Ditec PAS024AST

MANUFACTURER'S STATEMENT

Read this operation manual carefully before use to ensure proper operation of this product.
Failure to read this operation manual may cause improper operation and may result in serious injury or death of
a person. The meanings of the symbols are as follows:

WARNING
- The sensor has to be connected to a door system which has a SELV circuit.

CAUTION
- Special attention is required to the section of this symbol.
- It is required to check the operation manual if this symbol is shown on the product.

NOTE
- This product is a non-contact switch intended for header mount or wall mount for use on an automatic sliding door.
- Do not use for any other applications.
- Do not set the 2nd row overlapping the threshold regardless of the setting of dipswitch 15.

MANUFACTURER'S STATEMENT

WARNING
- Danger of electric shock

The following conditions are not suitable for sensor installation:
- Fog or exhaust around the detection area
- Hot air
- Vibration or movement around the header or mounting surface
- Moving objects, steel plate, emergency lights or illumination in the detection area or on Nicoty
- Nightly reflecting floor or highly reflecting objects around the door

WARNING
- Do not wash, disassemble, rebuild or repair the sensor, otherwise it may cause electric shock or breakdown of the equipment.

NOTE
- The values mentioned in "detection area" refer to the test conditions as described in the EN16005 installation.

To comply with EN16005, make sure that the detection area is within the values of the chart below.

The actual detection area may become smaller depending on the ambient light, the color/material of the object, the floor as well as the entry speed of the object.

WARNING
- Make sure not to mount the sensor lower than the bottom of header.

The specifications are subject to change without prior notice due to improvements.

1. Active infrared reflection has a presence detection function.
2. The sensor has to be connected to a door system which has a SELV circuit.
3. Overcurrent protection is less than 2A

SPECIFICATIONS

Model: PAS024AST
Cover color: Black
Mounting height: 2.3m (7'6"
Detection area: See DETECTION AREA
Detection method: Active infrared reflection
Microwave doppler effect
Depth adjustable
Power supply: 12 to 24VAC 50/60 Hz
Power consumption: 2.5W AC (LVD)
Sensitivity: Middle
Angle adjustment: ±5°
Output hold time: 1sec.
Safety / test output: Opto coupler (NPN)
Current 100mA Max.
Voltage 5 to 30VDC
Noise level: <70dBA
IP rate: IP54
Performance level: Class 2
Output: 50mm/sec. or faster than 1500mm/sec.

NOTE
- Make sure not to mount the sensor lower than the bottom of header.

OUTER DIMENSIONS AND PART NAMES

When dipswitch 15 is set to ON, the lookback area, which provides extra safety over the threshold, is activated.
In case the lookback function is not required, set dipswitch 15 to OFF.
Do not set the 2nd row overlapping the threshold regardless of the setting of dipswitch 15.

LOOKBACK AREA

- The sensor has to be connected to a door system which has a SELV circuit.
**ADJUSTMENTS**

1. **Area depth adjustment**

   **Depth angle adjustment screw**

   When adjusting the 2nd row close to the door, active Table 2 Dipswitch H for the easier adjustment.

   **NOTE**

   Make sure that the detection area does not overlap with the door/ header, and there is no highly reflecting object near the detection area otherwise malfunction may occur.

   **1-1 Air adjustment**

   Depth angle adjustment screw for the Air area

   Use the area adjustment tool (A) as shown above to change the area depth angle.

   **NOTE**

   For the easier adjustment, see REFERENCE.

   **2-2 Air adjustment**

   Depth angle adjustment screw for the microwave area

   Use the area adjustment tool (B) as shown above to change the area depth angle.

   **3. Microwave sensitivity**

   Adjust the microwave detection with potentiometer. Afterwards, make sure to push the function switch for 2 seconds.

   **4. Dipswitch settings**

   After changing the dipswitch settings, make sure to push the function switch for 2 seconds.

   **Table 2**

<table>
<thead>
<tr>
<th>Function</th>
<th>Setting</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Presence timer</td>
<td>Off</td>
<td>30s</td>
</tr>
<tr>
<td>Frequency</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Test input to door controller</td>
<td>Off</td>
<td>10ms</td>
</tr>
<tr>
<td>Direction</td>
<td>B</td>
<td>U</td>
</tr>
<tr>
<td>Autocare</td>
<td>Off</td>
<td>ON</td>
</tr>
<tr>
<td>Immunity</td>
<td>Off</td>
<td>ON</td>
</tr>
<tr>
<td>Activation output</td>
<td>N/C</td>
<td>N/C</td>
</tr>
<tr>
<td>Activation / Test output to the door controller</td>
<td>N/C</td>
<td>N/C</td>
</tr>
<tr>
<td>AIR output</td>
<td>Safety</td>
<td>Actuation</td>
</tr>
<tr>
<td>Self monitoring</td>
<td>Enable</td>
<td>Disable</td>
</tr>
<tr>
<td>Lookback</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>Installation mode</td>
<td>Off</td>
<td>ON</td>
</tr>
</tbody>
</table>

   **TROUBLESHOOTING**

   **WARNING**

   1. Always keep the detection window clean. If dirty, wipe the window with a damp cloth. Do not use any cleaner or solvent.
   2. Do not wash the sensor with water.
   3. Do not disassemble, rebuild or repair the sensor yourself, otherwise an electric shock may occur.
   4. When the operation indicator blinks green, always contact your service engineer.
   5. Always contact your installer or service engineer when changing the settings.
   6. Do not paint the detection window.

   **NOTE**

   1. When turning the power ON, always walk-test the detection area to ensure the proper operation.
   2. Do not place any objects that move or emit light in the detection area (e.g. plant, illumination, etc.)

   **CHECKING**

   Check the operation in the operation mode according to the chart below.

<table>
<thead>
<tr>
<th>Entry</th>
<th>Power OFF</th>
<th>Outside of detection area</th>
<th>Entry into microwave area</th>
<th>Entry into 3rd row</th>
<th>Entry into Lookout area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>-</td>
<td>Motion detection active</td>
<td>Motion / Presence detection active</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   **Operation indicator**

   None | Green | Orange | Red | Blue

   **Activation output**

   | Safety | OFF | <0.5V |
   | Safety + Activation | OFF | <0.5V |

   **Safety / Test output**

   | High | OFF | ON |
   | Low | OFF | ON |

   **2.3V@10mA Min.**

   **INFORM BUILDING OWNER / OPERATOR OF THE FOLLOWING ITEMS**

   **TO COMPLY WITH EN16005**

   Make sure to confirm the following content to comply with EN16005.

   1. Detection area settings (See DETECTION AREA).
   2. Presence timer (See ADJUSTMENTS Dip switch settings).
   3. Self monitoring (See ADJUSTMENTS Dip switch settings).

   **REFERENCE**

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   www.entrematic.com