



(1) Supplementary EU - Type Examination Certificate No.4

Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 2014/34/EU)

(3) EU - Type Examination Certificate number:

FTZÚ 04 ATEX 0136X

(4) Product:

Supply and evaluating units type NxxU-8xx

(5) Manufacturer: Dinel s.r.o.

(6) Address:

U Tescomy 249, 760 01 Zlín, Czech Republic

- (7) This supplementary certificate extends EC Type Examination Certificate No. FTZÚ 04 ATEX 0136X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.
- (8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, 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.
- (9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.
- (10) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018, EN 60079-11:2012

(11) The marking of the product shall include the following:

II (1)G [Ex ia Ga] IIC

II (1)D [Ex ia Da] IIIC

I (M1) [Ex ia Ma] I

(12) This certificate is valid till:

27.10.2024

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 25.10.2019

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Schedule

Supplementary EU - Type Examination Certificate No. 4 to FTZÚ 04 ATEX 0136X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus;
- Evaluation according to the newest standards;
- Prolongation of certificate validity.

This supplementary certificate describes the minor changes of internal electronic parts of product. The validity of certificate was prolonged for next five years. Technical parameters of product remain unchanged. The list of modified documents is listed in the clause (19) of this supplement.

Technical parameters: remain unchanged

(16) Report Number.:

04/0136/4

(17) Specific Conditions of Use:

None additional to those listed previously.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate.

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 25.10.2019

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Schedule

Supplementary EU - Type Examination Certificate No. 4 to FTZÚ 04 ATEX 0136X

(19) Drawings and Documents:

Number	Sheet	Date	Description
-	15	07.2018	User's manual
NxxU-8xx-SZ-01	1	12.07.2019	Schematic diagram NxxU-8xx-230V
NxxU-8xx-SZ-02	1	12.07.2019	Schematic diagram NxxU-8xx-24V
NxxU-8xx-SZ-03	1	12.07.2019	Schematic diagram NxxU-8xxV-R
NxxU-8xx-SZ-04	1	12.07.2019	Schematic diagram NxxU-8xxV-T
NxxU-8xx-OS-01	1	12.07.2019	Component layout NxxU-8xx-230V-R
NxxU-8xx-OS-02	1	12.07.2019	Component layout NxxU-8xx-24V-R
NxxU-8xx-OS-03	1	12.07.2019	Component layout NxxU-8xx-230V-T
NxxU-8xx-OS-04	1	12.07.2019	Component layout NxxU-8xx-24V-T
NxxU-8xx-MO-01	1	12.07.2019	PCB NxxU-8xx-230V-R
NxxU-8xx-MO-02	1	12.07.2019	PCB NxxU-8xx-24V-R
NxxU-8xx-MO-03	1	12.07.2019	PCB NxxU-8xx-230V-T
NxxU-8xx-MO-04	1	12.07.2019	PCB NxxU-8xx-24V-T
NxxU-8xx-SS-01	1	12.07.2019	BOM NxxU-8xx-230V
NxxU-8xx-SS-02	1	12.07.2019	BOM NxxU-8xx-24V
NxxU-8xx-SS-03	1	12.07.2019	BOM NxxU-8xxV-R
NxxU-8xx-SS-04	1	12.07.2019	BOM NxxU-8xxV-T

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 25.10.2019

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(1)

Supplement No. 3 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0136X

(4) Equipment or protective system: Supply and evaluating units type NxxU-8xx

(5) Manufacturer: Dir

Dinel s.r.o.

(6) Address:

U Tescomy 249, 760 01 Zlín, Czech Republic

(7) This supplement of certificate is valid for:

- application of new standards
- prolongation of certificate validity
- change the marking
- (8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.
- (9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 (Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.
- (10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0:2012, EN 60079-11:2012

(11) Marking of equipment shall contain symbols:

ᢄx II (1)G [Ex ia Ga] IIC

(x) II (1)D [Ex ia Da] IIIC

(12) This type examination certificate is valid till: 27.10.2019

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body AO 210 NB 1026

Date of issue: 27.10.2014

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(13)

Schedule

(14)

Supplement No. 3 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(15) Description of Equipment or Protective System:

In the equipment have not been made changes. Category devices have been expanded (1) D. The apparatus is manufactured according to the verified documentation shown in the basic certificate and in this Supplement and complies with requirements of upgraded standards mentioned in clause (10).

The validity of the certificate is prolonged till 27.10.2019.

- (16) Report No.: 04/0136-3
- (17) Special conditions for safe use: remain unchanged
- (18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standards mentioned in clause (10) of this supplement according which the equipment was verified.

