

| Technical parameters | RFDAC-71B |
| :---: | :---: |
| Supply voltage: | $110-230$ V AC |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | 3 VA |
| Dissipated power: | 1.2 W |
| Supply voltage tolerance: | +10/-15 \% |
| Control |  |
| Potential-free analog output/max. current: | $0(1)-10 \mathrm{~V} / 10 \mathrm{~mA}$ |
| Rated current: | $1 \times \mathrm{AgSnO}_{2}$, switches the phase conductor |
| Rated current: | 16 A/AC1 |
| Switching power: | 4000 VA/AC1 |
| Switching voltage: | 250 V AC1 |
| Mechanical service life: | $3 \times 10^{7}$ |
| Electrical service life: | $0.7 \times 10^{5}$ |
| Indication: | red LED/green LED |
| Output selection: | $0(1)-10 \mathrm{~V} / \mathrm{PROG}$ button |
| Control |  |
| Wireless: | up to 25-channels (buttons) |
| Communication protocol: | RFIO2 |
| Frequency: | 866-922 MHz (for more information see p. 76) |
| Repeater function: | yes |
| Manual control: | button PROG (ON/OFF) |
| Range: | in open space up to 200 m |
| Minimal control distance: | 20 mm |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | plug into a socket |
| Protection: | IP30 |
| Overvoltage category: | III. |
| Contamination degree: | 2 |
| Terminals (CY wire, cross-section): | $3 \times 0.75 \mathrm{~mm}^{2}, 2 \times 2.5 \mathrm{~mm}^{2}$ |
| Length of terminals: | 90 mm |
| Dimensions: | $49 \times 49 \times 21 \mathrm{~mm}$ |
| Weight: | 52 g |
| Related standards: | EN 60669, EN 300 220, EN 301489 R\&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC) |

- The device with analog output $0(1)-10 \mathrm{~V}$ is used to control devices, luminaires, thermal actuators and thermal heads - which are equipped with such an input.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Potential free analog output $0(1)-10 \mathrm{~V}$, contact relay 16 A .
- 6 light functions - smooth increase or decrease with time setting $2 \mathrm{~s}-30 \mathrm{~min}$. Function description can be found on page 75.
- The analog controller may be controlled by up to 25 -channels.
- The programming button on the controller is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.


## Device description



## Connection

Connection example: dimming of fluorescent tubes with dimmable ballast


Connection example: with thermo valve


Light scene function 1

a）By pressing the programmed button for less than 0.5 s ，the light illuminates；it goes out by pressing again．
b）By pressing the programmed button for more than 0.5 s ，fluid brightness regulation will occur．After releasing the button，the brightness level is saved in the memory， and pressing the button shortly later will switch the light on／off to this intensity．
c）It is possible to readjust the change in intensity at any time by a long press of the programmed button．
The actuator remembers the adjusted value even after disconnecting from the power supply．

Light scene function 3

a）By pressing the programmed button for less than 0.5 s ，the light fluidly illuminates for a period of 3 s （at $100 \%$ brightness）．By pressing the button shortly again，the light will continuously switch off for 3 seconds．
b）By pressing the programmed button for more than 0.5 s ，fluid brightness regulation will occur．After releasing the button，the brightness level is saved in the memory， and pressing the button shortly later will switch the light on／off to this intensity．
c）It is possible to readjust the change in intensity at any time by a long press of the programmed button．
The actuator remembers the adjusted value even after disconnecting from the power supply．

## Function sunrise



After pressing the programmed button，the light begins to illuminate in the pro－ grammed time interval in a range of 2 seconds to 30 minutes．

## Function ON／OFF



If the light is switched off，pressing the programmed button will switch it on．If the light is switched on，pressing the programmed button will switch it off．

