



Product Service

EG-Baumusterbescheinigung

Nr. M6A 041745 0013 Rev. 00

Zertifikatsinhaber: **B&R**
Industrial Automation GmbH
B&R Strasse 1
5142 Eggelsberg
ÖSTERREICH

Produkt: **Sicherheitsgerichtete programmierbare elektronische Systeme**

Modell(e): **B&R-Safety-System: mappSafety**

Kenndaten:

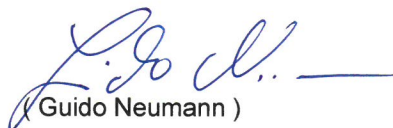
Sicherheits-	bis zu SIL 3	(IEC 61508:2010)
kennzahlen		(IEC 61511-1:2016)
		(EN 61800-5-2:2007)
	bis zu Cat 4, PL e	(EN ISO 13849-1:2015)
	bis zu SIL CL 3	(EN 62061:2005/A2:2015)

Diese EG-Baumusterbescheinigung bestätigt die Übereinstimmung des bezeichneten Anhang IV-Produktes mit den einschlägigen Bestimmungen gemäß Artikel 12(3) b bzw. 12(4) a der Richtlinie des Rates 2006/42/EG für Maschinen. Prüfgrundlage ist ausschließlich das zur Prüfung vorgestellte Prüfmuster sowie dessen technische Dokumentation. Umseitige Hinweise sind zu beachten.

Prüfbericht Nr.: BE94015C

Gültig bis: 2024-06-03

Datum, 2019-06-04


(Guido Neumann)

Seite 1 von 1

TÜV SÜD Product Service GmbH ist benannte Stelle gemäß der Richtlinie des Rates Nr. 2006/42/EG für Maschinen, notifiziert durch Veröffentlichung im Amtsblatt der EG mit der Kennnummer 0123.

TÜV SÜD Product Service GmbH • Zertifizierstelle • Ridlerstraße 65 • 80339 München • Deutschland

TÜV®

Zertifizierungsvertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung von TÜV SÜD Product Service.

Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an (www.tuev-sued.de/ps_regulations) und wird somit Partner im Zertifiziersystem von TÜV SÜD Product Service.

Prinzipielle Voraussetzung für die Gültigkeit des Zertifikates:

- Gültigkeit der zitierten normativen Prüfgrundlage(n) ist gegeben und zusätzlich bei Zertifikaten mit Berechtigung zur Verwendung eines Prüfzeichens bzw. bei Zertifikaten für QM-Systeme:
- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

Certification contract

Certification is based on the TÜV SÜD Product Service Testing and Certification Regulations. On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations (www.tuv-sud.com/ps_regulations) and thus becomes partner in the TÜV SÜD Product Service Certification System.

Requirements for the validity of the certificate in principle:

- Validity of the quoted test standard(s) In addition, for certificates with the right to use a certification mark and for QM certificates:
- Conditions for an adequate manufacturing are maintained
- Regular surveillance of the facility is performed

认证合约

认证基于 TÜV SÜD 产品服务《测试及认证准则》。获得证书即表明证书持有者接受当前版本的《测试及认证准则》(见 www.tuv-sud.com/ps_regulations) 并成为 TÜV SÜD 产品服务认证系统内的合作伙伴。

维持证书有效性的原则要求：

- 认证所依据标准的有效性
- 此外，对于授权可使用认证标志的证书和质量管理体系证书：
- 保持充分的生产条件
 - 生产场地通过定期的监督

認證契約

認證は TÜV SÜD Product Service の試験認証規約に基づく。認証書保持者は認証書を受領することにより最新の試験認証規約(www.tuv-sud.com/ps_regulations)に同意したものとする。その結果、TÜV SÜD Product Service 認証システムのパートナーとなる。

認證書の有効性に関する原則的な要求事項

- 引用している試験規格が有効である
- さらに認証マークの使用を許諾された認証書や品質マネジメント認証書は：
- 適切な製造の条件を維持している
 - 定期的な工場監査を実施している

Contrato de certificação

A certificação se baseia nos Regulamentos de Testes e Certificação do Grupo TÜV SÜD. Ao receber o certificado, o Fornecedor, titular do certificado concorda com a versão atual dos Regulamentos de Testes e Certificação do Grupo TÜV SÜD (www.tuv-sud.com/ps_regulations) e assim, torna-se parceiro no Sistema de Certificação de Produtos e Serviços TÜV SÜD.

