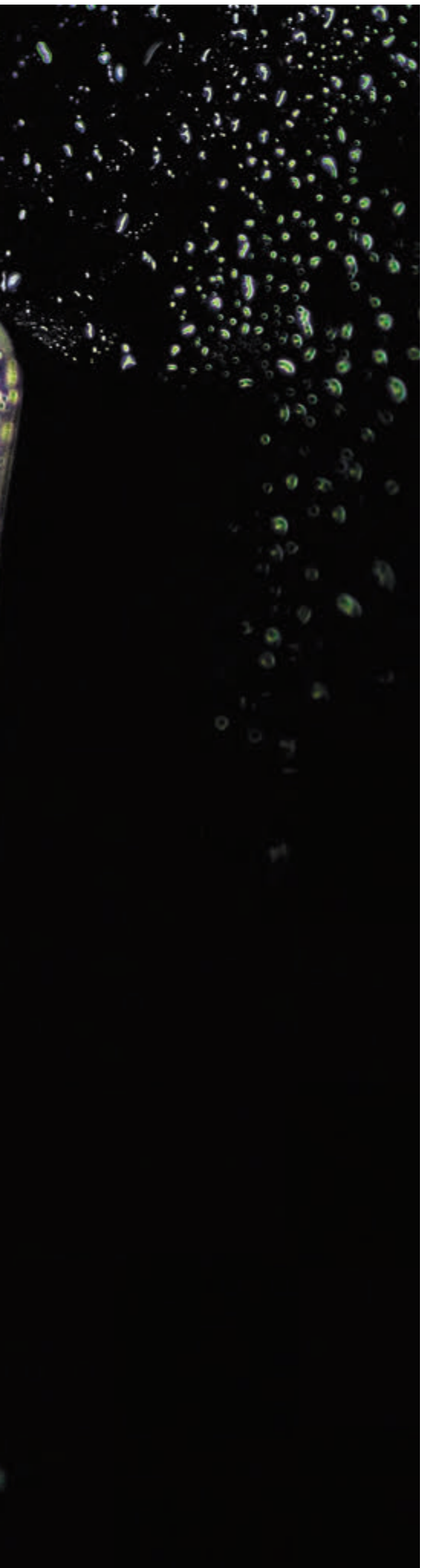
zamel



Intelligent LED lighting LEDIX

The LEDIX device group consists of eleven lighting fitting families (MOZA, MUNA, TERA, TICO, TIMO,RUBI, NAVI, SONA, LONG, TETI, LAMI), which differ in design and functionalities. The intelligent LEDIX lighting system includes almost a thousand products of the highest quality. This modern line of LED lighting fittings additionally equipped with a power supply and control devices, allows to create interesting interior designs and non-standard illumination of facades, gardens and bring incomparable light effect to corridors an staircases. A group of modern electronic transform - ers has been added to the LEDIX series. The series of lighting fittings, which is an ideal friend both for people decorating their house or apartment, for interior designers decorating public buildings and office buildings and for HoReCa buildings. Intelligent LED LEDIX lighting was awarded First Prize in the 21st international Fair of Lighting Equipment LIGHT 2013 and a Prize of Polish Chamber of Civil Engineers.

The connection of control devices with selected LED lighting fittings allows to design applications to the individual requirements of users. LEDIX enables an automatic switching on and switching off the light by means of built-in motion sensors, a radio control of light colour and luminous flux intensity by means of a remote control or a push-button transmitter, light battery backup after power failure and many other functionalities specific to intelligent lighting control systems.

Diversified LEDIX lighting fittings are an excellent offer for demanding people who want to create their surrounding with light. Among the lighting fittings there are products which emit light in two directions (MOZA, MUNA, TERA), there are lighting fittings with an elegant design (TIMO, TICO) and products emitting a delicate light down (SONA, RUBI, NAVI, LONG). Metal lighting fittings are available in six colours: aluminum, stainless steel, graphite, old gold, black and white. Plastic lighting fittings are available in four colours: white, black, beige and silver. As for the light colour, the customers can select lighting fittings with RGB diodes or optionally a lighting fitting with a diode: white cold, white warm and white neutral.

LEDIX series lighting fittings can be supplied with 12 V DC , 14 V DC, 24 V DC or 230 V AC. They are available for surface and flush mounting. LEDIX series devices have the protection rating IP20, IP44 or IP56, so some of them can be used in moist rooms, and they can also be used to create non-standard illumination of building facades, gardenhouses, etc.

LEDIX operational reliability and energy saving are not only a gentle form, but also reliability thanks to the application of the highest quality LED diodes and anodized aluminum sheets that guarantee the suitable quality of lighting fittings. The major advantage of LEDIX series lighting fittings is undoubtedly the energy efficiency due to the low power consumption and a long lifetime of up to 40 thousand hours of continuous light.

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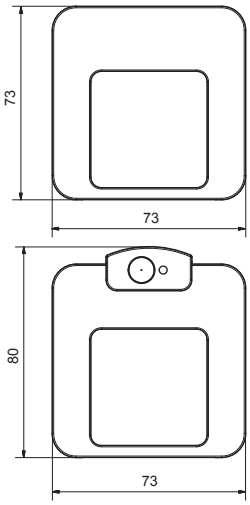
MOZA

Dimensions [mm]:



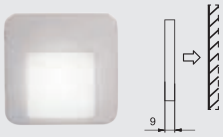
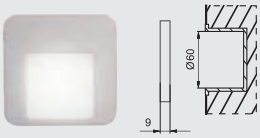
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

Lighting fitting colour

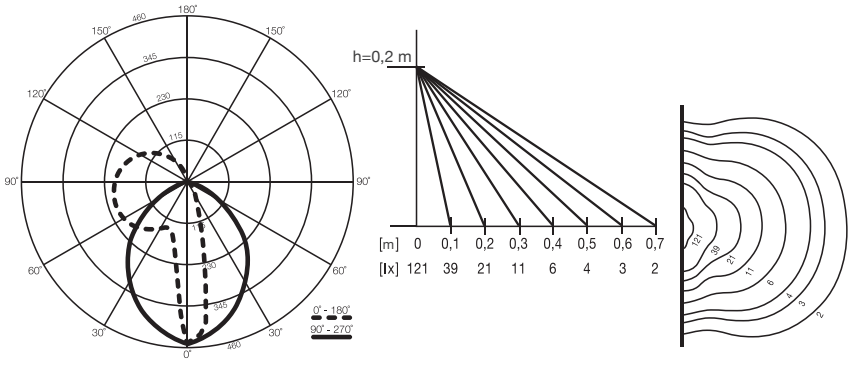
- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

4xLED | const | CE | PIR | LUX

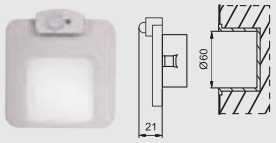
Type:								
Mounting:								
Power supply:	14V⎓				14V⎓			
Power consumption [W]:	0,56	0,42	0,4	0,84	0,56	0,42	0,4	0,84
Light colour:	○	○	○	RGB RGB	○	○	○	RGB RGB
Functionality:	-				-			
Features:	IP44				IP44			
Weight:	0,108 kg				0,108 kg			

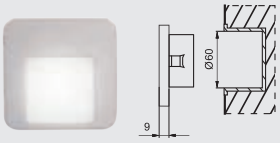
Lighting fitting colour	Article number			
Aluminum	○ 01-111-11	RGB 01-111-16	○ 01-211-11	RGB 01-211-16
	○ 01-111-12		○ 01-211-12	
	○ 01-111-17		○ 01-211-17	
Stainless steel	○ 01-111-21	RGB 01-111-26	○ 01-211-21	RGB 01-211-26
	○ 01-111-22		○ 01-211-22	
	○ 01-111-27		○ 01-211-27	
Graphite	○ 01-111-31	RGB 01-111-36	○ 01-211-31	RGB 01-211-36
	○ 01-111-32		○ 01-211-32	
	○ 01-111-37		○ 01-211-37	
Old gold	○ 01-111-41	RGB 01-111-46	○ 01-211-41	RGB 01-211-46
	○ 01-111-42		○ 01-211-42	
	○ 01-111-47		○ 01-211-47	
White	○ 01-111-51	RGB 01-111-56	○ 01-211-51	RGB 01-211-56
	○ 01-111-52		○ 01-211-52	
	○ 01-111-57		○ 01-211-57	
Black	○ 01-111-61	RGB 01-111-66	○ 01-211-61	RGB 01-211-66
	○ 01-111-62		○ 01-211-62	
	○ 01-111-67		○ 01-211-67	

Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	82
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	19	13	17
Luminous efficiency	[lm/W]	34	31	43



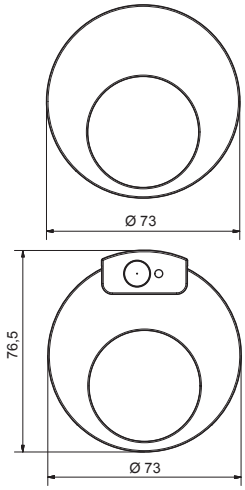


ø60						ø60						
14V⎓			230V~			230V~						
0,78	0,64	0,62	1,4	1,23	1,2	1,1	0,93	0,9	1,3	1,12	1,1	1,65
○	○	○	○	○	○	○	○	○	○	○	○	RGB
PIR LUX						-			DIM			DIM
IP20			IP20			IP20						
0,165 kg			0,174 kg			0,152 kg			0,158 kg			0,159 kg

Article number				
○ 01-212-11	○ 01-222-11	○ 01-221-11	○ 01-224-11	RGB 01-225-16
○ 01-212-12	○ 01-222-12	○ 01-221-12	○ 01-224-12	
○ 01-212-17	○ 01-222-17	○ 01-221-17	○ 01-224-17	
○ 01-212-21	○ 01-222-21	○ 01-221-21	○ 01-224-21	RGB 01-225-26
○ 01-212-22	○ 01-222-22	○ 01-221-22	○ 01-224-22	
○ 01-212-27	○ 01-222-27	○ 01-221-27	○ 01-224-27	
○ 01-212-31	○ 01-222-31	○ 01-221-31	○ 01-224-31	RGB 01-225-36
○ 01-212-32	○ 01-222-32	○ 01-221-32	○ 01-224-32	
○ 01-212-37	○ 01-222-37	○ 01-221-37	○ 01-224-37	
○ 01-212-41	○ 01-222-41	○ 01-221-41	○ 01-224-41	RGB 01-225-46
○ 01-212-42	○ 01-222-42	○ 01-221-42	○ 01-224-42	
○ 01-212-47	○ 01-222-47	○ 01-221-47	○ 01-224-47	
○ 01-212-51	○ 01-222-51	○ 01-221-51	○ 01-224-51	RGB 01-225-56
○ 01-212-52	○ 01-222-52	○ 01-221-52	○ 01-224-52	
○ 01-212-57	○ 01-222-57	○ 01-221-57	○ 01-224-57	
○ 01-212-61	○ 01-222-61	○ 01-221-61	○ 01-224-61	RGB 01-225-66
○ 01-212-62	○ 01-222-62	○ 01-221-62	○ 01-224-62	
○ 01-212-67	○ 01-222-67	○ 01-221-67	○ 01-224-67	

MUNA

Dimensions [mm]:



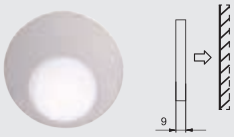
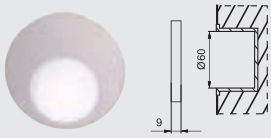
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

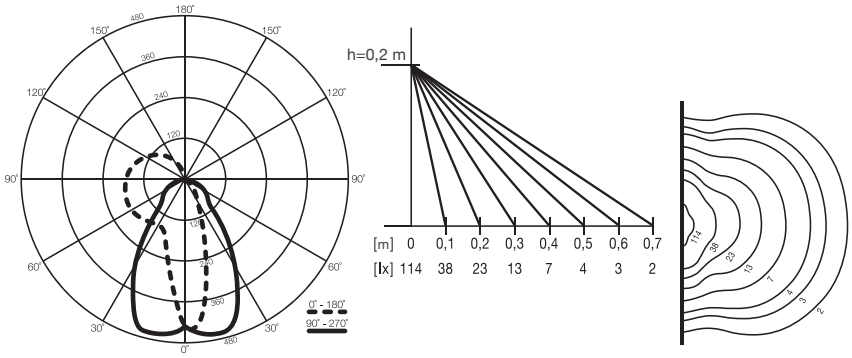
Lighting fitting colour

- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

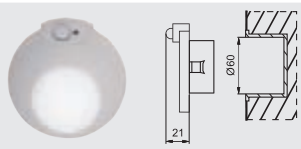
4xLED | const | CE | PIR | LUX

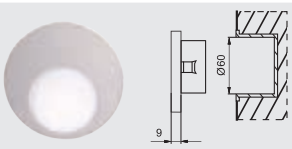
Type:								
Mounting:								
Power supply:	14V⎓				14V⎓			
Power consumption [W]:	0,56	0,42	0,4	0,84	0,56	0,42	0,4	0,84
Light colour:	○	○	○	RGB	○	○	○	RGB
Functionality:	-				-			
Features:	IP44				IP44			
Weight:	0,108 kg				0,108 kg			
	Article number							
Lighting fitting colour: Aluminum	○ 02-111-11			RGB 02-111-16	○ 02-211-11			RGB 02-211-16
	○ 02-111-12				○ 02-211-12			
	○ 02-111-17				○ 02-211-17			
Stainless steel	○ 02-111-21			RGB 02-111-26	○ 02-211-21			RGB 02-211-26
	○ 02-111-22				○ 02-211-22			
	○ 02-111-27				○ 02-211-27			
Graphite	○ 02-111-31			RGB 02-111-36	○ 02-211-31			RGB 02-211-36
	○ 02-111-32				○ 02-211-32			
	○ 02-111-37				○ 02-211-37			
Old gold	○ 02-111-41			RGB 02-111-46	○ 02-211-41			RGB 02-211-46
	○ 02-111-42				○ 02-211-42			
	○ 02-111-47				○ 02-211-47			
White	○ 02-111-51			RGB 02-111-56	○ 02-211-51			RGB 02-211-56
	○ 02-111-52				○ 02-211-52			
	○ 02-111-57				○ 02-211-57			
Black	○ 02-111-61			RGB 02-111-66	○ 02-211-61			RGB 02-211-66
	○ 02-111-62				○ 02-211-62			
	○ 02-111-67				○ 02-211-67			

Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	81
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	18	12	18
Luminous efficiency	[lm/W]	32	29	45



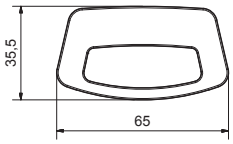


ø60						ø60						
14V⎓			230V~			230V~						
0,78	0,64	0,62	1,4	1,23	1,2	1,1	0,93	0,9	1,3	1,12	1,1	1,65
○	○	○	○	○	○	○	○	○	○	○	○	RGB
PIR LUX						-			DIM			DIM
IP20			IP20			IP20						
0,165 kg			0,174 kg			0,152 kg			0,158 kg			0,159 kg

Article number				
○ 02-212-11	○ 02-222-11	○ 02-221-11	○ 02-224-11	RGB 02-225-16
○ 02-212-12	○ 02-222-12	○ 02-221-12	○ 02-224-12	
○ 02-212-17	○ 02-222-17	○ 02-221-17	○ 02-224-17	
○ 02-212-21	○ 02-222-21	○ 02-221-21	○ 02-224-21	RGB 02-225-26
○ 02-212-22	○ 02-222-22	○ 02-221-22	○ 02-224-22	
○ 02-212-27	○ 02-222-27	○ 02-221-27	○ 02-224-27	
○ 02-212-31	○ 02-222-31	○ 02-221-31	○ 02-224-31	RGB 02-225-36
○ 02-212-32	○ 02-222-32	○ 02-221-32	○ 02-224-32	
○ 02-212-37	○ 02-222-37	○ 02-221-37	○ 02-224-37	
○ 02-212-41	○ 02-222-41	○ 02-221-41	○ 02-224-41	RGB 02-225-46
○ 02-212-42	○ 02-222-42	○ 02-221-42	○ 02-224-42	
○ 02-212-47	○ 02-222-47	○ 02-221-47	○ 02-224-47	
○ 02-212-51	○ 02-222-51	○ 02-221-51	○ 02-224-51	RGB 02-225-56
○ 02-212-52	○ 02-222-52	○ 02-221-52	○ 02-224-52	
○ 02-212-57	○ 02-222-57	○ 02-221-57	○ 02-224-57	
○ 02-212-61	○ 02-222-61	○ 02-221-61	○ 02-224-61	RGB 02-225-66
○ 02-212-62	○ 02-222-62	○ 02-221-62	○ 02-224-62	
○ 02-212-67	○ 02-222-67	○ 02-221-67	○ 02-224-67	

TERA

Dimensions [mm]:



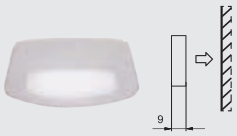
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

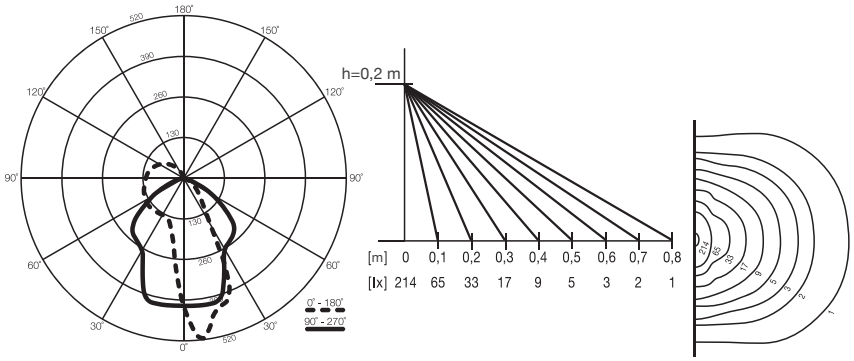
Lighting fitting colour

- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

4xLED | I const | CE

Type:				
Mounting:				
Power supply:				
Power consumption [W]:	0,56	0,42	0,4	0,84
Light colour:	○	○	○	RGB / RGB
Functionality:	-			
Features:	IP44			
Weight:	0,058 kg			
	Article number			
Lighting fitting colour: Aluminum	○ 03-111-11			RGB 03-111-16
	○ 03-111-12			
	○ 03-111-17			
Stainless steel	○ 03-111-21			RGB 03-111-26
	○ 03-111-22			
	○ 03-111-27			
Graphite	○ 03-111-31			RGB 03-111-36
	○ 03-111-32			
	○ 03-111-37			
Old gold	○ 03-111-41			RGB 03-111-46
	○ 03-111-42			
	○ 03-111-47			
White	○ 03-111-51			RGB 03-111-56
	○ 03-111-52			
	○ 03-111-57			
Black	○ 03-111-61			RGB 03-111-66
	○ 03-111-62			
	○ 03-111-67			

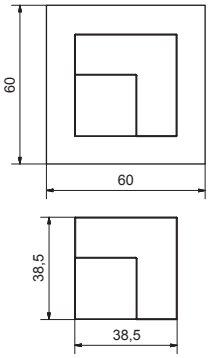
Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	83
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	22	14	22
Luminous efficiency	[lm/W]	39	33	55

TICO

Dimensions [mm]:



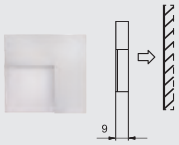
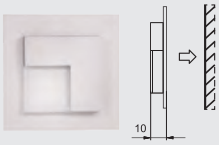
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

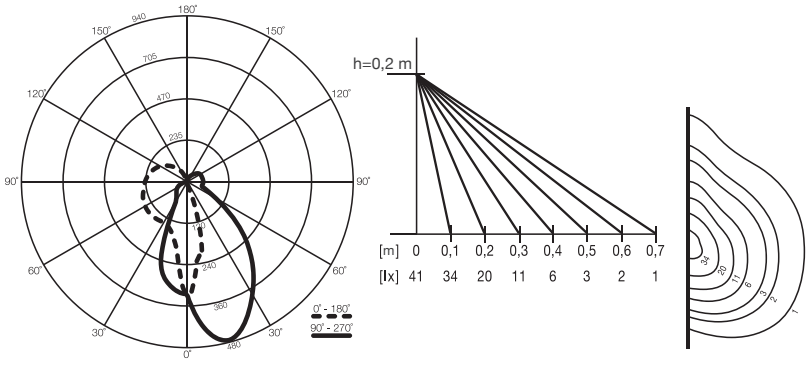
Lighting fitting colour

- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

2xLED | I const | CE

Type:							
Mounting:							
Power supply:							
Power consumption [W]:		0,28	0,42	0,4	0,28	0,42	0,4
Light colour:		○	○	○	○	○	○
Functionality:		-					
Features:		IP44					
Weight:		0,046 kg			0,055 kg		
		Article number					
Lighting fitting colour	**Aluminum**	○ 04-111-11			○ 05-111-11		
		○ 04-111-12			○ 05-111-12		
		○ 04-111-17			○ 05-111-17		
	Stainless steel	○ 04-111-21			○ 05-111-21		
		○ 04-111-22			○ 05-111-22		
		○ 04-111-27			○ 05-111-27		
	Graphite	○ 04-111-31			○ 05-111-31		
		○ 04-111-32			○ 05-111-32		
		○ 04-111-37			○ 05-111-37		
	Old gold	○ 04-111-41			○ 05-111-41		
		○ 04-111-42			○ 05-111-42		
		○ 04-111-47			○ 05-111-47		
	White	○ 04-111-51			○ 05-111-51		
		○ 04-111-52			○ 05-111-52		
		○ 04-111-57			○ 05-111-57		
	Black	○ 04-111-61			○ 05-111-61		
		○ 04-111-62			○ 05-111-62		
		○ 04-111-67			○ 05-111-67		

