



Product Service

CERTIFICATE

No. Z10 13 08 84596 001

Holder of Certificate: Elmo Motion Control Ltd.60 Amal St. P.O. Box 3078
49516 Petach-Tikva
ISRAEL**Factory(ies):** 84596**Certification Mark:****Product:** Safety Related Programmable Electronic System**Model(s):** Drive System GOLD LINE

Parameters: Safety Function: STO (EN 61800-5-2)
PL e, CAT 3 (EN ISO 13849)
SIL 3 (EN 61508)

Further approvals can be found in the report below.

The report below and the user documentation in the currently valid revision are mandatory part of this certificate. The product complies with the following listed safety requirements only if the specifications documented in the currently valid revision of this report are met.

Tested according to: EN 61508-1:2010 (SIL 3)
EN 61508-2:2010 (SIL 3)
EN 61508-3:2010 (SIL 3)
EN 61800-5-2:2007
EN ISO 13849-1:2008 (Cat 3, PL e)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: EP85169C**Date,** 2013-08-12

(Peter Weiss)

Page 1 of 1





Choose certainty.
Add value.

Annex 1
of the
Report to the Certificate
Z10 13 08 84596 001
Drive System
GOLD LINE

Manufacturer:

ELMO Motion Control Ltd.
60 Amal St. P.O. Box 3078
Petach-Tikva 49516
Israel

Report No.: EP85169C-A1
Revision 1.3 of the annex, dated 2017-05-09

Testing Body:

TÜV SÜD Rail GmbH
Generic Safety Systems
Barthstr. 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	2013-08-13	Initial
1.1	T. Paradzik/K. Leupold	2014-09-30	Modification report: EP86131T Added chapter 2.5, 2.6, 2.7 and 2.8
1.2	K. Leupold	2016-11-04	Modification report: EP90002T New variants: Twitter, Clarinet, Oboe
1.3	A. Valente	2017-05-09	Modification report: EP90971T Changed Diagnostic test



Safety-Certified Hardware and Software Components

The following GOLD LINE system components are covered by Certificate no. Z10 13 08 84596 001 and the report to the certificate, report no. EP85169C.

The following system components are certified 'safety-related'. This allows the components to be used to process safety critical signals and functions.

1 Software

1.1 STO Diagnostics Module

Filename	Safety-Firmware-Version
StoDiagnostics.c	1.0.11.0 1.0.12.0 1.0.14.0
StoDiagnostics.h	1.0.11.0 1.0.12.0 1.0.14.0



2 Hardware

2.1 DC Non- Isolated Products (up to 200v)

Gold BELL		
Model Name	Model Part Number	Version
Gold Bell	G-BEL	V03
Gold DC Bell	G-DCBEL	V03
Gold Solo Bell	G-SOLBEL	V03
Gold GUITAR / Gold CELLO		
Model Name	Model Part Number	Version
Gold Guitar	G-GUT	V03
Gold Solo Guitar	G-SOLGUT	V03
Gold Cello	G-CEL	V03
Gold Falcon	G-FAL	V03
Gold Hawk	G-HAK	V03
Gold Solo Hawk	G-SOLHAK	V03



Gold WHISTLE		
Model Name	Model Part Number	Version
Gold Whistle	G-WHI	V03
Gold DC Whistle	G-DCWHI	V03
Gold Solo Whistle	G-SOLWHI	V03
Gold Hornet	G-HOR	V03
Gold Solo Hornet	G-SOLHOR	V03
Gold DC Hornet	G-DCHOR	V03
Gold Duo	G-DUO	V03
Gold Duo AMBA	G-DUO-AMBA	V03
Gold Uno AMBA	G-UNO-AMBA	V03
Gold Twitter		
Model Name	Model Part Number	Version
Gold Twitter	G-TWI	V03
Gold Bee	G-BEE	V03
Gold Solo Twitter	G-SOLTWI	V03
Gold Clarinet		
Model Name	Model Part Number	Version
Gold Clarinet	G-CLA	V03

2.2 DC Isolated Products

Gold DRUM (up to 400V)		
Model Name	Model Part Number	Version
Gold Drum	G-DRU	V03
Gold Eagle	G-EAG	V03
Gold TROMBONE (up to 800V)		
Model Name	Model Part Number	Version
Gold Trombone	G-TRO	V03



Gold DC Trombone	G-DCTRO	V03
Gold Solo Trombone	G-SOLTRO	V03
Gold Panther	G-PAN	V03
Gold Solo Panther	G-SOLPAN	V03
Gold DC Panther	G-DCPAN	V03
Gold DRUM HV (up to 800V)		
Model Name	Model Part Number	Version
Gold Drum HV	G-DRU	V03
Gold Eagle HV	G-EAG	V03

2.3 AC Isolated Products

Gold BASSOON (230V)		
Model Name	Model Part Number	Version
Gold Bassoon	G-BAS	V03
Gold Tuba (up to 480V)		
Model Name	Model Part Number	Version
Gold Tuba	G-TUB	V03
Gold Oboe (up to 480V)		
Model Name	Model Part Number	Version
Gold Oboe	G-OBO	V03

Munich, 2017-05-09

TÜV SÜD Rail GmbH
Rail Automation


G. Greil
Technical Certifier