Requisitos para a validade do certificado (em princípio):

- Validade da(s) norma(s) de ensaio(s) referenciada(s).
- Adicionalmente, para os certificados com o direito ao uso da marca de certificação e para certificados de SG:
- Condições de fabricação adequada estão mantidas.
 - Auditoria de monitoração realizada regularmente.



Product Service

EC-Type Examination Certificate

No. M6A 041745 0013 Rev. 00

Holder of Certificate: B&R

Industrial Automation GmbH

B&R Strasse 1
5142 Eggelsberg
AUSTRIA

Product:

Safety Related Programmable Electronic System

Model(s):

B&R-Safety-System: mappSafety

Parameters:

Safety-parameters	up to SIL 3	(IEC 61508:2010) (IEC 61511-1:2016) (EN 61800-5-2:2007)
	up to Cat 4, PL e	(EN ISO 13849-1:2015)
	up to SIL CL 3	(EN 62061:2005/A2:2015)

This EC Type Examination Certificate is issued according to Article 12(3) b or 12(4) a of Council Directive 2006/42/EC relating to machinery. It confirms that the listed Annex-IV equipment complies with the principal protection requirements of the directive. It refers only to the sample submitted to TÜV SÜD Product Service GmbH for testing and certification. See also notes overleaf.

Test report no.:

BE94015C

Valid until: 2024-06-03

Date,

2019-06-04


(Guido Neumann)

Page 1 of 1

TÜV SÜD Product Service GmbH is Notified Body according to Council Directive 2006/42/EC relating to machinery, notified by publication in the Official Journal of the EC with identification No.0123.

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

Zertifizierungsvertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung von TÜV SÜD Product Service.

Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an (www.tuev-sued.de/ps_regulations) und wird somit Partner im Zertifiziersystem von TÜV SÜD Product Service.

Prinzipielle Voraussetzung für die Gültigkeit des Zertifikates:

- Gültigkeit der zitierten normativen Prüfgrundlage(n) ist gegeben und zusätzlich bei Zertifikaten mit Berechtigung zur Verwendung eines Prüfzeichens bzw. bei Zertifikaten für QM-Systeme:
- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

Certification contract

Certification is based on the TÜV SÜD Product Service Testing and Certification Regulations. On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations (www.tuv-sud.com/ps_regulations) and thus becomes partner in the TÜV SÜD Product Service Certification System.

Requirements for the validity of the certificate in principle:

- Validity of the quoted test standard(s) In addition, for certificates with the right to use a certification mark and for QM certificates:
- Conditions for an adequate manufacturing are maintained
- Regular surveillance of the facility is performed

认证合约

认证基于 TÜV SÜD 产品服务《测试及认证准则》。获得证书即表明证书持有者接受当前版本的《测试及认证准则》(见 www.tuv-sud.com/ps_regulations) 并成为 TÜV SÜD 产品服务认证系统内的合作伙伴。

维持证书有效性的原则要求：

- 认证所依据标准的有效性
- 此外，对于授权可使用认证标志的证书和质量管理体系证书：
- 保持充分的生产条件
 - 生产场地通过定期的监督

認證契約

認證は TÜV SÜD Product Service の試験認証規約に基づく。認証書保持者は認証書を受領することにより最新の試験認証規約(www.tuv-sud.com/ps_regulations)に同意したものとする。その結果、TÜV SÜD Product Service 認証システムのパートナーとなる。

認證書の有効性に関する原則的な要求事項

- 引用している試験規格が有効である
- さらに認証マークの使用を許諾された認証書や品質マネジメント認証書は：
- 適切な製造の条件を維持している
 - 定期的な工場監査を実施している

Contrato de certificação

A certificação se baseia nos Regulamentos de Testes e Certificação do Grupo TÜV SÜD. Ao receber o certificado, o Fornecedor, titular do certificado concorda com a versão atual dos Regulamentos de Testes e Certificação do Grupo TÜV SÜD (www.tuv-sud.com/ps_regulations) e assim, torna-se parceiro no Sistema de Certificação de Produtos e Serviços TÜV SÜD.

Requisitos para a validade do certificado (em princípio):

- Validade da(s) norma(s) de ensaio(s) referenciada(s).
- Adicionalmente, para os certificados com o direito ao uso da marca de certificação e para certificados de SG:
- Condições de fabricação adequada estão mantidas.
 - Auditoria de monitoração realizada regularmente.



