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|  <b>TI5821en</b> | <b>Technical Information</b>   |  |
| <b>CRC1- Series (L&amp;M)</b>   | <b>Ceiling Light Sensor and Motion Switch</b><br><b>with active and ON/OFF outputs</b> |  |

The CRC1 -Series (L&M) is designed for light measuring and motion detection in rooms and spaces

The sensor have an integrated color filter (green filter) which is adapted to the sensitivity of human eyes

The sensor works with low power supply

Light sensor output is active

The Motion output is ON/OFF



|            |   |
|------------|---|
| <b>Use</b> | <p>Compatible with all common HVAC DDC and Analog Controls systems, with/without Building Automation Systems</p> <p>Light measurement and motion detection in Buildings and Spaces</p> <p>Used in all common HVAC applications</p> <p>Used in Commercial and Industrial Buildings</p> |
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|                 |  |
|-----------------|--|
| <b>Features</b> | <p>Sensor with active output for light and passive output for motion detection</p> <p>With integrated color filter</p> <p>Relay switch off delay selectable</p> <p>Professional and practical product design, withstands rough environmental conditions</p> <p>Easy to use, install and maintain</p> |
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| <b>Product Range</b> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="153 1751 300 1850">Model</th> <th data-bbox="300 1751 446 1850">Power Supply</th> <th data-bbox="446 1751 593 1850">Light Output</th> <th data-bbox="593 1751 740 1850">Measuring Ranges (Lux)</th> <th data-bbox="740 1751 887 1850">Accuracy Light</th> <th data-bbox="887 1751 1034 1850">Motion Output</th> <th data-bbox="1034 1751 1142 1850">Delay Time</th> <th data-bbox="1142 1751 1289 1850">Detection Specifications</th> <th data-bbox="1289 1751 1436 1850">Detection Range</th> <th data-bbox="1436 1751 1548 1850">Protection</th> </tr> </thead> <tbody> <tr> <td data-bbox="153 1850 300 2136" style="text-align: center;">CRC1.AG</td> <td data-bbox="300 1850 446 2136" style="text-align: center;">AC/DC 24V ±10% ; SELV</td> <td data-bbox="446 1850 593 2136" style="text-align: center;">0 ... 10V</td> <td data-bbox="593 1850 740 2136" style="text-align: center;">1.000Lux</td> <td data-bbox="740 1850 887 2136" style="text-align: center;">±50Lux</td> <td data-bbox="887 1850 1034 2136" style="text-align: center;">24V 1A (resistive), Normally Open (NO)</td> <td data-bbox="1034 1850 1142 2136" style="text-align: center;">1sec ... 30min</td> <td data-bbox="1142 1850 1289 2136" style="text-align: center;">Cone-shaped detection range, angle 105°, range &gt; 5 m, 444 detection zones</td> <td data-bbox="1289 1850 1436 2136" style="text-align: center;">With an installation height of 2,7 m circular detection range will have a R= 7 m.</td> <td data-bbox="1436 1850 1548 2136" style="text-align: center;">IP20 to IEC60529</td> </tr> </tbody> </table> | Model        | Power Supply           | Light Output   | Measuring Ranges (Lux)                 | Accuracy Light | Motion Output   | Delay Time  | Detection Specifications | Detection Range | Protection | CRC1.AG | AC/DC 24V ±10% ; SELV | 0 ... 10V | 1.000Lux | ±50Lux | 24V 1A (resistive), Normally Open (NO) | 1sec ... 30min | Cone-shaped detection range, angle 105°, range > 5 m, 444 detection zones | With an installation height of 2,7 m circular detection range will have a R= 7 m. | IP20 to IEC60529 |
|----------------------|--|--------------|------------------------|----------------|--|----------------|---|---|--------------------------|-----------------|------------|---------|-----------------------|-----------|----------|--------|--|----------------|---|---|------------------|
| Model                | Power Supply   | Light Output | Measuring Ranges (Lux) | Accuracy Light | Motion Output                          | Delay Time     | Detection Specifications  | Detection Range   | Protection               |                 |            |         |                       |           |          |        |  |                |   |   |                  |
| CRC1.AG              | AC/DC 24V ±10% ; SELV  | 0 ... 10V    | 1.000Lux               | ±50Lux         | 24V 1A (resistive), Normally Open (NO) | 1sec ... 30min | Cone-shaped detection range, angle 105°, range > 5 m, 444 detection zones | With an installation height of 2,7 m circular detection range will have a R= 7 m. | IP20 to IEC60529         |                 |            |         |                       |           |          |        |  |                |   |   |                  |

