32 1735xExx Product Specification

STANDARD COLLECTION

Single-phase rectifier with overexcitation

The rectifiers with overexcitation, of the series 32 17350Exx, which are controlled via micro controller, serve to improve the switching function of electromagnetic devices. They are available, upon request, for mounting rails and as litz version to be mounted on motors. 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>Type</th>
<th>Installation</th>
<th>Rated input voltage (Tol.:±10%) U₁ (40-60Hz) V</th>
<th>Output voltage with over-excitation U₁ - U₂ V</th>
<th>Output voltage half-wave U₁ - U₂ V</th>
<th>Output current half-wave max. at R-Load I A</th>
<th>L-Load I A</th>
<th>Over-excitation period* (Tol.:±10%) Preconfigured / (with S2 changeable) t_ex s</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 1735E00</td>
<td>screwed connection</td>
<td>220 - 415</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>0.25 / (1.0)</td>
</tr>
<tr>
<td>32 1735E10</td>
<td>screwed connection</td>
<td>220 - 415</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>1.0 / (0.25)</td>
</tr>
<tr>
<td>32 1735E20</td>
<td>screwed connection</td>
<td>220 - 415</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>1.8 / (3.0)</td>
</tr>
<tr>
<td>32 1735E04</td>
<td>screwed connection</td>
<td>48 - 120</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>0.25 / (1.0)</td>
</tr>
<tr>
<td>32 1735E14</td>
<td>screwed connection</td>
<td>48 - 120</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>1.0 / (0.25)</td>
</tr>
<tr>
<td>32 1735E24</td>
<td>screwed connection</td>
<td>48 - 120</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>1.8 / (3.0)</td>
</tr>
<tr>
<td>32 1735E08</td>
<td>screwed connection</td>
<td>480 - 525</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>0.25 / (1.0)</td>
</tr>
<tr>
<td>32 1735E28</td>
<td>screwed connection</td>
<td>480 - 525</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>1.8 / (3.0)</td>
</tr>
<tr>
<td>32 1735E00</td>
<td>35mm mounting rails</td>
<td>220 - 415</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>0.25 / (1.0)</td>
</tr>
<tr>
<td>32 1735E14</td>
<td>35mm mounting rails</td>
<td>48 - 120</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>0.25 / (1.0)</td>
</tr>
<tr>
<td>32 1735E33</td>
<td>35mm mounting rails</td>
<td>110 - 230</td>
<td>U₁ - 0.89</td>
<td>U₁ - 0.445</td>
<td>2.3</td>
<td>3</td>
<td>15.0 / (1.0)</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

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Depending 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 rated values:
- a reduction in power consumption
- reduced thermal stress

The overexcitation time can be determined for all versions via a link. The voltage is switched electronically from bridge connected to half-wave rectification.

**Control of the overexcitation period**

If a (normally open) limit switch S2 is connected instead of the link B2, the following are possible for controlling the overexcitation period:

- After 30 ms after the limit switch contacts are 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 overexcitation period.

**Connection of the limit switch:**

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 17350Exx</td>
<td><img src="image1" alt="" /></td>
</tr>
<tr>
<td>32 17353Exx</td>
<td><img src="image2" alt="" /></td>
</tr>
</tbody>
</table>

**Connection diagrams**

<table>
<thead>
<tr>
<th>Normal response time on switch-off:</th>
<th>Reduced response time on switch-off:</th>
</tr>
</thead>
</table>

MA = Solenoid
B2 = Overexcitation period
closed = short
open = long
(see table)
B1 = Reduced response time on switch-off

**Degree of protection**

to EN 60529: IP 00 Rating with IP 65 upon request

**Please note ordering data!**

**Order example**

- Single-phase rectifier

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| 32 17350E | 0 or 2 as per table
| 0, 4 or 8 as per table |

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