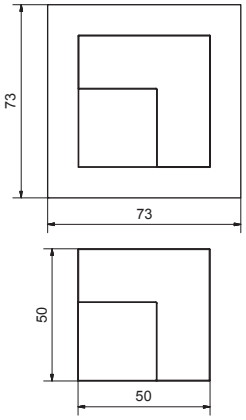
Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	83
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	10	7	9
Luminous efficiency	[lm/W]	36	17	23

TIMO

Dimensions [mm]:



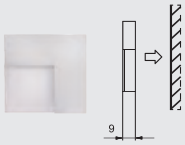
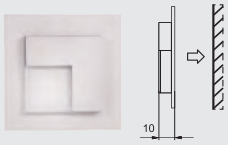
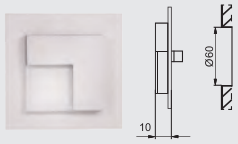
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

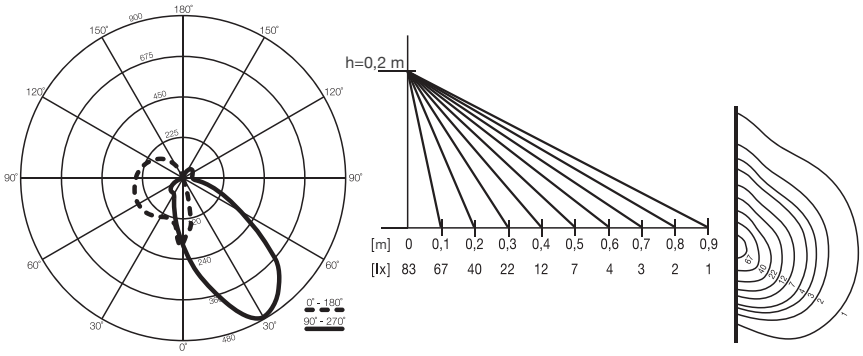
Lighting fitting colour

- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

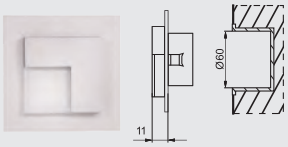
4xLED | const | CE

Type:												
Mounting:												
Power supply:	14V⎓				14V⎓				14V⎓			
Power consumption [W]:	0,56	0,42	0,4	0,84	0,56	0,42	0,4	0,84	0,56	0,42	0,4	0,84
Light colour:	○	○	○	RGB	○	○	○	RGB	○	○	○	RGB
Functionality:	-											
Features:	IP44				IP44				IP44			
Weight:	0,074 kg				0,086 kg				0,088 kg			
	Article number											
Lighting fitting colour: Aluminum	○ 06-111-11 ○ 06-111-12 ○ 06-111-17	RGB 06-111-16			○ 07-111-11 ○ 07-111-12 ○ 07-111-17	RGB 07-111-16			○ 07-211-11 ○ 07-211-12 ○ 07-211-17	RGB 07-211-16		
Stainless steel	○ 06-111-21 ○ 06-111-22 ○ 06-111-27	RGB 06-111-26			○ 07-111-21 ○ 07-111-22 ○ 07-111-27	RGB 07-111-26			○ 07-211-21 ○ 07-211-22 ○ 07-211-27	RGB 07-211-26		
Graphite	○ 06-111-31 ○ 06-111-32 ○ 06-111-37	RGB 06-111-36			○ 07-111-31 ○ 07-111-32 ○ 07-111-37	RGB 07-111-36			○ 07-211-31 ○ 07-211-32 ○ 07-211-37	RGB 07-211-36		
Old gold	○ 06-111-41 ○ 06-111-42 ○ 06-111-47	RGB 06-111-46			○ 07-111-41 ○ 07-111-42 ○ 07-111-47	RGB 07-111-46			○ 07-211-41 ○ 07-211-42 ○ 07-211-47	RGB 07-211-46		
White	○ 06-111-51 ○ 06-111-52 ○ 06-111-57	RGB 06-111-56			○ 07-111-51 ○ 07-111-52 ○ 07-111-57	RGB 07-111-56			○ 07-211-51 ○ 07-211-52 ○ 07-211-57	RGB 07-211-56		
Black	○ 06-111-61 ○ 06-111-62 ○ 06-111-67	RGB 06-111-66			○ 07-111-61 ○ 07-111-62 ○ 07-111-67	RGB 07-111-66			○ 07-211-61 ○ 07-211-62 ○ 07-211-67	RGB 07-211-66		

Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	82
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	20	14	17
Luminous efficiency	[lm/W]	36	33	43

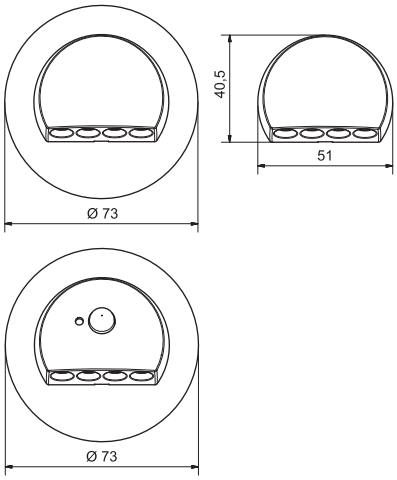


230V~						
1,1	0,93	0,9	1,3	1,12	1,1	1,65
○	○	○	○	○	○	RGB
-			DIM			DIM
IP20						
0,138 kg			0,144 kg			0,145 kg

Article number		
○ 07-221-11	○ 07-224-11	RGB 07-225-16
○ 07-221-12	○ 07-224-12	
○ 07-221-17	○ 07-224-17	
○ 07-221-21	○ 07-224-21	RGB 07-225-26
○ 07-221-22	○ 07-224-22	
○ 07-221-27	○ 07-224-27	
○ 07-221-31	○ 07-224-31	RGB 07-225-36
○ 07-221-32	○ 07-224-32	
○ 07-221-37	○ 07-224-37	
○ 07-221-41	○ 07-224-41	RGB 07-225-46
○ 07-221-42	○ 07-224-42	
○ 07-221-47	○ 07-224-47	
○ 07-221-51	○ 07-224-51	RGB 07-225-56
○ 07-221-52	○ 07-224-52	
○ 07-221-57	○ 07-224-57	
○ 07-221-61	○ 07-224-61	RGB 07-225-66
○ 07-221-62	○ 07-224-62	
○ 07-221-67	○ 07-224-67	

RUBI

Dimensions [mm]:



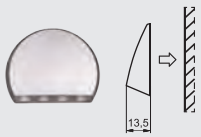
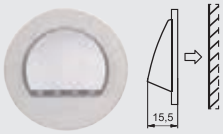
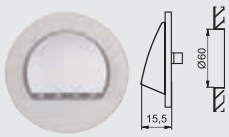
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

Lighting fitting colour

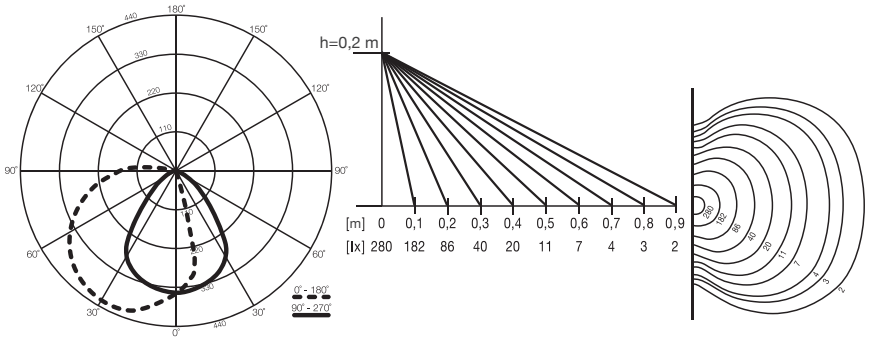
- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

4xLED | const | CE | PIR | LUX | RGB

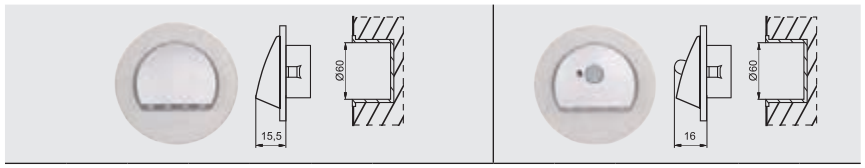
Type:												
Mounting:												
Power supply:	14V⎓											
Power consumption [W]:	0,56	0,42	0,58	0,84	0,56	0,42	0,58	0,84	0,56	0,42	0,58	0,84
Light colour:	○	○	○	RGB	○	○	○	RGB	○	○	○	RGB
Functionality:	-											
Features:	IP56				IP56				IP56			
Weight:	0,058 kg				0,071 kg				0,073 kg			

Lighting fitting colour		Article number					
Aluminum	○ 08-111-11	RGB 08-111-16	○ 09-111-11	RGB 09-111-16	○ 09-211-11	RGB 09-211-16
	○ 08-111-12		○ 09-111-12		○ 09-211-12	
	○ 08-111-17		○ 09-111-17		○ 09-211-17	
Stainless steel	○ 08-111-21	RGB 08-111-26	○ 09-111-21	RGB 09-111-26	○ 09-211-21	RGB 09-211-26
	○ 08-111-22		○ 09-111-22		○ 09-211-22	
	○ 08-111-27		○ 09-111-27		○ 09-211-27	
Graphite	○ 08-111-31	RGB 08-111-36	○ 09-111-31	RGB 09-111-36	○ 09-211-31	RGB 09-211-36
	○ 08-111-32		○ 09-111-32		○ 09-211-32	
	○ 08-111-37		○ 09-111-37		○ 09-211-37	
Old gold	○ 08-111-41	RGB 08-111-46	○ 09-111-41	RGB 09-111-46	○ 09-211-41	RGB 09-211-46
	○ 08-111-42		○ 09-111-42		○ 09-211-42	
	○ 08-111-47		○ 09-111-47		○ 09-211-47	
White	○ 08-111-51	RGB 08-111-56	○ 09-111-51	RGB 09-111-56	○ 09-211-51	RGB 09-211-56
	○ 08-111-52		○ 09-111-52		○ 09-211-52	
	○ 08-111-57		○ 09-111-57		○ 09-211-57	
Black	○ 08-111-61	RGB 08-111-66	○ 09-111-61	RGB 09-111-66	○ 09-211-61	RGB 09-211-66
	○ 08-111-62		○ 09-111-62		○ 09-211-62	
	○ 08-111-67		○ 09-111-67		○ 09-211-67	

Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	76
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	28	25	28
Luminous efficiency	[lm/W]	68	60	48



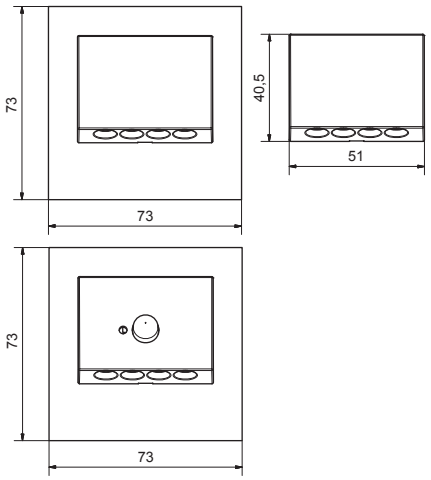
ø60

230V~							14V⎓			230V~		
1,1	0,93	1,13	1,3	1,12	1,32	1,65	0,78	0,64	0,8	1,4	1,23	1,43
○	○	○	○	○	○	RGB	○	○	○	○	○	○
-			DIM			DIM	PIR LUX					
IP20							IP20			IP20		
0,118 kg			0,124 kg			0,125 kg	0,117 kg			0,126 kg		

Article number				
○ 09-221-11	○ 09-224-11	RGB 09-225-16	○ 09-212-11	○ 09-222-11
○ 09-221-12	○ 09-224-12		○ 09-212-12	○ 09-222-12
○ 09-221-17	○ 09-224-17		○ 09-212-17	○ 09-222-17
○ 09-221-21	○ 09-224-21	RGB 09-225-26	○ 09-212-21	○ 09-222-21
○ 09-221-22	○ 09-224-22		○ 09-212-22	○ 09-222-22
○ 09-221-27	○ 09-224-27		○ 09-212-27	○ 09-222-27
○ 09-221-31	○ 09-224-31	RGB 09-225-36	○ 09-212-31	○ 09-222-31
○ 09-221-32	○ 09-224-32		○ 09-212-32	○ 09-222-32
○ 09-221-37	○ 09-224-37		○ 09-212-37	○ 09-222-37
○ 09-221-41	○ 09-224-41	RGB 09-225-46	○ 09-212-41	○ 09-222-41
○ 09-221-42	○ 09-224-42		○ 09-212-42	○ 09-222-42
○ 09-221-47	○ 09-224-47		○ 09-212-47	○ 09-222-47
○ 09-221-51	○ 09-224-51	RGB 09-225-56	○ 09-212-51	○ 09-222-51
○ 09-221-52	○ 09-224-52		○ 09-212-52	○ 09-222-52
○ 09-221-57	○ 09-224-57		○ 09-212-57	○ 09-222-57
○ 09-221-61	○ 09-224-61	RGB 09-225-66	○ 09-212-61	○ 09-222-61
○ 09-221-62	○ 09-224-62		○ 09-212-62	○ 09-222-62
○ 09-221-67	○ 09-224-67		○ 09-212-67	○ 09-222-67

NAVI

Dimensions [mm]:



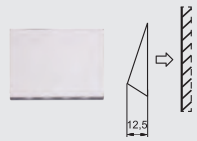
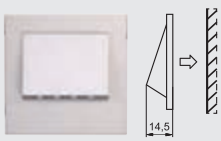
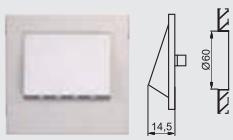
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

Lighting fitting colour

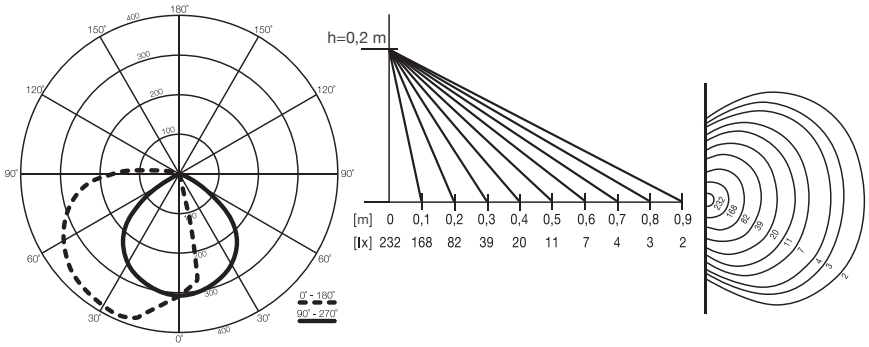
- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

4xLED | const | CE | PIR | LUX

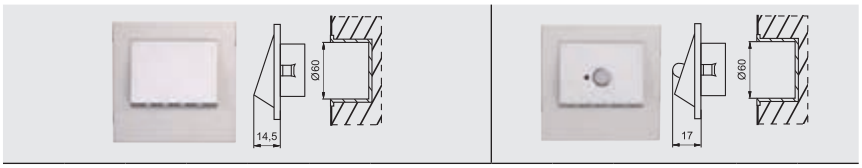
Type:												
Mounting:												
Power supply:	14V⎓											
Power consumption [W]:	0,56	0,42	0,58	0,84	0,56	0,42	0,58	0,84	0,56	0,42	0,58	0,84
Light colour:	○	○	○	RGB	○	○	○	RGB	○	○	○	RGB
Functionality:	-											
Features:	IP56				IP56				IP56			
Weight:	0,058 kg				0,071 kg				0,073 kg			

Lighting fitting colour		Article number					
Aluminum	○ 10-111-11	○ 10-111-12	○ 10-111-17	RGB 10-111-16	○ 11-111-11	○ 11-111-12	○ 11-111-17	RGB 11-111-16	○ 11-211-11	○ 11-211-12	○ 11-211-17	RGB 11-211-16
Stainless steel	○ 10-111-21	○ 10-111-22	○ 10-111-27	RGB 10-111-26	○ 11-111-21	○ 11-111-22	○ 11-111-27	RGB 11-111-26	○ 11-211-21	○ 11-211-22	○ 11-211-27	RGB 11-211-26
Graphite	○ 10-111-31	○ 10-111-32	○ 10-111-37	RGB 10-111-36	○ 11-111-31	○ 11-111-32	○ 11-111-37	RGB 11-111-36	○ 11-211-31	○ 11-211-32	○ 11-211-37	RGB 11-211-36
Old gold	○ 10-111-41	○ 10-111-42	○ 10-111-47	RGB 10-111-46	○ 11-111-41	○ 11-111-42	○ 11-111-47	RGB 11-111-46	○ 11-211-41	○ 11-211-42	○ 11-211-47	RGB 11-211-46
White	○ 10-111-51	○ 10-111-52	○ 10-111-57	RGB 10-111-56	○ 11-111-51	○ 11-111-52	○ 11-111-57	RGB 11-111-56	○ 11-211-51	○ 11-211-52	○ 11-211-57	RGB 11-211-56
Black	○ 10-111-61	○ 10-111-62	○ 10-111-67	RGB 10-111-66	○ 11-111-61	○ 11-111-62	○ 11-111-67	RGB 11-111-66	○ 11-211-61	○ 11-211-62	○ 11-211-67	RGB 11-211-66

Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	77
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	28	24	28
Luminous efficiency	[lm/W]	66	57	48



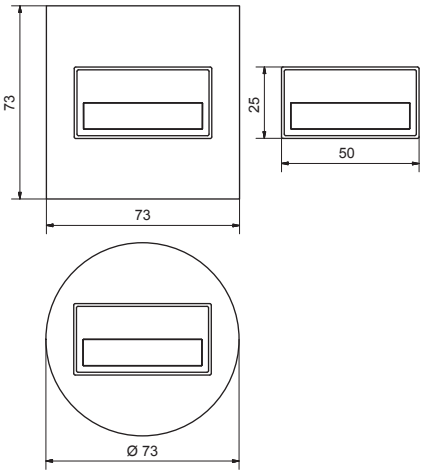
ø60

230V~							14V⎓			230V~		
1,1	0,93	1,13	1,3	1,12	1,32	1,65	0,78	0,64	0,8	1,4	1,23	1,43
○	○	○	○	○	○	RGB	○	○	○	○	○	○
-			DIM			DIM	PIR LUX					
IP20							IP20			IP20		
0,118 kg			0,124 kg			0,125 kg	0,117 kg			0,126 kg		

Article number				
○ 11-221-11	○ 11-224-11	RGB 11-225-16	○ 11-212-11	○ 11-222-11
○ 11-221-12	○ 11-224-12		○ 11-212-12	○ 11-222-12
○ 11-221-17	○ 11-224-17		○ 11-212-17	○ 11-222-17
○ 11-221-21	○ 11-224-21	RGB 11-225-26	○ 11-212-21	○ 11-222-21
○ 11-221-22	○ 11-224-22		○ 11-212-22	○ 11-222-22
○ 11-221-27	○ 11-224-27		○ 11-212-27	○ 11-222-27
○ 11-221-31	○ 11-224-31	RGB 11-225-36	○ 11-212-31	○ 11-222-31
○ 11-221-32	○ 11-224-32		○ 11-212-32	○ 11-222-32
○ 11-221-37	○ 11-224-37		○ 11-212-37	○ 11-222-37
○ 11-221-41	○ 11-224-41	RGB 11-225-46	○ 11-212-41	○ 11-222-41
○ 11-221-42	○ 11-224-42		○ 11-212-42	○ 11-222-42
○ 11-221-47	○ 11-224-47		○ 11-212-47	○ 11-222-47
○ 11-221-51	○ 11-224-51	RGB 11-225-56	○ 11-212-51	○ 11-222-51
○ 11-221-52	○ 11-224-52		○ 11-212-52	○ 11-222-52
○ 11-221-57	○ 11-224-57		○ 11-212-57	○ 11-222-57
○ 11-221-61	○ 11-224-61	RGB 11-225-66	○ 11-212-61	○ 11-222-61
○ 11-221-62	○ 11-224-62		○ 11-212-62	○ 11-222-62
○ 11-221-67	○ 11-224-67		○ 11-212-67	○ 11-222-67

