ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

America

C E R T I F I C A T E

No. U10 022705 0016 Rev. 00

Holder of Certificate: **RSF Elektronik Ges.m.b.H.**
Tarsdorf 93
5121 Tarsdorf
AUSTRIA

Certification Mark:

Product: **Electronic measuring equipment (Angle Encoders)**

Tested according to:
UL 61010-1:2012/R:2024-11
CSA C22.2 No. 61010-1:2012/U4:2024-11

This product was voluntarily tested to the relevant safety requirements referenced on this certificate. It can be marked with the certification mark above. The mark must not be altered in any way. The certificate holder shall not transfer this certificate to third parties. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. Certification is based on the TÜV SÜD "Testing, Certification, Validation and Verification Regulations (TCVVR)". For Canadian standards TÜV SÜD America Inc. is accredited by the Standards Council of Canada to ISO/IEC 17065.

Test report no.: 713388481

Date, 2025-12-16

Siemon

(Thorsten Siemon)

TÜV SÜD America, Inc. • 401 Edgewater Place Suite #500 • Wakefield • MA 01880 • USA

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America

C E R T I F I C A T E

No. U10 022705 0016 Rev. 00

Model(s):

WMK abcd.egfh-z
WMKA abcd.ejfh-z
WMR iklm-n-o-p-z
WMRA iklm-n-o-p-z
WMF iklm-n-o-p-z
WMFA iklm-n-o-p-z
WMB iklm-n-o-p-z
WMBA iklm-n-o-p-z
WMS iklm-n-o-p-z
SCE abcd.eh-z

“a” can be “1, 2 or 3” and defines electronic design (e.g. connector, internal, spindle encoder)
“b” can be “0, 1, 2, 3, 4 or 5” and defines scanning (e.g. outside, inside, with or without segment, axial)
“c” can be “05, 10 or 30” and defines grating period (e.g. 500 µm, 1000 µm, 3000 µm)
“d” can be “S, HA, HD, HT” and defines performance (e.g. standard, high accuracy, high dynamics, high tolerance)
“e” can be “01 to 99” and defines interface (e.g. EnDat, TTL, serial interface, 1Vpp, DRIVE-CLiQ, SSI, BISS C, high speed)
“f” can be “.., FA, FS or FZ” and defines safety concept (e.g. safety function, functional safety)
“g” can be “RI, RV, RS, LV” and defines type of reference (e.g. 360°el., 90°el.)
“h” can be a combination of 2 characters and defines interpolation / multiplication or support of external sensor
“i” can be “1 or 3” and defines type (e.g. standard, spindle encoder)
“j” can "01 to 99" and defines digital interpolation factor (in “bit”)
“k” can be “0, 1 or 5” and defines scanning (e.g. outside, inside, axial)
“l” can be “A or I” defines scanning (e.g. outside, inside)
“m” can be “03, 05, 10 or 20” and defines accuracy class (µm)
“n” can be “0 to 99999” and defines division lines
“o” can be “.. or MF” and defines safety concept (e.g. e.g. safety function)
“p” can be a combination of 4 characters and defines type of graduation carrier
“z” can be up to 20 characters and defines non-safety critical configurations (e.g. build factor, division lines, cable length, pins of electrical connections)

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C E R T I F I C A T E

No. U10 022705 0016 Rev. 00

Parameters:

Max. 36 Vdc; max. 300 mA (Limited Voltage, Limited Energy)

Conditions of Acceptability:

- When installing requirements of test standards and installation guide must be fulfilled.
- Equipment consists of scanning head and scale.
- If heated up by end-use system and a hazard can occur: Heating test shall be conducted at end-use.
- If equipment is accessible: mechanical enclosure test shall be conducted at end-use.
- Identification shall be marked on equipment; ratings shall be included in documentation.
- All supplies and connected circuits shall fulfil requirements of “Low Voltage, Limited Energy” or “Class 2 power”.
- Functional Safety is not part of this investigation.

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