Choose certainty.
Add value.

**Report
on the
Certificate**

M6A 041745 0013 Rev. 00

**Safety Related Programmable
Electronic System**

B&R-Safety-System: mappSafety

Manufacturer:

**B&R Industrial Automation GmbH
B&R Strasse 1
A-5142 Eggelsberg**

**Report No.: BE94015 C
Revision 1.0 dated 2019-06-04**

Testing Body:

**TÜV SÜD Rail GmbH
Barthstraße 16
D-80339 München**

Certification Body:

**TÜV Süd Product Service GmbH
Ridlerstraße 65
D-80339 München**



Revision Log

Revision	Name	Date	Changes/History
1.0	K. Leupold	2019-06-04	Initial



Content	Page
1 Purpose and Scope	4
2 System Components	4
3 Certification	4
3.1 Certification Process	4
3.2 Certification Documentation	4
3.3 Standards and Guidelines	5
4 Testing Results	6
4.1 Functional Safety	6
5 General conditions and restrictions	6
5.1 Safety manual	6
6 Certificate Number	6



1 Purpose and Scope

TÜV SÜD Rail GmbH has been contracted by B&R Industrial Automation GmbH to certify the B&R-Safety-System: mappSafety.

The report on the certificate is a set of the user-related results of all steps made during verification and validation of the B&R-Safety-System: mappSafety. It is based on the standards and guidelines listed in chapter 3 and documented in the documents listed in chapter 3.2.

2 System Components

The different modules of the B&R safety system mappSafety covered by this certificate are listed in the Annex A1 to this report.

3 Certification

3.1 Certification Process

The certification of the drive system was done according to the regulations and standards listed in clause 3.3 of this document. This will certify the successful completion of the following test segments:

- I. Functional Safety
 - a. Hardware analysis including estimation of safe failure fraction
 - b. Software analysis
 - c. Descriptive safety as given by the Safety Manual
- II. Basic Safety including electrical safety
 - a. Environmental Stress Testing
 - b. Climatic and temperature stress
 - c. Mechanical stress
- III. Electromagnetic Compatibility
 - a. Electromagnetic susceptibility
- IV. Product-related Quality Management in manufacturing and product care

3.2 Certification Documentation

- Annex A1 (BE94015C_A1) of this certification report
- EC-Type Examination M6A 17 04 41745 010: SafeLOGIC, SafeIO
- EC-Type Examination M6A 17 02 41745 009: ACOPOS P3 SafeMOTION EnDat 2.2
- EC-Type Examination M6A 16 12 41745 008: ACOPOSmotor SafeMOTION EnDat 2.2
- EC-Type Examination 01/205/5445.00/15 (TÜV Rheinland): ACOPOSmulti SafeMOTION EnDat 2.2
- EC-Type Examination 01/205/5358.01/15 (TÜV Rheinland): ACOPOSmulti SafeMOTION SinCos



3.3 Standards and Guidelines

3.3.1 European directives

The testing was performed using the following directive:

2006/42/EC	DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast)
------------	--

3.3.2 Product standard

The testing was performed using the following product standard:

EN 61800-5-2:2007	Adjustable speed electrical power drive systems – Part 5.2: Safety requirements -Functional
-------------------	---

3.3.3 Functional Safety

The testing for functional safety is to be performed using the following standards and guidelines:

IEC 61508-1:2010	Functional Safety of electrical/electronic/programmable electronic safety-related systems Part 1: General requirements
IEC 61508-2:2010	Functional Safety of electrical/electronic/programmable electronic safety-related systems Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems
IEC 61508-3:2010	Functional Safety of electrical/electronic/programmable electronic safety-related systems Part 3: Software requirements
IEC 61508-4:2010	Functional Safety of electrical/electronic/programmable electronic safety-related systems Part 4: Definitions and abbreviations
IEC 62061:2005/A1:2012	Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems
EN ISO 13849-1:2015	Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design
IEC 61511-1: 2016	Safety instrumented systems for the process industry sector – Part 1: Hardware and software requirements



4 Testing Results

4.1 Functional Safety

The tests performed and quality assurance measures implemented by the manufacturer have shown that the B&R-Safety-System: mappSafety complies with the testing criteria specified in clause 3.3. The result of the assessment is documented in the technical reports listed in chapter 3.2.