SONA

Dimensions [mm]:



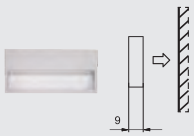
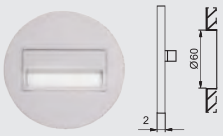
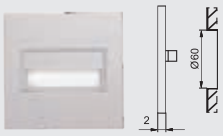
Light colour

- Cold white
- Warm white
- Neutral white
- RGB

Lighting fitting colour

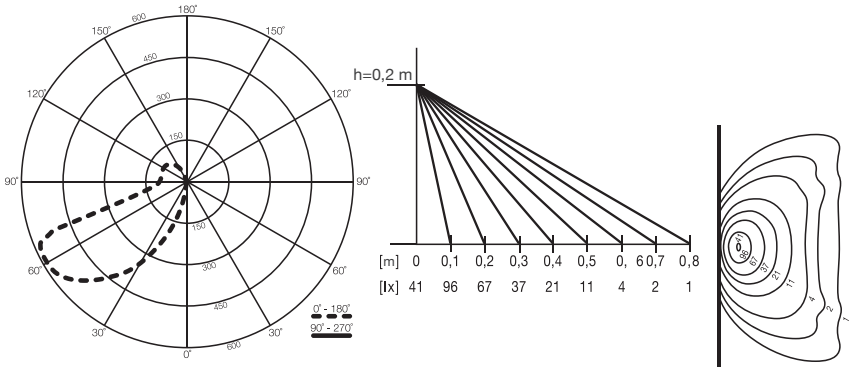
- Aluminum
- Stainless steel
- Graphite
- Old gold
- White
- Black

4xLED | const | CE

Type:												
Mounting:												
Power supply:	14V⎓											
Power consumption [W]:	0,56	0,42	0,3	0,84	0,56	0,42	0,4	0,84	0,56	0,42	0,4	0,84
Light colour:	○	○	○	RGB	○	○	○	RGB	○	○	○	RGB
Functionality:	-											
Features:	IP44											
Weight:	0,038 kg				0,058 kg				0,066 kg			

Lighting fitting colour		Article number					
Aluminum	○ 12-111-11	○ 12-111-12	○ 12-111-17	RGB 12-111-16	○ 13-211-11	○ 13-211-12	○ 13-211-17	RGB 13-211-16	○ 14-211-11	○ 14-211-12	○ 14-211-17	RGB 14-211-16
Stainless steel	○ 12-111-21	○ 12-111-22	○ 12-111-27	RGB 12-111-26	○ 13-211-21	○ 13-211-22	○ 13-211-27	RGB 13-211-26	○ 14-211-21	○ 14-211-22	○ 14-211-27	RGB 14-211-26
Graphite	○ 12-111-31	○ 12-111-32	○ 12-111-37	RGB 12-111-36	○ 13-211-31	○ 13-211-32	○ 13-211-37	RGB 13-211-36	○ 14-211-31	○ 14-211-32	○ 14-211-37	RGB 14-211-36
Old gold	○ 12-111-41	○ 12-111-42	○ 12-111-47	RGB 12-111-46	○ 13-211-41	○ 13-211-42	○ 13-211-47	RGB 13-211-46	○ 14-211-41	○ 14-211-42	○ 14-211-47	RGB 14-211-46
White	○ 12-111-51	○ 12-111-52	○ 12-111-57	RGB 12-111-56	○ 13-211-51	○ 13-211-52	○ 13-211-57	RGB 13-211-56	○ 14-211-51	○ 14-211-52	○ 14-211-57	RGB 14-211-56
Black	○ 12-111-61	○ 12-111-62	○ 12-111-67	RGB 12-111-66	○ 13-211-61	○ 13-211-62	○ 13-211-67	RGB 13-211-66	○ 14-211-61	○ 14-211-62	○ 14-211-67	RGB 14-211-66

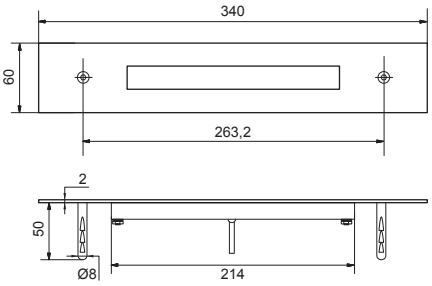
Photometric data



		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	83
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	23	15	19
Luminous efficiency	[lm/W]	41	36	48

LONG-02

Dimensions [mm]:



Light colour

- Cold white
- Warm white

Lighting fitting colour

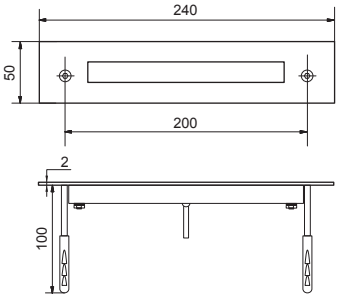
Stainless steel

I const CE

Type:				
Mounting:				
Power supply:	10 V⎓ ÷ 14 V⎓		24 V⎓	
Power consumption [W]:	1,44 W		2,16 W	
Light colour:	○	○	○	○
Functionality:	-			
Features:	PV IP56 III		IP56 III	
Weight:	0,129 kg			
	Article number			
Lighting fitting colour: Stainless steel	○ 15-211-21		○ 15-231-21	
	○ 15-211-22		○ 15-231-22	

LONG-03

Dimensions [mm]:



Light colour

- Cold white
- Warm white

Lighting fitting colour

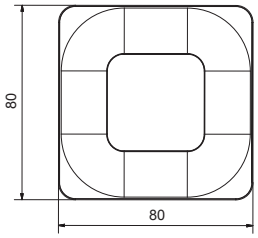
Stainless steel

const CE

Type:				
Mounting:				
Power supply:	10 V⎓ ÷ 14 V⎓		24 V⎓	
Power consumption [W]:	1,44 W		2,16 W	
Light colour:	○	○	○	○
Functionality:	-			
Features:	PV IP56 III		IP56 III	
Weight:	0,110 kg			
	Article number			
Lighting fitting colour Stainless steel	○ 16-211-21		○ 16-231-21	
	○ 16-211-22		○ 16-231-22	

TETI

Dimensions [mm]:



Light colour

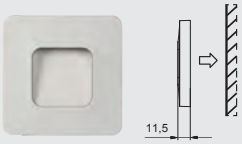
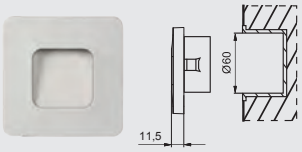
- Cold white
- Warm white
- Neutral white

Lighting fitting colour

- White
- Black
- Beige
- Silver

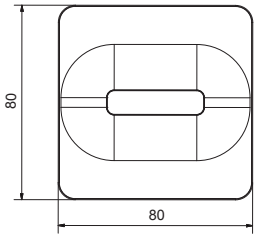
		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	82
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	22	16	18
Luminous efficiency	[lm/W]	31	23	26

6xLED | I const | CE

Type:						
Mounting:						
Power supply:	12V⎓			230V~		
Power consumption [W]:	0,7	0,7	0,7	1,1	1,1	1,1
Light colour:	○	○	○	○	○	○
Functionality:	-					
Features:	IP44			IP20		
Weight:	0,174 kg			0,174 kg		
	Article number					
Lighting fitting colour White	○ 17-141-51			○ 17-221-51		
	○ 17-141-52			○ 17-221-52		
	○ 17-141-57			○ 17-221-57		
Black	○ 17-141-61			○ 17-221-61		
	○ 17-141-62			○ 17-221-62		
	○ 17-141-67			○ 17-221-67		
Beige	○ 17-141-71			○ 17-221-71		
	○ 17-141-72			○ 17-221-72		
	○ 17-141-77			○ 17-221-77		
Silver	○ 17-141-81			○ 17-221-81		
	○ 17-141-82			○ 17-221-82		
	○ 17-141-87			○ 17-221-87		

LAMI

Dimensions [mm]:



Light colour

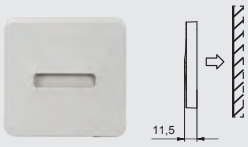
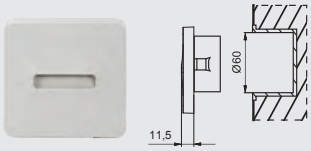
- Cold white
- Warm white
- Neutral white

Lighting fitting colour

- White
- Black
- Beige
- Silver

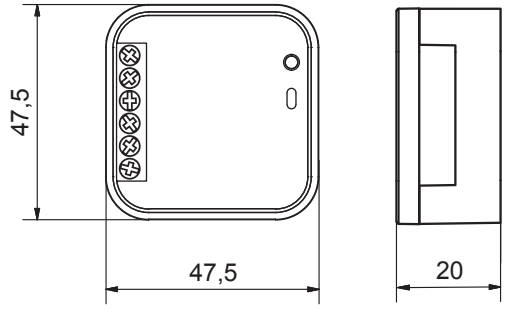
		Cold white	Warm white	Neutral white
Colour Rendering Index	R_a	71	80	82
Colour temperature	T_C [K]	5900	3100	4200
Luminous flux	Ø [lm]	22	16	18
Luminous efficiency	[lm/W]	31	23	26

6xLED | I const | CE

Type:						
Mounting:				ø60		
Power supply:	12V⎓			230V~		
Power consumption [W]:	0,7	0,7	0,7	1,1	1,1	1,1
Light colour:	○	○	○	○	○	○
Functionality:	-					
Features:	IP44			IP20		
Weight:	0,174 kg			0,174 kg		
	Article number					
Lighting fitting colour – **White**	○ 18-141-51			○ 18-221-51		
	○ 18-141-52			○ 18-221-52		
	○ 18-141-57			○ 18-221-57		
Black	○ 18-141-61			○ 18-221-61		
	○ 18-141-62			○ 18-221-62		
	○ 18-141-67			○ 18-221-67		
Beige	○ 18-141-71			○ 18-221-71		
	○ 18-141-72			○ 18-221-72		
	○ 18-141-77			○ 18-221-77		
Silver	○ 18-141-81			○ 18-221-81		
	○ 18-141-82			○ 18-221-82		
	○ 18-141-87			○ 18-221-87		

One colour LED controller SLR-01

Dimensions [mm]:



12 V⎓ 24 V⎓ DIM III CE ø60 SERIA F IP20

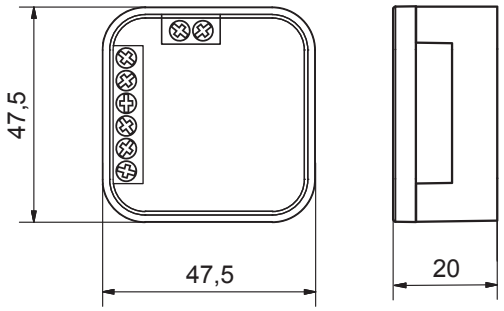
SLR-01 controller is designed for cooperation with a light sources equipped with LED diodes and supplied with 12 ÷ 24 V DC. The device carries out simple functions connected with lighting control such as: switching on/ switching off, brightening / dimming, bistable and time mode. There is a wired control system and a possibility of wireless control by means of any EXTA FREE system transmitter. The controller's output is based on MOSFET transistor with a maximum current capacity of 4A. Its small casing dimensions allow for an easy mounting in a Ø60 junction box. The product belongs to the ECOLINE group with the characteristic feature of low power consumption.

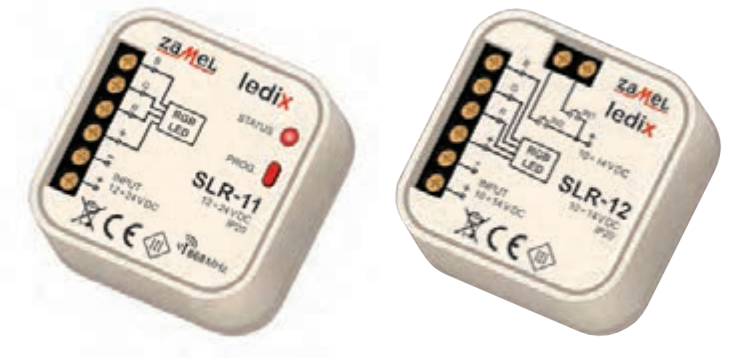
Technical data

Type:	SLR-01
Power supply:	12 ÷ 24 V DC
Power consumption:	0,22 W
Number of channels:	1
Maximum current in the channel:	4 A
Controlling signal:	PWM
Programs:	• switch on/switch off • bistable • time function with dimming • brightening/dimming
Control	• monostable push buttons • EXTA FREE transmitters
Wired inputs:	2 (IN1, IN2)
Transmission:	radio 868,32 MHz
Transmission way:	one-way
Coding:	yes
Maximum number of transmitters:	32
Range:	up to 230 m in the open area
Time adjustment:	1 s ÷ 18 h
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	47,5 x 47,5 x 20 mm
Weight:	0,025 kg
Reference standard:	PN-EN 60669, PN-EN 60950, PN-EN 61000

Wireless / Wired RGB controller SLR-11 / SLR-12

Dimensions [mm]:





10 V⎓ ÷ 14 V⎓ | 12 V⎓ ÷ 24 V⎓ | DIM | III | CE | ø60 | SERIA F | IP20

SLR-11 controller is designed to control LED RGB diodes in the circuit with common "+" potential (RGB LEDIX series standard fittings, RGB strips and modules). The control is carried out wireless on 868,32 MHz frequency. The device has a default setting of 5 LED diode control programmes, and the user can select one out of 10 LED diode colours. Colour control is done by means of PWM modulation with 9-bit resolution. Its small casing dimensions allow for an easy mounting in a Ø60 junction box. FLOATING and STROBE modes enable to stop the device on a chosen light colour which is remembered by the controller. SLR-11 in cooperation with P-260 remote control enables to change the lighting colour by means of the touch field.

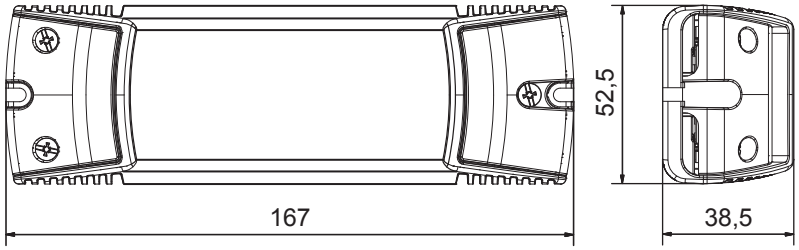
Technical data

Type:	SLR-11	SLR-12
Power supply:	12 ÷ 24 V DC	10 ÷ 14 V DC
Power consumption:	0,22 W	0,06 W
Number of channels:	3	
Maximum current in the channel:	2,5 A	
Controlling signal:	PWM	
Colour resolution:	9-bit	
Programs:	• colour selection • brightening / dimming • fluent colour change (FLOATING) • step by step colour change - only for P-260 (STROBE) • rainbow - only for P-260 (RAINBOW)	
Colours:	10 (default setting), fluent selection for P-260	
Steps (FLOATING, STROBE):	10 (do 50 min)	
Control:	selected EXTA FREE transmitters, P-260 remote control*	monostable push buttons
Transmission:	radio 868,32 MHz	-
Transmission way:	one-way	-
Coding:	yes	-
Maximum number of transmitters:	32	-
Range:	up to 230 m in the open area	-
Cross-section of connection cables:	up to 2,5 mm^2	
Ambient temperature range:	-10° ÷ +55°C	
Protection degree:	IP20	
Protection class:	III	
Dimensions:	47,5 x 47,5 x 20 mm	
Weight:	0,027 kg	
Reference standard:	PN-EN 60669, PN-EN 60950, PN-EN 61000	PN-EN 60669, PN-EN 61000

* cooperation refers to two push-button transmitters

RGB amplifier WLN-01

Dimensions [mm]:



10 V⎓ ÷ 14 V⎓ | III | CE | IP20

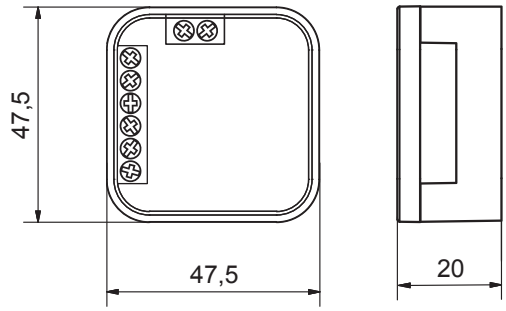
The RGB amplifier is dedicated for cooperation with RGB controllers. It is used when the load output of RGB products exceeds the maximum current output load of the RGB controller. The amplifiers are used also in very long RGB installations to synchronise all RGB modules. The device has got the three MOSFET outputs with a maximum continuous capacity of 4 A. All connections are done by means of terminal clamps. The amplifier allows to create a serial and parallel RGB installations. The surface mounting allows the device to be mounted in gypsum-carton board structures, furniture and niches.

Technical data

Type:	WLN-01
Power supply:	10 ÷ 14 V DC
Power consumption:	0,155 W
Number of inputs/outputs:	4 (+RGB)
Output loading capacity – maximum	4 A
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	52,5 x 167 x 38,5 mm
Weight:	0,120 kg
Reference standard:	PN-EN 60669, PN-EN 61000

Flush RGB amplifier WLP-01

Dimensions [mm]:



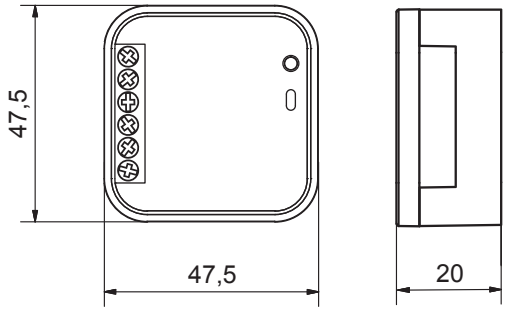
The WLP-01 amplifier is dedicated for cooperation with RGB controllers. It is used when load output of lighting RGB products exceeds the maximum current output load of RGB controller. The amplifiers are used also in very long RGB installations to synchronise all RGB modules. The device has got the three MOSFET outputs with a maximum continuous capacity of 2,5 A. All connections are done by means of terminal clamps. The amplifier allows to create a serial and parallel RGB installations. The small size flush casing allows the device to be mounted easily in Ø60 mm junction boxes.

Technical data

Type:	WLP-01
Power supply:	10 ÷ 14 V DC
Power consumption:	0,1 W
Number of inputs/outputs:	3 (RGB)
Supply terminals:	2 (+, -)
Output loading capacity – maximum	2,5 A
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	47,5 x 47,5 x 20 mm
Weight:	0,027 kg
Reference standard:	PN-EN 60669, PN-EN 61000

Radio flush receiver ROP-03

Dimensions [mm]:



10 V⎓ ÷ 14 V⎓ | III | CE | ø60 | SERIA F | IP20

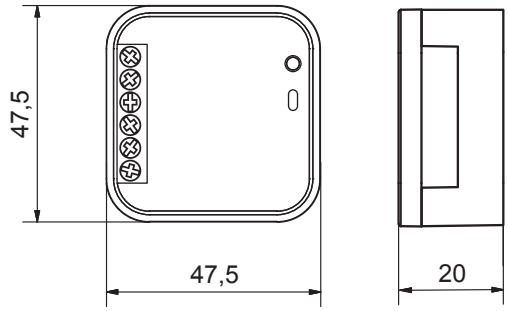
ROP-03 receiver is designed to carry out simple control functions in the low-voltage installations from 10 ÷ 14 V DC. In connection with EXTA FREE (www.extafree.pl) system transmitters, it enables the realisation of the switch on / switch off function, the monostable mode, the bistable and time modes. The receiver is recommended for use especially with LED lighting. The device has 2 relay potential free outputs (NO) with a maximum capacity of 5 A and its small casing size allows the device to be directly mounted in Ø60 mm junction box. The product belongs to the ECOLINE product group with a characteristic feature of low power consumption.

