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**Safety related Encoder Series R35 inductive
Geberfamilie R35 induktiv**

EC-Type Examination Certificate No.: M6A 020196 0274 Rev. 00

**1. Safety functions, encoder with serial EnDat 2.2 interface /
Sicherheitsfunktionen, Geber mit serieller EnDat 2.2 Schnittstelle:**

No. Lfd. Nr.	Safety function Sicherheitsfunktion
101	Provision of an absolute position value Pos1 by the encoder. The safety relevant resolution of Pos1 depends on the encoder type.
102	Provision of position value Pos2 by the encoder for the verification of Pos1.
103	For every position value the safe encoder shall provide current error bits F1, F2 at the CU-Interface.
104	As soon as the Safe CU requests Pos1, Pos2 or error bits via the CU interface, the safe encoder shall transmit these data safely to the Safe CU via the CU interface.

**2. Safety functions, encoder with serial EnDat 3.0 interface /
Sicherheitsfunktionen, Geber mit serieller EnDat 3.0 Schnittstelle:**

No. Lfd. Nr.	Safety function Sicherheitsfunktion
SF1	Safe provision and transfer of one or more items of safety information (e.g., position, speed, acceleration, temperature) from the encoder to the safe CU
SF2	Safe provision and transfer of the error bits and ignore bits for every item of safety information from the encoder to the safe CU
SF3	Provision of a safe electronic ID label in the encoder, and transfer to the safe CU
SF4	Provision of safe settings, and transfer to the safe CU. Note: the control can read and write the safe settings in the encoder
SF5	Provision and transfer of one item of additional, redundant information for each item of safety information for the safe comparison in the safe CU



3. Standards and ID-numbers for SIL2 encoders /
Normen und Identnummern für SIL2 Drehgeber:

a. Standards / Normen:

No. Lfd. Nr.	Standards met by all devices Von allen Geräten erfüllte Standards
1	EN ISO 13849-1:2015 EN ISO 13849-1:2023 (Cat. 3, PL d)
2	EN 61508-1:2010 (SIL2)
3	EN 61508-2:2010 (SIL2)
4	EN 61800-5-2:2017
5	IEC 61800-5-3:2021
6	Applicable only with additional measures: EN 61508-1:2010 (SIL3), EN 61508-2:2010 (SIL3) EN ISO 13849-1:2015 (Cat. 4, PL e)

b. List of certified R35 inductive encoders with serial EnDat 2.2 interface /
Liste der zertifizierten induktiven R35 Drehgeber mit serieller EnDat 2.2 Schnittstelle:

Ident No. Ident Nr.	Product name Produktbezeichnung	Further Standards Weitere Standards
Exl 11xx 		
1164809-01	ECI1119 16 5PS15-T9 A 1KA 70C 00 01 .. D EnDat22 37 01 FS	-
1164809-02	ECI1119 16 5PS15-T9 A 82A 70C 00 01 .. D EnDat22 37 01 FS	-
1164809-05	ECI1119 16 5PS15-T9 A 82A 70G 00 B6 .. D EnDat22 37 01 FS	-
1164809-51	ECI1119 16 5PS15-T9 A 1KA 70C 00 01 .. D EnDat22 37 07 FS	-
1164809-52	ECI1119 16 5PS15-T9 A 82A 70C 00 01 .. D EnDat22 37 07 FS	-
1164811-01	EQI1131 16 5PS15-T9 A 1KA 70C 00 01 .. D EnDat22 37 01 FS	-
1164811-02	EQI1131 16 5PS15-T9 A 82A 70C 00 01 .. D EnDat22 37 01 FS	-
1164811-03	EQI1131 16 5PS15-T9 A 82A 70D 00 B6 .. D EnDat22 37 01 FS	-
1164811-04	EQI1131 16 5PS15-T9 A 82A 70C 00 35 .. D EnDat22 37 01 FS	-
1164811-05	EQI1131 16 5PS15-T9 A 82A 70G 00 B6 .. D EnDat22 37 01 FS	-
1164811-51	EQI1131 16 5PS15-T9 A 1KA 70C 00 01 .. D EnDat22 37 07 FS	-
1164811-52	EQI1131 16 5PS15-T9 A 82A 70C 00 01 .. D EnDat22 37 07 FS	-
1164811-53	EQI1131 16 5PS15-T9 A 82A 70D 00 B6 .. D EnDat22 37 07 FS	-
1164811-54	EQI1131 16 5PS15-T9 A 82A 70C 00 35 .. D EnDat22 37 07 FS	-
1164811-55	EQI1131 16 5PS15-T9 A 82A 70G 00 01 .. D EnDat22 37 07 FS	-
1164811-62	EQI1131 16 5PS15-T9 A 82A 70C 00 B6 .. D EnDat22 37 07 FS	-



c. List of certified R35 inductive encoders with serial EnDat 3.0 interface /
Liste der zertifizierten induktiver R35 Drehgeber mit serieller EnDat 3.0 Schnittstelle:

Ident No. Ident Nr.	Product name Produktbezeichnung	Further Standards Weitere Standards
Exl 11xx 		
1259551-01	ECI1119 16 5PS15-6b 1KA 70C 00 01 D E30-R2 84 01 FS	-
1259551-02	ECI1119 16 5PS15-6b 82A 70C 00 01 D E30-R2 84 01 FS	-
1259551-05	ECI1119 16 5PS15-6b 82D 70H 00 01 D E30-R2 84 01 FS	-
1259551-51	ECI1119 16 5PS15-6b 1KA 70C 00 01 D E30-R2 84 07 FS	-
1259551-52	ECI1119 16 5PS15-6b 82A 70C 00 01 D E30-R2 84 07 FS	-
1259551-55	ECI1119 16 5PS15-6b 82D 70H 00 01 D E30-R2 84 07 FS	-
1259552-01	EQI1131 16 5PS15-6b 1KA 70C 00 01 D E30-R2 84 01 FS	-
1259552-02	EQI1131 16 5PS15-6b 82A 70C 00 01 D E30-R2 84 01 FS	-
1259552-03	EQI1131 16 5PS15-6b 82A 70D 00 B6 D E30-R2 84 01 FS	-
1259552-05	EQI1131 16 5PS15-6b 82D 70H 00 01 D E30-R2 84 01 FS	-
1259552-51	EQI1131 16 5PS15-6b 1KA 70C 00 01 D E30-R2 84 07 FS	-
1259552-52	EQI1131 16 5PS15-6b 82A 70C 00 01 D E30-R2 84 07 FS	-
1259552-53	EQI1131 16 5PS15-6b 82A 70D 00 B6 D E30-R2 84 07 FS	-
1259552-55	EQI1131 16 5PS15-6b 82D 70H 00 01 D E30-R2 84 07 FS	-
1391210-01	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 19 0 0 01	-
1391210-02	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 0 0 01	-
1391210-04	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70G 00 B6 .. D 84 22 0 0 01	-
1391210-05	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82D 70H 00 B6 .. D 84 19 0 0 01	-
1391210-09	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 0342 D 84 19 0 0 01	-
1391210-51	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 19 0 0 07	-
1391210-52	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 0 0 07	-
1391210-54	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70G 00 B6 .. D 84 22 0 0 07	-
1391210-55	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82D 70H 00 B6 .. D 84 19 0 0 07	-
1391210-59	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 0342 D 84 19 0 0 07	-
1391216-01	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 19 12 0 01	-
1391216-02	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 12 0 01	-
1391216-03	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70D 00 B6 .. D 84 19 12 0 01	-
1391216-04	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70G 00 B6 .. D 84 22 12 0 01	-
1391216-05	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82D 70H 00 B6 .. D 84 19 12 0 01	-
1391216-09	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 0342 D 84 19 12 0 01	-
1391216-51	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 19 12 0 07	-



List of certified products Encoder Series R35 inductive:
Liste der geprüften Produkte Geberfamilie R35 induktiv:

EC-Type Examination Certificate No.: M6A 020196 0274 Rev. 00

Ident No. Ident Nr.	Product name Produktbezeichnung	Further Standards Weitere Standards
1391216-52	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 12 0 07	-
1391216-53	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70D 00 B6 .. D 84 19 12 0 07	-
1391216-54	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70G 00 B6 .. D 84 22 12 0 07	-
1391216-55	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82D 70H 00 B6 .. D 84 19 12 0 07	-
1391216-59	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 0342 D 84 19 12 0 07	-
1391221-01	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82E 70I 00 B6 .. D 84 19 0 0 01	-
1391221-02	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70I 00 B6 .. D 84 19 0 0 07	-
1391221-51	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82E 70I 00 B6 .. D 84 19 0 0 07	-
1391221-52	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70I 00 B6 .. D 84 19 12 0 01	-
1391222-01	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82E 70I 00 B6 .. D 84 19 12 0 01	-
1391222-02	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82A 70I 00 B6 .. D 84 19 12 0 07	-
1391222-51	EQI 1131 SE. E30-R2 FS 5PS15-6b A 82E 70I 00 B6 .. D 84 19 12 0 07	-
1391222-52	ECI 1119 SE. E30-R2 FS 5PS15-6b A 82A 70I 00 B6 .. D 84 19 0 0 01	-



4. Standards and ID-numbers for SIL3 encoders /
Normen und Identnummern für SIL3 Drehgeber:

a. Standards / Normen:

No. Lfd. Nr.	Standards met by all devices Von allen Geräten erfüllte Standards
101	EN ISO 13849-1:2015 EN ISO 13849-1:2023 (Cat. 3, PL e)
102	EN 61508-1:2010 (SIL3)
103	EN 61508-2:2010 (SIL3)
104	EN 61800-5-2:2017
105	IEC 61800-5-3:2021

b. List of certified R35 inductive encoders with serial EnDat 3.0 interface /
Liste der zertifizierten induktiven R35 Drehgeber mit serieller EnDat 3.0 Schnittstelle:

Ident No. Ident Nr.	Product name Produktbezeichnung	Further Standards Weitere Standards
Exl 11xx 		
1334662-03	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 0 0 01	-
1334662-53	ECI 1122 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 0 0 07	-
1334664-03	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 12 0 01	-
1334664-04	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70D 00 B6 .. D 84 22 12 0 01	-
1334664-53	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70C 00 B6 .. D 84 22 12 0 07	-
1334664-54	EQI 1134 SE. E30-R2 FS 5PS15-6b A 82A 70D 00 B6 .. D 84 22 12 0 07	-



5. Version history / Versionshistorie:

Revision:	Name:	Date: Datum:	Changes / History: Änderungen / Historie
1.0	M. Braun	29.05.2020	Initial Version
1.1	M. Braun	26.01.2022	Exl 11xx FS kompakt added (HT97828T, HT85545T v1.3)
1.2	M. Braun	26.11.2024	Exl 11xx Gen.5.0 (G187 - E30-R2) (HT104008T)
1.3	M. Braun	23.09.2025	Exl 11xx Gen5.0 Mid-Range (HT105538T)

	Release by Test Body: Freigabe Prüfstelle:	Release by Certification Body: Freigabe Zertifizierstelle:	Release by Manufacturer: Freigabe Hersteller:
Date: Datum:			
Signature: Unterschrift:			