5 General conditions and restrictions

5.1 Safety manual

Conditions of use, prescription of acceptance tests and proof tests are given in the following safety manuals:

- “Sicherheitstechnik mappSafety“

The information, recommendations, specifications and safety instructions given in the belonging manuals shall be read and understood.

6 Certificate Number

This report specifies technical details and implementation conditions required for the application of the Safety Related Programmable Electronic System mappSAFETY by B&R Industrial Automation GmbH on the certificates:

M6A 041745 0013 Rev. 00

Munich, 2019-06-04

A blue ink signature of Guido Neumann.

Digital
unterscriben von
Guido Neumann
Datum: 2019.06.04
16:59:12 +02'00'

G. Neumann
Rail Automation
Technical Certifier



Rail

List for tracking of the version releases of components of the safety related automation system:
Liste zur Verfolgung der Versionsfreigaben der Komponenten des sicheren Automatisierungssystems:

B&R Safety System: mappSAFETY EC-Type Examination Certificate No. M6A 041745 0013 Rev. 00

Manufacturer / Hersteller

B&R Industrial Automation GmbH

**B&R Strasse 1
5142 Eggelsberg, Austria**

Testing body / Prüfstelle

TÜV SÜD Rail GmbH

**Barthstrasse 16
80339 München, Germany**

**Annex 1
of the
Report to the Certificate
M6A 041745 0013 Rev. 00
B&R Safety System: mappSAFETY**

**Report No.: BE94015C
Revision 1.23 of the annex, dated 2023-05-11**

⁽¹⁾ x=0-99, the certificate scopes all minor versions / das Zertifikat beinhaltet alle Unterversionen

⁽²⁾ not relevant / nicht relevant

It is not accepted to reproduce any part of this list without prior written authorization of TÜV SÜD Rail GmbH
Diese Liste darf ohne die schriftliche Genehmigung der TÜV SÜD Rail GmbH nicht auszugsweise vervielfältigt werden



List for tracking of the version releases of components of the safety related automation system:
Liste zur Verfolgung der Versionsfreigaben der Komponenten des sicheren Automatisierungssystems:

B&R Safety System: mappSAFETY EC-Type Examination Certificate No. M6A 041745 0013 Rev. 00

Rail

List of certified mappSAFETY versions:

Liste der zertifizierten mappSAFETY Versionen:

No. Nr.	Product group Produktgruppe	mappSAFETY Version									
ID 1	mapp Safety Technology Package	5.7.0	5.8.0 5.8.1	5.9.0 5.9.1	5.10.0 5.10.1	5.11.0 5.11.1	5.12.0 5.12.1 5.12.2	5.13.0	5.14.0 5.14.1	5.15.0	5.16.0
		5.17.0	5.18.0	5.19.0	5.20.0	5.21.0	5.22.0	5.23.0			
ID 2	SafeDESIGNER	5.7.0	5.8.0 5.8.1	5.9.0 5.9.1	5.10.0 5.10.1	5.11.0 5.11.1	5.12.0 5.12.1 5.12.2	5.13.0	5.14.0 5.14.1	5.15.0	5.16.0
		5.17.0	5.18.0	5.19.0	5.20.0	5.21.0	5.22.0	5.23.0			

List of certified AS-Hardwareupgrades / Firmware versions:

Liste der zertifizierten AS-Hardwareupgrades / Firmware Versionen:

