

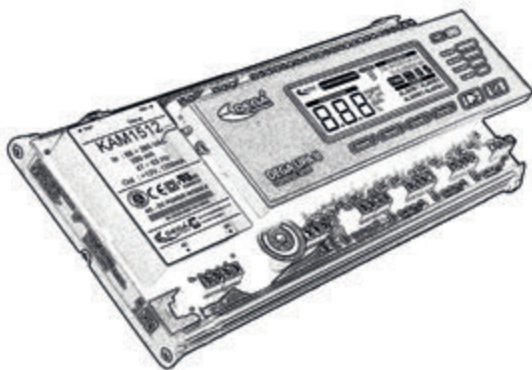
# INSTRUCTION MANUAL



## Compact Evaluation Controller DEGA UPA II L



**ISO 9001:2008**  
Quality Management Systems  
Système de Qualité  
[www.sgs.com](http://www.sgs.com)



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DEGA CZ s.r.o. reserves the right to alter the specifications of the hardware and software described in this manual at any time and without prior notice.

DEGA CZ s.r.o. bears no liable for any damage resulting from the use of this device!

## ▼ FOR YOUR PROTECTION



### **Watch out for static electricity**

Prior to installing or handling the product, ensure that you do not have an accumulated static charge. Touch a grounded metal object to trigger the discharge of any accumulated electric charge. Otherwise the product could suffer damage.



### **In the event of any failure of the equipment unplug it immediately**

If you notice an unusual odour or smoke emanating from the product, unplug it from the mains and from all peripherals. Continued operation could result in injury or property damage. After disconnecting the product deliver it to an authorised service centre or the manufacturer for inspection.



### **Do not use the product in the vicinity of flammable gases or in areas where there is a potential occurrence of these gases.**

Do not use electronic equipment in the vicinity of flammable gases; this could potentially cause a fire or an explosion. The product is not designed for use in industrial or commercial spaces nor in „Ex“ hazardous areas.



### **Do not disassemble the product and ensure against its contact with water**

Contact with internal components of the product may cause an electric shock. In the case of any failure refer the servicing of the product exclusively to a certified service centre. Contact with water can create a short circuit in the product and consequent damage to property or personal injury.



### **Utilise only certified DEGA accessories**

The device is certified and is technically and functionally suitable for authentic „DEGA“ accessories. In the event that the device is utilised with other products the manufacturer shall not liable for any damages that this may cause.



### **Use cables of the appropriate types**

To ensure compliance with the parameters of the product, to connect the product to other devices or to the power supply utilise exclusively the cables recommended and described in the Technical Data and Information section.

## ▼ TECHNICAL DATA AND INFORMATION

**Supply voltage:** 230V AC/50 Hz  
(in the case of the utilisation of the DEGA UPA II 24/12 accessories the supply voltage is 24V DC)

**Cable for connecting the DEGA Tc II temperature sensor:** the UTP cat 5e (max. length 100 m) or shielded 4x1 mm2 cable

**Cable for connecting the DEGA Zc II flood sensor:** the UTP cat 5e (max. length 100 m) or shielded 4x1 mm2 cable

**Cable for connection of the DEGA TL II external reset button:** cable 2x1 mm2 (max. length 100m)

**Output:** 8 x relay (potential-free switching contacts)  
RS 485  
RS 232  
Control of the DEGA HV-DNx emergency valve (in the case of mounting the DEGA UPA II V accessories)  
Output of the optical/acoustic signalling:  
a) 12V/100mA in the event of a 230VAC supply to the controller  
b) 12V/4A in the event of a 24VDC supply to the controller  
(in the event of installing the DEGA UPA II 24/12 accessories)

**Ingress protection:** IP 20  
**Relay contact ampacity:** resistance load: 8A / 250 V 50Hz  
8A / 30V DC  
inductive load: 1,6A / 30V DC

**Dimensions (W x H x D):** 245 x 72 x 121mm  
**Weight:** 0,7kg

## ▼ OPERATIONAL AND EXTERNAL CONDITIONS (CSN 33 2000-5-51)

<b>Operating temperature range:</b>	- 20°C to +85°C
<b>Relative humidity of the ambient air:</b>	max. 95%
<b>Altitude:</b>	AC1
<b>The occurrence of humidity:</b>	AD1
<b>The incidence of solid foreign bodies:</b>	AE1
<b>The occurrence of corrosive or polluting substances:</b>	AF1
<b>Vibrations:</b>	AH1
<b>The types of materials processed or stored:</b>	BE1
<b>Working environment:</b>	BE1 – non-explosive atmosphere BNV (CSN EN 60079–10)

The compact controller is intended primarily for internal spaces to be mounted in racks or in DEGA boxes.

## ▼ BASIC TYPES

**The DEGA UPA II L** – a compact evaluation controller is utilised to supply power for four gas transmitters and for the full evaluation of the 1-4 level of detection (including the „PEL“ detection). It is designed as a compact device to be mounted on a DIN rail in racks or in DEGA boxes. The status of all the transmitters is indicated on the controller, including failures, by means of a built-in LCD display and LED indicators. The controller is fitted with acoustic signalling and a reset button for the acoustic alarm and the function of the automatic monitoring of the calibration periods.

In conjunction with an external temperature sensor (the DEGA Tc II) it is possible to evaluate up to two levels of critical temperatures. Flooding can be detected by means of an external flood sensor (DEGA Zc II).

In conjunction with the circuit for controlling the emergency valve (DEGA UPA II V) it is possible, using a current pulse, to close the emergency valves, e.g. DEGA HV-DNx.

