	$\epsilon$
X	7
X	2

GNALS —		
The ORANGE LED flashes every second.	The sensor goes into security mode.	1 Cut and restore power supply.
The ORANGE LED flashes 1 x.	The sensor signals an internal fault.	1 Cut and restore power supply. 2 If orange LED flashes again, replace sensor.
The ORANGE LED flashes 2 x.	Irregularities in the power supply	1 Check power supply. 2 Check wiring.
The ORANGE LED flashes 4 x.	The sensor receives not enough IR-energy.	<ol> <li>Use the 1 m prism if possible.</li> <li>Check the angle of the IR-curtains.</li> </ol>
The ORANGE LED flashes 5 x.	The sensor receives too much IR-energy.	<ol> <li>Use a low energy prism if possible.</li> <li>Check the angle of the IR-curtains.</li> </ol>
The ORANGE LED flashes 6 x.	The radar sensor output is faulty.	1 Replace sensor.
The ORANGE LED flashes 7 x.	The sensor is disturbed.	1 Change radar antenna angle.
	The radar sensor encounters a hardware problem.	1 Replace sensor.
The ORANGE LED is on.	The sensor encounters a memory problem.	Cut and restore power supply.  If orange LED lights up again, replace sensor.
The RED LED flashes quickly after an assisted setup.	The sensor sees the door during the assisted setup.	1 Check the angle of the IR-curtains. 2 Launch a new assisted setup. Attention: Do not stand in the detection field!
The RED LED lights up sporadically.	The sensor vibrates.	<ol> <li>Check if the sensor is fastened firmly.</li> <li>Check position of prism and cover.</li> </ol>
	The sensor sees the door.	1 Launch an assisted setup and adjust the IR angle.
	The sensor is disturbed by lamps or another sensor.	1 Choose a different frequency by remote control.
	The sensor is disturbed by the rain.	1 Increase the IR-immunity filter to value 2 or 3.
The GREEN LED lights up sporadically.	The sensor is disturbed by rain and/or leaves.	1 Increase radar-immunity filter by remote control.
	Ghosting	1 Change radar antenna angle.
	The sensor vibrates.	<ul><li>Check if the sensor is fastened firmly.</li><li>Check position of cable and cover.</li></ul>
	The sensor sees the door	Remove the objects if possible.

BEA SA | LIEGE Science Park | ALLÉE DES NOISETIERS 5 - 4031 ANGLEUR [BELGIUM] | T +32 4 361 65 65 | F +32 4 361 28 58 | INFO@BEA.BE | WWW.BEA.BE



■ BEA hereby declares that the ACTIV8 THREE PULSE is in conformity with the basic requirements and the other relevant provisions of the directives 1999/5/EC, 2004/108/EC and 2006/42/EC. Notified Body for EC inspection: 0044 - TÜV NORD CERT GmbH, Langemarckstr. 20, D-45141 Essen Angleur, November 2010 Jean-Pierre Valkenberg, Authorized representative The complete declaration of conformity is available on our website: www.bea.be

or other moving objects.



Only for EC countries: According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment (WEEE)

Change radar antenna. 3 Change radar field size (sensitivity). Please keep for further use Designed for colour printing

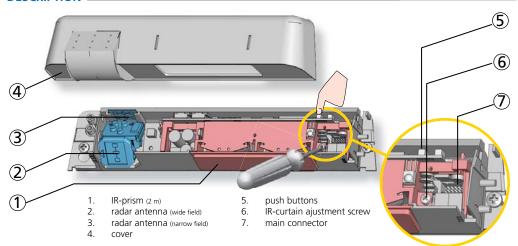
# **ACTIV8 THREE PULSE**



Other use of the device is outside the permitted purpose and can not be guaranteed by the manufacturer. The manufacturer cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.

