 1,32 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 80 / 4p | 1410 / 1690 | 0,55 / 0,66 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 80 / 4p | 1420 / 1715 | 0,75 / 0,90 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 90S / 2p | 2865 / 3440 | 1,5 / 1,80 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 90L / 2p | 2875 / 3450 | 2,2 / 2,64 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 90S / 4p | 1420 / 1705 | 1,1 / 1,32 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 90L / 4p | 1415 / 1700 | 1,5 / 1,80 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 100 / 2p | 2875 / 3450 | 3 / 3,60 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 100 / 2p | 2865 / 3440 | 4 / 4,80 | 230 and 400 V / 50 Hz , 265 and 460 V/60 Hz 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 100 / 4p | 1430 / 1715 | 2,2 / 2,64 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 100 / 4p | 1425 / 1710 | 3 / 3,60 | 230 and 400 V / 50 Hz, 265 and 460 V/60 Hz |
| 112 / 2p | 2895 / 3475 | 4 / 4,80 | 230 and 400 V / 50 Hz , 265 and 460 V/60 Hz 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 112 / 2p | 2890 / 3470 | 5,5 / 6,60 | 230 and 400 V / 50 Hz , 265 and 460 V/60 Hz 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 112 / 4p | 1445 / 1735 | 4 / 4,80 | 230 and 400 V / 50 Hz , 265 and 460 V/60 Hz 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 132S / 2p | 2885 / 3465 | 5,5 / 6,60 | 230 and 400 V / 50 Hz , 265 and 460 V/60 Hz 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 132M / 2p | 2925 / 3510 | 7,5 / 9,00 | 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 132M / 2p | 2910 / 3490 | 11,0 / 13,2 | 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 132S / 4p | 1455 / 1745 | 5,5 / 6,60 | 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |
| 132M / 4p | 1460 / 1750 | 7,5 / 9,00 | 400 and 690 V / 50 Hz , 460 and 800 V/60 Hz |

Ta: (-30 , +40) °C

Ex Code: Type 56, 63, 71, 80, 90, 100, 112



II 2G Ex db IIC T4 Gb
II 2D Ex tb IIIC T120 °C Db , IP 65

Type 132

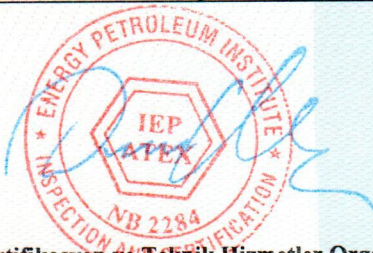


II 2G Ex db IIB T4 Gb
II 2D Ex tb IIIC T120 °C Db , IP 55

(IEP 16 ATEX 0433X) X means: The place of use for 132 engine groups is IIB. It should be installed by authorized personnel according to the manual. Periodic maintenance should be done according to EN 60079-17.

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyon Ticaret Limited Sirketi
5746/1 Sk. No:9 K:2 Bornova - IZMIR / TURKEY Tel: +90 232 431 1745 - 46 Fax: +90 232 431 1730 E-mail: iep@iep.com.tr Fr:45
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(21) Certificate Nr: IEP 16ATEX 0433X

(22) Drawings;

Drawing nr:

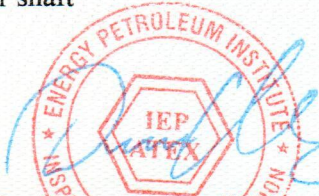
Drawing name:

Date:

| | | |
|--------|------------------------------------|------------|
| 56xx01 | 56 EX body | 16.03.2021 |
| 56xx02 | 56 EX body | 16.03.2021 |
| 56xx03 | 56 EX stator | 18.03.2021 |
| 56xx04 | 56 EX shaft | 16.03.2021 |
| 56xx05 | 56 EX rotor | 18.03.2021 |
| 56xx06 | 56 EX cover | 16.03.2021 |
| 56xx07 | 56 EX cover | 18.03.2021 |
| 56xx08 | 56 EX b14 flange | 18.03.2021 |
| 56xx09 | 56 EX b5 flange | 18.03.2021 |
| 56xx10 | 56 EX terminal box spacer | 18.03.2021 |
| 56xx11 | 56 EX MONO terminal box | 04.12.2020 |
| 56xx12 | 56 EX terminal box cover | 18.03.2021 |
| 56xx13 | 56 EX fan | 18.03.2021 |
| 56xx14 | 56 EX cooling fan cover | 18.03.2021 |
| 56xx15 | 56 EX flame path | 19.04.2021 |
| 63xx01 | 63 Ex frame | 12.05.2017 |
| 63xx02 | 63 2/4 pole stator | 15.04.2017 |
| 63xx03 | 63 ex shaft | 09.05.2017 |
| 63xx04 | 63 2/4 pole rotor | 09.05.2017 |
| 63xx05 | 63 ex cover | 09.05.2017 |
| 63xx06 | 63 ex b14 flange | 11.05.2017 |
| 63xx07 | 63 ex b5 flange | 12.05.2017 |
| 63xx08 | 63-81 ex-proof terminal box spacer | 31.10.2016 |
| 63xx09 | 63-112 type ex terminal box | 17.02.2016 |
| 63xx10 | 63-112 type ex terminal box cover | 17.02.2016 |
| 63xx11 | 63 cooling fan | 02.12.2013 |
| 63xx12 | 63 fan cover | 02.12.2013 |
| 63xx13 | 63 type flame path | 12.05.2017 |
| 71xx01 | 71 Ex frame | 15.12.2015 |
| 71xx02 | 71 stator | 13.04.2016 |
| 71xx03 | 71 shaft | 21.08.2015 |
| 71xx04 | 71/2 Ex rotor | 21.08.2015 |
| 71xx05 | 71/4 Ex rotor | 21.08.2015 |
| 71xx06 | 71/6 Ex rotor | 21.08.2015 |
| 71xx07 | 71 ex end shield | 02.11.2016 |
| 71xx08 | 71 ex b14 flange | 19.08.2015 |
| 71xx09 | 71 ex b5 flange | 19.08.2015 |
| 71xx10 | Ex-proof terminal box spacer | 31.10.2016 |
| 71xx11 | Ex terminal box | 17.02.2016 |
| 71xx12 | Ex terminal box cover | 17.02.2016 |
| 71xx13 | 71 cooling fan | 29.01.2009 |
| 71xx14 | 71 fan cover | 29.01.2009 |
| 71xx15 | 71 type flame path | 12.05.2016 |
| 81xx01 | 81 Ex frame | 07.04.2016 |
| 81xx02 | 81 stator | 12.10.2016 |
| 81xx03 | 81 shaft | 17.03.2016 |

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



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(23) Certificate Nr: IEP 16ATEX 0433X

(24) Drawings;

| Drawing nr: | Drawing name: | Date: |
|-------------|-----------------------------------|------------|
| 81xx04 | 81/2 Ex rotor | 18.07.2016 |
| 81xx05 | 81/4 Ex rotor | 18.07.2016 |
| 81xx06 | 81 ex end shield | 04.11.2016 |
| 81xx07 | 81 ex b14 flange | 12.04.2016 |
| 81xx08 | 81 ex b5 flange | 12.04.2016 |
| 81xx09 | Ex-proof terminal box spacer | 31.10.2016 |
| 81xx10 | Ex terminal box | 17.02.2016 |
| 81xx11 | Ex terminal box cover | 17.02.2016 |
| 81xx12 | 81 cooling fan | 07.08.2003 |
| 81xx13 | 81 fan cover | 11.08.2009 |
| 81xx14 | 81 type flame path | 31.05.2016 |
| 90xx01 | 90S-90L ex frame | 29.03.2017 |
| 90xx02 | 90 2/4 pole stator | 03.04.2017 |
| 90xx03 | 90S ex shaft | 21.02.2017 |
| 90xx04 | 90L ex shaft | 29.03.2017 |
| 90xx05 | 90/2 pole rotor | 21.02.2017 |
| 90xx06 | 90/4 pole rotor | 21.02.2017 |
| 90xx07 | 90 ex end shield | 07.02.2017 |
| 90xx08 | 90 ex b14 flange | 07.04.2017 |
| 90xx09 | 90 ex b5 flange | 07.04.2017 |
| 90xx10 | 63-112 type ex terminal box | 17.02.2016 |
| 90xx11 | 63-112 type ex terminal box cover | 17.02.2016 |
| 90xx12 | 90 cooling fan | 07.04.2017 |
| 90xx13 | 90 fan cover | 29.05.2009 |
| 90xx14 | 90 type flame path | 10.05.2017 |
| 100xx01 | 100 ex frame | 20.04.2017 |
| 100xx02 | 100 2/4 pole stator | 07.04.2017 |
| 100xx03 | 100 ex shaft | 17.03.2017 |
| 100xx04 | 100/2 pole rotor | 17.03.2017 |
| 100xx05 | 100/4 pole rotor | 17.03.2017 |
| 100xx06 | 100 ex end shield | 16.02.2017 |
| 100xx07 | 100 ex b14 flange | 07.04.2017 |
| 100xx08 | 100 ex b5 flange | 07.04.2017 |
| 100xx09 | 63-112 type ex terminal box | 17.02.2016 |
| 100xx10 | 63-112 type ex terminal box cover | 17.02.2016 |
| 100xx11 | 100-112 cooling fan | 24.06.2009 |
| 100xx12 | 100 fan cover | 24.06.2009 |
| 100xx13 | 100 type flame path | 10.05.2017 |
| 112xx01 | 112 ex frame | 05.04.2017 |
| 112xx02 | 112 2/4 pole stator | 07.04.2017 |
| 112xx03 | 112 ex shaft | 20.03.2017 |
| 112xx04 | 112/2 pole rotor | 17.03.2017 |
| 112xx05 | 112/4 pole rotor | 17.03.2017 |
| 112xx06 | 112 ex end shield | 16.02.2017 |
| 112xx07 | 112 ex b14 flange | 07.04.2017 |