(19) List of Documentation:

Title:	Date:	Pages:
Technical manual	07.2014	21
Users manual	07.2014	9
NxxU-8xx-OD-01 to 09	07.2014	9

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 27.10.2014

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(1)

Supplement No. 2 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0136X

- (4) Equipment or protective system: Supply and evaluating units type NxxU-8xx
- (5) Manufacturer:

Dinel, s.r.o.,

(6) Address:

U Tescomy 249, 760 01 Zlín, Czech Republic

- (7) This supplement of certificate is valid for: modification of certified apparatus
- (8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.
- (9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.
- (10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0: 2006; EN 60079-11: 2007

(11) Marking of equipment shall contain symbols:

 $\langle \epsilon_x \rangle$

II (1)G [Ex ia] IIC



I (M1) [Ex ia] I

(12) This type examination certificate is valid till:

27. 10. 2014

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

Date of issue: 23.04.2010

Number of pages: 3

Page: 1/3



(13)

Schedule

- Supplement No. 2 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X
- (15) Description of Equipment or Protective System:
 - The new type of transformer STROPTEL 430-0183 was approved.

The above mentioned modifications have no influence to the safety level.

Technical data remain unchanged.

(16) Report No.: 04/0136-2 (10 pages)

(17) Special conditions for safe use:

remain unchanged

(18) Essential Health and Safety Requirements: Covered by standards mentioned in (10).

Responsible person:

Dipl. Ing. Sindler Jaroslav Head of certification body



Date of issue: 23.04.2010

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(13)

Schedule

Supplement No. 2 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(19)

LIST OF DOCUMENTATION

Documentation:

Date:

1. Drawing No. 430-0183

26.11.2009

2. Drawings:

Annex 1: Wiring diagram NxxU-8xx -230V-R

Annex 9: Component list NxxU-8xx -230V-R

Annex 10: Wiring diagram NxxU-8xx -24V-R

Annex 18: Component list NxxU-8xx -24V-R

Annex 19: Wiring diagram NxxU-8xx -230V-T

Annex 24: Component list NxxU-8xx -230V-T

Annex 25: Wiring diagram NxxU-8xx -24V-T

Annex 30: Component list NxxU-8xx -24V-T

All Annexes are verified dated 22.04.2010.

Responsible person:

Dipl. Ing. Šindler Jaroslav Head of certification body



Date of issue: 23.04.2010

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(1)

Supplement No. 1 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0136X

- (4) Equipment or protective system: Supply and evaluating units type NxxU-8xx
- (5) Manufacturer:

Dinel, s.r.o.,

(6) Address:

U Tescomy 249, 760 01 Zlín, Czech Republic

(7) This supplement of certificate is valid for:

- application of new standards

- prolongation of certificate validity

modification of certified apparatus

- (8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.
- (9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.
- (10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0:2006; EN 60079-11:2007

(11) Marking of equipment shall contain symbols:

Ex II (1)G

II (1)G [Ex ia] IIC

 $\langle \epsilon_x \rangle$

I (M1) [Ex ia] I

(12) This type examination certificate is valid till:

27. 10. 2014

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

Date of issue: 27.10.2009

Number of pages: 4

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Schedule

Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(15) Description of Equipment or Protective System:

The original unit series with relay output was extended with unit provided galvanic separation. The marking was supplemented wit affix "-T" (transistor output) or "-R" (relay output). The new type of transformer PTF-20HR.011 was approved. At the same time the printed circuit board was modified. The above mentioned modifications have no influence to the safety level.

The certified apparatus is manufactured according to the verified documentation shown in the basic certificate and in this Supplement and complies with requirements of upgraded standards listed in (10).

The validity of the certificate is prolonged till 27.10.2014.

Technical data remain unchanged.

- (16) Report No.: 04/0136-1
- (17) Special conditions for safe use: remain unchanged
- (18) Essential Health and Safety Requirements: Covered by standards mentioned in (10).

Responsible person:

Date of issue: 27.10.2009

Dipl. Ing. Šindler Jaroslav Head of certification body

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Documentation:

(14)

Physical Technical Testing Institute Ostrava-Radvanice

(13) Schedule

Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(19) **LIST OF DOCUMENTATION**

