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## Radar Motion Detector with Planar Module



# Merkur – Radar Motion Detector with Planar Module

## Functions / Settings / Mounting

### Function

The Merkur radar motion detector is the first of its kind to operate on the basis of planar technology in the K-band range. This results in considerable advantages that speak for the newest Reglomat detector: it can be mounted on the ceiling or wall, is resistant to vandalism, and offers other benefits not provided by previous detectors.

#### • «Slow motion detection»

Nine sensitivity levels enable the fine adjustment of the Merkur; this has simply not been possible with ordinary detectors. The new «Slow motion detection» takes place after the entry of an already detected person directly under the installed sensor. The maximum sensitivity level is able to detect movements of 0.03m/sec. With this «Slow motion detection» a minimizing of the risk for accidents with closing doors is guaranteed.

#### • Remote control «Reglobeam»

What makes this new sensor of Bircher Reglomat also stand out is the bidirectional remote control: after a setting has been made, the feedback from the detector is directly indicated on the Reglobeam. In this way, the Merkur can be adjusted perfectly and conveniently.

Another innovation is the possibility of pre-programmed settings adapted to different applications. Configurations for – e.g. – an old people’s home or in the area of a sidewalk can be easily called up on the remote control.

The Reglobeam is available as an option. The basic functions of the Merkur such as the field size (sensitivity) and direction recognition can also be adjusted without using the remote control.

#### • Direction recognition

The Merkur is able to recognize the direction of moved objects. If necessary this function can be switched off, so that all movements are recognized by the sensor. Due to the consistent evaluation of radar signals and by using digital signal processing, vibrations do not pose a problem for the Merkur.

#### • Planar module

The advantages of the Merkur with the flat planar module are immediately convincing.

#### • Setting the detection areas

With the Merkur, it is possible to set clearly limited detection areas. Another important advantage of the new Reglomat detector: the masking of crossing traffic.

The antenna, which can be tilted and turned, makes it possible to further optimize the settings of the detection area.

A further possibility to set the detection of areas is using our sophisticated clip.

### Mounting options

#### • Mounting on the wall or ceiling

The Merkur is designed to be mounted both on the wall and the ceiling without additional mounting aids required.

In addition, mounting heights of up to 4 meters are possible – thanks to the switchable amplification of the Merkur.

### A promise

Due to its planar technology, the Merkur radar motion detector opens up new possibilities of object detection in the field of pedestrian doors and industrial gates. With this development, the engineers of Bircher Reglomat have managed to add new dimensions to the benefits of a detector – something you can count on in the future.

### Detection areas

Adjustable antenna	
without Clip	Field dimensions
min. field (w x d)	0.5 m x 0.5 m
max. field (w x d)	2.5 m x 2.5 m

mounting height 2.2 m

Adjustable antenna	
with Clip	Field dimensions
min. field (w x d)	1.0 m x 0.5 m
max. field (w x d)	4.0 m x 2.0 m

mounting height 2.2 m

## Merkur M

### Without direction recognition

The Merkur is also available without direction recognition. It is applicable for almost the same applications like the Merkur with direction recognition function. Almost the same functions can be programmed.

#### The exceptions

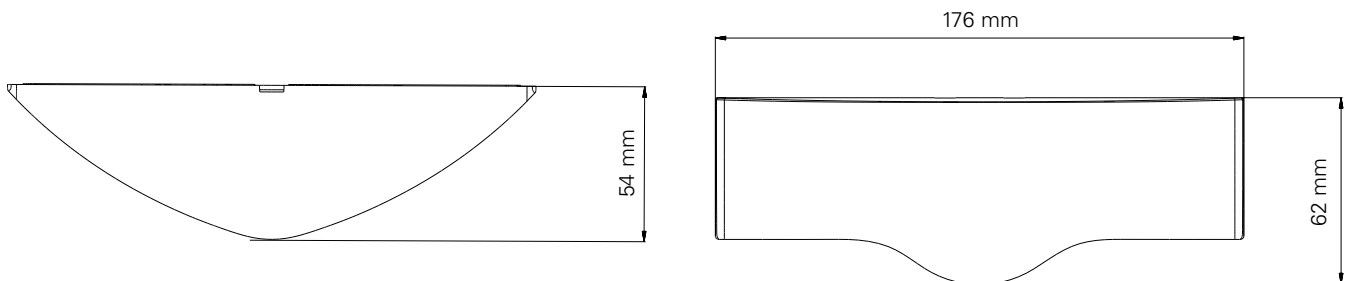
The Merkur M has only three pre-programmed comfort adjustments. It also does not have a direction recognition as well as the cross traffic optimizing.

But the Merkur M has also the very important slow motion detection, which allows to detect smallest movements at a door. The Merkur M can be set also with the remote control Reglobeam – it is available optional.

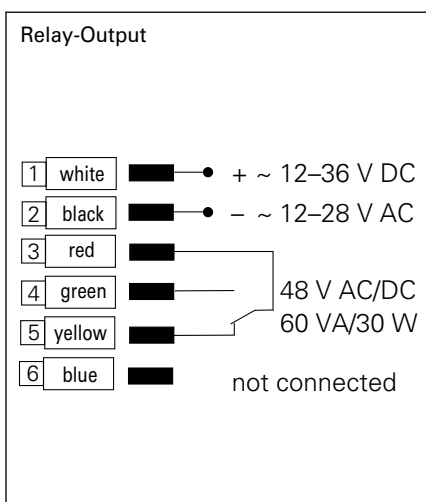
The Merkur M guarantees with it’s possibilities a high use at every automatic door – it is the best solution for simple applications.

