



## TYPE APPROVAL CERTIFICATE

**Certificate No.** : MIL20769-EL001 **Initial Approval** : 8th August, 2007.  
**Product** : Intrinsically Safe Isolators  
**Manufacturer** : G.M. International Srl  
Via San Fiorano, 70 - 20058 Villasanta (MI) Italy

**Product Description** : Type : D1000 series

D1010S/D	D1012Q	D1014S/D	D1020S/D	D1021S,
D1022S/D	D1030S/D	D1130S/D	D1031D/Q	D1032D/Q,
D1033D/Q	D1034S/D	D1035S	D1040Q~43Q	D1052S/D/X/Y,
D1053S	D1054S	D1060S	D1061S	D1063S,
D1072S/D	D1073S	D1080D	D1081D	D1180D
PSD1000	PSD1000F	PSD1001	PSD1001C	PSD1004

" See Appendix 1 & 2 "

**Approval Condition** : 1. This approval is granted on the basis of test report no. 2006-3120 rev. 02 and 57399 TRFEMC issued by Nemko S.p.A.  
2. Individual Product Certification is not required.

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 1, Section. 9 of the Rules for Classification, Steel Ships

This Certificate is valid until 7th August, 2017.  
Issued at Busan, Korea on 19th September, 2012.



*Handwritten signature*

General Manager of  
Materials and Equipment Team

**Note** : 1 : The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2 : The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.

## Appendix 1

# Product Description and/or Approval Condition

Certificate No : MIL20769-EL001

Date of Issue : 19th September, 2012.

Product Description :

Type	Channel	Description	Reference Document No.
<b>Analog input</b>			
D1010S/D	1/2Ch	SIL2-SIL3 Repeater Power Supply Smart-Hart Compatible	DTS0016-11
D1012Q	4Ch	Quadruple Repeater Power Supply	DTS0189-4
D1014S/D	1/2Ch	SIL3 Repeater Power Supply Hart Compatible	DTS0181-6
D1054S	1Ch	Repeater Power Supply and Trip Amplifiers	DTS0183-3
<b>Analog output type</b>			
D1020S/D	1/2Ch	SIL2 Powered Isolating Driver Smart-Hart Compatible	DTS0017-7
D1021S	1Ch	SIL2 Powered Isolating Driver Fault detection Smart-Hart compatible	DTS0133-7
D1022S/D	1/2Ch	Loop Powered Fire/Smoke Detector Interface	DTS0195-2
<b>Digital input</b>			
D1030S/D	1/2Ch	DC Power Switch/Proximity Detector Repeater, Relay Out	DTS0020-7
D1130S/D	1/2Ch	AC Power Switch/Proximity Detector Repeater, Relay Out	DTS0173-6
D1031D/Q	2/4Ch	Switch/Proximity Detector Repeater, Transistor Out	DTS0023-8
D1032D/Q	2/4Ch	SIL2 Switch/Proximity Detector Repeater, Relay Out	DTS0148-5
D1033D/Q	2/4Ch	SIL2 Switch/Proximity Detector Repeater, Transistor Out	DTS0151-7
D1034S/D	1/2Ch	SIL3 Contact/Proximity Detector Interface	DTS0182-5
<b>Digital Output</b>			
D1040Q~43Q		SIL2/SIL3 Digital Out Loop/Bus Powered to Drive solenoid/LED/Horn	DTS0038-6
<b>Signal Converter and Trim Amplifier</b>			
D1035S	1Ch	Frequency-Pulse Isolating Repeater	
D1052S/D	1/2Ch	mA-V Input, mA-V Output, SW Programmable	DTS0040-6
D1052X/Y	1/2Ch	Analog Signal Converter Duplicator/Selector, Adder, Subtractor	DTS0040-6
D1053S	1Ch	Analog Signal Converter and Trip Amplifier	DTS0041-6
D1060S	1Ch	Frequency-Pulse Converter, Repeater, Trip Amplifier	DTS0162-5
<b>Serial Line Converter</b>			
D1061S	1Ch	RS 422 / RS 485 Fieldbus Isolating Repeater	DTS0184-3
<b>Load Cell Isolator Converter</b>			
D1063S	1Ch	Strain Gauge Bridge Isolating Repeater	DTS0185-3
<b>Temperature Converter</b>			
D1072S/D	1/2Ch	SIL2 Temperature Signal Converter	DTS0025-9
D1073S	1Ch	Temperature Converter and Trip Amplifiers	DTS0043-8

< To be continued >

## Appendix 2

# Product Description and/or Approval Condition

Certificate No : MIL20769-EL001

Date of Issue : 19th September, 2012.

Type	Channel	Description	Reference Document No.
Flammable Liquid Presence Detector - Interface			
D1080D		Flammable Liquid Presence Detector Interface Relay Output	DTS0178-4
D1081D		Flammable Liquid Presence Detector Interface Transistor Output	DTS0179-4
D1180D		Flammable Liquid Presence Detector Interface Transistor Output	DTS0180-4
Power Supply			
PSD1000		Universal AC input 24V-500mA Switching Power Supply	DTS0165-4
PSD1000F		Universal AC input 24V-500mA Switching power supply with Fault Relay	DTS0165-4
PSD1001	4Ch	15V-20mA Intrinsically Safe Power Supply	DTS0145-5
PSD1001C	1Ch	10V-150mA Intrinsically Safe Power Supply	DTS0187-2
PSD1004		Instinsically Safe 5V Supply Module	DTS0191-0

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