

REDUCE LIGHT POLLUTION AND ENERGY CONSUMPTION SIMULTANEOUSLY. ESY!

ACHIEVING ENVIRONMENTALLY FRIENDLY LIGHTING THROUGH INTELLIGENT CONTROL

Increasing levels of lighting during the night is a growing environmental issue around the world. It also attracts millions of insects, which circle around the light endlessly, often driving them to exhaustion and death.

Demand-driven control of outdoor lighting automatically reduces this problem – and simultaneously saves energy. Ideal for use with the intelligent automation and lighting solutions from ESYLUX.

PERFORMANCE FOR SIMPLICITY

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LIGHTING AND ENERGY ONLY WHEN IT'S NEEDED INTELLIGENT AUTOMATION AND LIGHTING FOR OUTDOOR AREAS

EXAMPLES OF THE PROBLEM

- · Artificial light at night attracts a lot of insects, often with a fatal outcome
- The light pollution contributes to the death of insects with far-reaching consequences for the ecosystem - and therefore also for people
- According to a study from the University of Bern, it reduces insect pollination by 62 %
- It makes it difficult for fireflies to find a partner (see above) and therefore threatens their existence

THE MAIN COUNTERMEASURES

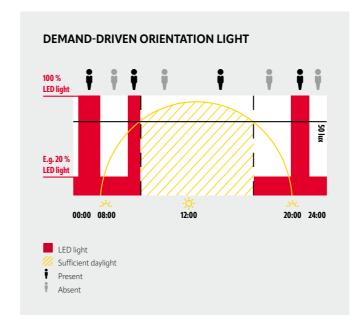
- · Automatically switching lighting on and off, and only when it's needed
- · Reduction of light intensity to a minimum
- · No beams of light directed upwards
- · Advanced protection types prevent insects from getting inside luminaires and being killed
- · Only installing as much lighting as is needed
- Lighting that tends to have a lower blue light content
- More important than the colour temperature: switching off or dimming!

SOLUTION A

CONTROLLING THE ALVA SERIES USING AN INTEGRATED SENSOR SYSTEM

The ideal lighting for nature is no artificial light - or at least artificial light dimmed to a very low level. An ideal solution: ALVA bollard lights with an integrated DALI motion detector.

- Lighting only when it's needed via demand-driven control
- · Optional dimmed orientation light for low brightness when no people are present
- · Variants with transparent diffuser (beam only directed downwards)
- Protection type IP65
- ON/OFF luminaires can be integrated via switch actuator



SOLUTION B

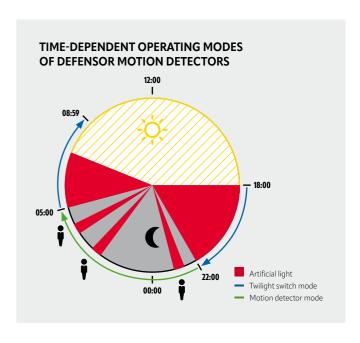
CONTROLLING THE ALVA SERIES VIA A SEPARATE SENSOR SYSTEM (RC, DEFENSOR, MD-W)

The classic alternative is demand-driven switching of lighting via separate outdoor motion detectors. The luminaire is then energy-efficient as it is only active when movement is detected and is not therefore attracting insects at all times.

Those looking to ensure suitable lighting early in the morning and evening can use the time-dependent operating modes of the DEFENSOR motion detectors. Luminaires only come on at night when there is movement:

- In the morning and evening when in twilight switch mode
- Between 10 pm and 5 am when in motion detector mode





SOLUTION A

CONTROL VIA AN INTEGRATED SENSOR SYSTEM: DALI SOLUTION WITH BOLLARD LIGHTS FROM THE ALVA SERIES

ALVA SERIES

- · Protected against sea air, robust and dirt-resistant
- Variants with integrated motion detectors feature orientation light and twilight switch functions
- Motion detectors for the energy-efficient control of other luminaires and switch actuators



Suggested combination 1

ALVA 940/170 360° 3000K with and without motion detector

Product name	Item no.		
ALVA BL 940/170 TR 360° 1000 830 MD IR DALI AN	EL10820403		
ALVA BL 940/170 TR 360° 1000 830 DALI AN	EL10820205		



Suggested combination 2

ALVA 940/170 360° 4000K with and without motion detector

Product name	Item no.
ALVA BL 940/170 TR 360° 1200 840 MD IR DALI AN	EL10820427
ALVA BL 940/170 TR 360° 1200 840 DALI AN	EL10820229



Suggested combination 3

ALVA 700/100 360° 3000K with and without motion detector

Product name	Item no.
ALVA BL 700/100 TR 360° 500 830 MD IR DALI AN	EL10821172
ALVA BL 700/100 TR 360° 500 830 DALI AN	EL10821257



Suggested combination 4

ALVA 940/170 180° 3000K with and without motion detector

Product name	Item no.
ALVA BL 940/170 TR 180° 600 830 MD IR DALI AN	EL10820922
ALVA BL 940/170 TR 180° 600 830 DALI AN	EL10820762

Find additional combination options and ON/OFF luminaires that can be controlled by DALI actuators in the product section of the ESYLUX website!

Produc	ct group / product name	Item no.	
Access	Accessories		
1	ESY-Pen	EP10425356	
To the same of	REMOTE CONTROL PDi DALI	EP10425899	
(T)	ACTUATOR FULL AUTO C3 DALI	EP10427473	
	ACTUATOR SEMI AUTO C4 DALI	EP10427480	
V	ALVA GROUND SPIKE 100	EL10820182	
T	ALVA GROUND SPIKE 170	EL10820199	

SOLUTION B

CONTROL VIA A SEPARATE SENSOR SYSTEM: ON/OFF SOLUTION WITH ALVA, RC, DEFENSOR, MD-W

RC, DEFENSOR, MD-W SERIES

- A wide range of designs for various requirements
- RC and DEFENSOR with creep protection
- DEFENSOR with special functions for increased level of building safety (e.g. time-dependent operating modes)



Suggested combination 1

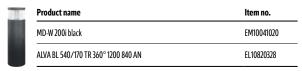
DEFENSOR MD 280° motion detector + ALVA 940/170 360° 3000K

Product name	Item no.
DEFENSOR MD 280° 40 IR 1C IP55 AN	EM10025402
ALVA BL 940/170 TR 360° 1000 830 AN	EL10820007



Suggested combination 2

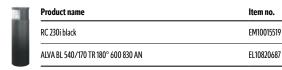
MD-W motion detector + ALVA 540/170 360° 4000K





Suggested combination 3

RCi motion detector + ALVA 540/170 180° 3000K





Suggested combination 4

DEFENSOR MD 230° motion detector + ALVA 700/100 360° 3000K

Product name	Item no.
DEFENSOR MD 230° 40 IR 1C IP55 AN	EM10025389
ALVA BL 700/100 TR 360° 500 830 AN	EL10821134

Find additional combination options, including different housing colours, in the product section of the ESYLUX website!

Product	Product group / product name		Item no.	
Accesso	Accessories			
1	ESY-Pen		EP10425356	
	RC REMOTE CONTROL		EM10016004	
1	REMOTE CONTROL USER		EM10016011	
	DEFENSOR REMOTE CONTROL	NEW	EM10025501	
-	DEFENSOR REMOTE CONTROL USER		EM10025495	
V	ALVA GROUND SPIKE 100		EL10820182	
V	ALVA GROUND SPIKE 170		EL10820199	