



NOTIFIED BODY No. 1293

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0494

In compliance with the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Control and Indicating Equipment MHU 117, MHU 116

For specifications see Annex

produced by

LITES Liberec s.r.o. Oblouková 135, 463 03 Stráž nad Nisou, Czech Republic

and produced in the manufacturing plant

LITES Liberec s.r.o. Kateřinská 235, 463 03 Stráž nad Nisou, Czech Republic

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standards

EN 54-2: 1997/A1: 2006/AC: 1999, EN 54-4: 1997/A2: 2006/AC: 1999

under system 1 are applied and that

the product fulfils all the prescribed requirements set out above.

This certificate was first issued on June 23, 2015 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Nová Dubnica, June 23, 2015



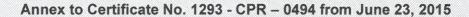
Marek Hudák



Marking may only be used if conformity with all relevant and effective Directives of EP and Council is attested.

049886

EVPÚ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 1/3 FCO 425-13



General Information:

Control and Indicating Equipment MHU 116 and MHU 117 are fire alarm equipment designed to evaluate the fire situation in the protected object. To control of internal and external functions of the entire CIE serves system boards with a redundant solution for maximum reliability of the entire system. Redundancy is provided by two microprocessors Freescale Kinetis. For normal operation of the CIE only one of these processors is used. The second is prepared in the event of system failure to take over a control so, the functionality of the CIE was not limited. Electronics of CIE is built in a metal cabinet with a lid. At the top of the lid is panel with graphic display of 320x240 pixels, LED signalling and control buttons. Inside the box there are the printed circuit boards, mounted (except power elements) by components for surface mounting.

The operation of CIE is performed by using buttons and control menu in 4 levels of access (according to EN 54-2) preventing encroachment of unauthorized persons into the system. CIE provide a modular solution to their installation in the rack stackers. Slots of system boards and supply boards have a predefined location. Furthermore CIE MHU 116 includes 6 user slots and the CIE MHU 117 has 12 user slots for mounting of loop boards, inputs and outputs boards.

Loop board contains two circular loops, each of which allows the connection of 128 addressable detectors and line elements. Circular loop can be divided into two simple lines. Detectors and elements are connected to the detection loops in parallel, wirings of loops can be branched. Element number (address) is set by using of the addressing preparation MHY 535. In some interactive detectors there are built isolators. As a separate element can be used isolator built in technological detector MHG 942.

Boards of inputs, containing 16 universal inputs and boards of outputs containing 12 outputs type relay potential free changeover contact can be fitted into user slots instead of loop boards.

On the system board is mounted serial port RS 232 for connecting of printer, USB channel for connecting of configuration computer, as well as one input (contact input NO / NC) and three system outputs (alarm, fault, siren) type relay potential free changeover contact.

Actions of output device, (e.g. input /output elements on detection loops, boards of outputs and system outputs) can be programmatically bind by using of the configuration program on various inputs of CIE, or even their logical linkage

Technical Specifications:

Main Power Supply: 230V~ ±10%

Frequency: 50Hz

Input power: 35VA/120VA (MHU 116)

50VA/120/240VA (MHU 117)

IP protection: IP30

Temperature renge: -5°C to +40°C

Products parameters:

Transaction of the second	D. C. C.	Harmonised technical specification	
Essential characteristics	Performance	EN 54-2:1997/A1:2006/AC:1999	EN 54-4:1997/A2:2006/AC:1999
Performance under fire conditions	Pass	cl. 4, 5, 7	-
Response delay (response time to fire)	Pass	cl. 7.1, 7.7, 7.12	-
Operational reliability	Pass	cl. 4 to 10, 12 to 14	cl. 4 to 8
Performance of power supply	Pass	· 3	cl. 4 to 6
Durability of operational reliability and response delay: - temperature resistance	Pass	cl. 15.4	cl. 9.5
Durability of operational reliability and response delay: - vibration resistance	Pass	cl. 15.6, 15.7, 15.15	cl. 9.7, 9.8, 9.15
Durability of operational reliability and response delay: - electrical stability	Pass	cl. 15.8, 15.13	cl. 9.9
Durability of operational reliability and response delay: - humidity resistance	Pass	cl. 15.5, 15.14	cl. 9.6, 9.14

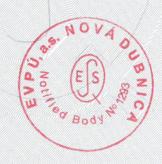




EVPÚ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, www.evpu.sk Page 2/3 FCO 425-13

Annex to Certificate No. 1293 - CPR - 0494 from June 23, 2015

EN 54-2 Clause			No
7.8	Output to the Fire along davice	X	
	Output to the fire alarm device		1
7.9	Control of fire alarm routing equipment		1
7.9.1	Output to fire alarm routing equipment		1
7.9.2	Alarm confirmation input from fire alarm routing equipment		
7.10	Output to fire protection equipment		
7.10.1	Output type A		
7.10.2	Output type B		
7.10.3	Output type C		
7.10.4	Fault monitoring of fire protection equipment		
7.11	Delay to outputs		
7.12	Dependencies on more than one alarm signal		
7.12.1	Type A dependency		
7.12.2	Type B dependency		
7.12.3	Type C dependency		
7.13	Alarm counter		
8.3	Fault signals from points		
8.4	Total loss of the power supply		
8.9	Output to fault warning routing equipment		
9.5	Disablement of addressable points		
10	Test condition		
11	Standardized input/output interface		



Nová Dubnica, June 23, 2015

Marek Hudák Director NB

049887

EVPÚ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 3/3 FCO 425-13