32 17350ExxUL Product Specification

STANDARD COLLECTION
Single-phase rectifier
with over-excitation

The rectifiers with overexcitation, of the series 32 17350Exx that are controlled via microcontroller serve to improve the switching function of electromagnetic devices. All work must only be carried out by suitably qualified personnel. Make sure that no voltage is applied during connection. The specifications on the rating plate and the information provided in the circuit diagram or in the datasheet must be strictly observed.

Technical specifications

<table>
<thead>
<tr>
<th>Principle of operation</th>
<th>time-controlled change-over of bridge-/ one-wave current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast switching</td>
<td>DC offswitching by protective contact</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>See derating (at 80°C are only 15% of the output voltage allowed)*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rectifier type</th>
<th>bridge/half-wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Recovery period</td>
</tr>
<tr>
<td></td>
<td>t_p (s)</td>
</tr>
<tr>
<td>50E00UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E10UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E20UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E33UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E04UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E14UL</td>
<td>0.1</td>
</tr>
<tr>
<td>50E24UL</td>
<td>0.1</td>
</tr>
</tbody>
</table>

*See derating (diagram: max. current load at ambient temperature)

CE

EMC Directive 2014/30/EU:
Compliance with the following standards is confirmed:
- EN 50081-2 (Emission):
- EN 55011 (VDE 0875, part 11, 2011)
- Group 1, Class A conducted interference
- Group 1, Class B radiated interference
- EN 61000-6-2 (Immunity):
- EN 61000-4-3 (2011) severity level 4
- EN 61000-4-4 (2013) severity level 3
- EN 61000-4-5 (2015) severity level 3

Low Voltage Directive 2014/35/EU:
Compliance with the following standards is confirmed:
- HD 625.1 S1:2009 (VDE 0110) insulation coordination
- EN 60529 (2014) IP 54 external mounting

Machinery Directive 2006/42/EC:
These products are considered components in the sense of Machinery Directive 2006/42/EC and must not be put into service until the machinery in which they are incorporated has been declared in conformity with the provisions of the EC Directives.

ROHS
We hereby declare that the above-mentioned products comply with the requirements of the RoHS Directive 2011/65/EU on the restriction of the usage of certain hazardous substances in electrical and electronic equipment, assigned to equipment category 11.

Protection:
IP 00 to EN 60529
Dependent on the rating of the electromagnetic devices, they enable:

- reduced response times when switching on the power supply
- increased pull-in force
- a longer stroke

or in comparison to operation under normal values:

- a reduction in power consumption
- reduced thermal stress
- longer service life
- abridged response times when switching off.

The voltage is switched electronically from bridge-connected to half wave rectification.

**Control of the overexcitation period**

The over-excitation time can be determined for all versions via a link.

If a (normally open) limit switch S2 is connected instead of the link B2, the following are possible for controlling the overexcitation period $t_{\text{ex}}$:

- 30 ms after the limit switch contact is closed, the rectifier switches from overexcitation to half wave (hold). If the contact does not close, then the switchover is effected after the long overexcitation period. Switching operations of the contact S2 are detected at the soonest 60 ms after connecting the power supply to the terminals U - V. If the switch contact closes earlier, then the switchover to half-wave (hold) is effected at the latest after the short over-excitation period.

**Connection of the limit switch:**

![Connection of the limit switch](image)

**Dimensions (mm)**

![Dimensions diagram](image)

**Degree of protection:**

IP 00 according to EN60529

Pollution degree:

For use in pollution degree II only. (VDE110/UL840: I1)

**Subject to design modifications without prior notice. Please note ordering data!**

**Order example**

Single-phase rectifier with over-excitation

32 17350E

0, 2 or 3 as per table

0, 3, 4 or 8 as per table

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