		Duie.
1.	Technical specification NxxU-8xx (21 pages)	06/2009
2.	Instruction for use NSSU, NDSU, NCLU (2 sheets)	06/2009
3.	Production documentation NxxU-8xx (85 pages)	06/2009
4.	Drawings:	
	Annex 1: Wiring diagram NxxU-8xx -230V-R Annex 2: Layout chart of PCB NxxU-8xx -230V-R Annex 3: Layout chart NSSU-811-230V-R with component values Annex 4: Layout chart NSSU-812-230V-R with component values Annex 5: Layout chart NDSU-822-230V-R with component values Annex 6: Layout chart NLCU-821-230V-R with component values Annex 7: Layout chart NLCU-822-230V-R with component values Annex 8: PCB face NxxU-8xx -230V-R (components and track side) Annex 9: Component list NxxU-8xx -230V-R Annex 10: Wiring diagram NxxU-8xx -24V-R Annex 11: Layout chart of PCB NxxU-8xx -24V-R Annex 12: Layout chart NSSU-811-24V-R with component values Annex 13: Layout chart NSSU-812-24V-R with component values Annex 15: Layout chart NDSU-822-24V-R with component values	verified on 27.10.2009
•	Annex 15: Layout chart NLCU-821-24V-R with component values Annex 16: Layout chart NLCU-822-24V-R with component values	verified on 27.10.2009 verified on 27.10.2009
•	Annex 17: PCB face NxxU-8xx -24V-R (components and track side) Annex 18: Component list NxxU-8xx -24V-R	verified on 27.10.2009 verified on 27.10.2009 verified on 27.10.2009
•	Annex 19: Wiring diagram NxxU-8xx -230V-T	verified on 27.10.2009
•	Annex 20: Layout chart of PCB NxxU-8xx -230V-T	verified on 27.10.2009
•	Annex 21: Content of side plate NSSU-811-230V-T Annex 22: Content of side plate NSSU-812-230V-T	verified on 27.10.2009 verified on 27.10.2009
•	Annex 23: PCB face NxxU-8xx -230V-T (components and track side)	verified on 27.10.2009

Responsible person:

Dipl. Ing. Sindler Jaroslav Head of certification body Date of issue: 27.10.2009

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Date:

This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute. This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.

NB 1026



(13)

Schedule

Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(19)

LIST OF DOCUMENTATION

	Documentation:	Date:
•	Annex 24: Component list NxxU-8xx -230V-T	verified on 27.10.2009
•	Annex 25: Wiring diagram NxxU-8xx -24V-T	verified on 27.10.2009
•	Annex 26: Layout chart of PCB NxxU-8xx -24V-T	verified on 27.10.2009
	Annex 27: Content of side plate NSSU-811-24V-T	verified on 27.10.2009
•	Annex 28: Content of side plate NSSU-812-24V-T	verified on 27.10.2009
•	Annex 29: PCB face NxxU-8xx -24V-T (components and track side)	verified on 27.10.2009
•	Annex 30: Component list NxxU-8xx -24V-T	verified on 27.10.2009
•	Annex 31: Front panel drawing NxxU-8xx -230V-x, NxxU-8xx -24V-x	verified on 27.10.2009
	(the holes machining)	
•	Annex 32: Front panel layout NxxU-8xx -230V-x and terminal numbering	
•	Annex 33: Front panel layout NxxU-8xx -24V-x and terminal numbering	verified on 27.10.2009
•	Annex 34: Side plate NSSU-811-230V-R and NSSU-811-24V-R	verified on 27.10.2009
•	Annex 35: Side plate NSSU-811-230V-T and NSSU-811-24V-T	verified on 27.10.2009
•	Annex 36: Side plate NSSU-812-230V-R and NSSU-812-24V-R	verified on 27.10.2009
•	Annex 37: Side plate NDSU-822-230V-R and NDSU-822-24V-R	verified on 27.10.2009
•	Annex 38: Side plate NDSU-822-230V-T and NDSU-822-24V-T	verified on 27.10.2009
•	Annex 39: Side plate NLCU-821-230V and NLCU-821-24V	verified on 27.10.2009
•	Annex 40: Side plate NLCU-822-230V and NLCU-822-24V	verified on 27.10.2009
•	Annex 41: Manufacturer pate with serial No.	verified on 27.10.2009
•	Annex 42: Microproces programme U1	verified on 27.10.2009
•	Annex 43: Technical parameters of component related to intrinsic safety	verified on 27.10.2009
•	Annex 44: Technical parameters of box DOLD KO 4300S	verified on 27.10.2009

Responsible person:

Dipl. Ing. Sindler Jaroslav Head of certification body



Date of issue: 27.10.2009

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EC-Type Examination Certificate (1)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0136X

(4) Equipment or protective system: Supply and evaluating units type NxxU-8xx

(5) Manufacturer:

Dinel, s.r.o.,

(6) Address:

Na Výsluní 541, 760 01 Zlín, Czech Republic

- (7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No

04/0136 dated 20 September 2004

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 50014:1997 + A1, A2;

EN 50020:2002

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include following:

II (1)G [EEx ia] IIC



I (M1) [EEx ia] I

This EC-Type Examination Certificate is valid till:

21.09. 2009

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

Date of issue: 21 of September 2004

Number of pages: 3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute. This certificate may only be reproduced in its entirety and without any change, schedule included.

