KENDRION 32 17350ExxUL Product Specification

32 17350ExxUL

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

Principle of operation	**time-controlled change-over of bridge-/ one-wave current**
Fast switching	**DC offswitching by protective contact**
Ambient temperature	**See derating (at 80C° are only 15% of the output voltage allowed)***
Rectifier type	**bridge/half-wave**

Type	Recovery period t_p s	Output voltage with over-excitation U_2 V —	Rated input voltage (Tol.:±10%) U_1 (40-60Hz) V 1	Output voltage half-wave U_3 V —	Output current half-wave max. at		Over-excitation period *) (Tol.:±10%) Preconfigured / (with B2 changeable) t_{oe} s
					R-Last I A —	L-Last I A —	
50E00UL	0.1	U_1 · 0.89 - 8%	220 - 300	U_1 · 0.445	2	2	0.25 / 1
50E10UL	0.1	U_1 · 0.89 - 8%	220 - 300	U_1 · 0.445	2	2	1 / 0.25
50E20UL	0.1	U_1 · 0.89 - 8%	220 - 300	U_1 · 0.445	2	2	1.8 / 3
50E33UL	0.1	U_1 · 0.89 - 8%	110 - 230	U_1 · 0.445	2	2	15 / 1
50E04UL	0.1	U_1 · 0.89 - 8%	48 - 120	U_1 · 0.445	2	2	0.25 / 1
50E14UL	0.1	U_1 · 0.89 - 8%	48 - 120	U_1 · 0.445	2	2	1 / 0.25
50E24UL	0.1	U_1 · 0.89 - 8%	48 - 120	U_1 · 0.445	2	2	1.8 / 3

***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

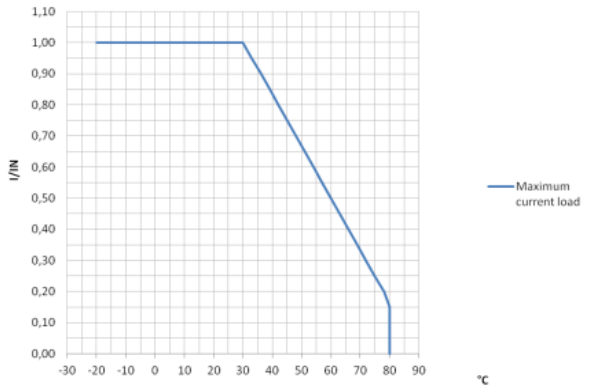
Low Voltage Directive 2014/35/EU:
Compliance with the following standards is confirmed:
HD 625.1 S1:2009 (VDE 0110) insulation coordination
EN 60529 (2014) IP 54 external mounting

Protection:
IP 00 to EN 60529

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.

Maximum current load over ambient air temperature



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
- longer service life
- abridged response times when switching off.

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

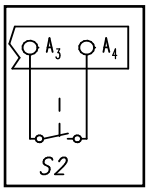
Control of the overexcitation period

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

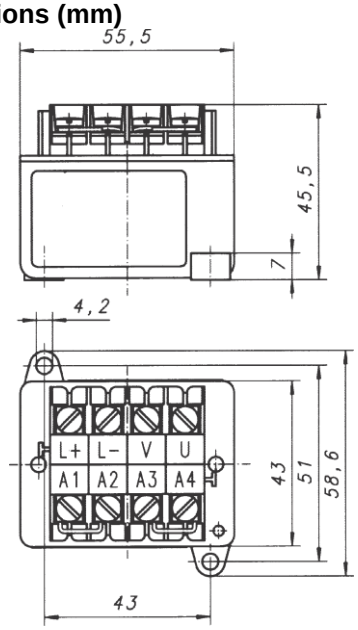
If a (normally open) limit switch S2 is connected instead of the link B2, the following are possible for controlling the overexcitation period t_{oe}:

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:

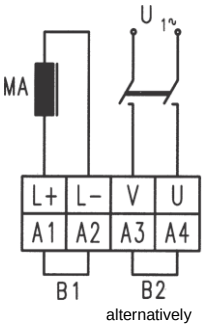


Dimensions (mm)

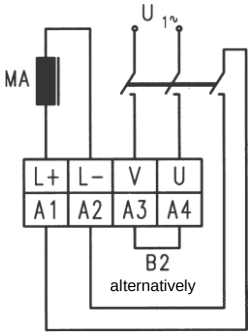


Connection diagrams

normal response time on switch-off:



reduced response time on switch-off:



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

Caution!
If switching is effected on the direct current side, it is also necessary to switch on the AC side.
A fuse 3,15A fast acting according to UL248-14 has to be used at the AC side.

Degree of protection: IP 00 according to EN60529
Pollution degree: For use in pollution degree II only. (VDE110/UL840: II)

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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