Technical details	Merkur	Remarks
Field dimensions (w x d)	max. 2.5 m x 2.5 m (100" x 100") – with clip: 4 m x 2 m (160" x 80")	dependent on antenna position
Mounting height	max. 4 m (160")	
Sensitivity adjustment	adjustable in 9 steps	
Antenna	patch antenna	
Direction recognition	switchable on/off	Merkur M without direction recognition
Operating voltage	12–36 V DC/12–28 V AC	
Current consumption	approx. 70 mA at 24 V AC	
Signal output	<b>Relay output / Switchover contact</b> max. switching voltage 48 V AC / DC max. switching current 0.5 A AC / 1 A DC max. switching power 60 VA / 30 W	
Fall-delay time	0.2–4 sec., adjustable only with remote control (Reglobeam)	without Reglobeam: fixed 1.5 sec.
Switching mode	active/passive reversible, only with Reglobeam	without Reglobeam: active
Function indication	LED red lights up on detection / LED green lights up when smd active	
Connection type	Connection via the ready made cable, incl. 3 m	reverse battery protected, bolted
Protection class	IP 54	
Housing material	ABS	
Operating temperature	-20°C to +60°C / -4°F to 140°F	
humidity	0% to 90% rel.	
Electromagnetic compatibility	according to EMC directive 89/336/EEC, edition 01/96	
Approvals	1999/5/EC: directive R&TTE, edition 03/99	<b>CE 0682</b> Ⓢ

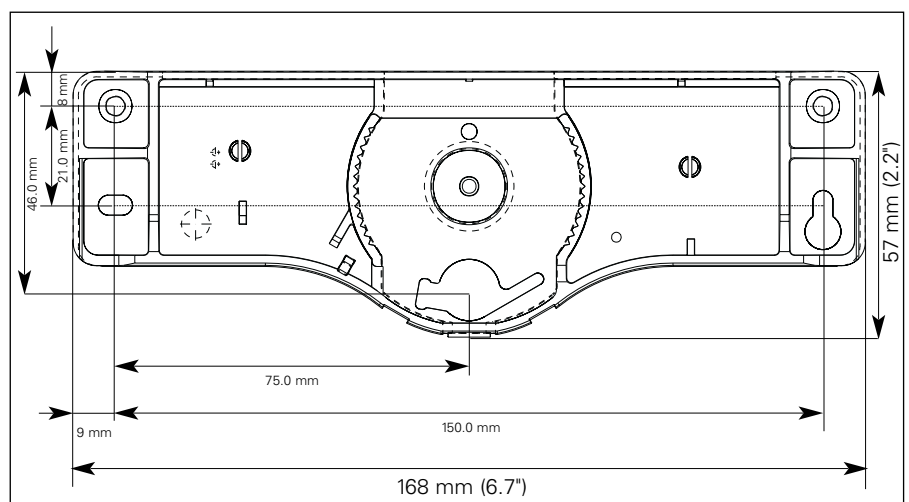
### Dimensions of housing



### Connection diagram



### Dimensions of base plate



## Applications

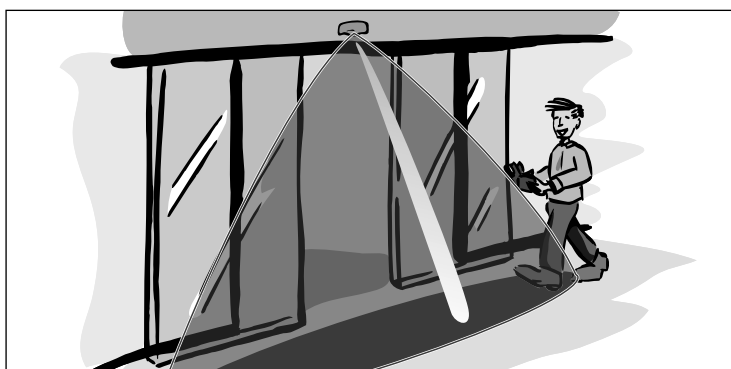
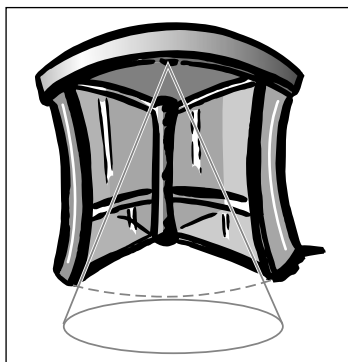
### Automatic door installations

- Trigger sensor for sliding doors, revolving doors, semi-circular doors, etc.
- The best ride-along sensor for swing doors

### Locks

### Elevators and escalators

- Cabin-access control



## Ordering information

Article no.	Designation	Scope of delivery
F531 113000	Merkur /31	3 m cable, drilling jig
F531 113080	Merkur /31/S	with plug-in screw terminal 3 m cable, drilling jig
F531 113100	Merkur M /31	3 m cable, drilling jig
F531 113120	Merkur M /31/S	with plug-in screw terminal 3 m cable, drilling jig
F539 89420	Remote control «Reglobeam»	

## Your contact

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