Technical data

Type:	ROP-03
Power supply:	10 ÷ 14 V DC
Power consumption:	• 0,15 W stand-by • 0,7 W work 2 channels
Number of channels:	2
Maximum current in the channel:	5 A / 250 V AC
Relay contact:	2 NO 5 A / 250 V AC1 1250 VA
Programs:	• switch on/switch off • monostable • bistable • time
Control:	EXTA FREE transmitters
Transmission:	radio 868,32 MHz
Transmission way:	one-way
Coding:	yes
Maximum number of transmitters:	32
Range:	up to 230 m in the open area
Time adjustment:	1 s ÷ 18 h
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	47,5 x 47,5 x 20 mm
Weight:	0,036 kg
Reference standard:	PN-EN 60669, PN-EN 60950, PN-EN 61000

Radio flush receiver ROP-04

Dimensions [mm]:



10 V⎓ ÷ 14 V⎓ | III | CE | ø60 | IP20

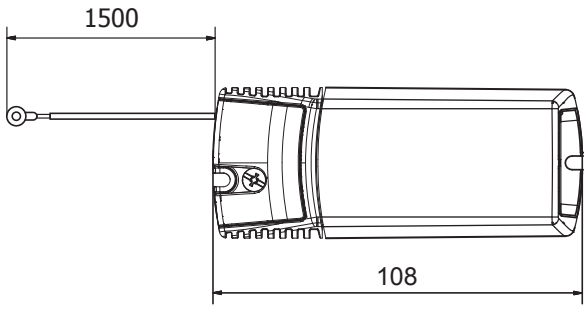
ROP-04 receiver similarly to ROP-03 is designed to carry out simple control functions in low voltage installations of 10 ÷ 14 V. The device in connection with EXTA FREE system transmitters (www.extafree.pl) enables the realisation of the switch on / switch off function, the monostable mode, the bistable and time modes. It is designed to a direct cooperation with any 10 ÷ 14 V power supply LED diode lighting. The receiver has three MOSFET type transistor outputs with a maximum capacity of 2,5 A. Small dimensions of the casing allow for a direct mounting of the receiver in the Ø60 mm junction box. The product belongs to the ECOLINE product group with a characteristic feature of low power consumption.

Technical data

Type:	**ROP-04**
Power supply:	10 ÷ 14 V DC
Power consumption:	0,22 W
Number of channels:	3 X MOSFET
Maximum current in the channel:	2,5 A
Programs:	• switch on/switch off • monostable • bistable • time
Control:	EXTA FREE transmitters
Transmission:	radio 868,32 MHz
Transmission way:	one-way
Coding:	yes
Maximum number of transmitters:	32
Range:	up to 230 m in the open area
Time adjustment:	1 s ÷ 18 h
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	47,5 x 47,5 x 20 mm
Weight:	0,025 kg
Reference standard:	PN-EN 60669, PN-EN 60950, PN-EN 61000

Touch switch 10 ÷ 14 V DC WDN-01

Dimensions [mm]:



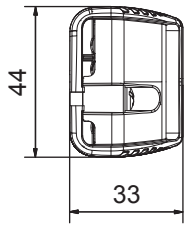
The WDN-01 device is used to switch on or switch off the light by means of a touch. The switch has a sensor with 1,5 m long wire, which is connected to conductive components of lighting fittings. The WDN-01 switch is supplied with 1 ÷ 14V DC. It has a PWM output for a direct connection of LED diodes and the output of NO free relay with a maximum load of 5 A. It is possible to switch on / switch off any receiver (conventional light bulbs, halogens) by means of the relay output. Using the PWM output the brightening / dimming function is also available, apart from switching on / switching off. The relay output operates in parallel way with the PWM output. WDN-01 has small casing dimensions and is designed for surface mounting. It is recommended to use WDN-01 to control lighting in the kitchen and bathroom furniture. The device can also be installed on flammable materials, e.g. wood, furniture boards and plasterboard.

Technical data

Type:	WDN-01
Power supply:	10 ÷ 14 V DC
Power consumption:	0,25 W
Number of channels:	1
Maximum current in the PWM output:	2,5 A
PWM output resolution:	9-bit
Maximum current in the relay output:	5 A / 250 V AC
Relay contact:	1 x NO 5 A / 250 V AC 1250 VA AC1
Relay output type:	volt free - NO
Sensor's length:	1,5 m
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	44 x 108 x 33 mm
Weight:	0,055 kg
Reference standard:	PN-EN 60669, PN-EN 61000

1,5 meter long sensor is connected to conducting elements such as metal lamp casings, handles and door handles, etc. These elements must be ground insulated and their surface should be the smallest. The sensor's cable can be maximum extended up to 3 meters with the cross section of 1 mm^2.

Touch switch 230 V AC WDN-03



The WDN-03 switch is used to switch on or switch off the light by means of a touch. The switch have a sensor with 1,5 m long wire, which is connected to conductive components of lighting fittings. The switch have a 230 V AC output with a maximum load of 5 A. It is possible to connect any 230 V AC receiver to the output such as: conventional light bulbs, halogens, transformers and power supplies. The device is designed for surface mounting. It is recommended to use the switch to control lighting in the kitchen and bathroom furniture. The device can also be mounted on flammable materials, e.g. wood, furniture boards and plasterboard. WDN-03 is the most economical solution assuring the basic function of a touch switch.

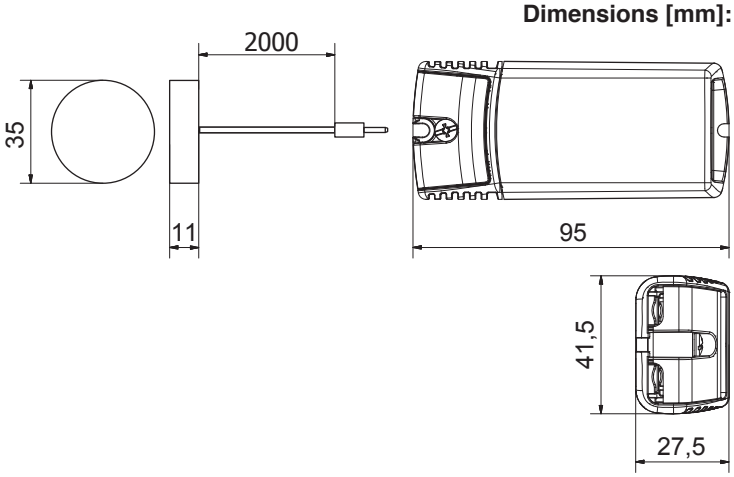
Technical data

Type:	WDN-03
Power supply:	230 V AC
Supply voltage tolerance:	-15 ÷ +10 %
Nominal frequency:	50 Hz
Power consumption:	0,9 W
Number of channels:	1
Type of output:	voltage 230 V AC
Output circuit nominal load:	300 W
Relay contact:	1 x NO 5 A / 250 V AC 1250 VA AC1
Sensor's length:	1,5 m
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	II
Dimensions:	44 x 108 x 33 mm
Weight:	0,060 kg
Reference standard:	PN-EN 60669; PN-EN 61000

1,5 meter long sensor is connected to conducting elements such as metal lamp casings, handles and door handles, etc. These elements must be ground insulated and their surface should be the smallest. The sensor's cable can be maximum extended up to 3 meters with the cross section of 1 mm^2.

Proximity switch 230 V AC WDN-04

Dimensions [mm]:

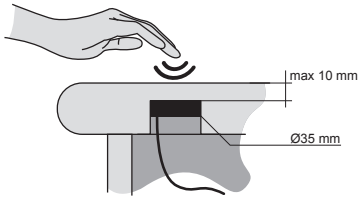


230V~ IP20

WDN-04 switch is used for hands free switching on and switching off the light. The switch is on by putting a hand close to the surface with a sensor installed beneath it. The surface above sensor should not exceed 10 mm. It can be wood, glass, stone and mineral elements (excluding metal elements or elements containing metal). The switch cooperates with a circular sensor which is mounted in a hole with a diameter of 35 mm. The sensor's cable length is 2 m. WDN-04 has one 230 V AC output with a maximum load of 5 A. It is possible to connect any 230 V AC receiver to the output such as: conventional light bulbs, halogens, transformers and power supplies. The device is designed for a surface mounting and it is recommended to be used in the kitchen and bathroom furniture as well as in places where it should be invisible for the user. WDN-04 meets all safety standards, therefore it can be mounted on flammable surfaces such as wood furniture boards and plasterboard.

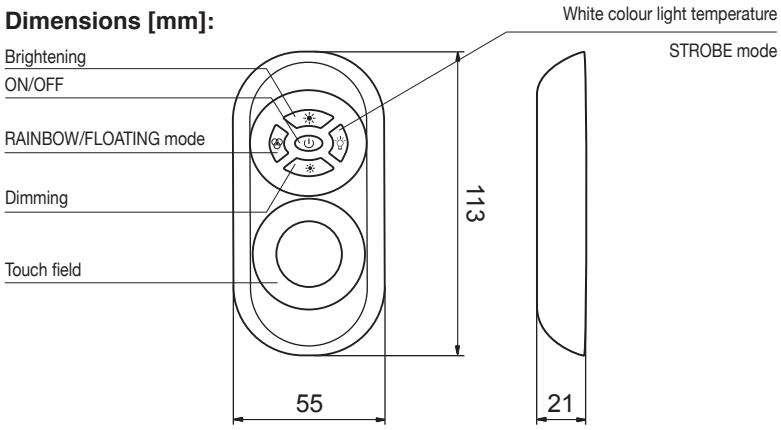
Technical data

Type:	WDN-04
Power supply:	230 V AC
Supply voltage tolerance:	-15 ÷ +10 %
Nominal frequency:	50 Hz
Power consumption:	0,8 W
Number of channels:	1
Type of output:	voltage 230 V AC
Output circuit nominal load:	300 W
Relay contact:	1 x NO 5 A / 250 V AC 1250 VA AC1
Sensor's length:	2 m
Sensor's dimensions:	Ø 35 mm, thickness 11 mm
Cross-section of connection cables:	up to 2,5 mm^2
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	II
Dimensions:	95 x 41,5 x 27,5 mm
Weight:	0,050 kg
Reference standard:	PN-EN 60669; PN-EN 61000
Application:	hands free switching on of the 230 V AC lighting fittings



Touch remote control P-260

Dimensions [mm]:



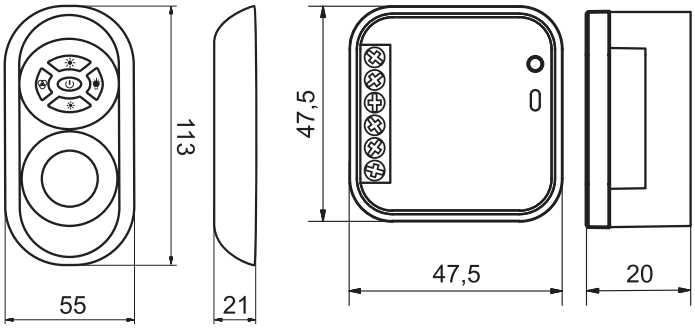
P-260 touch remote control is used to operate with LEDIX series lamps with a built-in RGB controller and to operate with SLR-11 RGB radio controller. The remote control has 5 mechanical keys and a round touch field used to fluently select a diode lighting colour. P-260 operates on the frequency of 868 MHz and realizes the following functions: switching on / switching off, brightening / dimming, floating or strobe change of colours. The remote control is also equipped in radio transmission and a battery discharge signal. P-260 remote control in connection with the SLR-11 controller makes the control of RGB tapes and other products with RGB diodes possible. Its characteristic feature is a modern design and a great operational range. The remote control operates only with SLR-11 controller and with LEDIX series lighting fittings with a built-in RGB controller.

Technical data

Type:	**P-260**
Power supply:	4,5 V
Battery type:	3 x AAA battery
Number of push-buttons:	5 + touch field
Transmission:	radio 868,32 MHz
Transmission way:	one-way
Coding:	yes – addressing
Range:	up to 230 m in the open area
Programs:	• fluent colour change (FLOATING) • step colour change (STROBE)
Functions:	• switch on / switch off • brightening / dimming • select a colour from the colour palette (RAINBOW) • white colour temperature adjustment
Steps (FLOATING, STROBE):	10 (do 50 min)
Ambient temperature range:	-10° ÷ +55°C
Protection degree:	IP20
Protection class:	III
Dimensions:	113 x 55 x 21 mm
Weight:	0,100 kg
Reference standard:	PN-ETSI EN 300 220-1, PN-ETSI EN 300 220-2, ETSI EN 301 489-1,3

Wireless RGB control set - RGB SLR-11P

Dimensions [mm]:



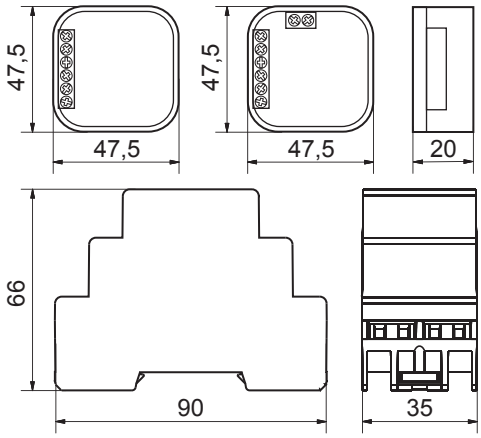
SLR-11P set consists of a wireless controller SLR-11 and a touch remote control P-260. The set is designed to cooperate with RGB products such as the RGB standard lamps of LEDIX series, RGB bands and modules with voltage supply of 10 to 14V DC. A set together with RGB products enables smooth adjustment of the colour of light and the intensity of the selected colour by means of remote touch-field P-260. In addition SLR-11P realises automatic fluent and strobe colour change programs with the possibility to stop the program in the selected colour and which is remembered by the controller. The white colour temperature adjustment is also possible by means of the touch field. The remote control included in the set is added (a factory-default setting) to the SLR-11 controller - immediately after mounting the set is ready for use. The advantage of the set is a possibility of adding other P-260 remote controls and selected EXTA FREE system transmitters to the controller. In this way users are not restricted to a single transmitter as it is in competing solutions. Small controller dimensions allow for a direct mounting in a Ø60 junction box.

Technical data

Type:	SLR-11P	
	SLR-11	P-260
Power supply:	12 ÷ 24 V DC	4,5 V DC - 3 x AAA battery
Number of channels:	3 x PWM 9-bit	-
Maximum current in the channel:	2,5 A	-
Programs:	• fluent colour change (FLOATING) • step colour change (STROBE)	
Steps (FLOATING, STROBE):	10 (up to 50 min)	
Functions:	• switch on / switch off • brightening / dimming • select a colour from the colour palette (RAINBOW) • white colour temperature adjustment	
Transmission:	radio 868,32 MHz	
Transmission way:	one-way	
Coding:	yes – addressing	
Range:	up to 230 m in the open area	
Ambient temperature range:	-10° ÷ +55°C	
Protection degree:	IP20	
Protection class:	III	
Dimensions:	47,5 x 47,5 x 20 mm	113 x 55 x 21 mm
Weight:	0,027 kg	0,100 kg

One-colour DALI controller SDL-01, SDL-12 / RGB DALI controller SDL-11, SDL-13

Dimensions [mm]:

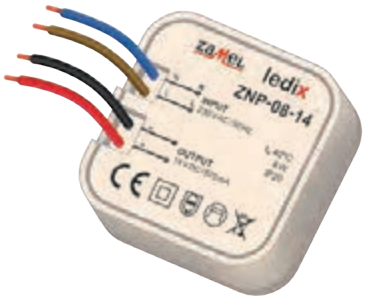


LED controllers DALI are designed to control LED diodes (one-colour and RGB diodes) by means of the DALI interface bus. LEDIX series low-voltage lamps, LED tapes and diode modules can be connected to controllers as the finishing elements. Dali protocol massages are converted by the LED controllers into PWM output signal controlling the lighting level of (SDL-01, SDL-12) one- colour diodes and, additionally, the colour in the case of RGB (SDL-11, SDL-13) diodes. The control bus includes two wires that can be led together with power supply wires. DALI controllers also allow for easy LED products implementation in complex lighting systems whose operating is based on DALI interface. SDL-01 and SDL-11 can also have a function of controllers in the autonomous LED lighting systems. LED Controllers are available in two housing versions which allow for easy mounting in the Ø60 junction box or in a switchboard on TH35 rail).

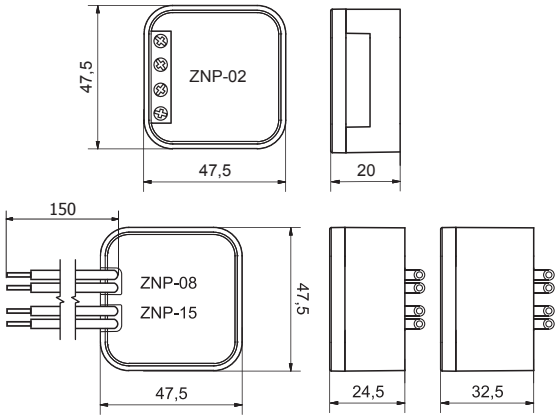
Technical data

Type:	SDL-01	SDL-11	SDL-12	SDL-13
Power supply:	10 ÷ 48 V DC		10 ÷ 48 V DC	
Power consumption:	0,22 W		< 0,3 W in stand-by mode	
Number of channels:	1	3	1	3
Maximum current in the channel:	2,5 A		6 A	2,5 A
Input signal:	DALI interface			
Output signal:	PWM 9-bit		PWM 16-bit	
Cross-section of connection cables:	up to 2,5 mm^2			
Ambient temperature range:	-10° ÷ +55°C			
Protection degree:	IP20			
Protection class:	III			
Dimensions:	47,5 x 47,5 x 20 mm		90 x 35 x 66 mm	
Weight:	0,024 kg	0,027 kg	0,025 kg	
Reference standard:	PN-EN 60669, PN-EN 61000		PN-EN 62386-102, PN-EN 62386-207	

Junction box power supplies ZNP-02 / ZNP-08 / ZNP-15



Dimensions [mm]:



230V~ ø60 IP20

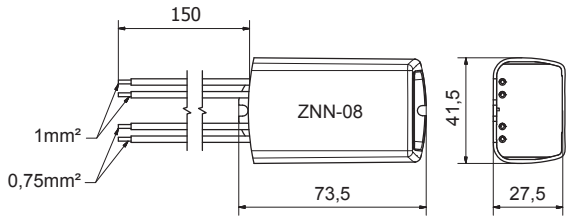
The ZNP series power supplies are professional impulse power supplies with voltage regulation of 12 V or 14 V for direct mounting in the Ø60 mm junction box. The 12 V version is recommended to supply the standard LED products, while the 14 V version is recommended to cooperate with LEDIX series products. As regards the output power, the ZNP power supplies are available in 2 W, 8 W and 15 W versions. These devices have a very low power consumption in the stand-by mode, high efficiency of about 79%, high stability of the output voltage and long-term reliability.

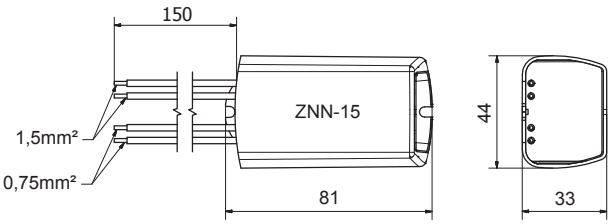
Technical data

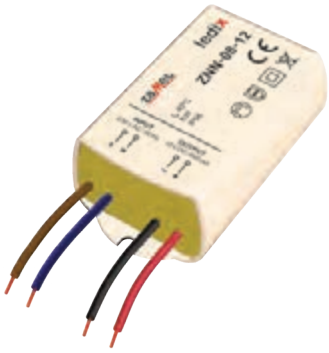
Type:	ZNP-02-12	ZNP-08-12	ZNP-15-12	14V⎓ ZNP-02-14	14V⎓ ZNP-08-14	14V⎓ ZNP-15-14
Output						
Voltage U_{out}:	12 V DC			14 V DC		
Nominal current:	0,165 A	0,65 A	1,25 A	0,14 A	0,57 A	1,07 A
Current range:	0 ÷ 0,165 A	0 ÷ 0,65 A	0 ÷ 1,25 A	0 ÷ 0,14 A	0 ÷ 0,57 A	0 ÷ 1,07 A
Nominal power:	2 W	8 W	15 W	2 W	8 W	15 W
Voltage tolerance:	5%					
Voltage pulsation:	80 mVpp					
Increase time U_{out}:	10 ms					
Transient response U_{out}:	20 ms					
Input						
Input rated voltage:	230 V AC					
Nominal frequency:	50 Hz					
Voltage tolerance:	-15% ÷ +10%					
Efficiency:	79 ÷ 80%					
Power consumption (stand-by):	0,25 W					
Starting current:	20 A					
Other						
Protections:	short circuit, overload					
Ambient temperature range:	-10 ÷ +50°C					
Protection degree:	IP20					
Protection class:	II					
Dimensions:	47 x 47 x 20 mm	47 x 47 x 24,5 mm	47 x 47 x 32,5 mm	47 x 47 x 20 mm	47 x 47 x 24,5 mm	47 x 47 x 32,5 mm
Weight:	0,030 kg	0,074 kg	0,100 kg	0,030 kg	0,074 kg	0,100 kg
Reference standard:	PN-EN 61204-3, PN-EN 55022, PN-EN 61000					

Power supplies for surface mounting ZNN-08 / ZNN-15

Dimensions [mm]:







230V~ IP56

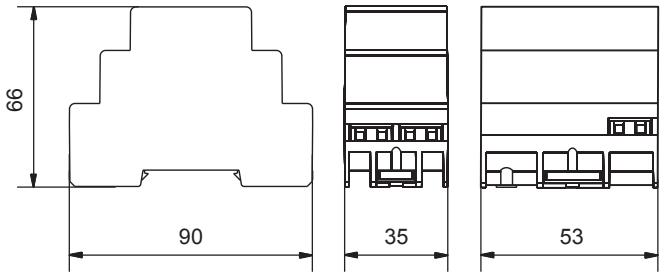
The ZNN series power supplies are professional impulse power supplies with voltage regulation of 12 V or 14 V for surface mounting. The 12 V version is recommended to supply the standard LED products while the 14 V version is dedicated to cooperate with LEDIX series products. As regards the output power, the ZNN power supplies are available in the 8 W and 15 W versions. These devices have a very low power consumption in the stand-by mode, high efficiency of about 79%, high stability of the output voltage and long-term reliability. The power supplies are additionally protected with polyurethane resin. They are recommended for the installation in a plaster-cardboard panels and directly on the furniture.

