

IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

Addition Sheet 14

to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1019 (Translation)

Three-phase Asynchronous Motor with Squirrel-Cage Rotor type K21Q 315 MY4 Ex II 2D (K20Q 315 M4 Ex II 2D)


The already certified motor series type K2.Q ... Ex II 2D is extended with the motor type K21Q 315 MY4 Ex IID (K20Q 315 M4 Ex II 2D). The motor is intended for use for mains operation 50 Hz and for operation with frequency converter in a range from 16 Hz up to 67 Hz at a maximum surface temperature of $T = 125\text{ °C}$.

Rated values and technical data

| | | Mains operation | Operation with frequency converter | | |
|-----------------------------|-------------------|-----------------|------------------------------------|------|------|
| Power: | kW | 160 | 51.5 | 160 | 160 |
| Terminal voltage: | V | 400 | 144 | 350 | 350 |
| Torque: | Nm | 1025 | 1025 | 1025 | 765 |
| Current: | A | 288 | 276 | 317 | 327 |
| Frequency: | Hz | 50 | 16 | 50 | 67 |
| Speed: | min ⁻¹ | 1492 | 475 | 1488 | 1993 |
| Power factor: | | 0.84 | 0.81 | 0.88 | 0.87 |
| Efficiency: | % | 95.7 | 92.4 | 94.6 | 92.8 |
| Operation mode: | | S1 | | S1 | |
| Cooling medium temperature: | °C | 45 | | 45 | |

Besides the voltage 400 V also other voltages in the range from 220 V up to 420 V are permissible. The related currents are converted in the reciprocal relation of the voltages.

The proof of explosion protection of the motor mentioned above is recorded in the test report IB-08-3-294 of 19 September 2008. The marking is:

 II 2D Ex tD A21 IP 65 T 125 °C
T_a -30 °C up to +45 °C

The safety instructions contained in the EC-Type Examination Certificate IBExU02ATEX1019 have to be noticed.

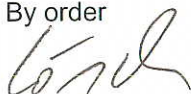
At operation with frequency converter the motors may only be operated with the frequency converter type KEB 28F5HAP-YV10. The current limitation is set at the most on the 1.6-fold motor rated current for max. 2 min.

This Addition Sheet is only valid in combination with the EC-Type Examination Certificate IBExU02ATEX1019.

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Authorised for certifications
-Explosion protection-

By order



(Dr. Lösch)



- Seal -
(ID no. 0637)

Freiberg, 19 September 2008

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.