

CleanScan



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Touchless Push Plate CleanScan

CleanScan – Touchless Push Plate

Function / Mounting

CleanScan – functional description

Unlike conventional push plates, CleanScan is a touchless push plate and operates without contact with human hands.

The stringent hygiene conditions required in certain areas (hospitals, operating theatres etc.) can be fulfilled as a result. The optimum system design (concealed mounting in single housing) enables the push plate to be installed both quickly and easily. Furthermore, the CleanScan can also be mounted using standard surface-mounting housings.

The optimised static evaluation principle allows objects to be detected correctly irrespective of whether they are moving or not.

Two different scanning ranges enable the push plate to be matched to the relevant ambient conditions.

Short-range switch

CleanScan has a small black/white difference in the short range (50–200 mm [197"–787"]*). Objects are detected at the same distance, mostly irrespective of their colour.

Wide-range switch

In the wide range (50–600 mm [197"–23.62"]*) CleanScan is functioning as active infrared detector.

Output configurations

Via jumpers can be set the following configurations.

CleanScan

As a stepping switch (ON/OFF)

The output switches when an object is detected and remains in this state. The relay drops out again the next time an object is detected.

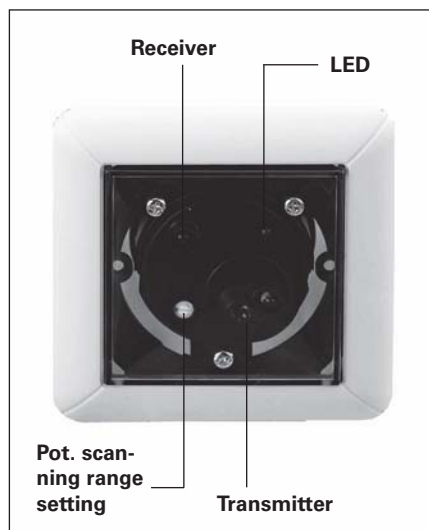
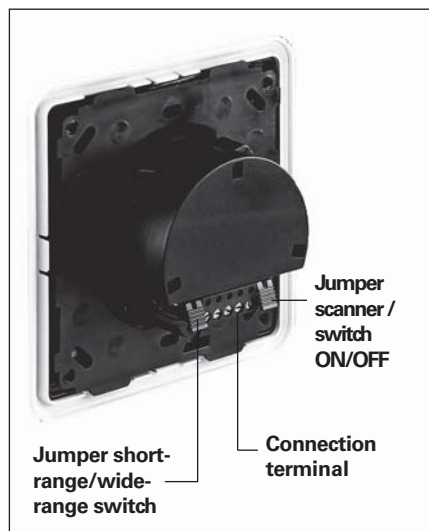
CleanScan

As a standard pulse generator (switch)

The output switches when an object is detected and remains in this state until it is no longer detected.

*typical values

System design



Operating mode

• Background suppression

The background is «perceived» but not evaluated (ignored). As switching signal a reflex signal is required from an object within the set scanning range.

- no background required
- independent of reflectance value of the background (with short-range switch)

Operating mode

• Light switching

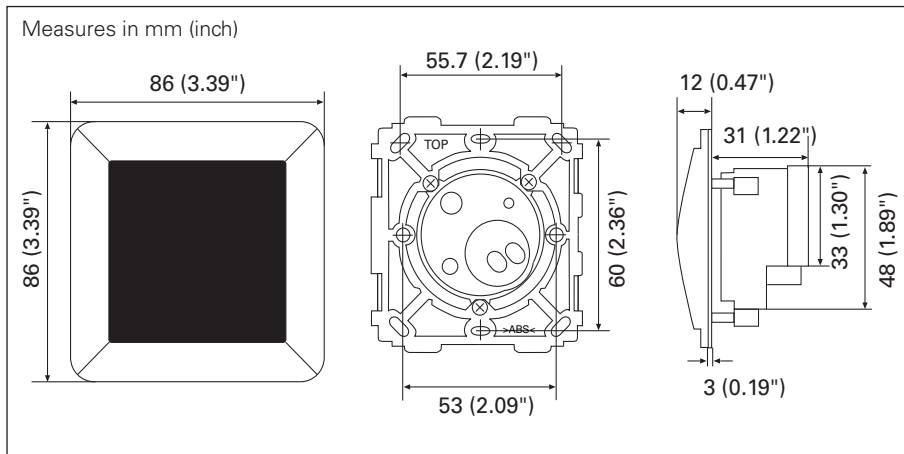
The output of an active infrared detector is switched (conducting, activated) when the receiver recognizes «light», i. e. there is an object within the active range.

Background suppression		
	LED	Signal output
		relay
Object within scanning range	lit	attracted
No object within scanning range	not lit	released

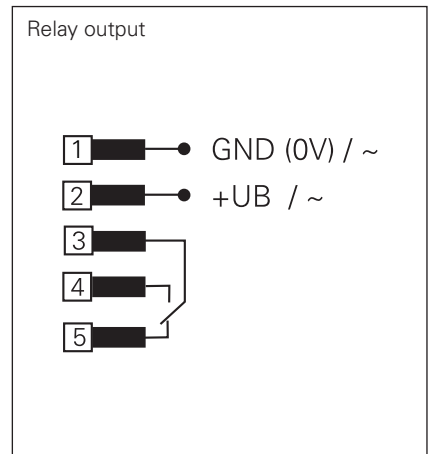
Technical data	CleanScan	Notes
Scanning range	– short-range switch 50–200 mm (197"–787")* adjustable – wide-range switch 50–600 mm (197"–23.62")* adjustable	Short-range switch/wide-range switch can be set via jumpers Wide-range switch on Kodak white
Scanning range setting	Potentiometer	
Type of light	IREL	pulsed alternating light 880 nm
b/w-difference	approx. 10 %	with scanning range 50–200 mm (197"–787")* (short-range switch)
Operating voltage	12–24 V AC (–0 % / +15 %), 12–30 V DC (–0 % / +15 %)	
Current consumption	approx. 50 mA	
Signal output	Relay, 1 changeover contact	
Response time	approx. 50 ms	
Switching mode	Light switching	
Output configurations	stepping switch / pulse generator	
Function indication	LED red	lit when output active
Connection type	5-pin plug-in terminal	
Protection class	IP50	IP55 with sealings
Housing material	ABS	
Optics surface	PMMA	
Operating temperature	–20° C to +60° C (–4° F to 140° F)	
Weight	approx. 80 g (2.82 ounce)	
Housing/colour	Frame white Optics surface black	
Mounting	Single housing	common concealed/surface-type housings
Electromagnetic compatibility	Acc. to EMC guidelines EMC 2014/30/EU	

*typical values

Dimensions



Wiring diagram



Applications

Automatic Doors

- Ideal opening sensor for cleanroom conditions (e.g. operating theatres etc.)
- Touchless opening pulse generator for doors in restaurants etc.
- Opening sensor for doors designed for handicapped persons

Elevators

- Touchless call signal generator for elevators

Building Management Technology

- Touchless on/off light control in doctor's offices, hospitals etc.
- Touchless activation of ATM terminals etc.



Ordering information

Article no.	Designation
212137	CleanScan AIR12-R1/31
212185	Surface-mounted box white, 85 × 85 × 32 mm (L × W × D)
213417	Cover frame white
213419	Cover frame silver
213420	Cover frame grey
213418	Cover plate black

Your contact

Bircher Reglomat AG

Wiesengasse 20
 CH-8222 Beringen
 Switzerland
 Phone +41 52 687 11 11
 Fax +41 52 687 11 12
 info@bircher.com
 www.bircher-reglomat.com

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