**Relays 1-8 have the following functions:**

RE8	Switching when exceeding level4 of gas leakage – “LEVEL4”
RE7	Switching when exceeding level3 of gas leakage – “LEVEL3”
RE6	Switching when exceeding level2 of gas leakage – “LEVEL2”
RE5	Switching when exceeding level1 of gas leakage – “LEVEL1”
RE4	The failure relay – “ERROR”
RE3	The relay for acoustic/optical signalling – “ALARM”
RE2	Switching when exceeding level 2 of critical temperature – “TEMP2”
RE1	Switching when exceeding level 1 of critical temperature – “TEMP1”

**DEGA UPA II L S** – a special version of the compact evaluation controller is utilised to supply power for four gas transmitters and for a full independent evaluation of 2 levels detection, independently for each of the transmitters. It is designed as a compact device for mounting on DIN rail in racks or in DEGA boxes. The status of all the transmitters, including failures, is indicated on the controller by means of a built-in LCD display and LED indicators. The controller is fitted with acoustic signalling and a reset button for the acoustic alarm and with the function of automatic monitoring of the calibration periods.

**Note:** This type of controller does not enable the detection of the critical temperature or flooding, nor the control of the emergency valve.

**Relays 1-8 have following functions:**

RE8	Switching when exceeding level 2 of gas leakage on channel 4
RE7	Switching when exceeding level 1 of gas leakage on channel 4
RE6	Switching when exceeding level 2 of gas leakage on channel 3
RE5	Switching when exceeding level 1 of gas leakage on channel 3
RE4	Switching when exceeding level 2 of gas leakage on channel 2
RE3	Switching when exceeding level 1 of gas leakage on channel 2
RE2	Switching when exceeding level 2 of gas leakage on channel 1
RE1	Switching when exceeding level 1 of gas leakage on channel 1

**DEGA UPA II L MULTI** – the highest version of the compact evaluation controller is utilised to supply power for four gas transmitters and for a full independent evaluation of detection levels 1-4, independently for each of the transmitters. It is designed as a compact device for mounting on DIN rail in racks or in DEGA boxes. The status of all the transmitters, including failures, is indicated on the controller by means of a built-in LCD display and LED indicators. The controller is fitted with acoustic signalling and a reset button for the acoustic alarm and with the function of automatic monitoring of the calibration periods.

In conjunction with an external temperature sensor (the DEGA Tc II) it is possible to evaluate up to two levels of critical temperature. In conjunction with an external flood sensor (the DEGA Zc II) flooding can be detected.

In conjunction with the circuit for controlling the emergency valve (DEGA UPA II V) it is possible, using a current pulse, to close the emergency valves, e.g. DEGA HV-DNx.

**Relays 1-8 have the following functions:**

RE8	Any function of each relay can be set in accordance with the individual customer's requirements - the function of individual relays can be specified to the manufacturer or set-up using the „DEGA CONFIG“ configuration software.  (i.e. any relay can be set as the alarm for gas detection levels 1-4 from any transmitter, or for transmitter failure, or for the detection of temperature and/or of flooding and for optical and acoustic signalling or for any combination thereof).
RE7	
RE6	
RE5	
RE4	
RE3	
RE2	
RE1	

**For all the above types of controllers, the following statuses of relay contacts are applicable:**

**The idle status of all the relays  
(with the exception of the “ERROR” relay):**

Positions of the contacts:	Status
C-NC	Idle status
C-NO	Active relay (alarm)

**The idle status of the “ERROR” relay:**

Positions of the contacts:	Status
C-NC	Active relay (alarm)
C-NO	Idle status the system works without any faults

**▼ ACCESSORIES**

**DEGA UPA II BOX** –A box with a lock for the installation of the controller outside the rack, i.e. on a wall, etc.

**DEGA UPA II UPS** - An uninterruptible power supply (30-60 minutes) (in development)

**DEGA UPA II 24/12** – Power supply for the controller (24V DC)

**DEGA UPA II V** – Circuit for control of the emergency valve using a current pulse  
(we recommended the DEGA HV-DNx emergency valve)

**DEGA Zc II** – External flood sensor (cannot be used with version DEGA UPA II L S)

**DEGA Tc II** – External temperature sensor (cannot be used with version DEGA UPA II L S)

**DEGA HV-DNx** – Emergency valve can be used in conjunction with DEGA UPA II L V (cannot be used with version DEGA UPA II L S)

**External acoustic and optical signalling:**

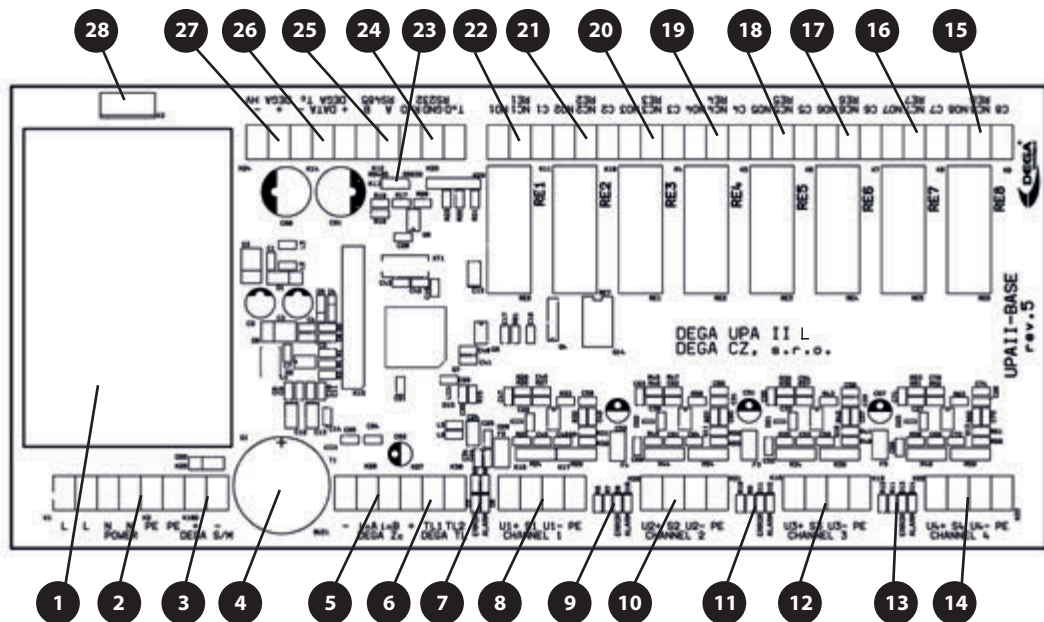
**DEGA MR/MY/MG/MSL** - Rotating beacon - red/yellow/green/column

