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Italia

COMPLIANCE

with IEC EN 61508

Certificate No.: C – IS – 204194 – 01

CERTIFICATE OWNER: **GM International S.r.l.**
Via San Fiorano, 70 – 20058 Villasanta (MI)

WE HEREWITH CONFIRM THAT

THE MODULES IN THE TABLE ENCLOSED TO THE PRESENT DOCUMENT

MEET THE REQUIREMENTS OF IEC EN 61508

(LOW DEMAND MODE OF OPERATION)

Examination result:	**The above described Modules were found to meet the standard defined requirements of the safety levels detailed in the following table (T-IS-204194-01) according to IEC EN 61508, under fulfillment of the conditions listed in the related Reports, mentioned in the same table, in their currently valid version, on which this Certificate is based**
Examination parameters:	**Functional characteristics, reliability and availability parameters and functional safety management**
Official Summary Table No.:	**T-IS-204194-01**
Expiry Date	**June, 7th 2013**

IT IS TO BE INTENDED THAT THE ABOVE OFFICIAL SUMMARY TABLE IS AN INTEGRAL PART OF THIS DOCUMENT

Reference Standard **IEC 61508 Part 1, 2, 4, 6, 7**

Sesto San Giovanni, June, 7th 2010

TÜV ITALIA Srl

TÜV Italia Industrie Service TÜV SÜD Italia

TÜV ITALIA Srl
Industry Service Division
Director

Gennaro Oliva

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SUMMARY TABLE
T-IS-204194-01

	ITEM NAME	REPORT CODE	FINAL RESULTS (*)		
			T_{Proof}	Configuration	Allowed SIL
1.	D5090S_D5290S	R-IS-204194-01-Rev.2	10 years	NE	SIL3
			20 years	NE	SIL2
2.	D5091S_D5291S	R-IS-204194-02-Rev.1	6 years	ND relays and NO contacts	SIL3
			20 years	ND relays and NO contacts	SIL2
			10 years	NE relays and NC contacts	SIL3
			20 years	NE relays and NC contacts	SIL2
3.	D5014S_D5014D	R-IS-204194-03-Rev.1	1 year	Active input	SIL3
			10 years	Active input	SIL2
			1 year	Passive input	SIL3
			10 years	Passive input	SIL2

(*)Considering the products not contribute more than 10% of total SIF dangerous failure.

	ITEM NAME	REPORT CODE	FINAL RESULTS (*)		
			T_{Proof}	Configuration	Allowed SIL
4.	D5011S_D5011D	R-IS-204194-03-Rev.1	1 year	Passive input	SIL3
			10 years	Passive input	SIL2
5.	D5034S_D5034D	R-IS-204194-04-Rev.1	1 year	NA	SIL3
			10 years	NA	SIL2
6.	D1044S	R-IS-204194-05-Rev.1	6 years	Bus Powered	SIL2
			10 years		SIL1
			7 years	Loop Powered	SIL2
			10 years		SIL1
7.	D1044D		6 years	Bus Powered – Independent channels	SIL2
			10 years		SIL1
			10 years	Bus Powered – 1oo2 architecture	SIL3
			10 years	Loop Powered – 1oo2 architecture	SIL3

(*)Considering the products not contribute more than 10% of total SIF dangerous failure.

	ITEM NAME	REPORT CODE	FINAL RESULTS (*)		
			T_{Proof}	Configuration	Allowed SIL
8.	D5030S_D5030D	R-IS-204194-06-Rev.1	5 years	Maximum relay contact current is 4A	SIL2
			20 years		SIL1
			2 years	Maximum relay contact current is 100mA	SIL3
			20 years		SIL2
9.	D5031S_D5031D		2 years	NA	SIL3
			20 years		SIL2
10.	D5032S_D5032D		2 years	Maximum relay contact current is 100mA	SIL3
			20 years		SIL2
11.	D5049S_D1049S	R-IS-204194-07-Rev.1	12 years	Bus Powered / NE load	SIL3
			20 years		SIL2
12.	D5048S_D1048S		20 years	Loop Powered / NE load	SIL3
13.	D5020S_D5020D	R-IS-204194-08-Rev.1	1 year	NA	SIL3
			10 years		SIL2

(*)Considering the products not contribute more than 10% of total SIF dangerous failure.

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	ITEM NAME	REPORT CODE	FINAL RESULTS (*)		
			T_{Proof}	Configuration	Allowed SIL
14.	D5290S/SA	R-IS-204194-01-Rev.2	10 years	NE	SIL3
			20 years		SIL2
15.	D5290S-080		10 years (**)	NE	SIL3
16.	D5293S	R-IS-204194-15-Rev.1	10 years	NE	SIL3
			20 years		SIL2
17.	D5294S		7 years	NE	SIL3
			20 years		SIL2

(*)Considering the products not contribute more than 10% of total SIF dangerous failure.

(**) It is considered the product life time.

FUNCTIONAL SAFETY ASSESSMENTS		
	REPORT CODE	**FINAL RESULT**
1	R IS 183645-11-Rev.1	Compliant to the standard for the following parts: - Documentation (IEC EN 61508 Part 1 Chapter 5) - Management of functional safety (IEC EN 61508 Part 1 Chapter 6) - Functional safety assessment (IEC EN 61508 Part 1 Chapter 8) - Realization: E/E/PES safety lifecycle from 9.1 to 9.6 (IEC EN 61508 Part 2) for the all safety related modules object of this certificate.