Technical data

Type:	ZNN-08-12	ZNN-15-12	14V⎓ ZNN-08-14	14V⎓ ZNN-15-14
Output				
Voltage U_{out}:	12 V DC		14 V DC	
Nominal current:	0,66 A	1,25 A	0,57 A	1,07 A
Current range:	0 ÷ 0,66 A	0 ÷ 1,25 A	0 ÷ 0,57 A	0 ÷ 1,07 A
Nominal power:	8 W	15 W	8 W	15 W
Voltage tolerance:	5%			
Voltage pulsation:	80 mVpp			
Increase time U_{out}:	10 ms			
Transient response U_{out}:	20 ms			
Input				
Input rated voltage:	230 V AC			
Nominal frequency:	50 Hz			
Voltage tolerance:	-15% ÷ +10%			
Efficiency:	79 ÷ 80%			
Power consumption:	0,25 W			
Starting current:	20 A			
Other				
Protections:	short circuit, overload			
Ambient temperature range:	-10 ÷ +50°C			
Protection degree:	IP56			
Protection class:	II			
Dimensions:	41,5 x 73,5 x 27,5 mm	44 x 81 x 33 mm	41,5 x 73,5 x 27,5 mm	44 x 81 x 33 mm
Weight:	0,105 kg	0,143 kg	0,105 kg	0,143 kg
Reference standard:	PN-EN 61204-3, PN-EN 55022, PN-EN 61000			

Modular power supplies ZNM-08 / ZNM-15

Dimensions [mm]:



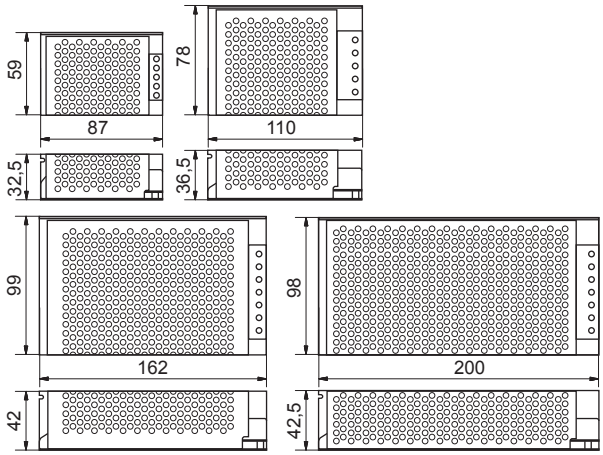
The ZNM series power supplies are professional impulse power supplies with voltage regulation of 12 V or 14 V. The 12 V version is recommended to supply the standard LED products while the 14 V version is recommended to cooperate with the LEDIX series products. The ZNM power supplies are designed to be mounted on a TH-35 DIN rail. The devices are available in a 1, 2 or 3 modular casings depending on the output power (10 W, 8 W, 15 W). The ZNM power supplies have a very low power consumption in the stand-by mode, high efficiency of about 79%, high stability of the output voltage and a long-term reliability.

Technical data

Type:	ZNM-08-12	ZNM-15-12	14V⎓ ZNM-08-14	14V⎓ ZNM-15-14
Output				
Voltage U_{out}:	12 V DC		14 V DC	
Nominal current:	0,66 A	1,25A	0,57A	1,07 A
Current range:	0 ÷ 0,66 A	0 ÷ 1,25 A	0 ÷ 0,57 A	0 ÷ 1,07 A
Nominal power:	8 W	15 W	8 W	15 W
Voltage tolerance:	5%	5%	5%	5%
Voltage pulsation:	80 mVpp	80 mVpp	80 mVpp	80 mVpp
Increase time U_{out}:	10 ms	10 ms	10 ms	10 ms
Transient response U_{out}:	20 ms	20 ms	20 ms	20 ms
Input				
Input rated voltage:	230 V AC			
Nominal frequency:	50 Hz			
Voltage tolerance:	-15% ÷ +10%			
Efficiency:	79 ÷ 80%			
Power consumption – stand-by:	0,25 W			
Starting current:	20 A			
Other				
Protections:	short circuit, overload			
Ambient temperature range:	-10 ÷ 50°C			
Protection degree:	IP20			
Protection class:	II			
Dimensions:	66 x 90 x 35 mm	66 x 90 x 53 mm	66 x 90 x 35 mm	66 x 90 x 53 mm
Weight:	0,075 kg	0,098 kg	0,075 kg	0,098 kg
Reference standard:	PN-EN 61204-3, PN-EN 55022, PN-EN 61000			

LED electronic power supplies ZSL-25 / ZSL-35 / ZSL-60 / ZSL-100 / ZSL-150

Dimensions [mm]:



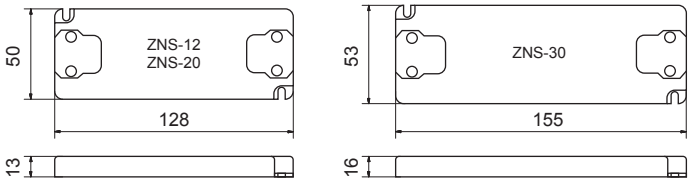
LED impulse power supplies ZSL series are intended to be used in household LED lighting installations. The modular design makes it easy and convenient for mounting on horizontal and vertical indoor surfaces. LED Power supplies are characterized by output voltage 12 V DC . They are offered in a wide range of output power (25 ÷ 150 W). Built-in safety features guarantee uninterrupted operation of all connected LED elements. LED Power supplies are equipped with a control unit for output voltage in the range of minimum ±10% with a potentiometer. The metal housing provides a suitable cooling of the PSU and extends its lifespan.

Technical data

Type:	**ZSL-25-12**	**ZSL-35-12**	**ZSL-60-12**	**ZSL-100-12**	**ZSL-150-12**
Output					
Voltage U_{out}:	12 V DC				
Nominal current:	2,5 A	3 A	5 A	8,5 A	12,5 A
Current range:	0 ÷ 2,5 A	0 ÷ 3 A	0 ÷ 5 A	0 ÷ 8,5 A	0 ÷ 12,5 A
Nominal power:	25 W	35 W	60 W	100 W	150 W
Ripples and noises (max):	200 mVpp				
Adjustment range U_{out}:	10,5 ÷ 13,5 V	8,5 ÷ 13 V	11,3 ÷ 13,2 V	11,5 ÷ 12,8 V	10,8 ÷ 15 V
Voltage tolerance:	1 %				
Increase time U_{out}:	~15 ms				
Output backup time (max):	~80 ms				
Input					
Input rated voltage:	110 ÷ 260 V AC				
Nominal frequency:	50 / 60 Hz				
Input current:	0,3 A	0,38 A	0,65 A	0,85 A	1,05 A
Power consumption – stand-by:	~0,5 W	~0,6 W	~1,5 W	~0,9 W	~3,9 W
Efficiency:	85 %	75 %	80 %	83 %	83 %
Power factor:	0,5				
Other					
Protections:	short circuit, overload				
Ambient temperature range:	-20 ÷ 60 °C				
Protection degree:	IP20				
Protection class:	I				
Dimensions:	87 x 59 x 32,5 mm	87 x 59 x 32,5 mm	110 x 78 x 36,5 mm	162 x 99 x 42 mm	200 x 98 x 42,5 mm
Weight:	100 g	115 g	195 g	340 g	385 g
Reference standard:	PN-EN 55015, PN-EN 61547, PN-EN 6100-3-2, PN-EN 6100-3-3, PN-EN 61347-1				

LED power supplies ZNS-12-12, ZNS-20-12, ZNS-30-12, ZNS-50-12, ZNS-75-12

Dimensions [mm]:

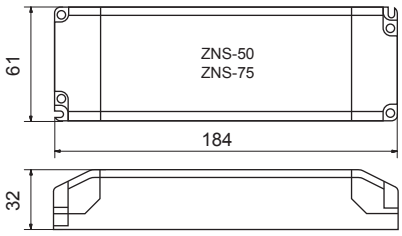


LED impulse power supplies ZNS series are intended to be used in household LED lighting installations. The modular design makes it easy and convenient for mounting on horizontal and vertical indoor surfaces. LED Power supplies are characterized by 12 V DC output voltage. They are offered in a wide range of output power (12 ÷ 75 W). Built-in safety features guarantee uninterrupted operation of all connected LED elements.

Technical data

Type:	ZNS-12-12	ZNS-20-12	ZNS-30-12	ZNS-50-12	ZNS-75-12
Output					
Voltage U_{out}:	12 V DC				
Nominal current:	1,0 A	1,67 A	2,5 A	4,10 A	6,25 A
Nominal power:	12 W	20 W	30 W	50 W	75 W
Voltage tolerance:	5%	5%	5%	5%	5%
Voltage pulsation:	600 mV	700 mV	700 mV	800 mV	500 mV
Transient response U_{out}:	500 ms				
Input					
Input rated voltage:	220 ÷ 240 V AC				
Rated current:	0,13 A	0,21 A	0,18 A	0,30 A	0,45 A
Nominal frequency:	50 / 60 Hz				
Efficiency:	78 %	82 %	88 %	88 %	86 %
Power consumption – stand-by:	0,5 W				
Starting current:	10 A	8 A	10 A	15 A	10 A
Other					
Protections:	short circuit, overload				
Ambient temperature range:	-20 ÷ 50°C		-20 ÷ 40°C	-20 ÷ 50°C	
Protection degree:	IP20				
Protection class:	II				
Dimensions:	128 x 50 x 13 mm		155 x 53 x 16 mm	184 x 61 x 32 mm	
Weight:	0,070 kg	0,075 kg	0,105 kg	0,270 kg	0,270 kg
Reference standard:	PN-EN 61204-3, PN-EN 55022, PN-EN 61000				

LED power supplies ZNS-12-24, ZNS-20-24, ZNS-30-24, ZNS-50-24, ZNS-75-24



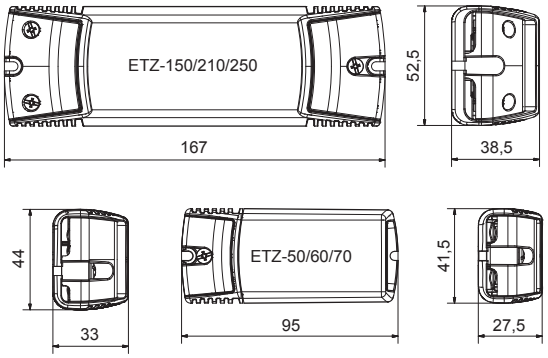
LED impulse power supplies ZNS series are intended to be used in household LED lighting installations. The modular design makes it easy and convenient for mounting on horizontal and vertical indoor surfaces. LED Power supplies are characterized by 24 V DC output voltage. They are offered in a wide range of output power (12 ÷ 75 W). Built-in safety features guarantee uninterrupted operation of all connected LED elements.

Technical data

Type:	ZNS-12-24	ZNS-20-24	ZNS-30-24	ZNS-50-24	ZNS-75-24
Output					
Voltage U_{out}:	24 V DC				
Nominal current:	0,5 A	0,83 A	1,25 A	2,10 A	3,10 A
Nominal power:	12 W	20 W	30 W	50 W	75 W
Voltage tolerance:	5%	5%	5%	5%	5%
Voltage pulsation:	600 mV	700 mV	700 mV	800 mV	500 mV
Transient response U_{out}:	500 ms				
Input					
Input rated voltage:	220 ÷ 240 V AC			100 ÷ 240 V AC	220 ÷ 240 V AC
Rated current:	0,13 A	0,13 A	0,18 A	0,60 A	0,45 A
Nominal frequency:	50 / 60 Hz				
Efficiency:	78 %	82 %	88 %	88 %	86 %
Power consumption – stand-by:	0,5 W				
Starting current:	10 A	8 A	10 A	15 A	10 A
Other					
Protections:	short circuit, overload				
Ambient temperature range:	-20 ÷ 50°C		-20 ÷ 40°C	-20 ÷ 50°C	
Protection degree:	IP20				
Protection class:	II				
Dimensions:	128 x 50 x 13 mm		155 x 53 x 16 mm	184 x 61 x 32 mm	
Weight:	0,070 kg	0,075 kg	0,105 kg	0,270 kg	0,270 kg
Reference standard:	PN-EN 61204-3, PN-EN 55022, PN-EN 61000				

ETZ50 / 60 / 70 / 105 / 150 / 210 / 250

Dimensions [mm]:



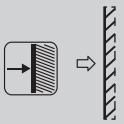
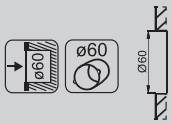
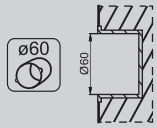
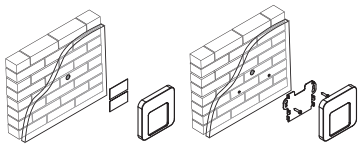
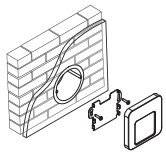
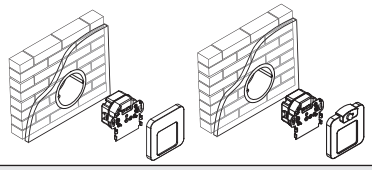
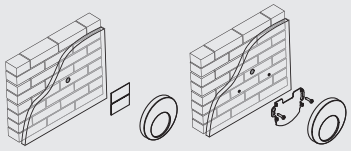
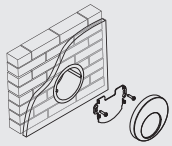
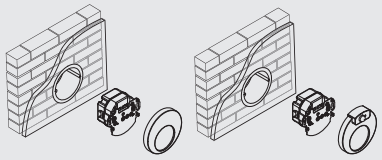
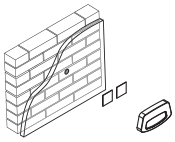
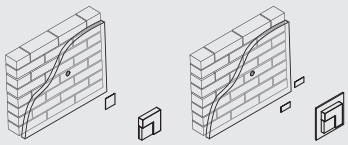
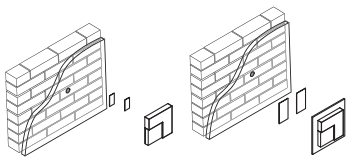
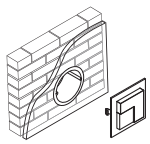
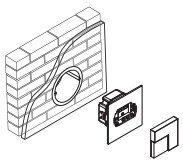
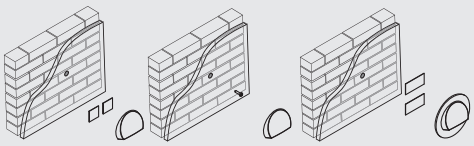
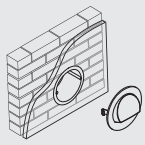
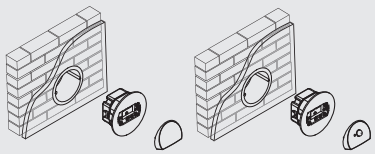
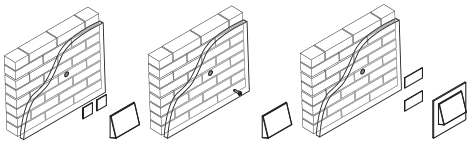
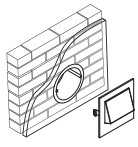
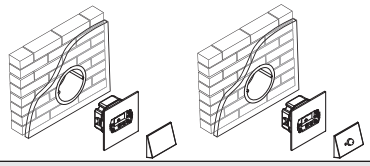
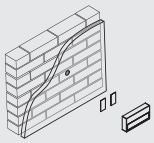
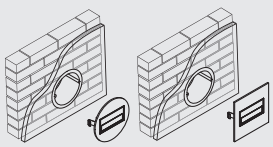
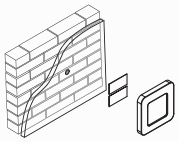
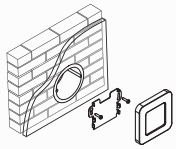
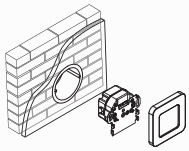
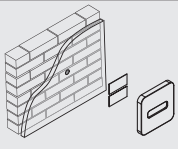
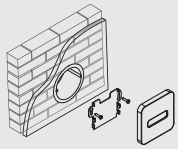
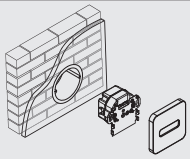
230V~ | 110 | IP20 | SELV

The transformers of the ETZ series are designed to cooperate with halogen light sources supplied with 12 V AC voltage. They are made in few versions depending on the nominal output power. A characteristic feature of ETZ series transformers is the possibility of supplying very low loads (0 W). These devices have a range of protections (against short circuit, overload, thermal) and patented solutions that prolong the lifespan of halogen bulbs cooperating with these transformers and improve the safe use of the devices. The ETZ series is designed for surface mounting. The connection is done by means of screw joints. This transformers can cooperate with intelligent types of lighting dimmers and have a range of certificates including German VDE certificate.

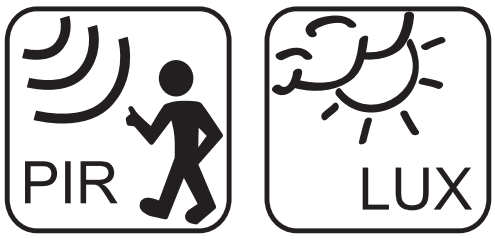
Technical data

Type:	ETZ50	ETZ60	ETZ70	ETZ105	ETZ150	ETZ210	ETZ250
Output							
Voltage U_{out}:	11,5 V AC						
Output power range:	0 ÷ 50 W	0 ÷ 60 W	0 ÷ 70 W	0 ÷ 105 W	0 ÷ 150 W	0 ÷ 210 W	0 ÷ 250 W
Nominal output current:	4,3 A	5,2 A	6 A	9,1 A	13 A	18,2 A	22 A
Power factor:	0,99						
Input							
Input rated voltage:	230 V AC						
Nominal frequency:	50 / 60 Hz						
Voltage tolerance:	-15% ÷ +10%						
Nominal input current:	0,22 A	0,27 A	0,32 A	0,46 A	0,65 A	0,93 A	1,1 A
Other							
Protections temperature:	yes - returning ≥100°C						
Short circuit protection:	yes - returning						
Overload protection:	yes > 200% nominal power						
Protection degree:	IP20						
Protection class:	II						
Ambient temperature range:	0 ÷ 40°C						
Cooperation with light dimmers:	yes – recommended types						
Weight:	100 g	100 g	100 g	125 g	212 g	225 g	225 g
Reference standard:	EN 61347-1, EN 61347-2-2, EN 61547, EN 55015, EN 61000-3-2, EN 60598						

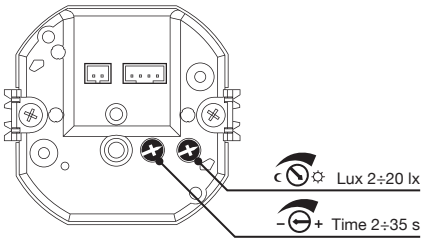
Mounting examples of LED lighting fittings

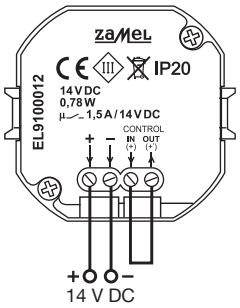
			
MOZA			
MUNA			
TERA			
TICO			
TIMO			
RUBI			
NAVI			
SONA			
TETI			
LAMI			

LED lighting fitting with motion and twilight sensors

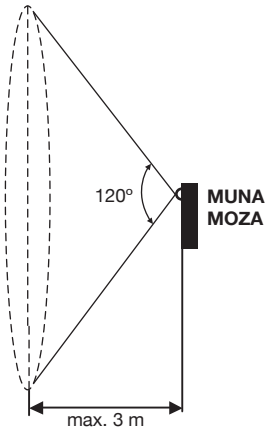


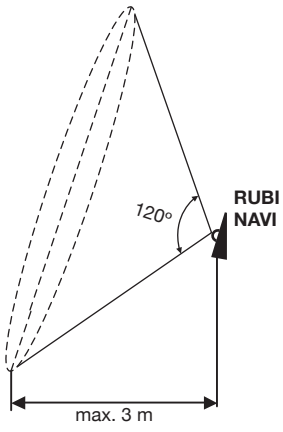
Some lighting fittings of the MUNA, MOZA, RUBI and NAVI series are equipped with a motion and a twilight sensor. The motion sensor is based on a PIR type component and enables to switch on the lighting fitting after motion has been detected in the sensor's detection field. It is switched on as long as the object remains in the operation field of the motion sensor. After the object has left the sensor's detection field, the lamp is still switched on for t=2÷35 seconds, it depends on the potentiometer's time adjustment. The twilight sensor switches on the fitting only at a specified luminous intensity. The twilight switch sensitivity can be adjusted in the range of 2÷20 lx by means of a Lux potentiometer, which enables to adjust precisely the „ twilight level". The selected lens is placed in a fitting in such a way, to ensure optimal motion detection and especially when we yese into account the specific mounting of lighting fittings in corridors and staircases. Motion is detected from the distance of 2÷3 meters off the lamp at the angle of 120º. The lighting fittings with a motion sensor are equipped with an additional dry contact normal open with a maximum capacity of 3 A. This makes the mounting of simple lighting control systems easy in corridors.