**DEGA S** - Sounder

**DEGA TL** - External reset button of the acoustic alarm

When using DEGA UPA II L 12/24 accessories it is possible to connect an external acoustic or optical signalling device (12V DC / max. 4 A), i.e. it is possible to use up to 8 x devices connected in parallel, the DEGA MR/MY/MG/MSL and DEGA S).

## ▼ DESCRIPTION OF THE PRODUCT



**1** – Power supply unit

**2** – Dual terminal block for the power supply (230 VAC)

**3** – Terminal block for the external connection of optical/acoustic signalling (12V DC, max.100 mA)

*Note: When using DEGA UPA II L 12/24 accessories it is possible to connect an external acoustic or optical signalling device (12V DC / max. 4 A), i.e. it is possible to use up to 8 x devices connected in parallel, the DEGA MR/MY/MG/MSL and DEGA S).*

**4** – Internal acoustic alarm (sounder)

**5** – Terminal block for the DEGA Zc II flood sensor

*Note: non-active in the DEGA UPA II L S version*

**6** – Terminal block for the DEGA TL reset button

**7** – LEDs of channel 1 (ALARM / ERROR)

**8** – Input terminal block for the channel for transmitter 1

**9** – LEDs of channel 2 (ALARM / ERROR)

**10** – Input terminal block for the channel for transmitter 2

**11** – LEDs of channel 3 (ALARM / ERROR)

**12** – Input terminal block for the channel for transmitter 3

**13** – LEDs of channel 4 (ALARM / ERROR)

**14** – Input terminal block for the channel for transmitter 4

**15** – Terminal block for relay 8

**16** – Terminal block for relay 7

**17** – Terminal block for relay 6

**18** – Terminal block for relay 5

**19** – Terminal block for relay 4

**20** – Terminal block for relay 3

**21** – Terminal block for relay 2

**22** – Terminal block for relay 1

**23** – Jumper for switching communication RS 485/ RS 232

**24** – RS 232 terminal block

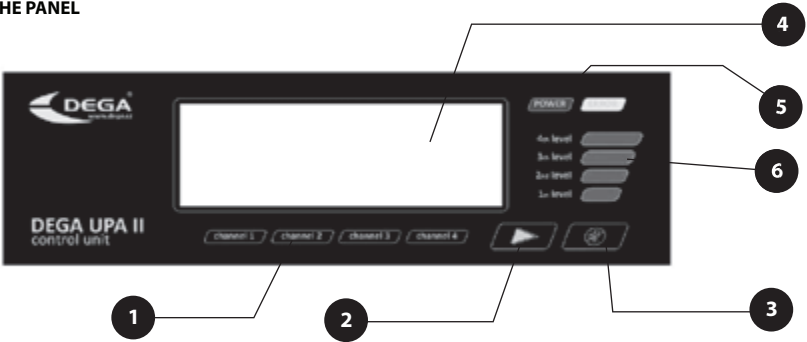
**25** – RS 485 terminal block

**26** – Terminal block for the DEGA Tc II temperature sensor

**27** – Terminal block for the DEGA HV emergency valve

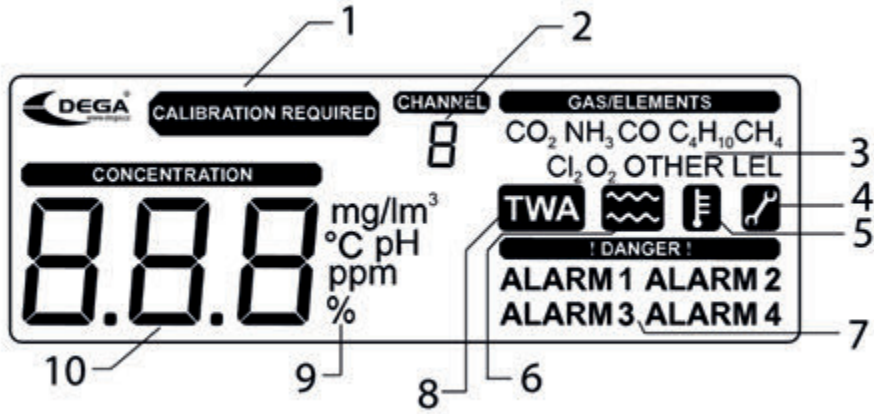
**28** – Connector for connecting DEGA UPA II UPS (in development)

DESCRIPTION OF THE PANEL



- 1 – The LED indicator of the serial number of the connected gas detection transmitter
- 2 – The OPTION button (for switching between the channels (transmitters) displayed
- 3 – The RESET button for the acoustic alarm
- 4 – The LCD display
- 5 – The LED indicator (POWER - ERROR)
- 6 – The LED indicator for detection (alarm) levels 1 - 4

DESCRIPTION OF THE LCD DISPLAY



- 1 – Warning concerning the requisite calibration
- 2 – The channel currently displayed
- 3 – The type of gas or substance detected
- 4 – Icon for failure/required service intervention
- 5 – Icon for the temperature sensor \*
- 6 – Icon for flooding \*
- 7 – The summary gas alarm
- 8 – Icon for the exceeding of the maximum average concentration - TWA
- 9 – Units in which the measuring is conducted
- 10 – Concentration displayed

\* This function is active only in the event of connecting an external DEGA-TCIIA temperature sensor / an external DEGA ZcII flood sensor.