No. Nr.	Product group Produktgruppe	Versionen									
ID 1	SafeLOGIC Generation 2	2.1.0.x FW: 570	2.2.0.x FW: 571	2.2.1.x FW: 571	2.3.0.x FW: 572	2.4.0.x FW: 573	2.4.1.x FW: 574	2.4.2.x FW: 575	2.5.0.x FW: 577		
		2.6.0.x FW: 578									
ID 2	SafeLOGIC - X Generation 1	2.1.0.x FW: 570	2.1.0.x FW: 591	2.4.1.x FW: 591							
ID 3	SafeLOGIC - X Generation 2	2.1.0.x FW: 570	2.2.0.x FW: 580	2.4.0.x FW: 590	2.4.1.x FW: 590	2.4.2.x FW: 591	2.4.3.x FW: 592				
ID 4	SCMar	FW: 570	FW: 591								
ID 5	Safe Analog Input Modules	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 572	2.4.0.x FW: 573	2.5.0.x FW: 574					
ID 6	Safe Digital Input Modules	2.1.0.x FW: 570 ¹	2.2.0.x FW: 571	2.3.0.x FW: 572	2.3.1.x FW: 573	2.4.0.x FW: 574					
ID 7	Safe Digital Output Modules	2.1.0.x FW: 570	2.2.0.x FW: 571	2.2.1.x FW: 572	2.4.0.x FW: 573						
ID 8	Safe Combined Modules Generation 1	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 573 ²	2.4.0.x FW: 574 ²						
ID 9	Safe Combined Modules Generation 2	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 572	2.3.1.x FW: 573	2.4.0.x FW: 574					
ID 10	Safe Relais Modules	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 572	2.4.0.x FW: 573 ³	2.4.1.x FW: 574	2.5.0.x FW: 575				
ID 11	Safe Powersupply Modules	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 572	2.3.1.x FW: 573	2.4.0.x FW: 574					
ID 12	Safe Counter Modules	2.1.0.x FW: 570	2.2.0.x FW: 572	2.3.0.x FW: 573	2.3.1.x FW: 574	2.4.0.x FW: 575	2.5.0.x FW: 576	2.5.0.x FW: 577			
ID 13	Safe reaction Technology Modules Generation 1	2.1.0.x FW: 570	2.2.0.x FW: 571	2.3.0.x FW: 573	2.4.0.x FW: 574	2.4.1.x FW: 575					
ID 14	ACOPOS P3 SafeMOTION	2.1.0.x FW: 570	2.2.0.x FW: 590	2.3.0.x FW: 600	2.4.0.x FW: 611						
ID 15	ACOPOSmulti SafeMOTION EnDat2.2	2.1.0.x FW: 570	2.2.0.x FW: 570	2.4.0.x FW: 611							
ID 16	ACOPOSmulti SafeMOTION SinCos	2.1.0.x FW: 570	2.2.0.x FW: 570	2.4.0.x FW: 611							
ID 17	ACOPOSmotor SafeMOTION	2.1.0.x FW: 570	2.2.0.x FW: 570	2.4.0.x FW: 611							
ID 18	SafeLOGIC for Mobile Automation	2.1.0.x FW: 572	2.2.0.x FW: 573	2.3.0.x FW: 574	2.4.0.x FW: 575	2.5.0.x FW: 576	2.5.1.x FW: 576	2.5.2.x FW: 578			

¹ For 9AX2X.01-000 and 9APLK.01-000 currently only FW570 implemented

² Only created for X20(c)SC2212.

³ Only created for X90RO440.04-S1

(¹) x=0-99, the certificate scopes all minor versions / das Zertifikat beinhaltet alle Unterversionen

(²) not relevant / nicht relevant

It is not accepted to reproduce any part of this list without prior written authorization of TÜV SÜD Rail GmbH
Diese Liste darf ohne die schriftliche Genehmigung der TÜV SÜD Rail GmbH nicht auszugsweise vervielfältigt werden



List for tracking of the version releases of components of the safety related automation system:
Liste zur Verfolgung der Versionsfreigaben der Komponenten des sicheren Automatisierungssystems:

B&R Safety System: mappSAFETY EC-Type Examination Certificate No. M6A 041745 0013 Rev. 00

