



(1) **TYPE EXAMINATION CERTIFICATE**

(2) Product Intended for use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**

(3) Type Examination Certificate Number:

SIQ 23 ATEX 302 X

Issue: 0



(4) Product: Power supply unit,
types: IM12-PS2412-U-U-PR/W3 and IM12-PS2412-U-U-PR/W3/CC

(5) Manufacturer: Hans Turck GmbH & Co. KG

(6) Address: Witzlebenstrasse 7, 45472 Mülheim an der Ruhr, Germany

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) SIQ Ljubljana 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 2014/34/EU.

The examination and test results are recorded in the confidential test report TEx302/23.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 + AC:2020-02

EN IEC 60079-7:2015 + A1:2018

Where additional criteria beyond those given here have been used, they are listed at item (18) in the schedule to this certificate.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and construction of the specified product in accordance with the Directive 2014/34/EU. 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:

II 3 G Ex ec IIC T4 Gc

Certification body

Ljubljana, 1 March 2024

Bojan Pečavar



(13)

SCHEDULE

(14) **Type Examination Certificate Number SIQ 23 ATEX 302 X, Issue: 0**

(15) Description of Product

Power supply unit, types: IM12-PS2412-U-U-PR/W3 and IM12-PS2412-U-U-PR/W3/CC, is an Ex equipment, intended for installation on the DIN rail in final enclosure with degree of ingress protection at least IP54 according to EN IEC 60079-0 and EN IEC 60079-7. Power supply unit can be installed in vertical and horizontal position as specified in Specific Conditions of Use.

Power supply unit has plastic enclosure with degree of ingress protection of IP20. It is designed in type of protection "ec". It has external terminals for mains input voltage and external connector for output circuits on the rear side.

Technical data

Type key:

- IM12-PS2412-U-U-PR/W3 ... input terminals with screw clamp
- IM12-PS2412-U-U-PR/W3/CC ... input terminals with spring-loaded clamp

Electrical ratings:

Input:	100 V – 240 V a.c., 50 Hz / 60 Hz
Output:	24 V d.c., 500 mA, 12 W

Ambient temperature range: From -25°C to +70°C

(16) Test Report

TEx302/23 dated 1 March 2024.

(17) Specific Conditions of Use

- Power supply unit shall be installed in appropriate IP54 enclosure according to EN IEC 60079-0 and EN IEC 60079-7. This can be assured by enclosure in type of protection "ec" or "eb".
- Ambient temperature (air temperature below the Power supply unit) shall not exceed +70°C.
- Power supply unit can be installed on DIN rail in vertical or horizontal position.
- In case of installation of adjacent component nearby the Power supply unit (PSU) following shall be assured:
 - o For vertical position (horizontal DIN rail): Up to 3 modules (e.g. IMX12-AI...) can be installed on one side of the Power supply unit. The distance from such block (PSU + max. 3 modules) to other components shall be at least 7 mm (left, right) and 30 mm (bottom, top). Maximum dissipation power (heat loss) of the nearest adjacent module shall not exceed 4 W.
 - o For horizontal position (vertical DIN rail): Up to 3 modules (e.g. IMX12-AI...) can be installed on top side of the Power supply unit. The distance from such block (PSU + max. 3 modules) to other components shall be at least 7 mm (bottom, top) and 30 mm (left, right). Maximum dissipation power (heat loss) of the nearest adjacent module shall not exceed 3 W.
- Connector/terminal (output and input) shall not be separated when energized. It can be separated with delay of at least 0.5 minute after de-energizing of the power supply.
- Metal clamping device shall be earthed by DIN rail, which is connected to earth.



(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).

(19) Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Specification, inpotron Schaltnetzteile GmbH	PSU-0331-04	J	13. 2. 2024
Schematics, Flyback 16W Slim-Line, inpotron Schaltnetzteile GmbH	Part No.: PSU-0331-04-SCH	/	11. 8. 2023
Stückliste PSU-0331-04, inpotron Schaltnetzteile GmbH	PSU-0331-04_STL LP-0600B	/	11. 8. 2023
Manufacturing Drawing, inpotron Schaltnetzteile GmbH	Part No.: LP-0600B	a	11. 10. 2023
Flyback 16W Slim-Line, inpotron Schaltnetzteile GmbH	Part No.: PSU-0331-04 - B	/	11. 8. 2023
Schematics, Submodul für PSU-0331-04 zur Bestückung der Filterkomponenten, inpotron Schaltnetzteile GmbH	Part No.: PSU-SUB58-SCH	/	7. 3. 2023
Stückliste PSU-SUB58, inpotron Schaltnetzteile GmbH	PSU-SUB58_STL LP-0608B	/	7. 3. 2023
Manufacturing Drawing, inpotron Schaltnetzteile GmbH	Part No.: LP-0608B	/	7. 3. 2023
Submodul für PSU-0331-04 zur Bestückung der Filterkomponenten, inpotron Schaltnetzteile GmbH	Part No.: PSU-SUB58 - B	/	7. 3. 2023
Schematics, Submodul für PSU-0331-04 zur Bestückung der Elkos, inpotron Schaltnetzteile GmbH	Part No.: PSU-SUB64-SCH	/	7. 3. 2023
Stückliste PSU-SUB64, inpotron Schaltnetzteile GmbH	PSU-SUB64_STL LP-0609B	/	7. 3. 2023
Manufacturing Drawing, inpotron Schaltnetzteile GmbH	Part No.: LP-0609B	/	7. 3. 2023
Submodul für PSU-0331-04 zur Bestückung der Elkos, inpotron Schaltnetzteile GmbH	Part No.: PSU-SUB64 - B	/	7. 3. 2023
Specification, Smartcoil Electronical Industrial Co., Ltd.	Customer part No.: LRC2x15mH/0.7A1 Smartcoil part No.: EM-0R002-0772	D	15. 7. 2022
Specification Sheet, Toroidal coil, Coils Electronic Co., Ltd. (alternative)	Customer part No.: LRC2X15mH/0.7A1 CEC Part No.: A80428010	/	17. 7. 2009



Title:	Drawing No.:	Rev. Level:	Date:
Specification, Smartcoil Electronical Industrial Co., Ltd.	Customer part No.: SLEFD20-001C	A	9. 6. 2023
Technical drawing, Markings, Hans Turck GmbH & Co. KG	Type: IM12-PS2412-U-U-PR/W3 Id. No: 100047815	/	/
Technical drawing, Markings, Hans Turck GmbH & Co. KG	Type: IM12-PS2412-U-U-PR/W3/CC Id. No: 100047816	/	/
Quick Start Guide, Hans Turck GmbH & Co. KG	IM12-PS2412-U-U-PR Doc. No.: 100047553	V02.00	February 2024

(20) Consolidated Certificates

None.