Responsible Person:

Nurettin Terzioglu
Head of Certification Body





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(25) Certificate Nr: IEP 16ATEX 0433X

(26) Drawings;

| Drawing nr: | Drawing name: | Date: |
|-------------|-----------------------------------|------------|
| 112xx08 | 112 ex b5 flange | 07.04.2017 |
| 112xx09 | 63-112 type ex terminal box | 17.02.2016 |
| 112xx10 | 63-112 type ex terminal box cover | 17.02.2016 |
| 112xx11 | 100-112 cooling fan | 24.06.2009 |
| 112xx12 | 112 fan cover | 25.03.2011 |
| 112xx13 | 112 type flame path | 10.05.2017 |
| 132xx01 | 132S/M ex frame | 25.12.2019 |
| 132xx02 | 132 2/4 pole stator | 25.12.2019 |
| 132xx03 | 132 S ex shaft | 25.12.2019 |
| 132xx04 | 132 M ex shaft | 25.12.2019 |
| 132xx05 | 132 S-M 2 pole ex shaft | 25.12.2019 |
| 132xx06 | 132 S-M 2 pole ex shaft | 25.12.2019 |
| 132xx07 | 132 Ex cover | 25.12.2019 |
| 132xx08 | 132 flange | 25.12.2019 |
| 132xx09 | 132 flange | 25.12.2019 |
| 132xx10 | 132 type ex terminal box | 25.12.2019 |
| 132xx12 | 132 type ex terminal box cover | 25.12.2019 |
| 132xx13 | 132 cooling fan | 25.12.2019 |
| 132xx14 | 132 fan cover | 25.12.2019 |
| 132xx15 | 132 type flame path | 30.12.2019 |

For the validity of analysis type certificate, the parts that are used in motors are confirmed in the table 3/6/9/12/14/15/18 and date 18.05.2017 and 11.12.2019.

| Supplement Nr | Issue Date | Summary Description of Variation |
|---------------|------------|--|
| 05 | 05.11.2021 | · New model addition 56 Types · Update to new edition of EN IEC 60079-0:2018 |
| 04 | 20.05.2020 | · New model addition 132 Types |
| 03 | 04.09.2018 | · IP Protection Class Change |
| 02 | 21.08.2017 | · New model addition 63, 90, 100, 112 Types · Update to new edition of EN 60079-0:2013, EN 60079-1:2014, EN 60097-31:2014 |
| 01 | 26.12.2016 | · New model addition 71 Types |
| 00 | 05.10.2016 | First issue of certificate |

Responsible Person:

Nurettin Terzioğlu
Head of Certification Body



Supplement Date of Issue: 05.11.2021

