## IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

## **Addition Sheet 15**

## to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1019

(Translation)

Three-phase Asynchronous Motor with Squirrel-Cage Rotor Type K21Q 160 M6 Ex II 2D (K20Q 132 M6 Ex II 2D)

The already certified motor series type K2.Q ... Ex II 2D is extended with the motor type K21Q 160 M6 Ex IID (K20Q 132 M6 Ex II 2D). The motor is intended for use for mains operation 50 Hz and for operation with frequency converter in a range from 5 Hz up to 50 Hz at a maximum surface temperature of T = 125 °C.

## Rated values and technical data

		Mains operation	Operation with frequency converter	
Power:	kW	2.2	0.19	2.2
Terminal voltage:	V	415	55	415
Torque:	Nm	21.5	21.5	21.5
Current:	Α	4.6	4.3	4.4
Frequency:	Hz	50	5	50
Speed:	min <sup>-1</sup>	975	85	978
Power factor:		0.77	0.77	0.77
Efficiency:	%	86.2	60.8	90.2
Operation mode:		S1		S1
Cooling medium temperature:	°C	55		55

Besides the voltage 415 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-09-3-001 of 25<sup>th</sup> February 2009. The marking is:

(x) II 2D Ex tD A21 IP 65 T 125 °C T<sub>a</sub> -30 °C up to +55 °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 NXI-0016-5-A-2-T-0-CSV of company VACON. 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 IBExU 02ATEX1019 with  $1^{st}$  up to  $3^{rd}$  Addition.

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7 - 09599 Freiberg, GERMANY

Authorised for certifications -Explosion protection-

By order

(Dr. Wagner)



Freiberg, 25<sup>th</sup> February 2009

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.