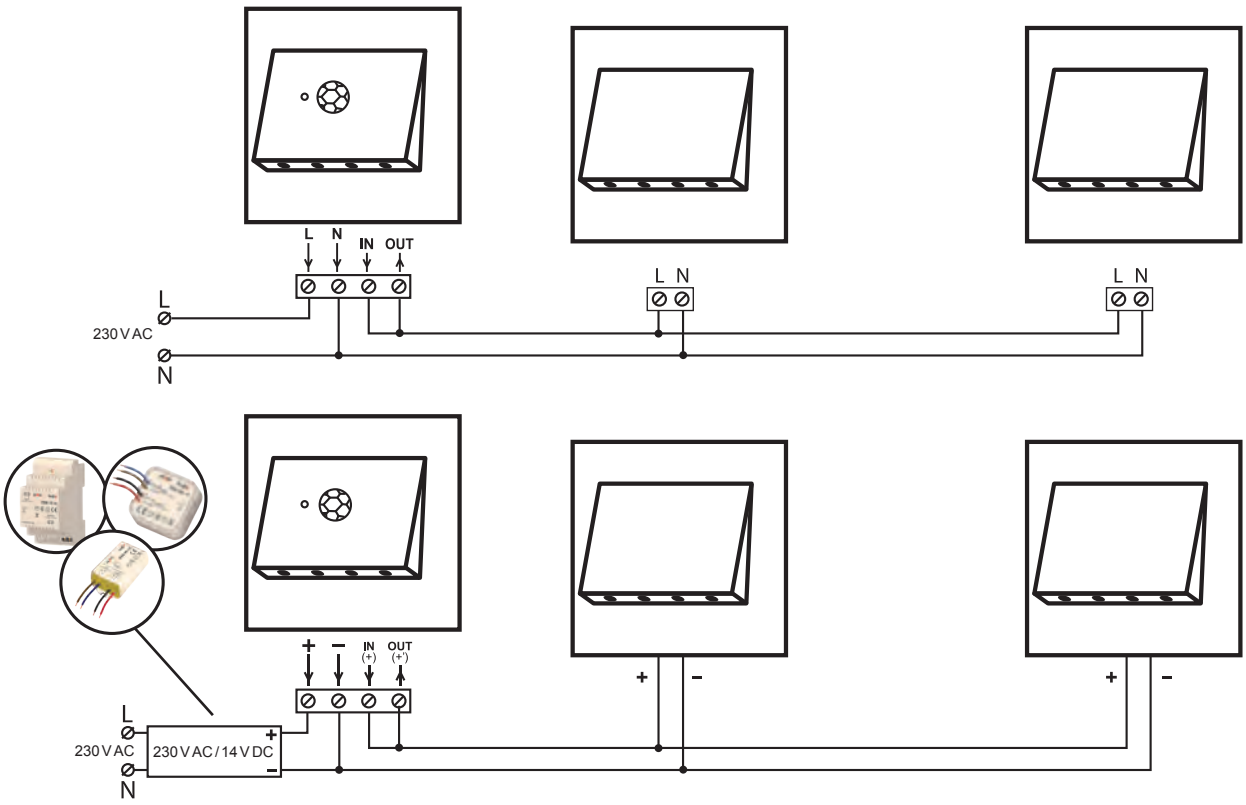
PIR sensor detection field



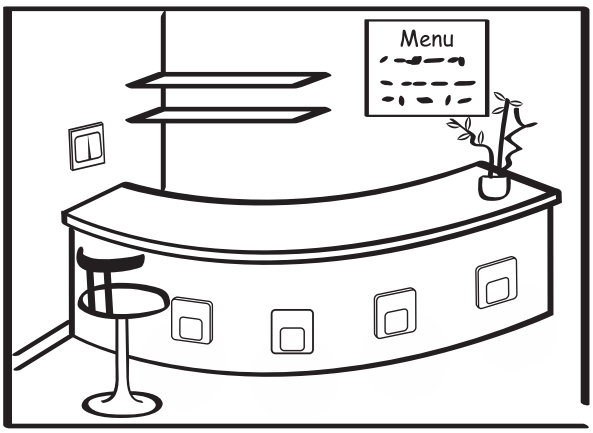


LED lighting fittings with motion sensor

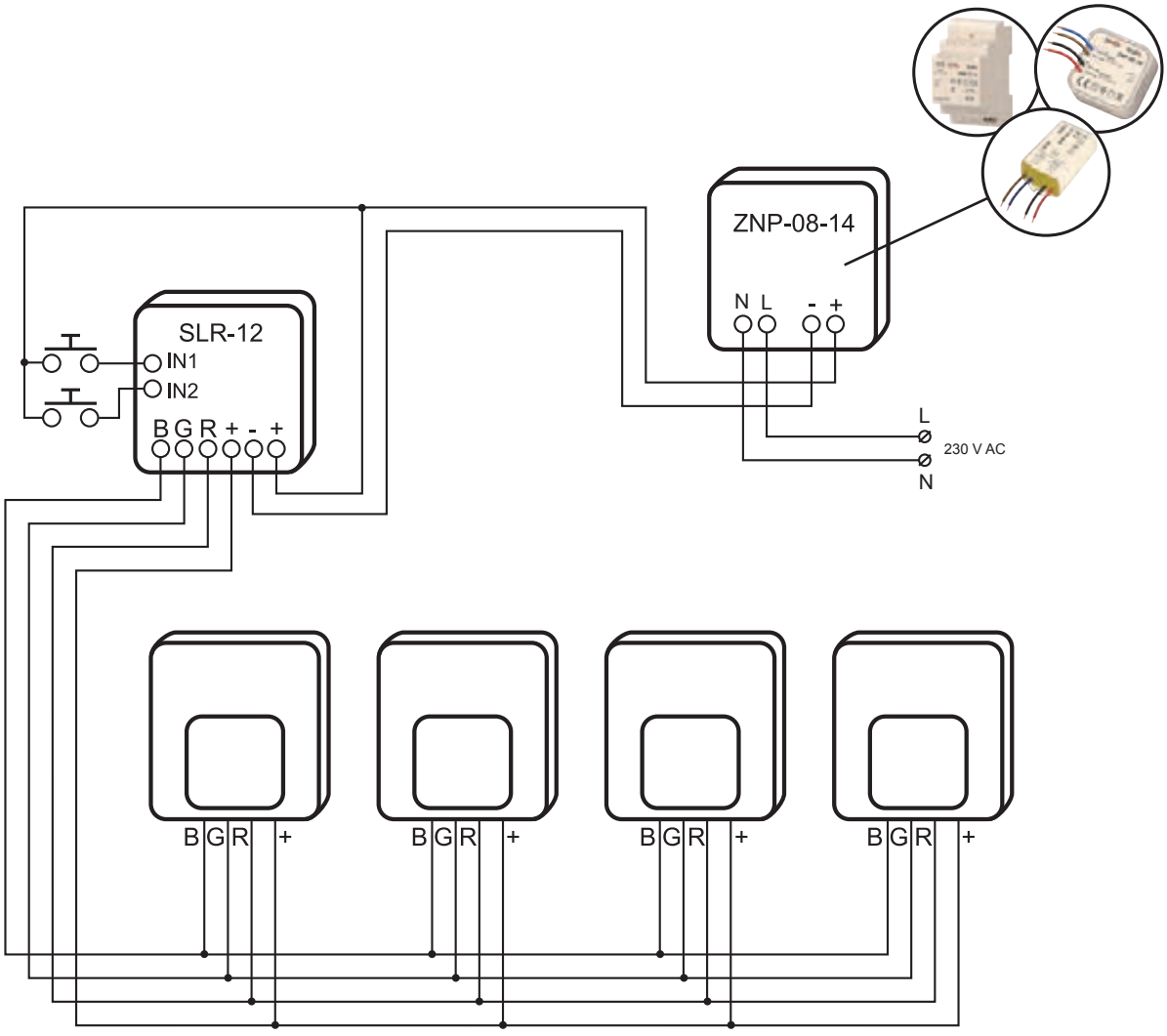
This application presents the use of the LEDIX series lighting fittings with a built-in motion sensor. The fitting with a motion sensor is mounted by the entrance door. After movement is detected, the light switches on in this and other fittings, which are supplied by an output contact normally open of a lighting fitting with a built-in motion sensor. Fittings can be supplied directly from the mains 230 V AC 50/60 Hz or by a 14 V DC power supply. The lighting is switched on as long as there is movement detection in the fittings' detection range. After there is no movement detected in its operation range the lighting is switched off after t=2÷35 s. time (dependent on the potentiometer's adjustment). The operation threshold of a twilight switch is adjusted between 2 ÷ 20 lx. It allows to adjust the dimming level the lighting switching will be switched on. Operation rule of two lighting fittings with motion sensor in one circuit on page 293.

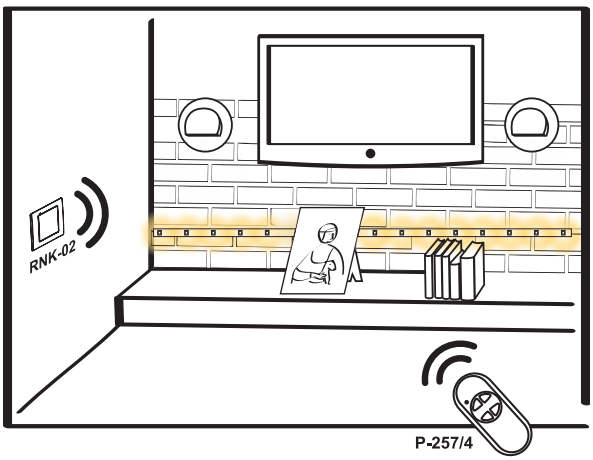


SLR-12 wired RGB controller + RGB LED lighting fittings of LEDIX series



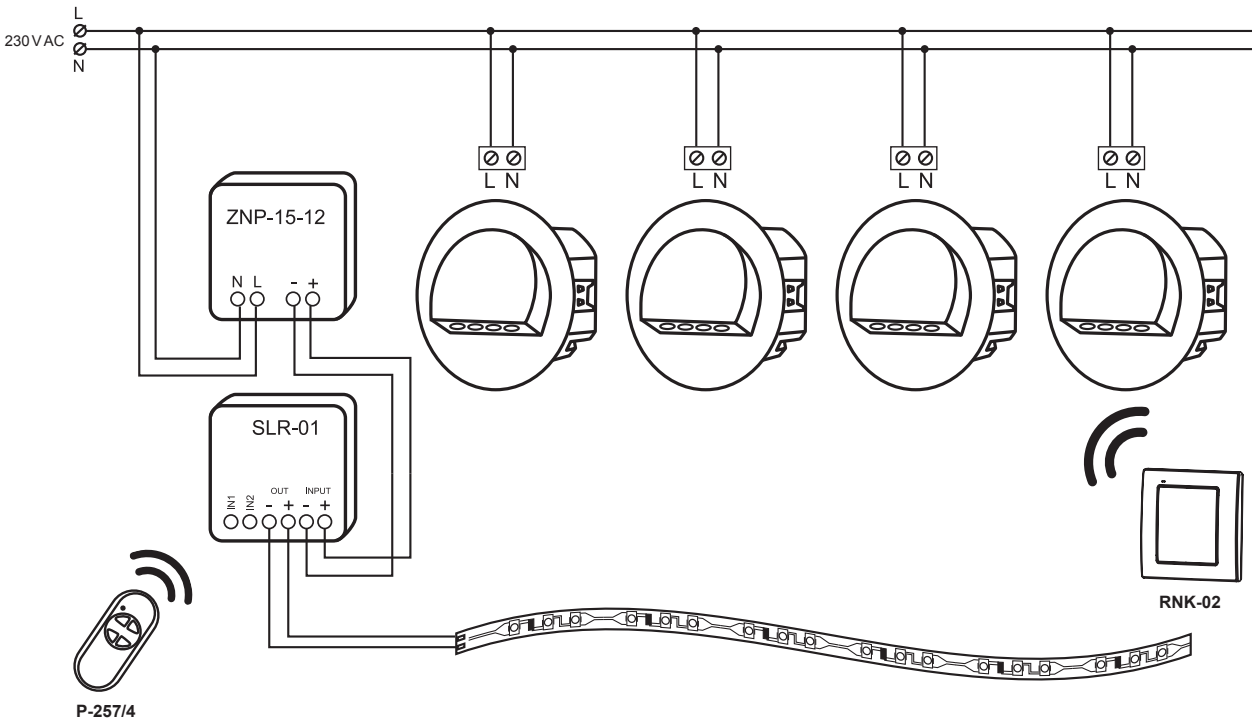
This application presents applications of the LEDIX lighting fittings with RGB diodes cooperating with a wired SLR-12 controller. 2 NO push button is connected to the controller. The push-button realizes the following functions: switching on/switching off the light, choosing 1 out of 10 colours included in the table range, brightening / dimming of a chosen colour. Additionally, it is possible to start the mode of a floating colour change (FLOATING). The RGB controller is supplied by means of ZNP-08-14 (14 V / 8 W) junction box power supply.



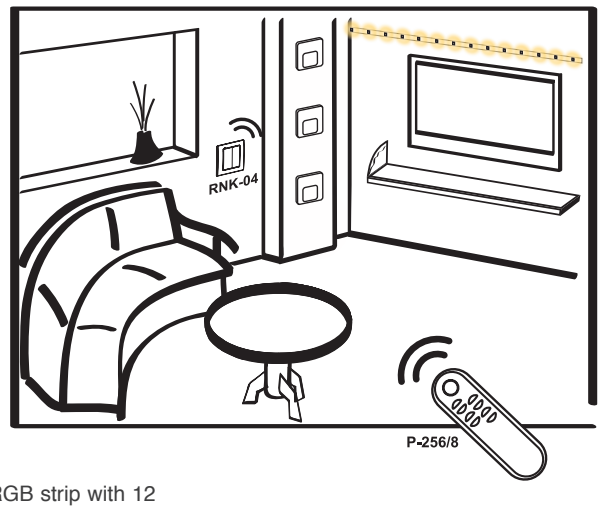


LED lighting fittings with a built-in radio receiver + SLR-01 controller

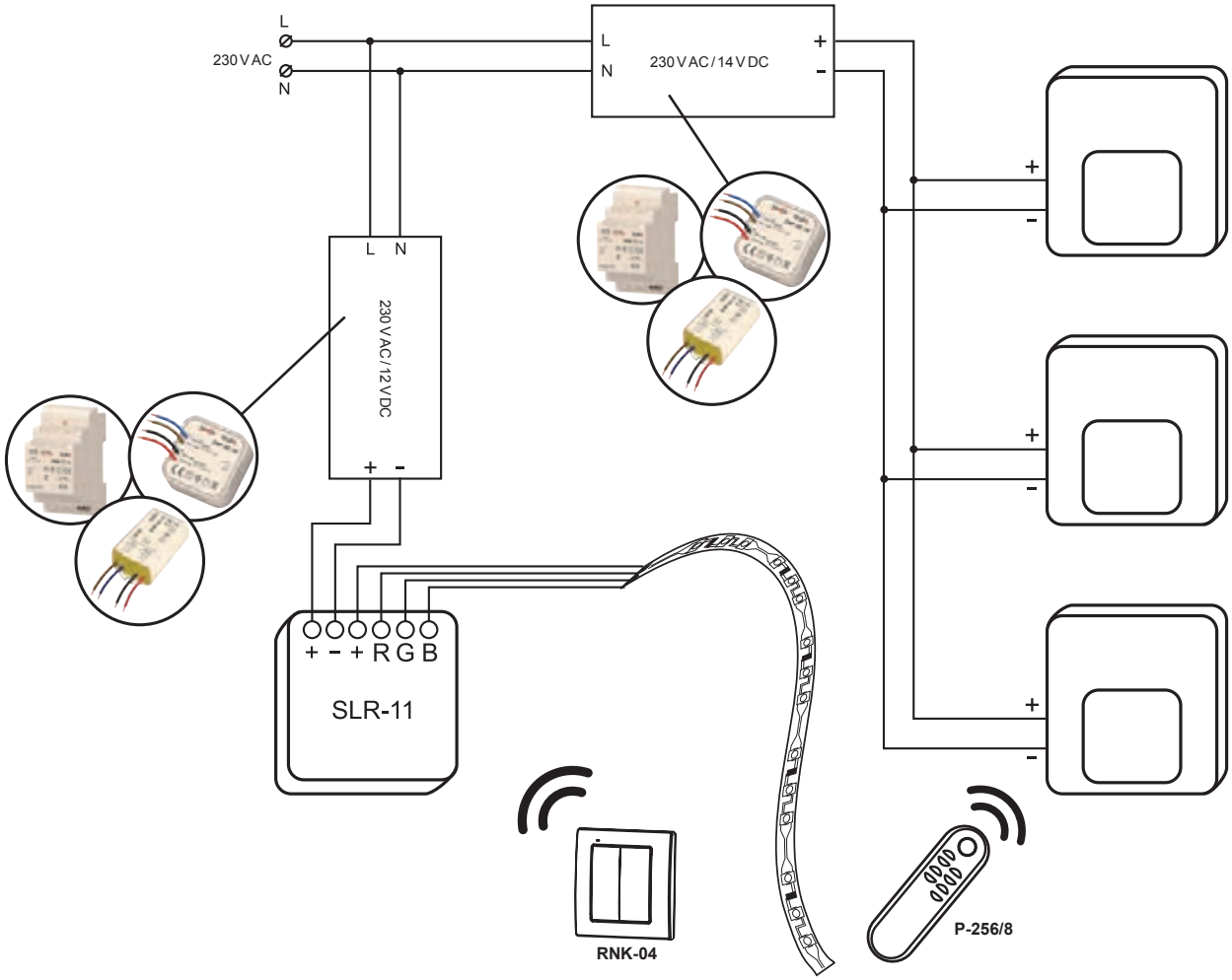
This application presents the use of the LEDIX series lighting fittings with a radio receiver and SLR-01 one-colour controller. The fittings (dependent on type) are supplied with voltage of 230 V AC 50/60 Hz or 14 V DC. They are switched on by means of RNK-02 wireless transmitter or by means of P-257/4 remote control (push buttons „1" and „2"). Push buttons „3" and „4" are added to SLR-01 controller and are used to control one-colour LED flexible strip supplied with 12 V DC voltage. The following functions are possible with the use of RNK-02 transmitter and P-257/4 remote control: switching on / switching off, brightening / dimming or time mode.

