



## [1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use  
in potentially explosive atmospheres  
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

**CESI 07 ATEX 056X**

[4] **Equipment:** Three-phase asynchronous motors series 5.x AZS 63-112, 2 ÷ 4 poles.

[5] **Manufacturer:** **KONCAR – MES d.d.**

[6] **Address:** Fallerovo setaliste, 22 – HR 10002 Zagreb - Croatia

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-A7026996.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0: 2006 EN60079-7: 2007 EN 61241-0:2006 EN 61241-1:2004**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

II 2G Ex e II T3, T4

II 2GD Ex e II T3, T4 Ex tD A21 IP66 T200°C, T135°C

II 2D Ex tD A21 IP66 T200°C, T135°C

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 12<sup>th</sup>.10.2007 - Translation issued the 12<sup>th</sup>.10.2007

Verified  
Mirko Balaz

Approved  
Fiorenzo Bregani

**CESI** S.p.A.  
Divisione Energia  
"Area Tecnica Certificazione"  
Il Responsabile

[13]

## Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 07 ATEX 056X

[15] Description of equipment (follows)

The motor type 5.x AZSU 63 B-2TK (II 2G Ex e II T3) can be supplied by network or by frequency converter (inverter); the electrical characteristics of the motor type 5.x AZSU 63 B-2TK supplied by inverter are mentioned below:

Motor type: 5.x AZSU 63 B-2TK			
Power [kW]	0,015	0,06	0,115
Voltage [V]	39	101	135
Current [A]	0,56	0,7	1,06
Frequency [Hz]	8,8	33,5	62
Speed [rpm]	360	1800	3175
Connection	delta		
Starting current $I_A$ [A]	5,3 (@230V/50Hz)		
Duty	S9		
Ambient temperature	-20°C + +50 °C		

Rated characteristics of the inverter type GRD6.2 – 0566390 with integrated motor thermal protection type 0566390 (certificate PTB02ATEX3043) are mentioned below:

Manufacturer	Scheidt&Bachmann
Inverter type	GRD6.2 – 0566390
Power [kW]	0,035... 0,238
Supply voltage [V]	230
Output voltage [V]	82 / 162
Input frequency [Hz]	50 / 60
Output frequency [Hz]	8.8 ... 62
Thermal protection	PTC T90

### Installation conditions

The motors (II 2 G or II 2 GD, with type of protection Ex e) shall be adequately protected by means of an electrical device suitable to limit the current to the rated value and to assure disconnection of the motor with rotor locked within the time limit: tE.

[16] Report n. EX-A7026996.

### Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 27 of the EN 60079-0 standard and at clause 7 of the EN 60079-7 standard.

The routine dielectric test with applied voltage shall be performed at  $(2 U_n + 1000V)$  on the stator winding

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