COMFORTLINE ROTARY SWITCH C-HSP 1–10 V

186208, 186581

Typical Applications
Built-in in compact luminaires for
- Industry lighting
- Street lighting

- SELECTABLE OUTPUT CURRENT VIA ROTARY SWITCH
- DIMMABLE: 1–10 V
- VERY LOW RIPPLE CURRENT: < 3%
- SURGE PROTECTION: UP TO 2 KV
- SUITABLE FOR EMERGENCY ESCAPE LIGHTING SYSTEMS ACC. TO EN 50172
- SELV
- LONG SERVICE LIFE: UP TO 100,000 HRS.
- PRODUCT GUARANTEE: 5 YEARS
LED Drivers – ComfortLine Rotary switch C-HSP 1–10 V

ComfortLine
Rotary switch C-HSP
1–10 V

Product features
• Compact casing shape

Functions
• The dial can be used to set the current output for 186581: 350 mA (1), 500 mA (2), 600 mA (3) or 700 mA (4) and for 186208: 900 mA (1), 1050 mA (2), 1200 mA (3) or 1400 mA (4).

Electrical features
• Mains voltage: 220–240 V ±10%
• Mains frequency: 50–60 Hz
• DC operation: 198–264 V, 0 Hz (186208), 176–264 V, 0 Hz (186581)
• Push-in terminals: 0.2–1.5 mm² (NTC interface: 0.2–0.5 mm²)
• Power factor at full load: > 0.95
• Open circuit voltage (Umax): 52 V (186208) or 60 V (186581)
• Secondary side switching of LED modules is not allowed.
• Standby losses: < 0.5 W

Dimming
• Dimming range: 3 to 100%
• If no dimming interface is connected, brightness will stay at 100%.

Safety features
• Electronic short-circuit protection
• Overload protection
• The LEDs are thermally protected by the driver's NTC interface, which ensures the current will be reduced when a critical temperature is reached.

<table>
<thead>
<tr>
<th>NTC at LED module 10 kΩ</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Type Nurata NCP18XH103J03RB)</td>
</tr>
<tr>
<td>R [kΩ]</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

• Protection against “no load” operation
• Degree of protection: IP20
• Protection class I
• SELV

Packaging units

| Ref. No. | Packaging unit | Pieces per box | Boxes per pallet | Weight
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>186208</td>
<td></td>
<td>12</td>
<td>75</td>
<td>230</td>
</tr>
<tr>
<td>186581</td>
<td></td>
<td>15</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

Dimensions
• Casing shape: K2
• Ref. No.: 186581
• Length: 103.6 mm
• Width: 67.4 mm
• Height: 31 mm

Applied standards
• EN 61347-1
• EN 61347-2-13
• EN 61547
• EN 61000-3-2
• EN 62384
• EN 55015

Dimming
PMW

Product guarantee
• 5 years
• The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.
LED Drivers – ComfortLine Rotary switch C-HSP 1–10 V

### Electrical characteristics

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Voltage 50–60 Hz V</th>
<th>Mains current mA</th>
<th>Inrush current A / µs</th>
<th>Current output DC mA (±5%–10%)</th>
<th>Voltage output DC V</th>
<th>THD at full load % (230 V)</th>
<th>Efficiency at full load % (230 V)</th>
<th>Ripple 100 Hz %</th>
</tr>
</thead>
<tbody>
<tr>
<td>186581</td>
<td>176–264</td>
<td>265–175</td>
<td>5.3 / 54.5</td>
<td>350 / 500 / 600 / 700</td>
<td>20–57</td>
<td>&lt; 7</td>
<td>&gt; 85</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>186208</td>
<td>198–264</td>
<td>315–290</td>
<td>8.2 / 148</td>
<td>900 / 1050 / 1200 / 1400</td>
<td>20–43</td>
<td>&lt; 10</td>
<td>&gt; 85</td>
<td>&lt; 3</td>
</tr>
</tbody>
</table>

### Maximum ratings

Exceeding the maximum ratings can lead to reduction of service life or destruction of the drivers.

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Ambient temperature range °C min.</th>
<th>Ambient temperature range °C max.</th>
<th>Operation humidity % min.</th>
<th>Operation humidity % max.</th>
<th>Storage temperature range °C min.</th>
<th>Storage temperature range °C max.</th>
<th>Storage humidity range % min.</th>
<th>Storage humidity range % max.</th>
<th>Max. operation temperature at t&lt;sub&gt;c&lt;/sub&gt; point °C</th>
<th>Degree of protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>186581</td>
<td>-20</td>
<td>+50</td>
<td>20</td>
<td>60</td>
<td>-40</td>
<td>+80</td>
<td>5</td>
<td>95</td>
<td>+80</td>
<td>IP20</td>
</tr>
<tr>
<td>186208</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

### Expected service life time

at operation temperatures at t<sub>c</sub> point

<table>
<thead>
<tr>
<th>Operation current</th>
<th>Ref. No.</th>
<th>186581</th>
<th>186208</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>70 °C</td>
<td>80 °C</td>
<td>75 °C</td>
</tr>
<tr>
<td>hrs.</td>
<td>100,000</td>
<td>50,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

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