

Translation

(1) EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of EC-Type Examination Certificate: **BVS 14 ATEX E 009**
- (4) Equipment: **Motor starter type MS132-***
- (5) Manufacturer: **ABB STOTZ-KONTAKT GmbH**
- (6) Address: **Eppelheimer Straße 82, 69123 Heidelberg, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 the Test and Assessment Report BVS PP 14.2025 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|---------------------------|--|
| EN 60079-0: 2012 | Explosive atmospheres, Part 0: General requirements |
| EN 60079-1: 2007 | Explosive atmospheres, Part 1:
Equipment protection by flameproof enclosures 'd' |
| EN 60079-7: 2007 | Explosive atmospheres, Part 7:
Equipment protection by increased safety 'e' |
| EN 60079-31: 2009 | Explosive atmospheres, Part 31:
Equipment dust ignition protection by enclosure |
| EN 60079-14: 2008 | Explosive atmospheres, Part 14:
Electrical installations design, selection and erection |
| EN 60947-1: 2007 | Low-voltage switchgear and control gear, Part 1: General rules |
| EN 60947-4-1: 2010 | Low-voltage switchgear and control gear, Part 4-1:
Contactors and motor starters |
| EN 60947-2: 2006 | Low-voltage switchgear and control gear, Part 2: Circuit breakers |
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

 **II (2) GD**

DEKRA EXAM GmbH
Bochum, dated 2014-02-05

Signed: Simanski

Certification body

Signed: Dr. Wittler

Special services unit

- (13) Appendix to
- (14) **EC-Type Examination Certificate
BVS 14 ATEX E 009**
- (15) 15.1 Subject and type
Motor starter type MS132- *.

15.2 Description

A thermally delayed tripping device has been installed with a function for motor protection in case of phase failure; therefore, the motor starters can be used as safety devices (protective devices for indirect temperature control) in order to protect motors by avoiding the occurrence of excess temperatures at the motor.

The manual motor starters are electromagnetic protective devices for the mains circuit. They are protective switches with bimetallic triggers. The motor current flows through the bimetallic tripping units and heats them up – directly and indirectly. In case of overload or overcurrent the bimetallic components bend to one side and interrupt – with a thermal delay – the mains circuit.

The motor starters are short-circuit resistant, sensitive to phase failure and equipped with a setting scale in amperes in order to set the required nominal current of the motor within certain limits. The series MS132-* consists of 15 sizes which differ in their current setting ranges from 0.16 A to 32 A. The individual types of each size are of identical mechanical and electrical design. In the full text labelling, the asterisk will be replaced by the maximum rated servicing current to be set with the following meanings:

Type	Order number	Current setting range
MS132-0.16	1SAM350000R1001	0.10 – 0.16
MS132-0.25	1SAM350000R1002	0.16 – 0.25
MS132-0.4	1SAM350000R1003	0.25 – 0.40
MS132-0.63	1SAM350000R1004	0.40 – 0.63
MS132-1.0	1SAM350000R1005	0.63 – 1.00
MS132-1.6	1SAM350000R1006	1.00 – 1.60
MS132-2.5	1SAM350000R1007	1.60 – 2.50
MS132-4.0	1SAM350000R1008	2.50 – 4.00
MS132-6.3	1SAM350000R1009	4.00 – 6.30
MS132-10	1SAM350000R1010	6.30 – 10.00
MS132-12	1SAM350000R1011	8.00 – 12.00
MS132-16	1SAM350000R1012	10.00 – 16.00
MS132-20	1SAM350000R1013	16.00 – 20.00
MS132-25	1SAM350000R1014	20.00 – 25.00
MS132-32	1SAM350000R1015	25.00 – 32.00

15.3 Parameters

Electrical parameters:

Number of poles:	3
Rated isolation voltage (U _i):	690 V
Rated servicing voltage (U _e):	690 V AC / 250 V DC A -
Rated servicing current (I _e):	Depends on type of series MS132-*, 0.1–32 A For each size and its current setting range an own curve is in place; this curve shows the triggering time in relation to x times the nominal current (three poles / two poles) in compliance with the requirements of explosion protection.
Current type:	AC, DC
Rated dielectric strength:	mains circuit 6 kV
Tripping class:	10

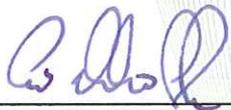
Other parameters:

Degree of pollution:	3
Utilisation category:	AC-3
Degree of ingress protection:	IP20
Terminals:	screw-type terminals
Ambient temperature range:	-25 °C to +60 °C The ambient temperature range is identical for all sizes and variations. Compared to EN 60947-4-1 the ambient temperature range has been enlarged.

- (16) Test and Assessment Report
BVS PP 14.2025 EG, as of 2014-02-05
- (17) Special conditions for safe use
None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 2014-02-05
BVS-Alh/Mu A 20131096



Certification body



Special services unit