## ▼ INSTALLATION, ASSEMBLY AND DISASSEMBLY

The compact controller is designed for mounting on a DIN rail in a rack or in the DEGA box. At the customer's request, it is possible to supply the LCD display for mounting on the door of the rack.

### CAUTION

*The controller is supplied with 230VAC voltage (connected to L and N terminals).*

*When using the DEGA UPA II 24/12 accessories, the controller is supplied with 24VDC voltage (the positive pole is connected to the L terminal and the negative pole to the N terminal). In the event of connecting this version to a 230VAC power supply, the controller will be destroyed!!!*

Four independent gas detection transmitters, the flood sensor and the temperature sensor can be connected to the device:

**a) the gas detection transmitter of the DEGA NBx-yL II type** is a linear transmitter communicating by means of an analogue current loop 4-20 mA. It is supplied in versions designed for the detection of natural gas (methane), propane-butane (butane), carbon monoxide (CO), combustible gases, carbon dioxide (CO<sub>2</sub>) and more than 100 other gases in accordance with the customer's requirements.

**b) the gas detection transmitter of the DEGA NSx type** with a semiconductor sensor communicating by means of a 4-20 mA current loop. It only transmits information in regard to two concentration levels.

**c) the DEGA NSx-CL, DEGA NSx-EL, DEGA NSx-IL** are linear transmitters for use in potentially explosive atmospheres („Ex“ zone 1), communicating through an analogue 4-20 mA current loop. They are supplied in versions for the detection of natural gas (methane), propane-butane (butane), carbon monoxide (CO), combustible gases, carbon dioxide (CO<sub>2</sub>) and more than 100 other gases, in accordance with the customer's requirements.

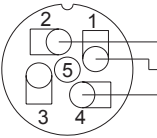
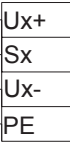
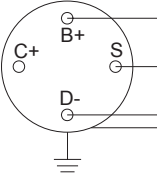
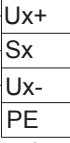
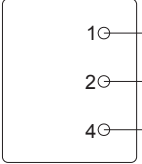
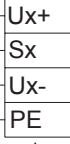
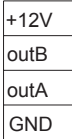
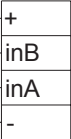
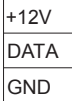

**d) the DEGA DV transmitter** is a special version of the transmitters (probes) that monitor the concentration of ammonia in water. Utilised for a 2-level detection.

**e) the DEGA Tc II temperature sensor** is an external critical temperature sensor with a linear range of 0-99°C.

**f) the DEGA Zc II flood sensor** is an external flood sensor for the indication of flooding of the premises (e.g. the boiler room, the warehouse, etc.)





CONNECTING TRANSMITTERS TO ALL TYPES OF DEGA UPA II L/S /MULTI CONTROLLERS

Transmitter	Terminal	Cable	Terminal	Controller
DEGA NBx-yL II		Shielded 3 x 1 mm² (max. 600m) Shielded 3 x 1,5 mm² (max. 1100m)	 x = channel number	DEGA UPA II L
DEGA NSx-yL II		Shielded 3 x 1 mm² (max. 600m) Shielded 3 x 1,5 mm² (max. 1100m)	 x = channel number	DEGA UPA II L
DEGA DV		Shielded 3 x 1 mm² (max. 600m) Shielded 3 x 1,5 mm² (max. 1100m)	 x = channel number	DEGA UPA II L
DEGA Tc II		Shielded 4 x 1 mm² (max. 100m) UTP cat 5e (max. 100m)	 yellow green brown blue	DEGA UPA II L
DEGA Zc		Shielded 4 x 1 mm² (max. 100m) UTP cat 5e (max. 100m)	 yellow green white/green	DEGA UPA II L





## ▼ OPERATION OF THE COMPACT CONTROLLER


Two buttons are used for the operation of the compact controller; the  button and the  button.

**Switching between the channels displayed (transmitters):** using the  button it is possible to switch between the occupied channels.








**Resetting the acoustic alarm:** press the  button thereby deactivating the internal piezo-buzzer for 20 minutes; the "ALARM" relay switches to the idle mode. If, after 20 minutes, the event for which the acoustic alarm was activated still persists, the sounder starts-up again and the "ALARM" relay is switched on. It is possible shut down the acoustic alarm 3 times in a row and subsequently it will no longer be active for the duration of the alarm.

Note: Resetting the acoustic alarm causes only temporary deactivation of the acoustic alarm. The other signalling features (relays LEVEL1, LEVEL2 etc.) remain functional.

**Service mode:** If it is necessary to replace the transmitter without announcing failure or alarms, it is possible to „freeze“ the status of all the relays of the compact controller for up to 60 minutes. This is achieved by pressing the  and the  buttons for at least 5 seconds. The display then shows only the length of time up to the reactivation of the compact controller. 60 minutes after entering the service mode the compact controller switches back to normal. If we wish to manually move out of service mode to normal operation, we press the  and  buttons again for 5 seconds.

Press the  button in the service mode to test the functions of the compact controller:

- all signalling elements and display will be illuminated (8 seconds)
- the acoustic alarm will be activated (2 seconds)
- sequential switching of all the relays

**Changing the setting of the critical temperature:** In the event of the requirement for changing the settings of values 1 and 2 of the critical temperature, in the service mode press the  button for 5 seconds. The level indicating the critical temperature 1 set will appear on the display. Press  to set the temperature lower, pressing  to set the temperature in the range of 0-99 °C. Save the temperature set by pressing the  button for 5 seconds. This will lead you to setting level 2 of the critical temperature. Critical temperature 2 must be set at least one °C higher than critical temperature 1. This adjustment is again carried out using the  and the  buttons. After selecting the correct temperature, save the setting by pressing the  button for 5 seconds and return to the service mode.