NB 1026



(13) Schedule

(14) EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

(15) Description of Equipment or Protective System:

The supply and evaluating units type NxxU-8xx are associated apparatus intended to be used for supply and state evaluation of sensors type NAMUR. They are manufactured in single-channel or two-channel version with possible detection of fault conditions. The main two versions differ in supply voltage of units - 230 V respectively 24 V. The outputs are voltage free contact of two relays.

Maximum parameters of input intrinsic safe circuit:

 $U_o = 10.5 \text{ V}$; $I_o = 10.4 \text{ mA}$; $P_o = 27.3 \text{ mW}$; $L_o = 150 \text{ mH}$; $C_o = 1.8 \mu\text{F}$

 $U_{\rm m} = 253 \text{ V}$

Ambient temperature:

- 20°C \leq T_a \leq + 60°C

(16) Report No.: 04/0136

(17) Special conditions for safe use: -

When use in mining conditions the units NxxU-8xx must be placed in non-hazardous areas or must be placed inside of the flameproof enclosure "d".

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate in accordance with the product was verified and in manufacturer's instruction for use.

Responsible person:

Date of issue: 21 of September 2004

Dipl. Ing. Šindler Jaroslav

Head of certification body

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(19)

Physical Technical Testing Institute Ostrava-Radvanice

Schedule

(14) EC-Type Examination Certificate N° FTZÚ 04 ATEX 0136X

LIST OF DOCUMENTATION

	Documentation:	Date:
1.	Technical specification NxxU-8xx (17 pages)	09 / 2004
2.	Instruction for use NSSU, NDSU, NCLU (4 pages)	06 / 2004
3.	Test schedule NxxU-8xx (2 pages)	07 / 2004
4.	Production documentation NxxU-8xx (5 pages)	09 / 2004
5.	Drawings:	
•	Annex 1: Wiring diagram NxxU-8xx -230 V	verified on 20.09.2004
•	Annex 2: Layout chart of PCB NxxU-8xx -230 V	verified on 20.09.2004
•	Annex 3: Layout chart NSSU-811-230 V with component values	verified on 20.09.2004
•	Annex 4: Layout chart NSSU-812-230 V with component values	verified on 20.09.2004
•	Annex 5: Layout chart NDSU-822-230 V with component values	verified on 20.09.2004
•	Annex 6: Layout chart NLCU-821-230 V with component values	verified on 20.09.2004
•	Annex 7: Layout chart NLCU-822-230 V with component values	verified on 20.09.2004
•	Annex 8: PCB face NxxU-8xx -230 V (components and track side)	verified on 20.09.2004
•	Annex 9: Component list NxxU-8xx -230 V	verified on 20.09.2004
•	Annex 10: Wiring diagram NxxU-8xx -230 V	verified on 20.09.2004
•	Annex 11: Layout chart of PCB NxxU-8xx -24 V	verified on 20.09.2004
•	Annex 12: Layout chart NSSU-811-24 V with component values	verified on 20.09.2004
•	Annex 13: Layout chart NSSU-812-24 V with component values	verified on 20.09.2004
•	Annex 14 Layout chart NDSU-822-24 V with component values	verified on 20.09.2004
	Annex 15: Layout chart NLCU-821-24 V with component values	verified on 20.09.2004
•	Annex 16: Layout chart NLCU-822-24 V with component values	verified on 20.09.2004
•	Annex 17: PCB face NxxU-8xx -24 V (components and track side)	verified on 20.09.2004
•	Annex 18: Component list NxxU-8xx -24 V	verified on 20.09.2004
•	Annex 19: Drawing of front panel NxxU-8xx -230 V, NxxU-8xx -24 V	verified on 20.09.2004
	(hole milling)	
•	Annex 20: Parts on front panel NxxU-8xx -230 V, NxxU-8xx -24 V	verified on 20.09.2004
	(terminals numbering)	
•	Annex 21: Content of side plate NSSU-811-230 V a NSSU-811-24 V	verified on 20.09.2004
	Annex 22: Content of side plate NSSU-812-230 V a NSSU-812-24 V	verified on 20.09.2004
•	Annex 23: Content of side plate NDSU-822-230 V a NDSU-822-24 V	verified on 20.09.2004
0	Annex 24: Content of side plate NLCU-821-230 V a NLCU-821-24 V	verified on 20.09.2004
•	Annex 25: Content of side plate NLCU-822-230 V a NLCU-822-24 V	verified on 20.09.2004
•	Annex 26: Content of manufacturers plate with production number	verified on 20.09.2004

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 21 of September 2004

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