Rail

Explanation of product groups: Erklärung der Produktgruppen

Product name / Product group Produktbezeichnung / Produktgruppe	Consists of: Besteht aus:
mapp Safety Technology Package	• MpSfDomMgr SafeDOMAINmanager Library • SfDomDrv SafeDOMAINdriver Library • SfDomain SafeDOMAIN Library • Sicherheitstechnik-GER Documentation of mapp Safety
SafeDESIGNER ⁴	• SafeDESIGNER SafeDESIGNER Engineering Tool • PLCopen_SF SafeDESIGNER PLCopen Library • Table_SF SafeDESIGNER Table Library • RoboticCtrl_SF_4 SafeDESIGNER Robotic Library • Utilities_SF SafeDESIGNER Utilities Library • openSAFETY_BuR_Motion_SF openSAFETY Motion Profile Support • ProfiSafe_SF SafeDESIGNER PROFIsafe Library • Math_Utilities_SF SafeDESIGNER Mathematics Library • LightCurtain_SF SafeDESIGNER Lightcurtain Library • DATA_to_SafeDATA_SF SafeDESIGNER DATAtoSafeDATA Library • PLCopen_Press_SF SafeDESIGNER Press Library • CANopen_Safety_SF SafeDESIGNER CANopen Safety Library
SafeLOGIC Generation 2	• X20SL8100 SafeLOGIC Basic • X20SL8101 SafeLOGIC Basic with local X2X • X20SL8110 SafeLOGIC Basic with IF - Slot • X20cSL8100 coated SafeLOGIC Basic • X20cSL8101 coated SafeLOGIC Basic with local X2X Certified hardware revisions: see EC-Type examination: M6A 041745 0010
SafeLOGIC for Mobile Automation	• X90SL104.48-S1 mobile SafeLOGIC with 24 Channel SI, 24 channel SO Certified hardware revisions: see EC-Type examination: M6A 041745 0015
SafeLOGIC - X Generation 1	• X20SLX210 SafeLOGIC with Safe Digital Input, 2 channel • X20SLX410 SafeLOGIC with Safe Digital Input, 4 channel • X20SLX910 SafeLOGIC with Safe Digital Input, 20 channel • X20cSLX410 coated SafeLOGIC with Safe Digital Input, 4 channel • X20cSLX910 coated SafeLOGIC with Safe Digital Input, 20 channel Certified hardware revisions: see EC-Type examination: M6A 041745 0010
SafeLOGIC - X Generation 2	• X20SLX811 SafeLOGIC with Safe Digital Input, 8 channel • X20SLX806 SafeLOGIC with 8 channel SI, 6 channel SO • X20SLX842 SafeLOGIC with 8 channel SI, 6 channel SO • X20SLX402 SafeLOGIC with 4 channel SI, 2 channel SO • X20cSLX402 coated SafeLOGIC with 4 channel SI, 2 channel SO Certified hardware revisions: see EC-Type examination: M6A 041745 0010
SCMar	• openSAFETY Configuration Manager for SafeLOGIC - X devices
Safe Analog Input Modules	• X20SA4430 Safe Analog Input, 2x2 channel • X20ST4492 Safe Temperature Input, 2x2 channel • X20cSA4430 coated Safe Analog Input, 2x2 channel Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe Digital Input Modules	• X20SI2100 Safe Digital Input, 2 channel • X20SI4100 Safe Digital Input, 4 channel • X20SI9100 Safe Digital Input, 20 channel • 9AX2X.01-000 Safe Digital Input, 8 channel SI • 9APLK.01-000 Safe Digital Input, 8 channel SI • B050006543xx-yy Safe Digital Input, 8 channel SI • B050006677xx-yy Safe Digital Input, 8 channel SI • X67SI8103 Safe Digital Input, 8 channel SI • X20cSI4100 coated Safe Digital Input, 4 channel • X20cSI9100 coated Safe Digital Input, 20 channel Certified hardware revisions: see EC-Type examination: M6A 041745 0010

⁴ System requirements of safety related libraries are documented in the dedicated user manuals.

(¹) x=0-99, the certificate scopes all minor versions / das Zertifikat beinhaltet alle Unterversionen

(²) not relevant / nicht relevant

It is not accepted to reproduce any part of this list without prior written authorization of TÜV SÜD Rail GmbH
Diese Liste darf ohne die schriftliche Genehmigung der TÜV SÜD Rail GmbH nicht auszugsweise vervielfältigt werden



List for tracking of the version releases of components of the safety related automation system:
Liste zur Verfolgung der Versionsfreigaben der Komponenten des sicheren Automatisierungssystems:

B&R Safety System: mappSAFETY EC-Type Examination Certificate No. M6A 041745 0013 Rev. 00