## ▼ FUNCTIONS OF THE COMPACT CONTROLLER

**The description of the relay functions corresponds to the basic model of compact data, the DEGA UPA II L logger.**


(in the DEGA UPA II L S and the DEGA UPA II L Multi versions the configuration of the relay is conducted differently and this is described at the end of this chapter).

### SWITCHING ON THE COMPACT CONTROLLER (ON)

After switching on the power supply the LCD display shows the current version of the installed firmware and subsequently all the indication features are tested. After this sequence, the compact controller counts down the time required for the stabilisation of the connected transmitters, 20 – 180 s, in accordance with the warm-up time of the individual transmitters. If everything is O.K., the compact controller goes into normal operation and the „ERROR“ relay is switched to the C4 - NO4 contacts position indicating its proper operation.

Note: Blocking after switching-on is necessary for the stabilisation of the sensor and for preventing an accidental power outage that could cause excitation of false alarms!

### IDLE MODE (READY)

The compact controller remains in this mode during most of its operation. The information displayed on the LCD display is relative to the transmitter, the number of which is displayed below the „CHANNEL“ icon with blue LEDs lit-up next to the displayed channel. Displaying concentration values from other transmitters or the current temperature from the DEGA Tc II temperature sensor can be achieved by pressing .

In the event that the concentration exceeds the maximum level that the connected transmitter is able to detect, the „HI“ symbol is displayed in place of the values. In the event of concentrations greater than 999, it shows the symbol „t“ indicating multiples of thousands, e.g. the number 1t1 stands for 1100, or 4t5 stands for 4500 or 99t stands for 99000.

## THE GAS ALARM STATUS (i.e. exceeding levels 1 – 4 of the detection limit)



Should level 1 of concentration be exceeded, the appropriate level of alarm lights up on the LCD display and the LED panel and the relevant relay will be switched on and the LCD display will show the concentration measured by the transmitter (channel), by which level 1 of concentration was exceeded. If multiple transmitters exceeded level 1 of concentration, the transmitter with the highest level of alarm is displayed.

*Note 1: Acoustic signalling is activated by default when level 4 of alarm is reached. In accordance with the customer's requirements, this can also be set to a lower level.*

*Note 2: By default, levels of alarm (1 - 4) for individual transmitters are set in accordance with the specifications of the transmitter and they can be altered in accordance with the customer's requirements.*

*Note 3: In the UPA II L - S version the compact controller is equipped only with two-level gas detection and the "ALARM" relay is utilised for level 1 of alarm on channel 2.*

## The „PEL“ STATUS OF THE GAS ALARM (i.e. exceeding the time-weighted average)

When the TWA concentration is exceeded the  icon and  sign are lit up and the switching on of the "LEVEL4" and the "ALARM" relays and the activation of the internal acoustic alarm.

*PEL (in English TWA- Time-weighted Average)*








*This function is activated only in the case of the detection of toxic gases (e.g. carbon monoxide (CO), etc.)*

*Note: Levels of "PEL" alarms for individual gases for specific transmitters are set by default in accordance with the specifications of the transmitter and can be adjusted in accordance with the customer's requirements.*

*Note: This function is not included in the DEGA UPA II L - S version.*



## FAILURE (ERROR)

In the event of any failure of the compact controller or of its accessories the yellow LED „ERROR“ comes on, the „ERROR“ relay switches to the C3 - NC3 position, the acoustic alarm is activated, the „ALARM“ relay is switched on (by contacts C4 - NO4) and the appropriate symbol commences flashing on the display:

- In the event of the failure of the DEGA UPA II L compact controller only a key  symbol flashes on the display.
- In the event of the failure of the gas/liquid transmitter only a key symbol  together with the  icon flash on the display, together with the number of the channel on which the transmitter that signalled the failure is located.
- In the event of a failure of the critical temperature sensor (DEGA Tc II) only the key  symbol and the  icon flash on the display.
- In the event of the failure of the flood sensor (DEGA Zc II) only the key  symbol and the  icon flash on the display.

Note: In the case of the DEGA UPA II L – S version the "ERROR" relay is not switched on and is used as a level 2 alarm on channel 2.

## DETECTION OF CRITICAL TEMPERATURE (only in the event of the DEGA Tc II temperature sensor being connected)

When exceeding the critical temperature, which is normally set as 45 °C at level 1 and 60 °C at level 2, the  icon and  sign are lit up and the contact of the relay associated with a critical temperature level is switched on, including the alarm relays for the lower levels. Reaching level 2 of critical temperature leads to the activation of an internal piezo-buzzer and the switching on of the „ALARM“ relay.

Note: This function is not included in the DEGA UPA II L – S version.

## DETECTION OF FLOODING (only in the event of the flood sensor of the DEGA Zc II being connected)

In the event of the detection of flooding the  icon and  sign lights up on the LCD display and the "TEMP2" relay contact is switched on.

Note: In the DEGA UPA II L – S version this function is not included.

Note: If both flooding and a critical temperature are detected, the „TEMP2“ relay is used for detection of both flooding and level 2 of the alarm of critical temperature.

## EMERGENCY/SOLENOID VALVE

### Emergency valve

The circuit for controlling emergency valves is designed to control the solenoid emergency valves with a 12 V DC coil of the switching power of up to 7 VA. The valve is connected by means of a two-wire cable to the terminals marked „DEGA HV +“ and „DEGA-HV-“. A voltage pulse is transmitted in the following cases: power failure, failure of the gas transmitters, exceeding level 4 of concentration.