Opening & safety sensor for automatic sliding doors in escape routes

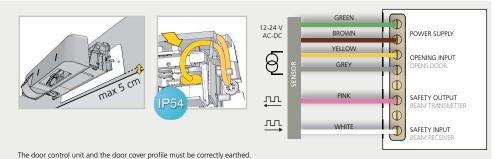
### **DESCRIPTION**



## **TECHNICAL SPECIFICATIONS**

Supply voltage:	12 V - 24 V AC +/-10% ; 12 V - 30 V DC -5	5%/+10% (to be operated from SELV compatible power supplies only)	
Power consumption:	< 3 W		
Mounting height:	1.8 m to 4 m (< 3 m to enable DIN 18650-conformity)		
Temperature range:	-25 °C to +55 °C		
Degree of protection:	IP54		
Expected lifetime:	5 years		
Norm conformity:	R&TTE 1999/5/EC; EMC 2004/108/EC; ME EN ISO 13849-1:2008 Performance Level « (under the condition that the door control system monitors)	d» CAT. 2	
Detection mode:	Motion Min. detection speed: 5 cm/s	Presence Typical response time: <128 ms (max. 500 ms)	
Technology:	Microwave doppler radar Transmitter frequency: 24.150 GHz Transmitter radiated power: < 20 dBm EIRP Transmitter power density: < 5 mW/cm2	Active infrared with background analysis Spot diameter: 0.1 m (typ) Number of spots: 24 or 12 by curtain Number of curtains: 2	
Angle:	From 15 ° to 50 ° vertical (adjustable)	From -4 ° to +4 ° (adjustable)	
Hold time output signal:	0.5 s to 9 s (adjustable)	0.3 s to 1 s (not adjustable)	
Output/Input:	Potential linked current source No detection: current source ON Max. open circuit voltage: 6.5 V Output voltage available at 10 mA: 3 V min. Typical load: up to 3 optocouplers in series Detection: current source OFF Leakage current: < 100 µA Open-circuit remained voltage: < 500 mV	Transistor (NPN open collector) requiring ext. pull-up resistor Max. output current: 25 mA Max. switching power: 40 V DC Max. pulse amplitude (detection state or fail state): 0,8 V Input Impedance: 100 k $\Omega$ Max. input voltage: 30 V DC External pull-up resistor: $<$ 470 $\Omega$ (check compatibility) Min. Pulse amplitude (Vpp): $>$ 50% of sensor supply voltage Max. Pulse duration: 100 µs @ 25 mA output current	
Specifications are subject to change All values measured in optimal condi		Min. time interval between pulses: > pulse duration	

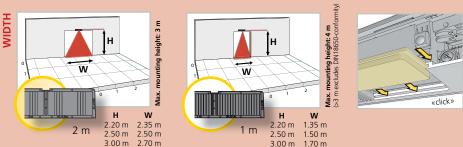
## **MOUNTING & WIRING**



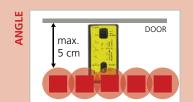
**RADAR FIELD - OPENING IMPULSE** ANGLE WIDTH 2.2 m 2.2 m 2.2 m 29  $\mathbf{Z}$ 4 m x 2 m 2 m x 2.5 m

## **INFRARED FIELD - SAFETY**

The width of the radar field varies according to the mounting height of the sensor.



Detection field width indicated according to conditions defined in DIN 18650 and including dimension of test body CA.

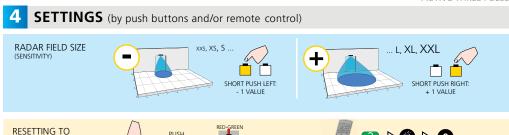


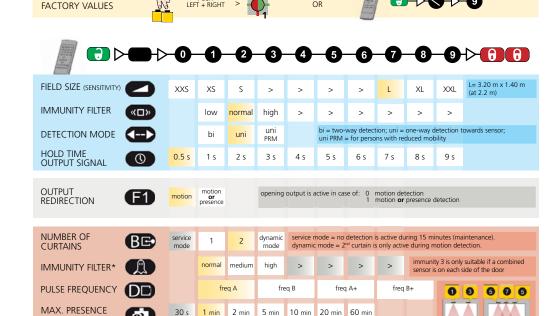
Check position of IR-curtains with Spotfinder and adjust if necessary.

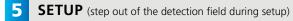




TIP: Launch an ASSISTED SETUP to verify wiring, position of the curtains and correct functioning of the sensor. It is recommended to clean the optical parts at least once a year or more often if required due to environmental conditions.









excludes DIN18650-conformity of the door system

**IMPORTANT**: Test the good functioning of the installation before leaving the premises.

1 min

FACTORY VALUES



#### SAFETY INSTRUCTIONS

The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety and if applicable, the machinery directive 2006/42/EC.

Only trained and qualified personnel may install and setup the sensor.

The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.

Avoid touching any electronic and optical components.

\* In immunity 2 and 3, the standard detection capability is the same as in immunity 1 (factory setting). Environmental and installation conditions can affect the detection capability of the sensor or can impact the availability of the door system. During harsh conditions, the sensor can temporarily adapt the detection capability to ensure the availability of the door system.