TI5861en	Technical Information	thermokon asia pacific
MRC2- Series (M)	Ceiling Motion Switch with ON/OFF Output	

The MRC2- Series (M) is designed for motion detection in rooms and spaces

The motion sensor is mounted on ceiling

The sensor works with low power supply

Multiple detection Ranges available

Sensor based on Passive Infrared (PIR) Technology

Motion sensor output is ON/OFF

MRC2.AA MRC2.BA MRC2.CA

Use

Compatible with all common HVAC DDC and Analog Controls systems, with/without Building Automation Systems

Motion detection in Buildings and Spaces

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

Features

Motion switch with passive output

Ceiling mounted

Passive Infrared (PIR) sensing element

Multiple detection ranges available

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

Product Range

Model	Power Supply	Output	Detection Specifications	Detection Range	Cable Lengths	Protection
MRC2.AA	AC/DC 24V (±10%) ; SELV	24V 1A (resistive), Normally Open (NO)	max. 10m / horizontal detection angle 110º / Vertical detection angle 93º	Standard / appr. 7.1 x 5.3m@2.5m Height	*100mm*	*IP20 to IEC60529*
MRC2.BA			max. 5m / horizontal detection angle 100º / Vertical detection angle 82º	Small Range / appr. 6 x 4.3m@2.5m Height		
MRC2.CA			max. 5m / horizontal detection angle 22º / Vertical detection angle 38º	Spot Range / appr. 1 x 1.7m@2.5m Height		

Sensor Specification	Sensor Specification	Measured	Motion detection
		Sensor Characteristics	Passive, 4-segment PIR
		Sensor Output (s)	NO Relay, max. 24V DC / 1A
		Switch OFF delay	8 sec.
		Accuracy	N/A
		Measuring Range (s)	Refer drawings
Technical Information	Electrical Information	Power Supply	AC/DC 24V (±10%) ; SELV
		Frequency	50/60 Hz at AC 24V
		Terminal Clamp	Screw terminal, max. 1.5mm²
		Power Consumption	24V; 0.15W / 0.5VA
	Mechanical Information	Cable Entry	N/A
		Sensing Element Position	Inside lens
	User Interface	n.a.	n.a.
	Color and Materials	Housing Cover	ABS, RAL 9010 (Pure white)
		Housing Bottom	ABS, RAL 9010 (Pure white)
	Environmental Conditions	Operation Temperature	-20...+50ºC
		Operation Humidity	<85% r.h., no condensation
		Transport Temperature	-35...+70ºC
		Transport Humidity	<90% r.h.
		Storage Temperature	-20...+70ºC
		Storage Humidity	< 85% r.h., no condensation
	Norms and Directives	Protection Rating	IP20 to IEC60529
		Safety Class	III to EN 60730
		Product Standard 1	Automatic Electrical Controls for household and similar use
		Product Standard 2	2009/EN 60 730-1
		CE Conformities to	2004/108/EG Electromagnetic Compatibility EMV
		CE Electromagnetic Compatibility Emitted Interference	2000/EN60730-1 Emitted Interference
		CE Electromagnetic Compatibility Interference resistance	2000/EN60730-1 Interference Resistance
		RoHS Compatibility	RoHS 3, Directive 2015/863
		Operation Climatic Condition	IEC60721-3-3
		Operation Mechanical Condition	IEC60721-3-3
		Transport Climatic Condition	IEC60721-3-2
		Transport Mechanical Condition	IEC60721-3-2
		Storage Climatic Condition	IEC60 721-3-1
		Storage Mechanical Condition	IEC60 721-3-1
Miscellaneous	Accessories	Accessory in delivery	n.a.
	Shipping & Handling	Minimum Order	Rigid Cardboards Packaging
		Package Material	Rigid Cardboards Packaging
	Order Notes	Order Code	See Product Range, Page 1, e.g. MRC2.AA

Advices

Installation Notes

Caution

All relevant national and heavy power regulations

Other country specific regulations

Country-specific regulations

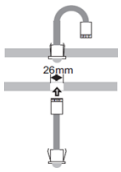
Local electrical supply authority regulations

Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge

Third party specifications, e.g. general contractors or constructors

Mounting Advices

Caution



Disposal Notes

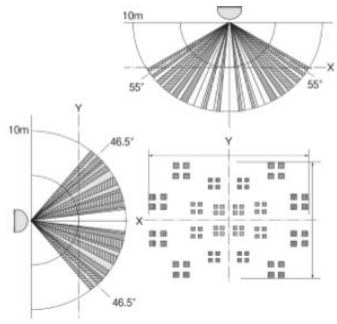
The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU

The device may not be disposed as domestic garbage

The device must be disposed through channels provided for this purpose

It is mandatory to complying with local currently applying laws and regulations

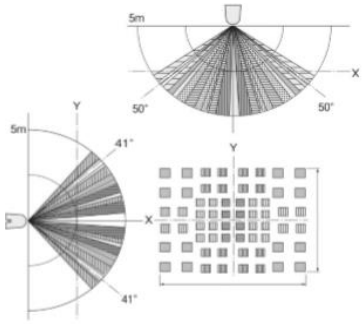
Detection Ranges



MRC2.AA

Detection Range calculation

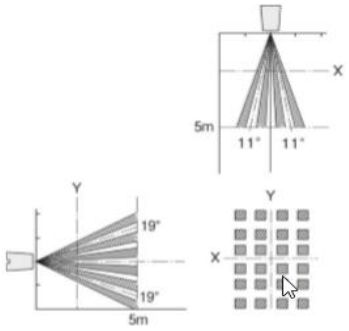
Ø detection Range+ tan(11) 8 instalation height



MRC2.BA

Detection Range calculation

Ø detection Range+ tan(11) 8 instalation height



MRC2.BA

Detection Range calculation

Ø detection Range+ tan(11) 8 instalation height

Connection

T1	T2	T3	T4	
NO- Contact	NO- Contact	Ground	UB+	AC/DC 24V

Dimensional Drawing