*Note: Connect the emergency valve of the DEGA HV-DN15, DEGA HV-DN20 or DEGA HV-DN25 type to the compact controller.*


### Solenoid valve


The relay of the compact controller can also be used for controlling the solenoid valves of the “without voltage, closed” type with a 230VAC coil. Connect one wire of the valve coil to the neutral wire. Connect the other wire to the NO terminal of the relay (NO RE8). Connect the C terminal of relay 8 (C RE8) to the live wire. Valve closure occurs in the following instances: power failure, failure of the gas transmitter(s), exceeding level 4 of concentration.

*Note: The requirement for controlling the solenoid valves must be specified in the order.*

## THE STATUS OF THE REQUIRED SERVICE INTERVENTION (CALIBRATION OF TRANSMITTERS)

The compact detector, in conjunction with the NBX-II transmitter, is provided with automatic monitoring of the calibration periods of the gas transmitters.

Following the expiration of 12 months since the last calibration of the transmitters the user is alerted to the necessity of recalibration. This status is displayed by long flashes of „ERROR“ LED, flashing  and the **CALIBRATION REQUIRED** icon. The compact controller remains in operation.

Following the expiration of 18 months from the most recent calibration of the transmitters, for security reasons the function of the entire compact controller is blocked. This status is displayed as a blinking „ERROR“ LED, a flashing  and the **CALIBRATION REQUIRED** icon. All the relays are in the C-NO position.

### The functions of the compact controller in the special S version

In this version, the compact controller is equipped with only 2-level detection of gases, whereby each transmitter controls 2 separate relays with levels 1 and 2. In this version it is not possible to connect the transmitter of the critical temperature. The „ERROR“ relay is used for switching on level 2 of alarm on channel 2 and the „ALARM“ relay is used for switching on level 1 of alarm on channel 2. The internal acoustic alarm remains functional.

All the other features are the same as for the DEGA UPA II L version.

### The functions of the compact controller in the special MULTI version

In this version, the settings of the relay switching are fully configurable by means of the DEGA CONFIG configuration software. The relay configuration options are described in the User Guide for the DEGA CONFIG software.

All the other features are the same as for the DEGA UPA II L version.



## 1. OPERATION

This compact controller does not require any special maintenance during operation. The surface can be cleaned with a cloth as needed.

## 2. MAINTENANCE

For proper operation of the detection system (which also includes the controller) it is requisite to periodically undertake specifically the following servicing of the transmitters connected to the controller:

**a)** calibration at least once every 6-12 months (i.e. setting the detection limits, checking the responsiveness of the sensor, checking the system's functionality). The precise interval is dependent on the level of contamination of the environment, the degree of accuracy required and the level of occurrence of the selective gases in the environment.

Calibration should be carried out only by authorised service centres holding a valid certificate of competency or by the manufacturer.

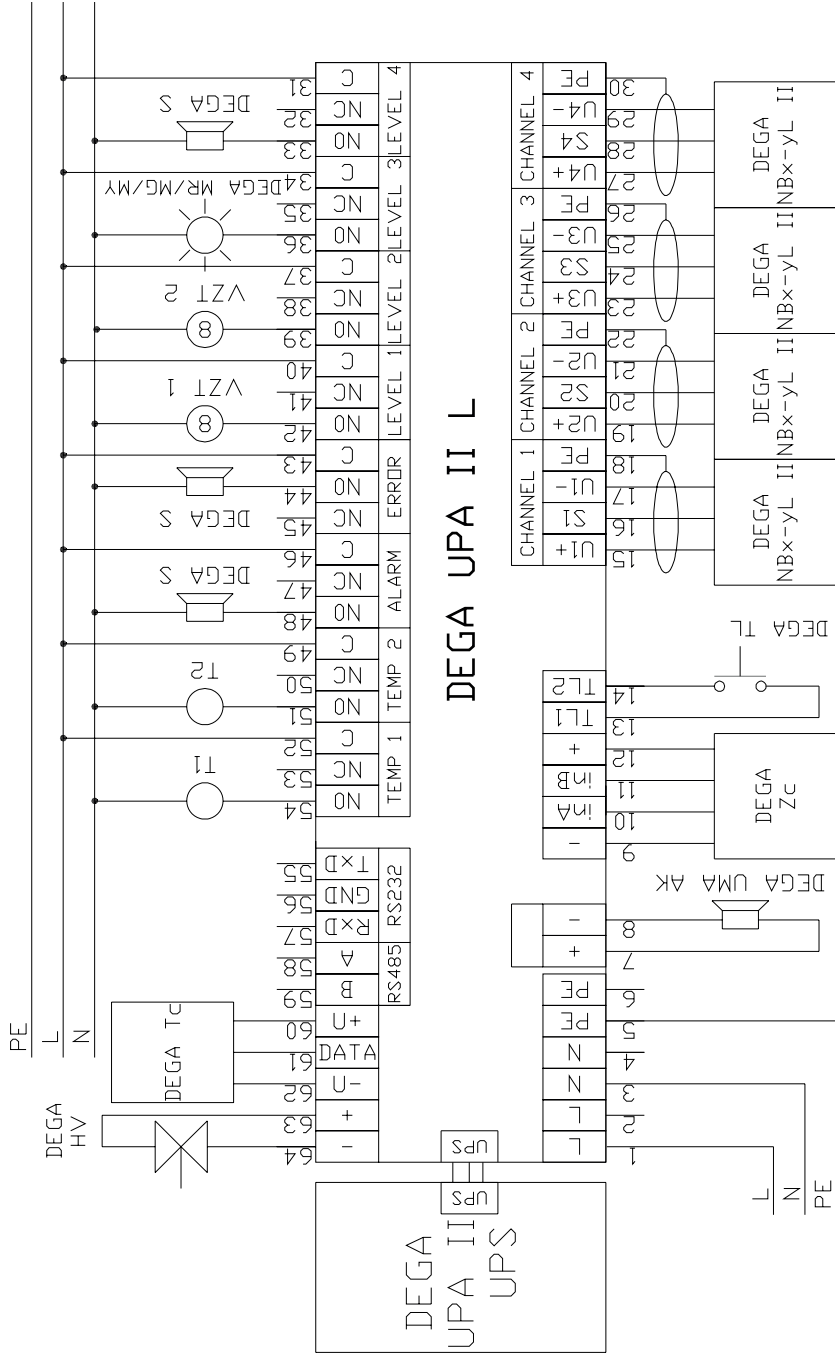
**b)** „Functional checking” at least once every 3-12 months. Functional checks are performed utilising the test gas at the concentration that is intended for it – this must not exceed the limit range of the transmitter. We recommend gases with a certified 1st grade of purity!