Rail

Safe Digital Output Modules	• X20SO2110 Safe Digital Output, 2 channel, 0.5 A • X20SO2120 Safe Digital Output, 2 channel, 2 A • X20SO4110 Safe Digital Output, 4 channel, 0.5 A • X20SO4120 Safe Digital Output, 4 channel, 2 A • X20SO6300 Safe Digital Output, 6 channel, 0.2 A • X20cSO4110 coated Safe Digital Output, 4 channel, 0.5 A • X20cSO4120 coated Safe Digital Output, 4 channel, 2 A • X20cSO6300 coated Safe Digital Output, 6 channel, 0.2 A Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe Combined Modules Generation 1	• X20SC2212 Safe Digital Mixed, 6 channel SI, 2 channel SO, 0.5 A • X67SC4122.L12 Safe Digital Mixed, 8 channel SI, 4 channel SO 2 A • X20cSC2212 coated Safe Digital Mixed, 6 channel SI, 2 channel SO, 0.5 A Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe Combined Modules Generation 2	• X20SC0806 Safe Digital Mixed with 8 channel SI, 6 channel SO • X20SC0842 Safe Digital Mixed with 8 channel SI, 6 channel SO • X20SC0402 Safe Digital Mixed with 4 channel SI, 2 channel SO • X20SI8110 Safe Digital Mixed with 8 channel SI • X20SI4110 Safe Digital Mixed with 4 channel SI Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe Relais Modules	• X20SC2432 Safe Digital Mixed, 2 channel SI, 2 channel relay 6 A • X20SO2530 Safe Digital Output, 2 channel relay SO, 240 V • X20SO6530 Safe Digital Output, 6 channel relay SO, 240 V • X20cSO6530 coated Safe Digital Output, 6 channel relay SO, 240 V • X20cSC2432 coated Safe Digital Mixed, 2 channel SI, 2 channel relay 6 A • X20cSO2530 coated Safe Digital Output, 2 channel relay SO, 240 V • X90RO440.04-S1 mobile Safe Digital Output, 4 channel relay SO, 9-48 V Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe Powersupply Modules	• X20SP1130 Safe Digital Output, 1 channel, 10 A, Power Supply
Safe Counter Modules	• X20SD1207 VDC safe digital counter module, 1 failsafe counter channel, 7 kHz, 24 VDC • X20cSD1207 kHz, 24 VDC coated safe digital counter module, 1 failsafe counter channel, 7 kHz, 24 VDC Certified hardware revisions: see EC-Type examination: M6A 041745 0010
Safe reaction Technology Modules Generation 1	• X20SRT806 ReAction for Safety with 8 channel SI, 6 channel SO • X20SRT842 ReAction for Safety with 8 channel SI, 6 channel SO • X20SRT402 ReAction for Safety with 4 channel SI, 2 channel SO Certified hardware revisions: see EC-Type examination: M6A 041745 0010
ACOPOS P3 SafeMOTION	• 8ESMC59314 ACOPOS P3 SafeMOTION EnDat2.2 - 1 Axis servo drive • 8ESMC59315 ACOPOS P3 SafeMOTION EnDat2.2 - 2 Axis servo drive • 8ESMC59316 ACOPOS P3 SafeMOTION EnDat2.2 - 3 Axis servo drive Certified hardware revisions: see EC-Type examination: M6A 041745 0009
ACOPOSmulti SafeMOTION EnDat 2.2	• 8BVS2SAFE1-1 ACOPOSmulti SafeMOTION EnDat2.2 Certified hardware revisions: see EC-Type examination: 01/205/5445.01/20 (TÜV Rheinland)
ACOPOSmulti SafeMOTION SinCos	• 8BVS2_21ENC1-1 ACOPOSmulti SafeMOTION SinCos Certified hardware revisions: see EC-Type examination: 01/205/5358.02/20 (TÜV Rheinland)
ACOPOSmotor SafeMOTION	• 8DSMC59534 ACOPOSmotor SafeMOTION EnDat2.2 Certified hardware revisions: see EC-Type examination: M6A 041745 0008

	Release by Test Body: Freigabe Prüfstelle:	Release by Certification Body: Freigabe Zertifizierstelle:	Release by Manufacturer: Freigabe Hersteller:
Date: Datum:	Klaus Digital unterschrieben von Klaus Leupold Datum: 2023.05.11 08:34:24 +02'00'	Christian Dirmeier Digital unterschrieben von Christian Dirmeier Datum: 2023.05.11 15:01:39 +02'00'	Dietmar Bruckner Digital unterschrieben von Dietmar Bruckner Datum: 2023.05.16 10:44:06 +02'00'
Signature: Unterschrift:	Leupold		Manfred Kuecher Digital unterschrieben von Manfred Kuecher Datum: 2023.05.16 14:32:09 +02'00'

(1) x=0-99, the certificate scopes all minor versions / das Zertifikat beinhaltet alle Unterversionen

(2) not relevant / nicht relevant

It is not accepted to reproduce any part of this list without prior written authorization of TÜV SÜD Rail GmbH
Diese Liste darf ohne die schriftliche Genehmigung der TÜV SÜD Rail GmbH nicht auszugsweise vervielfältigt werden