



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



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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)

<b>Gold BELL</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
Gold Bell	G-BEL	V03
Gold DC Bell	G-DCBEL	V03
Gold Solo Bell	G-SOLBEL	V03
<b>Gold GUITAR / Gold CELLO</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
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



<b>Gold WHISTLE</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
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
<b>Gold Twitter</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
Gold Twitter	G-TWI	V03
Gold Bee	G-BEE	V03
Gold Solo Twitter	G-SOLTWI	V03
<b>Gold Clarinet</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
Gold Clarinet	G-CLA	V03

## 2.2 DC Isolated Products

<b>Gold DRUM (up to 400V)</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
Gold Drum	G-DRU	V03
Gold Eagle	G-EAG	V03
<b>Gold TROMBONE (up to 800V)</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
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
<b>Gold DRUM HV (up to 800V)</b>		
<b>Model Name</b>	<b>Model Part Number</b>	<b>Version</b>
Gold Drum HV	G-DRU	V03
Gold Eagle HV	G-EAG	V03

### 2.3 AC Isolated Products

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

Munich, 2017-05-09

TÜV SÜD Rail GmbH  
Rail Automation

  
 G. Greil  
 Technical Certifier