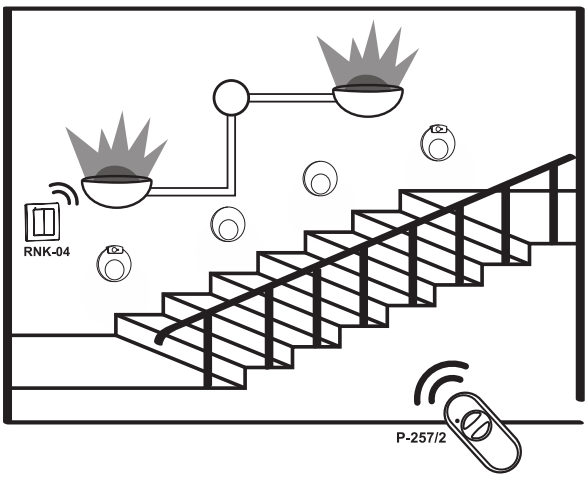


LED lighting fittings with RGB radio controller + SLR-11 controller



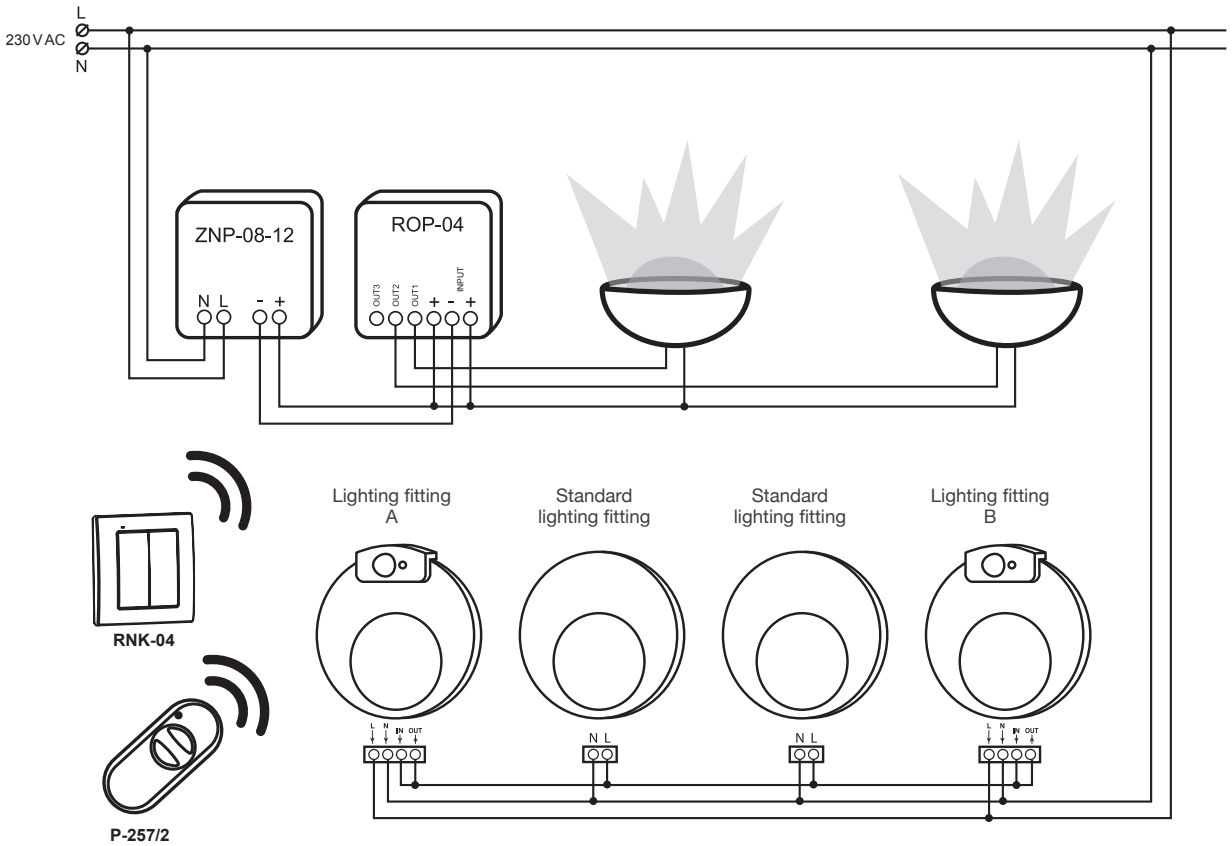
This application presents the use of the LEDIX series lighting fittings with RGB radio controller and RGB SLR-11 wireless controller. The lamps cooperate with P-256/8 remote control. It is possible by means of the remote control to switch on / switch off 1 out of 8 colours added to push-buttons 1÷8 or start the mode of floating (FLOATING) or strobe (STROBE) colour change. The fittings (dependent on type) can be supplied directly from the mains 230 V AC or by means of 14 V DC. RGB strip with 12 V DC voltage supply is connected to SLR-11 controller. The controller cooperates with RNK-04 push button transmitter, which enables to switch on / switch off, brighten / dim the RGB strip or start one out of two modes: FLOATING or STROBE. The controller is used to be mounted in a typical junction box Ø60 mm.



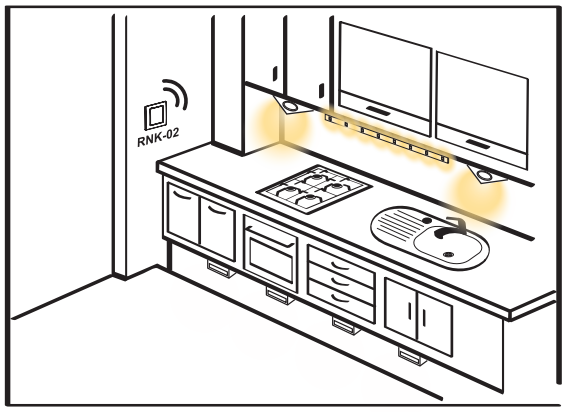


LED lighting fitting with motion sensor + ROP-04

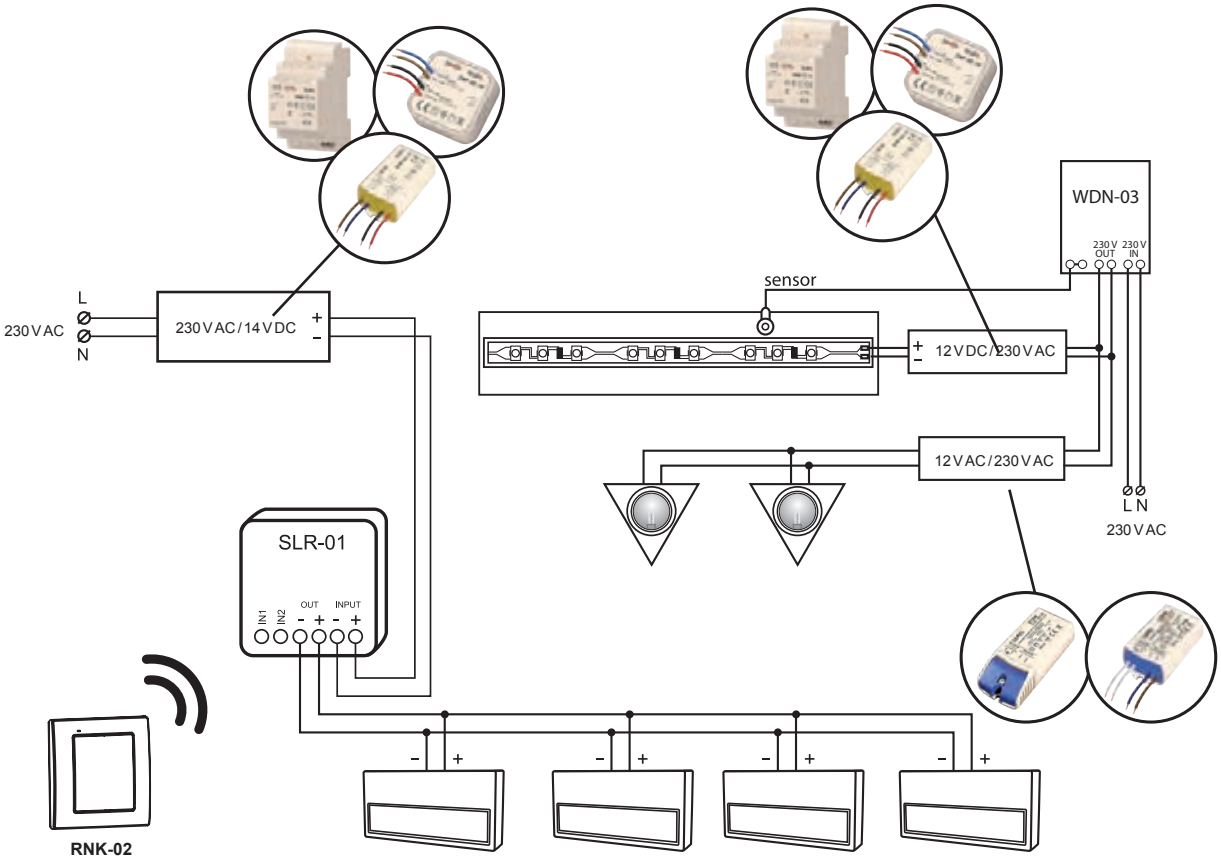
This application presents the use of the LEDIX series lighting fittings with a motion sensor and ROP-04 radio receiver. LED lighting lighting fittings with motion sensors are mounted at the beginning and at the end of staircases, whereas the other fittings in the staircases are supplied by the output contact (NO) lighting fitting with a motion sensor. If the luminous flux intensity is in accordance with the preset level, the motion detection in the detection field of “A” lighting fitting will cause its switching on as well as all other standard fittings. “B” lighting fitting is switched on after motion is detected in its operation field. After there is no more movement detection in “B” lighting fitting operation range the lighting remains switched on for a preset time (2 ÷ 35 sec.). Analogical and reversed sequence of steps will take place in case there is movement from lighting fitting “B” towards “A”. Two LED lighting fittings (12 V DC) are directly connected to ROP-04 radio receiver. Independent switching on /switching off of each is realised by means of RNK-04 wall transmitter or P-257/2 remote control. The receiver can be easily programmed for instance in time mode, with time 1 sec. ÷ 18 h, and at the same time obtain implementation of a staircase time delay switch function. The LEDIX series lighting fittings are supplied with 230 V AC 50/60Hz voltage. The ROP-04 receiver is supplied by means of a flush junction box power supply ZNP-08-12 (12 V/8 W).

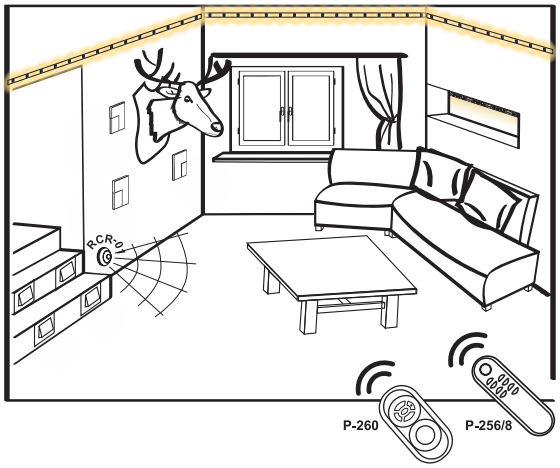


WDN-03 touch switch + SLR-01



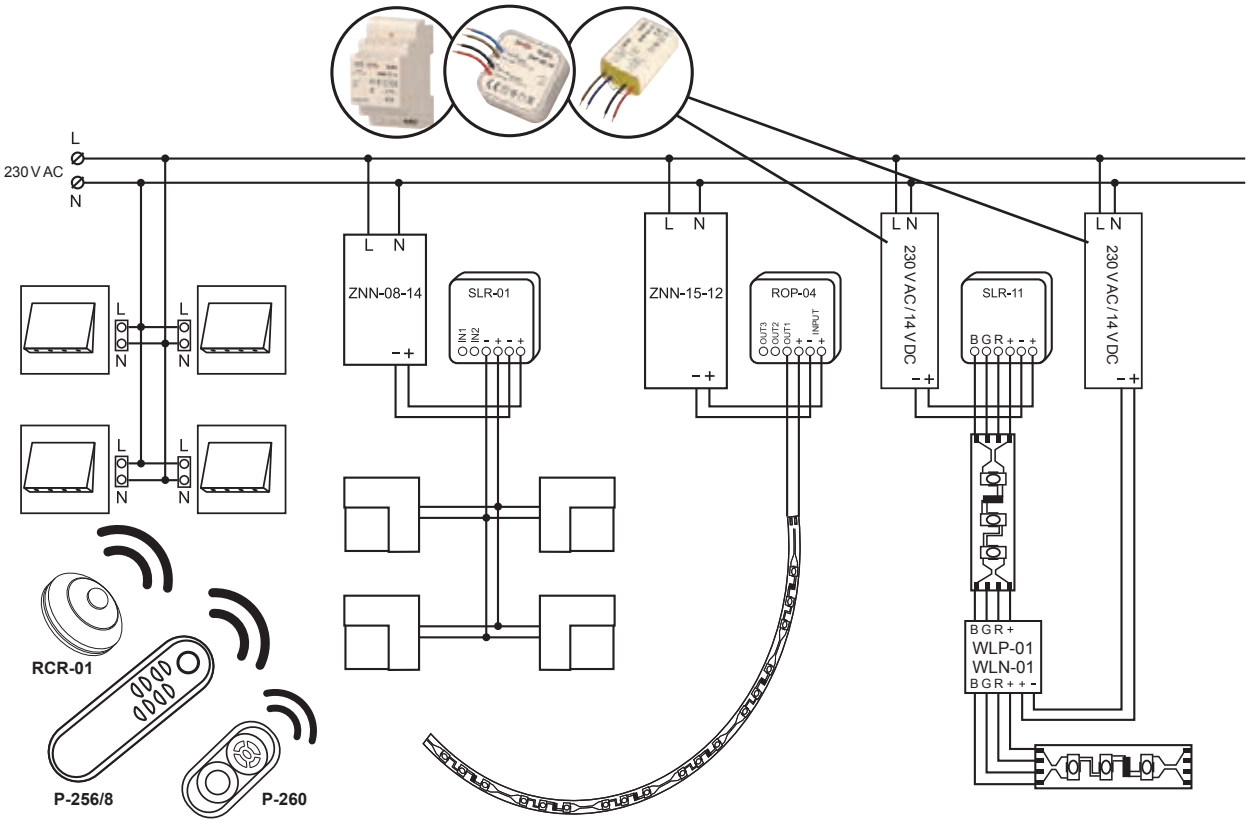
This application presents the use of WDN-03 touch switch and SLR-01 radio controller. The touch switch sensor is connected to a LED aluminium strip mounted under the upper kitchen wall cupboards. The LED tape is placed in the LED strip connected directly to LED power output (12 V DC). WDN-03 relay output switches on the spot-lighting of a halogen, which is supplied from an electronic transformer (ETZ or ETW series or LED power supply). Lighting switching on /switching off is realised by touching the LED aluminium strip. SLR-01 controller cooperates with LEDIX series lighting fittings placed under the furniture pedestal. Switching on/switching off is realised from RNK-02 radio transmitter. It is possible to brighten and to dim the light or to realise the time mode function with dimming by means of this transmitter. The fittings are mounted on a double-adhesive tape with 14 V DC voltage.



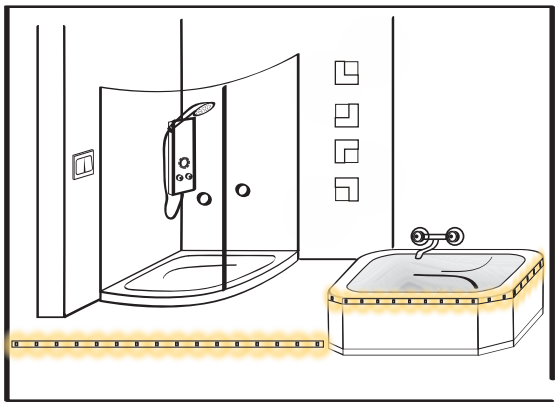


LED lighting fittings with a built-in radio receiver, SLR-01, ROP-04, SLR-11, P-260

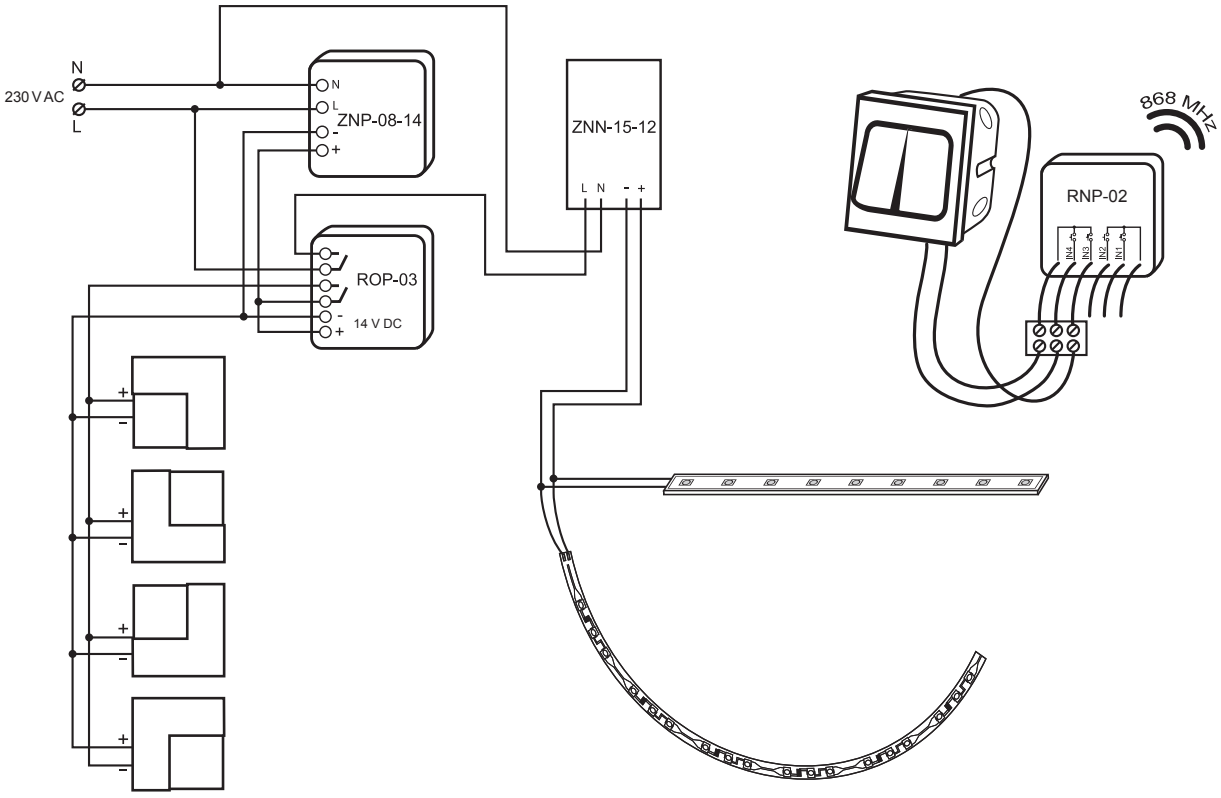
This application presents the use of the LEDIX series lighting fittings and a wide range of devices used to control lighting manufactured by the Zamel Company. The LEDIX fittings with built-in radio receiver are mounted in stair risers. They cooperate with RCR-01 radio motion sensor of the EXTA FREE system. TICO lighting fittings connected with SLR-01 one-colour controller are mounted on a wall. The controller cooperates with P-256/8 remote control - remote switching on/switching off, brightening / dimming, time mode function with switching off the lighting are possible. The P-256/8 remote control additionally cooperates with ROP-04 receiver. The LED flexible strip placed in a niche is connected to ROP-04. The P-260 remote control cooperates with RGB SLR-11 radio controller with connected RGB LED strip. The strip is placed around the ceiling on the length of several meters, and it is recommended to separate the strip (every 5 meters) by means of RGB amplifiers. Each amplifier has its own power supply system corresponding to the LED strip power supply. By means of the P-260 remote control it is possible to choose 1 out of 10 colours presented in a table or choose a colour in a floating way by means of a touch pad. It is also possible to choose FLOATING or STROBE modes, brighten / dim the previously chosen colour.

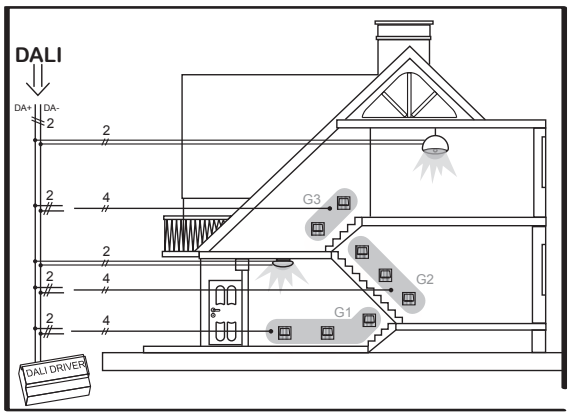


LEDIX LED lighting fittings + ROP-03



This application presents the use of the LEDIX series lighting fittings and the ROP-03 radio receiver. The LEDIX series fittings, supplied by means of ZNP-08-14 power supply, are connected to OUT1 output. A hermetic LED strip and a flexible LED strip (supplied by means of ZNN-15-12 power supply) are connected to OUT2 output. OUT1 and OUT2 outputs are switched on / switched off by means of 2NO push button cooperating with RNP-02 flush junction box battery transmitter. Time mode can be realized on each output, and this function allows to switch off the lighting automatically after the adjusted time is finished. Each output can be controlled separately. Other transmitters of the EXTA FREE system (e.g., portable remote controls) can be added to this receiver and their number should not exceed 32.





