MoviDim-RMS series

Line Voltage EasyDIM Occupancy Sensor

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REMOTE

OVERVIEW

The MoviDim-RMS series is a two-way IR remote programmable line voltage switching occupancy sensor with 0-10V output for dimmable ballast or LED driver control. The sensor is capable of providing energy efficient lighting control in multiple modes with fully programmable multi-level high/low dim or EasyDIM control. **EasyDIM** is a state-of-the-art automatic dimming control technology, which is capable of maintaining the overall ambient light level within the preset range through a smooth, flawless continuous dimming control to the connected lighting.

The sensor will turn on the connected lighting to the high dim or EasyDIM level as programmed when it detects the presence of an occupant or vehicle, and automatically dim the light down to the low level or shut off as programmed after the area is vacated for a period of time. An exclusive two-way handheld remote programmer allows you to configure sensor setting, or download the existing settings of the installed sensor from the floor. In addition, the Hybrid Switching technology makes the MoviDim-RMS series perfect sensor to control a group of LED lightings with exceptionally high inrush current (HIC) while switching on.

The MoviDim-RMS series is available with various mounting options and interchangeable lenses. This provides a second-to-none design and complete installation flexibility. The sensor is designed to operate in the coldest of environments, down to -40°C/°F.

FEATURES

- Omni-directional quad element infrared sensor
- Digital data control ambient light sensor built-in
- 2-way IR remote programmable sensor setting
- Hybrid switching for controlling loads with HIC
- EasyDIM or multi-level high/low dim control
- Remote programmable EasyDIM level setting
- Up to 10 m of remote programmable range
- Beeping or light flashing acknowledgement
- Available with a variety of mounting options
- Available with interchangeable lens options

APPLICATION

☑ 0-10V Continuous Dimming Control

☑ 0-10V Multi-level Dimming Control

The MoviDim-RMS series sensor can be used to provide occupancy sensing based, multi-mode, continuous dimming control by sensing the presence and movements of the occupant and the daylight available in the space. Specific control mode and sensor setting can be configured via the RMS-MD remote sensor programmer (optional). Within the maximum load allowed, one MoviDim-RMS sensor can control up to 50 dimmable ballasts/drivers with sinking current less than 0.5mA each. Basic wiring diagram is included at next page for reference.

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EasyDIM

EasyDIM is a continuous dimming control algorithm to provide a smooth and flawless automatic dimming performance. The output of the controlled lighting will be constantly adjusted to maintain the overall ambient light level within the pre-programmed range by sensing the daylight available in the space.

CONTROL MODES

The MoviDim-RMS series can be programmed by RMS-MD to control the lighting in one of the following modes with various conditions as set. For more details of specific control mode, please call our helpline on 01704 512000.

Mode	Day[1]	Night[2]	Remarks
ON/OFF	Vac: OFF Occ: ON/OFF*	Vac: OFF Occ: ON	For non-dimmable lighting *ALS enabled
OSO	Vac: LD Occ: SD/HD	Vac: LD Occ: SD/HD	LD: Low Dim, HD: High Dim SD: EasyDIM
OSLA	Vac: OFF Occ: SD/OFF	Vac: LD Occ: SD/HD	
OSLATO	Vac: OFF Occ: SD/OFF	Vac: LD*-OFF Occ: SD/HD	*Low Dim during Time Off delay

ON/OFF : ON-OFF Switching
OSO   : Occupancy Sensing Only
OSLA   : Occupancy Sensing at Low Ambient
OSLATO : Occupancy Sensing at Low Ambient with Time-Off
Vac : Vacant   **Occ** : Occupied

[1] While ambient light level is higher than the threshold.
[2] While ambient light level is lower than the threshold.

MOUNTING OPTIONS

The MoviDim-RMS series can be mounted into the ceiling or integrated with an OEM lighting fixture. The mounting options are available by combining a specific mounting bracket (if applicable) from the chart below. The bracket will be shipped with the sensor when ordered with the respective code.
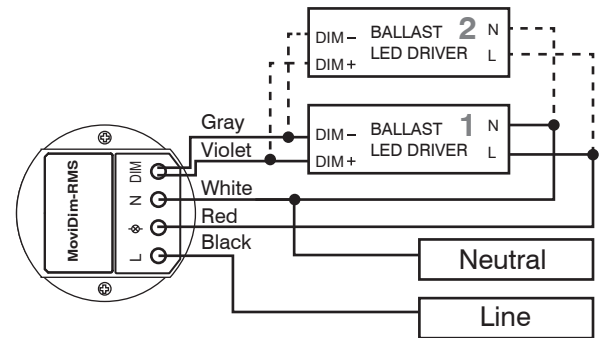
Code	Mounting Option	Mounting Bracket
F	Fixture Integrated	---
W	IP-66 Fixture Integrated	---
E	Fixture External	EMB-500
P	IP-66 Fixture External	PMB-500
S	Ceiling Surface	SMB-500
C	Junction Box	CMB-500
L	Ceiling Recess	LMB-500

LENS OPTIONS

The MoviDim-RMS series is available with following lens options which provide different coverage at different mounting height (H). When adding the lens code, the lens is then automatically shipped with the sensor.

	Lens	Shape	Mounting Height		Coverage
A	Standard	Cone	8~15 ft.	2.4~4.5m	2X height
B	Extra wide	Cone	8~10 ft.	2.4~3.0m	6X height
C	High bay	Cone	15~30 ft.	4.5~9.0m	3X height
D	Standard	Round	8~20 ft.	2.4~6.0m	2X height
F	Extra wide	Dome	8~20 ft.	2.4~6.0m	4X height
G	Aisle way	Arch	8~40 ft.	2.4~12.0m	3X height
H	High bay	Dome	30~50 ft.	9.0~15.0m	1X height
L	Long aisle	Arch	8~10 ft.	2.4~3.0 m	6X height

WIRING DIAGRAM

SPECIFICATIONS

Power supply	100/120/230/277VAC, 50/60 Hz		
Maximum Load	100-120VAC	230VAC	277VAC
-Incandescent/Halogen	800/*500W(VA)	5A	1200/*750W(VA)
-Fluorescent Ballast/CFL	800/*500W(VA)	5A	1200/*750W(VA)
-Ballast Electronic (LED)	540/*500VA	5A	1200/*750VA
Infrared sensor	Omni-directional quad element pyroelectric		
Photo sensor	Digital ambient light sensor		
HIC protection	Max. 80A for 16.7msec.		
Dim control output	0-10V, ±5%, isolated, max. 25mA		
Detectable speed	0.3 ~ 3 m/sec. (1~10 ft./sec.)		
Mounting height	Subject to the lens type applied.		
Detection range	Subject to the lens type and mounting height		
Remote range	10m (33 ft.) indoor, no backlight		
Op. humidity	Max. 95% RH		
Op. temperature	-40°C~70°C (-40°F~158°F)		
Dimensions	Ø60 x H37mm (Ø2.36"x H1.45")		

*Max load for operating temperature at 55°C~70°C (131°F~158°F)