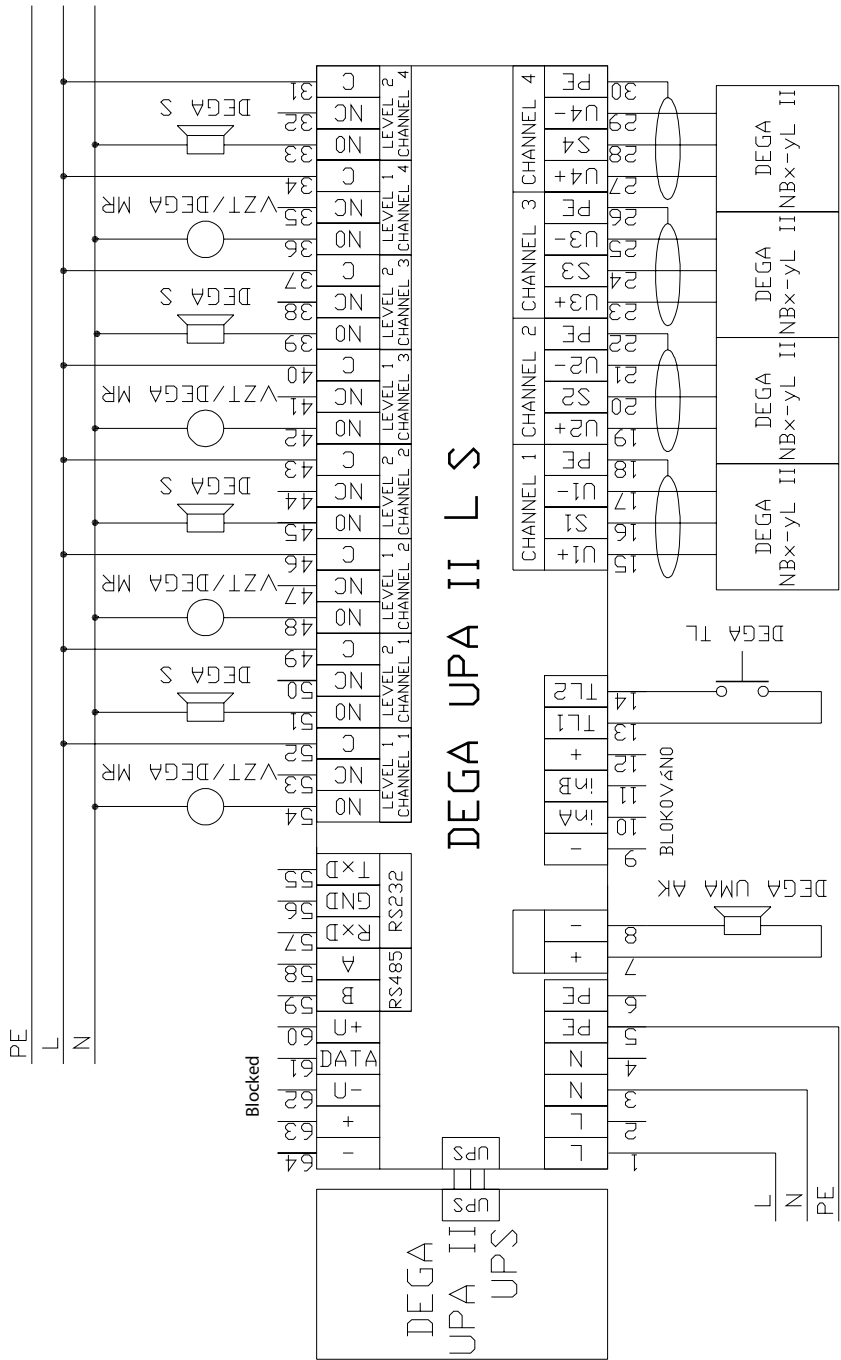
**Recommendation:** For ideal functioning it is recommended to carry out the calibration and the functional checks once every 6 months or the calibration once every 12 months and the functional check once every 3 months.

