



32 1735xExx

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

Principle of operation		Rectifier with time-controlled bridge- / half-wave change-over					
fast switching		Offswitching DC over external protective contact					
Min. recovery time T_P / s		0,15					
Rectifier type		bridge / half-wave					
Ambient temperature		See derating (at 80°C are only 70% of the output voltage allowed)*					
Type	Installation	Rated input voltage (Tol.:±10%) U_1 (40-60Hz) V 1	Output voltage with over-excitation U_2 V —	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-Load I A —	L-Load I A —						
32 17350E00	screwed connection	220 - 415	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 173 50E10	screwed connection	220 - 415	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,0 / (0,25)
32 17350E20	screwed connection	220 - 415	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,8 / (3,0)
32 17350E04	screwed connection	48 - 120	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 17350E14	screwed connection	48 - 120	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,0 / (0,25)
32 17350E24	screwed connection	48 - 120	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,8 / (3,0)
32 17350E08	screwed connection	480 - 525	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 17350E28	screwed connection	480 - 525	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,8 / (3,0)
32 17353E00	35mm mounting rails	220 - 415	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 17353E04	35mm mounting rail	48 - 120	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 17353E10	35mm mounting rails	220 - 415	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	0,25 / (1,0)
32 17353E14	35mm-mounting rails	48 - 120	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	1,0 / (0,25)
32 17353E33	35mm-mounting rails	110 - 230	$U_1 \cdot 0,89$	$U_1 \cdot 0,445$	2,3	3	15,0 / (1,0)

*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:

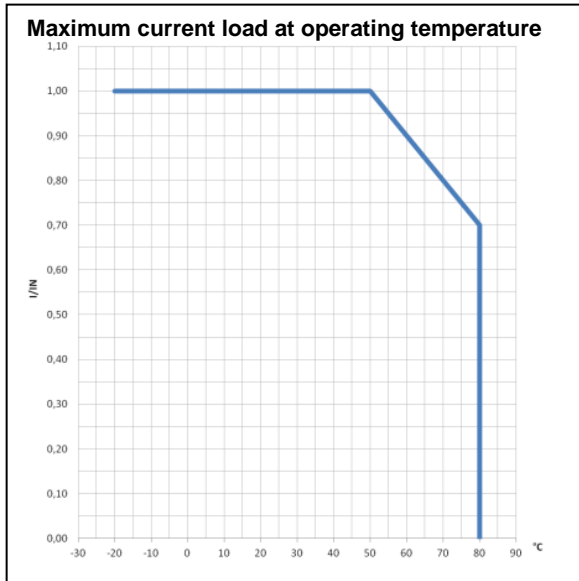
These products are considered components in the sense of Machinery Directive 2006/42/EC and must not be put into service until the machinery in which they are incorporated has been declared in conformity with the provisions of the EC Directives.

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



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 power supply.

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

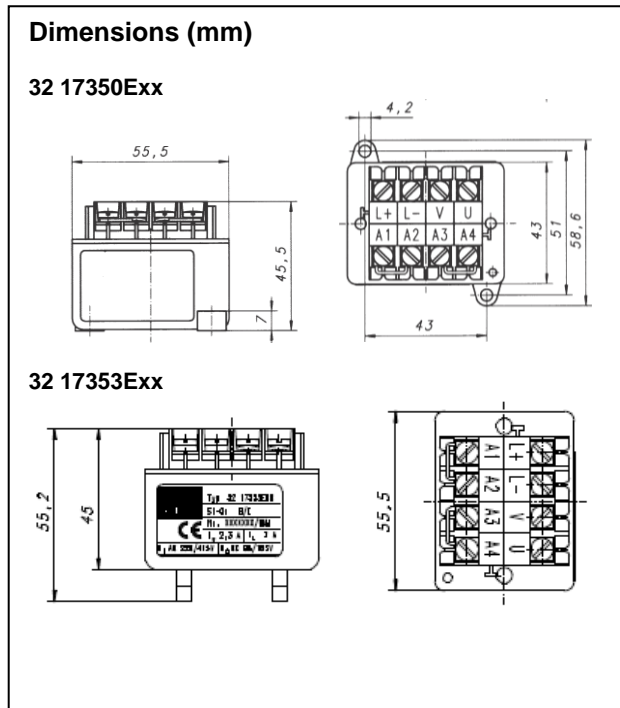
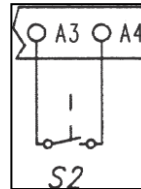
Control of the overexcitation period

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

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.

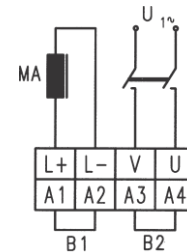
Switching operations of the contact S2 are detected at the soonest 60 ms after connecting the power supply to the terminals U - V. If the switch contact closes earlier, then the switchover to half-wave (hold) is effected at the latest after the short overexcitation period.

Connection of the limit switch:

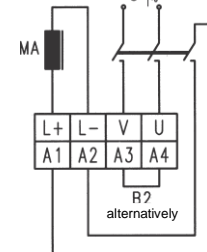


Connection diagrams

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 for the alternating current side to be switched.

Degree of protection

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

Subject design modifications without prior notice.

Please note ordering data!

Order example	Single-phase rectifier
	32 17350E <input type="checkbox"/> <input type="checkbox"/>
0 or 2 as per table	_____
0, 4 or 8 as per table	_____

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