Light scene function 2

a）By pressing the programmed button for less than 3 s ，the light illuminates；it goes out by pressing again．
b）In order to limit undesirable control of brightness，fluid brightness control occurs only by pressing a programmed button for over 3 s ．After releasing the button，the brightness level is saved in the memory，and pressing the button shortly later will switch the light on／off to this intensity．
c）It is possible to readjust the change in intensity at any time by pressing the pro－ grammed button for over 3 s ．
The actuator remembers the adjusted value even after disconnecting from the power supply．
Light scene function 4

a）By pressing the programmed button for less than 0.5 s ，the light illuminates．By pressing the button shortly again，the light will continuously switch off for 3 seconds （at $100 \%$ brightness）．
b）By pressing the programmed button for more than 0.5 s ，fluid brightness regulation will occur．After releasing the button，the brightness level is saved in the memory， and pressing the button shortly later will switch the light on／off to this intensity．
c）It is possible to readjust the change in intensity at any time by a long press of the programmed button．
The actuator remembers the adjusted value even after disconnecting from the power supply．

## Function sunset



After pressing the programmed button，the light begins to dim in the programmed time interval in a range of 2 seconds to 30 minutes．

## Function switch off



The dimmer output switches off by pressing the button．

## Rating of the light source ELKO lighting on dimmers ELKO EP

|  | LED bulb |  | LED spot lights |  |  | LED panels |  | LED／RGB strip |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { DLB-E27- } \\ & 806-2 \mathrm{~K} 7 \end{aligned}$ | $\begin{aligned} & \text { DLB-E27- } \\ & 806-5 K \end{aligned}$ | $\begin{array}{\|c} \hline \text { DLSL-GU10- } \\ -350-3 \mathrm{~K} \end{array}$ | $\begin{gathered} \text { LSL-GU10- } \\ 350-3 \mathrm{~K} \end{gathered}$ | $\begin{gathered} \text { LSL-GU10- } \\ 350-5 \mathrm{~K} \end{gathered}$ | LP－6060－3K | LP－6060－6K | $\begin{aligned} & \text { LED strip } \\ & 7.2 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & \text { LED strip } \\ & 14.4 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & \text { LED strip } \\ & 19.2 W \end{aligned}$ | LED strip 28．8W | RGB strip 7．2W | RGB strip $14.4 \mathrm{~W}$ |
|  |  |  |  |  |  | number |  |  | －2 8.2 <br> number |  | number |  |  |
| RFDSC－71 |  | $\checkmark \checkmark 21$ | $\checkmark$ ل： 45 | $\sqrt{\checkmark}$ 25 | $\checkmark$ | －－ | －－ | －－ | －－ | －－ | －－ | －－ | －－ |
| RFDEL－71B | $\sqrt{ } \sqrt{11}$ | $\sqrt{\checkmark}$ 11 | $\checkmark$ ，$\sqrt{ }$ 25 | $\sqrt{ } \sqrt{13}$ | $\sqrt{ } \sqrt{ } 13$ | －－ | －－ | －－ | －－ | －－ | －－ | －－ | －－ |
| RFDA－73M／RGB | －－ | －－ | －－ | －－ | －－ | －－ | －－ | $\sqrt{ } \sqrt{ } \times 3 \times 8 \mathrm{~m}$ | $\sqrt{ } \sqrt{ } \times 3 \times 4 m$ | $\sqrt{ } \sqrt{ } \times 3 \times 5 \mathrm{~m}$ | $\sqrt{ } \sqrt{ } \times \mathrm{x} 4 \mathrm{~m}$ | $\checkmark$ 石 | $\checkmark \checkmark 10 \mathrm{~m}$ |
| RFDAC－71B | －－ | －－ | －－ | ， | －－ | $\checkmark 50$ | $\checkmark$ ل 50 | －－ | －－ | －－ | －－ | －－ | － |

## WARNING！

May lead to different results based on the state of network cable length and other factors．
This table contains the results of tests that were conducted internally and therefore is ONLY for customers only informative．The products were tested in test laboratories ELKO EP，and therefore the company assumes no responsibility for any imitation test environment．
Inductive and capacitive loads must not be connected simultaneously！

## Load capacity：

＊Due to the huge amount of type of light sources，the maximum load depends on internal construction of dimmable LED and ESL bulbs and their power factor $\cos \varphi$ ， capacity for power factor $\cos \varphi=1$ ．The power factor of dimmable LEDs and ESL bulbs ranges from $\cos \varphi=0.95$ up to 0.4 ．An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source．