|                             |                              |  |  |
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| <b>Sensor Specification</b> | Measured                     | Light and Motion   |  |
|                             | Sensor Characteristics       | Light Active<br>Motion Passive, 4-segment PIR  |  |
|                             | Sensor Output (s)            | Light 0...10V<br>Motion NO Relay, max. 24V DC / 1A   |  |
|                             | Switch OFF delay             | 1sec...30min. selectable   |  |
|                             | Accuracy                     | Light ±50Lux<br>Motion Refer drawings  |  |
|                             | Measuring Range (s)          | Light 0...1000Lux  |  |
|                             | Detection Range              | Motion D=2.8m @7m height   |  |
|                             | <b>Technical Information</b> | Electrical Information   | Power Supply AC/DC 24V (±10%)<br>Frequency 50/60 Hz at AC 24V<br>Terminal Clamp Screw terminal, max. 1.5mm <sup>2</sup><br>Power Consumption 24V; 0.6W / 1.5VA |
| Mechanical Information      |                              | Cable Entry N/A<br>Sensing Element Position Inside housing   |  |
| User Interface              |                              | None   |  |
| Color and Materials         |                              | Housing Cover ABS, RAL 9010 (Pure White)<br>Housing Bottom ABS, RAL 9010 (Pure White)  |  |
| Environmental Conditions    |                              | Operation Temperature -0...+50°C<br>Operation Humidity <85% r.h., no condensation<br>Transport Temperature -35...+70°C<br>Transport Humidity <90% r.h.<br>Storage Temperature -20...+70°C<br>Storage Humidity < 85% r.h., no condensation  |  |
| Norms and Directives        |                              | Protection Rating IP20 to IEC60529<br>Safety Class III to EN 60730<br>Product Standard 1 Automatic Electrical Controls for household and similar use<br>Product Standard 2 2009/EN 60 730-1<br>CE Conformities to 2004/108/EG Electromagnetic Compatibility EMV<br>CE Electromagnetic Compatibility Emitted Interference 2000/EN60730-1 Emitted Interference<br>CE Electromagnetic Compatibility Interference resistance 2000/EN60730-1 Interference Resistance<br>RoHS Compatibility RoHS 3, Directive 2015/863<br>Operation Climatic Condition IEC60721-3-3<br>Operation Mechanical Condition IEC60721-3-3<br>Transport Climatic Condition IEC60721-3-2<br>Transport Mechanical Condition IEC60721-3-2<br>Storage Climatic Condition IEC60 721-3-1<br>Storage Mechanical Condition IEC60 721-3-1 |  |
| <b>Miscellaneous</b>        |                              | Accessories  | Accessory not included in delivery TRA0.A  |
|                             |                              | Shipping & Handling  | Minimum Order 1 box with 1 piece<br>Package Material Rigid Cardboards Packaging  |
|                             |                              | Order Notes  | Order Code See Product Range, Page 1, e.g. CRC1.AG   |

**Installation Notes**



Observe the following general regulation for engineering and implementation:

All relevant national and heavy power regulations

Other country specific regulations

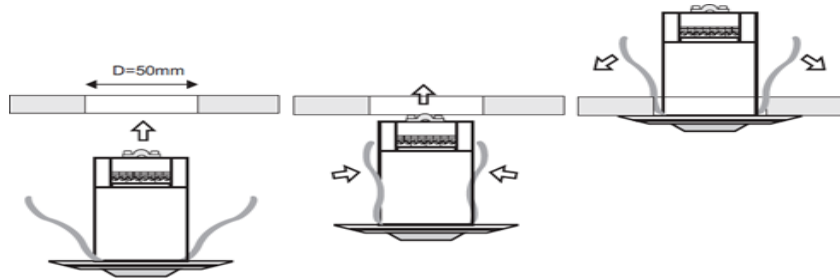
Country-specific regulations

Local electrical supply authority regulation

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**



**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 comply with local currently applying laws and regulations.

Terminals Connection

|     |          |   |   |                      |   |     |                      |                      |
|-----|----------|---|---|----------------------|---|-----|----------------------|----------------------|
|     | 1        | 2 | 3 | 4                    | 5 | 6   | 7                    | 8                    |
| UB+ | AC/DC24V |   |   | Out Light<br>0...10V |   | GND | NO Relay<br>Output 1 | NO Relay<br>Output 2 |

Delay time adjustment for motion



Variable delay time for motion detection 1s...30min