Extended installation - SDL-11 DALI controller

Standard LEDIX series lighting fittings with RGB LED diodes of 14 V DC are connected in following G1, G2, G3 groups. SDL-11 controller is assigned to each group. The controllers with main lighting at staircases and corridors are connected to a common DALI bus and cooperate with the central DALI (DALI DRIVER) control. The central controller enables the following functions: switching on, switching off, changing the fitting lighting level and control of the LEDIX series fittings. The realised function refers to all lighting fittings from the G1, G2 and G3 group. Additionally, the controller enables the control of other fittings on the bus. The use of SDL-11 (SDL-01) controllers allows easy integration of LEDIX fittings and other LED products with the already existing, extended installations based on DALI protocol. The above applies mainly to large public buildings: hotels, offices, hospitals.

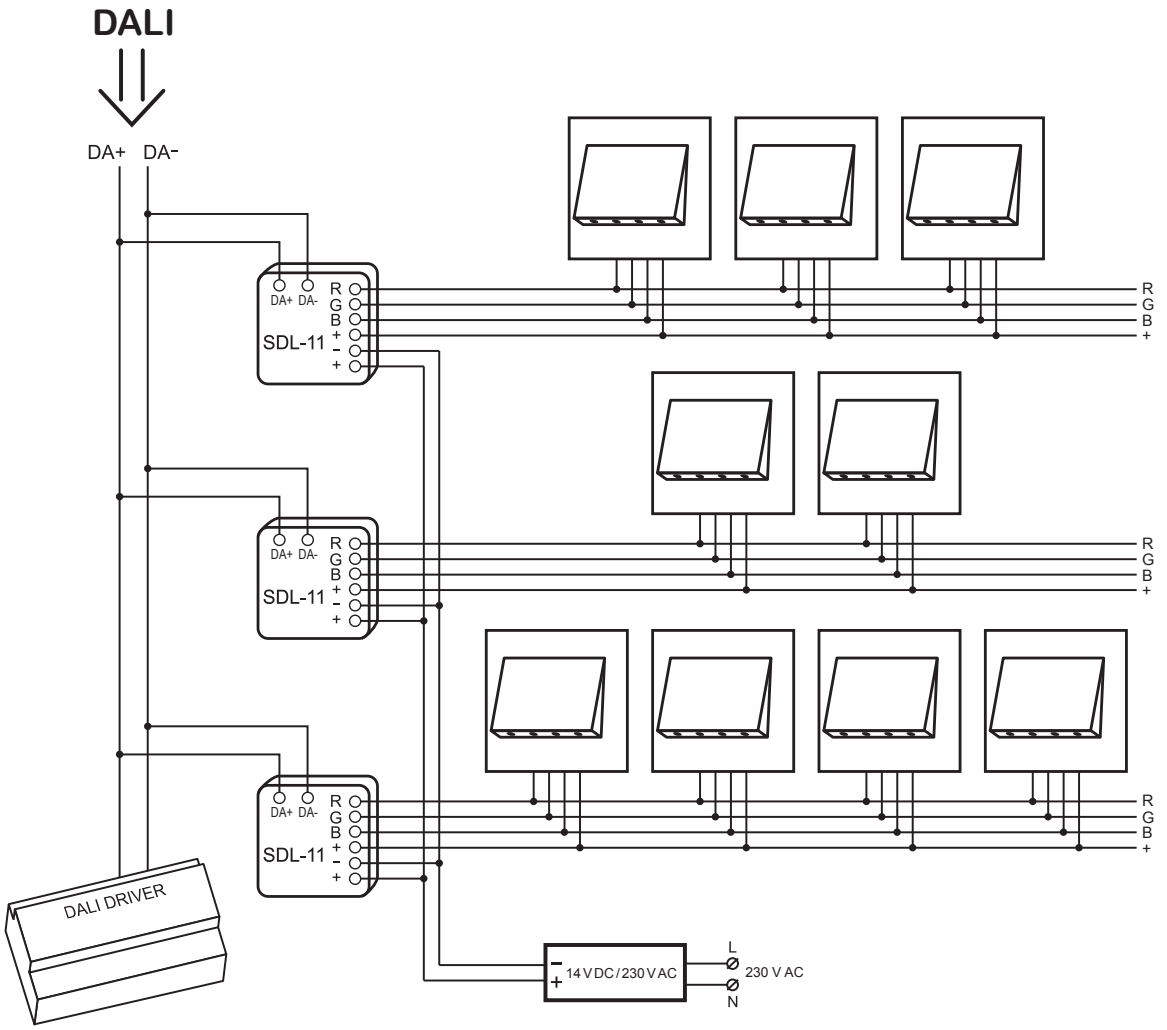


Table of ranges

Cooperation and operation range

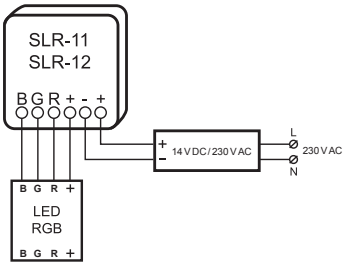
Symbol	SLR-01	SLR-11	ROP-03 ROP-04
RNK-02	180 m	180 m	200 m
RNK-04	180 m	180 m	200 m
P-256/8	230 m	230 m	250 m
P-257/2	180 m	180 m	200 m
P-257/4	180 m	180 m	200 m
RNM-10	230 m	230 m	250 m
RNP-01	160 m	160 m	180 m
RNP-02	160 m	160 m	180 m
RNL-01	160 m	-	180 m
RCR-01	160 m	-	180 m
RTI-01	160 m	160 m	180 m
RXM-01	230 m	230 m	250 m
P-260	-	200 m	-
RTN-01*	200 m	200 m	200 m

* It does not cooperate with P-260 remote control

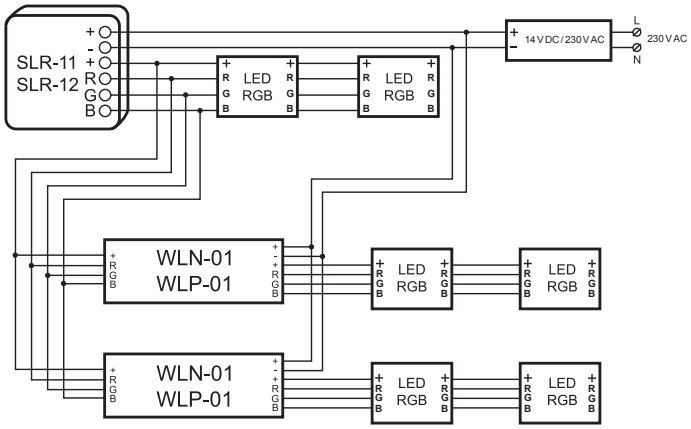
CAUTION: The given range concerns open area – an ideal condition without any natural or artificial obstacles. If there are some obstacles between a transmitter and a receiver, it is advisable to yese into account the range decrease with reference to the following: wood and plaster - from 5 to 20, bricks - from 10 to 40%, reinforced concrete - from 40 to 80 %, metal - from 90 to 100%, glass - from 10 to 20%. Over- and underground medium and high electrical power lines, radio and television transmitters, GSM transmitters set close to a device system have also a negative influence on the range. The operation range can be extended by 200 metres using RTN-01 retransmitter.

Connection examples of RGB controllers and amplifiers

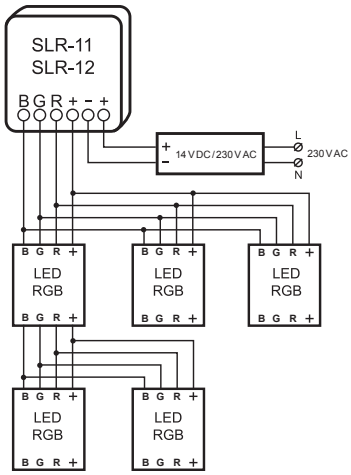
Connection of a single lighting fitting / RGB strip to SLR-11/12 controller.



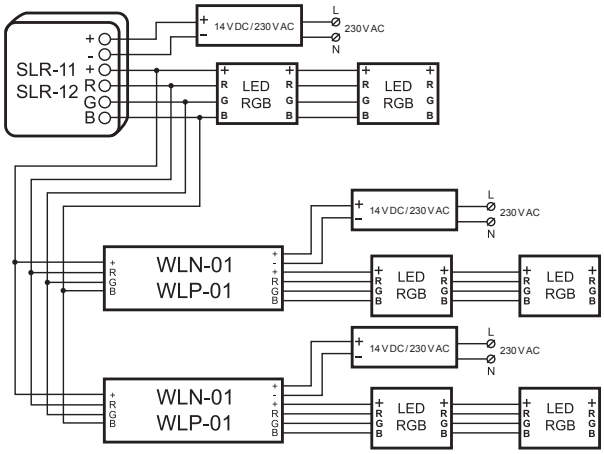
Connection of a lighting fitting / RGB strip to SLR-11/12 controller by means of RGB WLN-01/WLP-01 amplifiers – common supply of a controller and amplifiers.



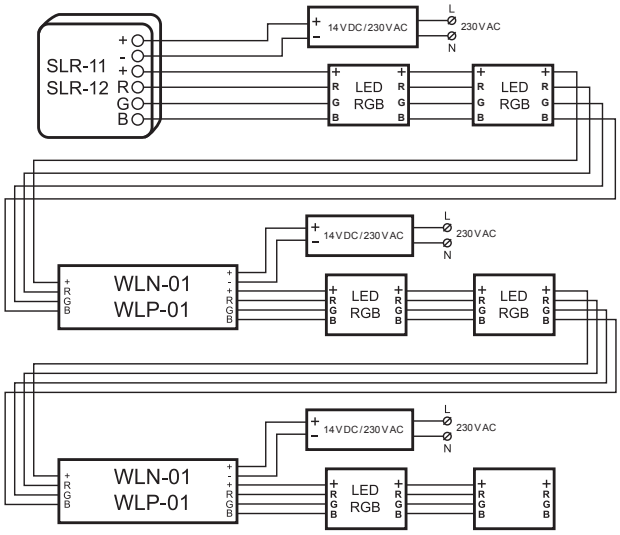
Connection of more than one lighting fitting / RGB item to SLR-11/12 controller.



Connection of a lighting fitting / RGB strip to SLR-11/12 controller by means of RGB WLN-01/WLP-01 amplifiers – individual supply of a controller and particular RGB amplifiers.



Connection of a lighting fitting / RGB strip to SLR-11/12 controller by means of RGB WLN-01/WLP-01 amplifiers – chain type installation



Numeration of articles for LED lighting fittings

XX-XXX-XX

SERIES

- 01 MOZA
- 02 MUNA
- 03 TERA
- 04 05 TICO
- 06 07 TIMO
- 08 09 RUBI
- 10 11 NAVI
- 12 13 14 SONA
- 15 16 LONG
- 17 TETI
- 18 LAMI

LIGHT COLOUR

- 1 Cold white
- 2 Warm white
- 7 Neutral white
- 6 RGB

LIGHTING FITTINGS COLOUR

1	2	3	4	5	6	7	8
Aluminum	Stainless steel	Graphite	Old gold	White	Black	Beige	Silver

FUNCTIONALITY

- 1 Standard
- 2 PIR LUX Built-in motion sensor
- 4 Built-in radio receiver
- 5 Built-in radio RGB controller

POWER SUPPLY

- 1 14V⎓ 14 V DC
- 2 230V~ 230 V AC
- 3 24V⎓ 24 V DC (selected LONG fitings)
- 4 12V⎓ 12 V DC

MOUNTING

- 1 Surface
- 2 ø60 ø60 Flush
- 3 ø68 Flush

Pictogram description

Supply voltage: 14 V DC

Supply voltage: 10 ÷ 14 V DC

Supply voltage: 12 ÷ 24 V DC

Supply voltage: 10 ÷ 48 V DC

Supply voltage: 24 V DC

Supply voltage: 230 V AC

Battery powered: 3 x AAA battery

Protection class: I

Protection class: II

Protection class: III

Installation allowed on materials with unknown flammability

Thermal protection against temperature above 110°C

Casing equipped with built-in LED power stabilization system

Independent converter - an electronic transformer with a possibility to use without the lighting set

Safety transformer resistant to short-circuit (direct or indirect)

Voltage present in the circuit, supplied from safety voltage source without PE (ground)

Mounting– indoor only

Mounting – protection level suitable for outdoor application

The device is mounted on a TH-35 DIN rail

Surface installation

Recessed installation in a hole of Ø60 mm

Installation in a junction box of Ø60 mm

Maximum cross-section of connecting cables: up to 2,5 mm²

LED number making up light source two, four, six

Casing with RGB diodes

Casing with no RGB controller

Built-in PIR motion sensor

Built-in twilight switch

Built-in radio receiver co-operating with EXTA FREE transmitters

Built-in radio controller RGB

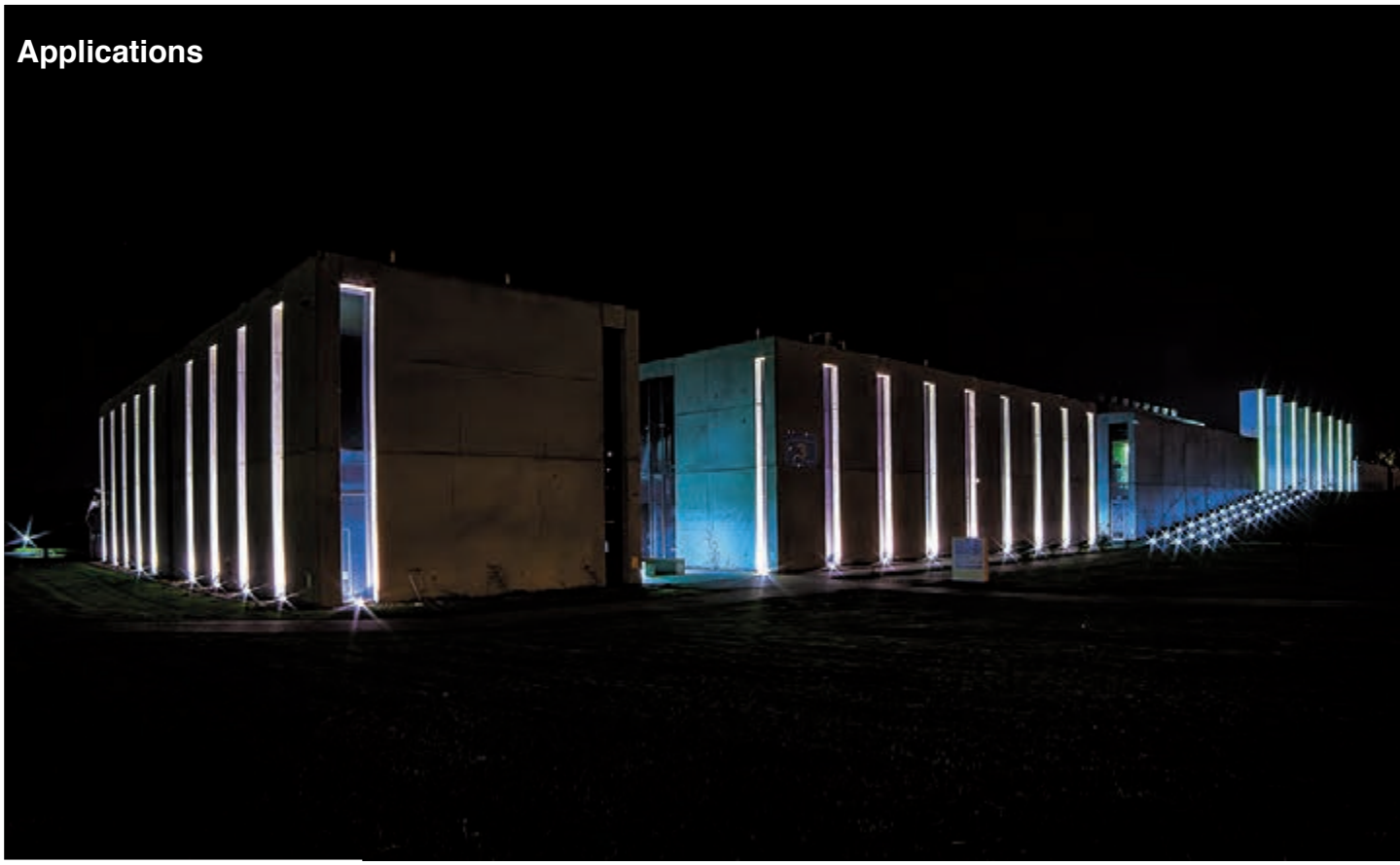
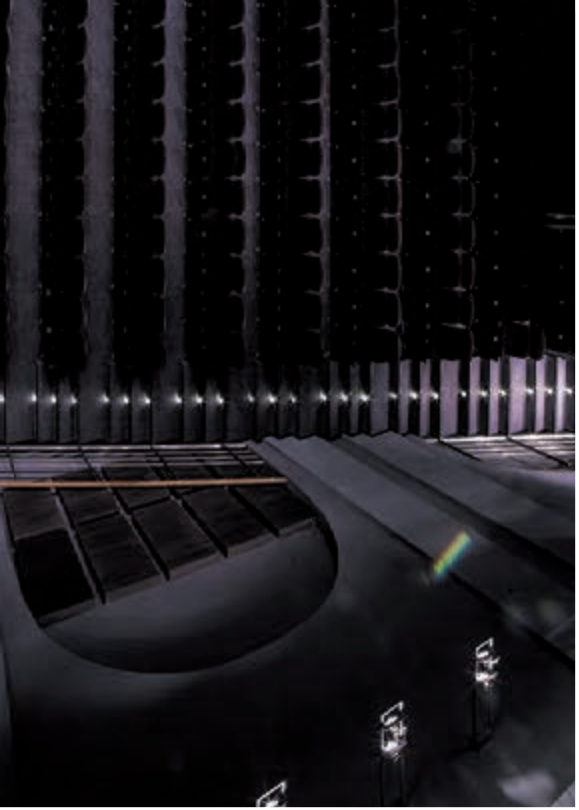
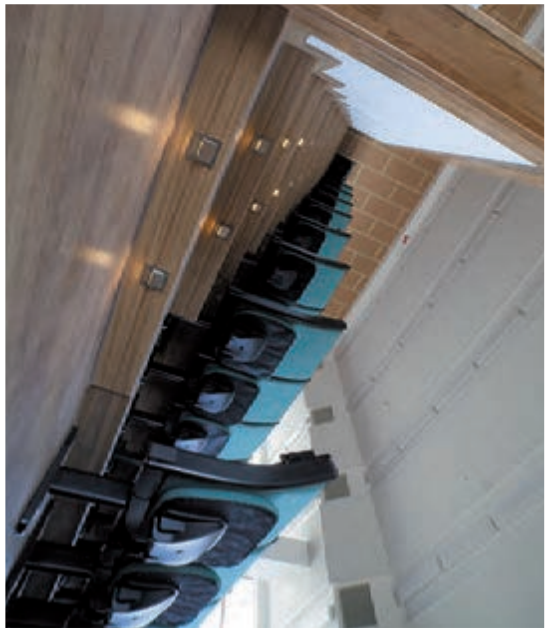
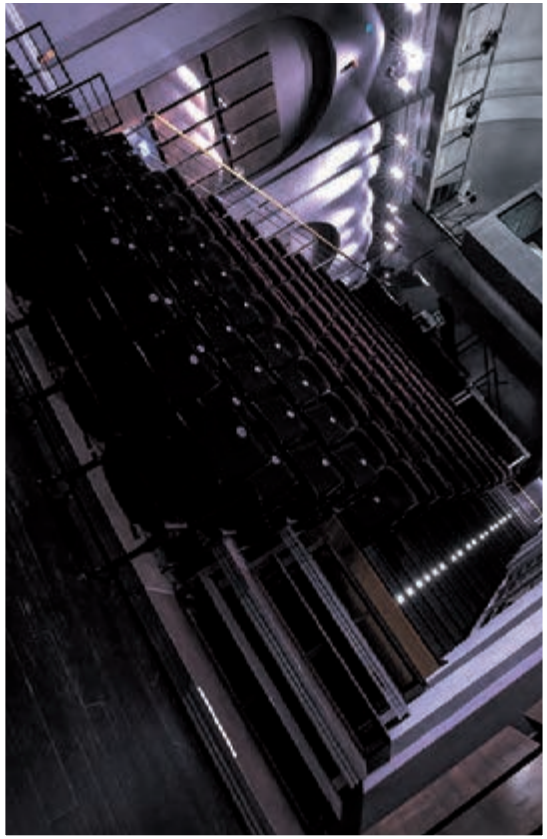
Brightening/dimming functions

Device tested in accordance with electromagnetic compatibility

Cooperation with EXTA FREE transmitters

Protection degree IP20 – no protection against water penetration, protection against solid penetration of 12,5 mm diameter or bigger

Protection degree IP44 - protection against rain

Protection degree IP56 – protection against dust and heavy water jets - minimum IP56 connection is required

Applications