Translation

1 # Type Examination Certificate

2 **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014**

3 Type Examination Certificate Number: **BVS 15 ATEX E 006 X** Issue: **01**

4 Equipment: **Power supply system type PSS1250-**-*-*-* and power supply modules type PSW1250 / PSW1250-xxx or type PSW1230 / PSW1230-xxx**

5 Manufacturer: **G.M. International S.R.L.**

6 Address: **Via Mameli 53/55, 20852 Villasanta (MB), Italy**

7 This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

8 DEKRA Testing and Certification GmbH certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential Report No. BVS PP 15.2010 EU.
This issue of the Type Examination Certificate replaces the previous issue of the Type Examination Certificate BVS 15 ATEX E 006 X including supplement 1.

9 The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018	**General requirements**
EN IEC 60079-7:2015+A1:2018	**Increased Safety "e"**
EN 60079-11:2012	**Intrinsic Safety "i"**
EN IEC 60079-15:2019	**Type of Protection "n"**

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

11 This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

II 3G Ex ec nC IIC T4 Gc

DEKRA Testing and Certification GmbH
Bochum, 2022-08-01

Signed: Dr. Rolf Krökel

Managing Director

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13 **Appendix**

14 **Type Examination Certificate**

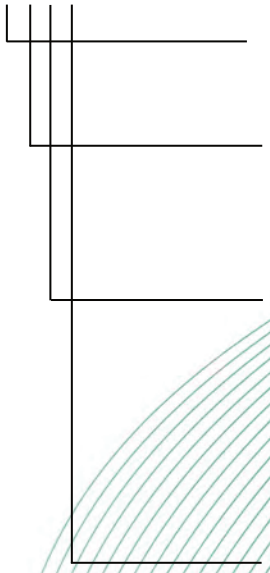
BVS 15 ATEX E 006 X Issue 01

15 **Product description**

15.1 **Subject and type**

Power supply system type PSS1250-**-*-*-* and power supply modules type PSW1250 / PSW1250-xxx- or type PSW1230 / PSW1230-xxx.
Type code:

PSS1250-**-*-*-*



Hot swapping capability
HS = yes
Null = no

Rack size
7 = 19 inch rack unit (for max 7 modules)
3 = 9 inch rack unit (for max 3 modules)
2 = 7 inch rack unit (for max 2 modules)

Output redundancy provision
1 = 1 x 150 A + 150 A redundancy (only for 19 inch rack unit)
2 = 1 x 100 A + 100 A and 1 x 50 A + 50 A redundancy (only for 19 inch rack unit)
3 = 3 x 50 A + 50 A redundancy (only for 19 inch rack unit)
X = customized redundancy configuration

Diagnostic
D: system with diagnostic module
Null: system without diagnostic module

PSW1250-xxx / PSW1230-xxx: '-xxx' = non-Ex-relevant details of construction and function.

15.2 **Description**

The PSS1250-**-*-*-* power supply system is a 19” or 9” rack unit suitable to accept up to 6 or 2 plug-in power supply modules type PSM1250.
Each module type PSM1250 provides 21-28 V DC, 50 A output, input voltage range AC 100 to 264 V. Modules can be paralleled for load sharing purposes.
The PSW1250 / PSW1250-xxx or PSW1230 / PSW1230-xxx modules are stand-alone power supply units, which need not be mounted in a 19” or 9” rack.
The Electrical characteristics of PSW1250 module is identical with parameters of PSM1250 module installed in PSS1250-**-*-*-* rack.
In deviation from PSW1250 / PSW1250-xxx, PSW1230 / PSW1230-xxx provides 30 A output current.

Reason for this issue:

- Updating of the standards
  - EN 60079-0
  - EN 60079-15
- Change of type of protection from "nA" to "ec”

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15.3 Parameters

15.3.1 PSS1250--**-7-*-*

Electrical data

Input				
Rated voltage	AC	100….264	V	
Frequency range		48…62	Hz	
Nominal current each module		14.5	A	(100 V)
		6.2	A	(230 V)
Output				
Min. output voltage	DC	21	V	
Max. output voltage	DC	28	V	

Output current

PSS1250--**-7-1-*	150 A (for module 1&2&3&4&5&6)
PSS1250--**-7-2-*	150 A (100 A for module 1&2&3&4 and 50 A for module 5&6)
PSS1250--**-7-3-*	150 A (50 A for module 1&2, 50 A for module 3&4 and 50 A for module 5&6)

15.3.2 PSS1250--**-3-*-*

Electrical data

Input				
Rated voltage	AC	100….264	V	
Frequency range		48…62	Hz	
Nominal current each module		14.5	A	(100 V)
		6.2	A	(230 V)
Output				
Min. output voltage	DC	21	V	
Max. output voltage	DC	28	V	
Output current		50	A	

15.3.3 PSW1250 / PSW1250-xxx

Electrical data

Input				
Rated voltage	AC	100….264	V	
Frequency range		48…62	Hz	
Nominal current each module		14.5	A	(100 V)
		6.2	A	(230 V)
Output				
Min. output voltage	DC	21	V	
Max. output voltage	DC	28	V	
Output current		50	A	

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15.3.4 PSW1230 / PSW1230-xxx

Electrical data

Input				
Rated voltage	AC	100….264	V	
Frequency range		48…62	Hz	
Nominal current each module		8.7	A	(100 V)
		3.7	A	(230 V)
Output				
Min. output voltage	DC	21	V	
Max. output voltage	DC	28	V	
Output current		30	A	

15.3.5 Ambient temperature range -40 °C ≤ T_{amb} ≤ +70 °C
(+50 °C bis +70 °C with derating)

16 **Report Number**

BVS PP 15.2010 EU, as of 2022-08-01

17 **Specific Conditions of Use**

In case of alternative installation in areas requiring EPL Gc equipment, the power supply system and the power supply modules shall be:

- used in an area with a pollution degree of at least 2 according to EN 60664-1, and
- be installed in an enclosure with a degree of protection of at least IP54 in accordance with EN 60079-0.

18 **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

19 **Remarks and additional information**

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2022-08-01
BVS-Ret/Mu A 20220293 / 342710200

Managing Director

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