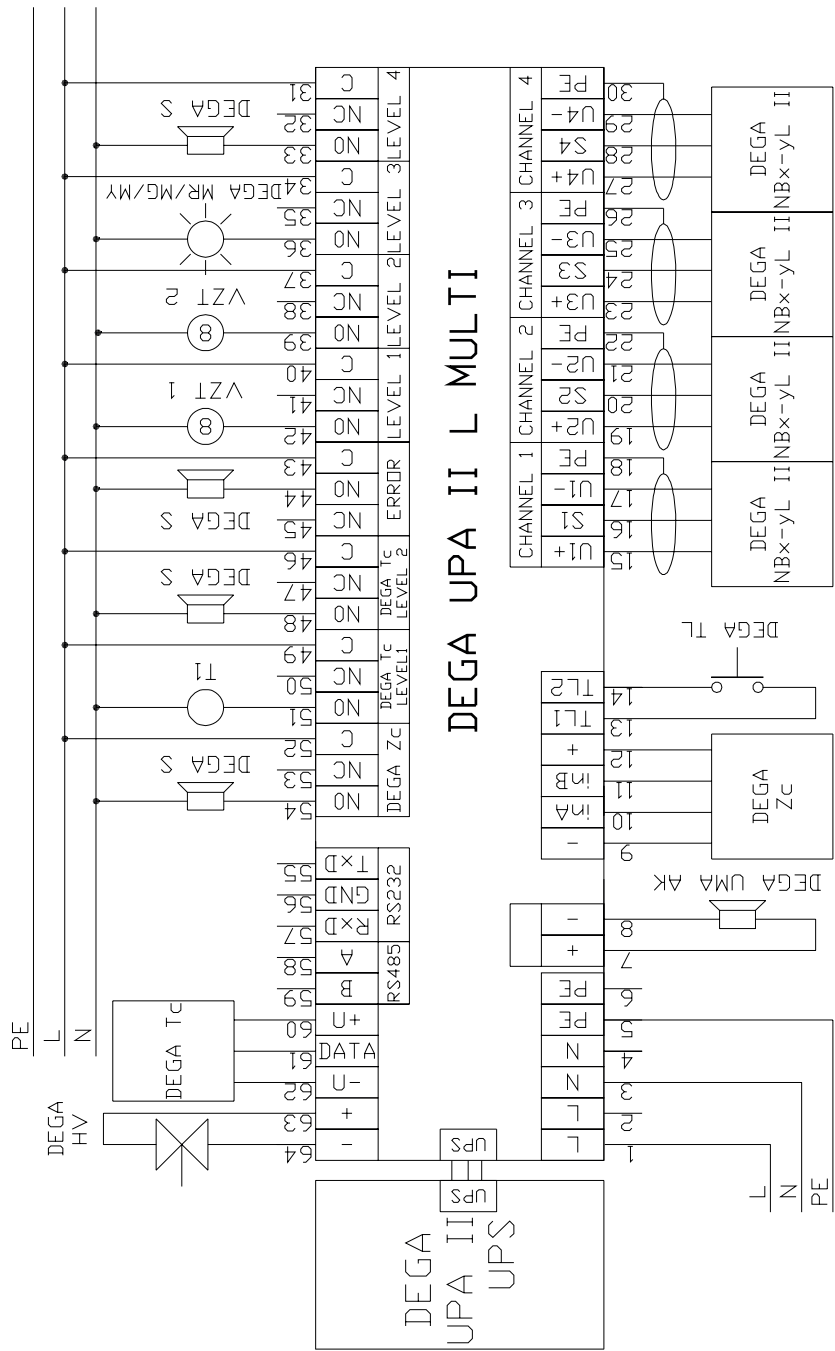
**The means for testing the fire alarm transmitters must not be utilised for these checks!**



Appendix No.1: Example of the connection of the DEGA UPA II L compact controller







## ▼ GENERAL WARRANTY TERMS AND CONDITIONS

**When following the instructions for installation, operation and maintenance, the manufacturer guarantee 24 months from the date of receipt for the product.** Should the product purchased be put into operation by an entity other than the seller, the warranty period commences from the date that the product is put into operation, provided that the buyer ordered its commissioning within three weeks of its receipt. The customer expressly acknowledges that during the warranty period that extends beyond the length of the warranty period that is specified in the Commercial Code (the statutory warranty) s/he can neither require replacement of the product nor may s/he withdraw from the contract.

1. When claiming a product defect it is necessary to submit a proof of purchase that contains the following information: name and surname, name and business name, address and the warranty card, if the buyer received one from the seller. The validity of the warranty shall not be affected by non-compliance with the obligations related to the issuance of the warranty card.
2. Claims concerning the product (for a warranty repair only complete devices are accepted) may be filed during the warranty period only with the seller from which it was purchased; subsequently the seller is required to forward the product to an authorised service centre or to the manufacturer.
3. A condition for the recognition of the rights under the warranty is the installation of the product having been undertaken by an authorised person in possession of a valid certificate from the manufacturer.
4. **This warranty is not applicable to:**
  - a product that has **not been put into operation by the manufacturer or by a certified employee** in possession of a valid certificate issued by the manufacturer ,
  - damage caused by fire, water, static electricity, power surges in the electric supply or in the public network, accident, improper use of the product, wear and tear
  - contamination of the product and its subsequent cleaning,
  - damage caused by **improper installation, any adjustment, modification** or improper manner of use inconsistent with the instruction manual, the technical standards or the applicable safety regulations in the Czech Republic,
  - damage to the product during transportation caused by improper handling or handling of the product in a manner contrary to the advice provided in the instruction manual,
  - DEGA products that have **been used in association with other than original DEGA products**, including consumables and accessories,
  - bearing additional parts or consumables (e.g. a foil label, seal, etc.), that are detrimental to normal wear and tear during operation, together with wear and tear of the product and its parts caused by their normal use.
5. Claims regarding a product defect that can be dealt with reasonably quickly and without additional consequences will be resolved by remedying the defect (repair) or by replacement of the product part , because in such a case it is a contradiction of the standard norms that the entire product shall be replaced (§ 616, paragraph 4 of the Commercial Code).
6. The buyer who exercises the right of warranty repair is not entitled to the return of the parts that have been replaced.
7. The warranty period can be extended for up to 48 months and its validity can be extended beyond the standard length on the basis of the conclusion of an individual warranty contract. Further information may be obtained through a specific business meeting.
8. For the complete version of the general business conditions and of the claims procedure go to [www.dega.cz](http://www.dega.cz)

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