



32 0735xA00

STANDARD COLLECTION

High-performance hybrid rectifier for half-wave and bridge rectified DC voltage

The sturdy rectifier is ideal for applications involving difficult power supply conditions such as transients and high ambient temperatures. Thanks to its unique circuitry configuration with external bridge circuit, the hybrid rectifier can work as half-wave rectifier or bridge rectifier. The hybrid rectifier has a built in protective circuit, which makes it ideal for use with inductive loads. All electronic components are installed in a compact receptacle housing. Complete PU encapsulation ensures perfect heat removal and optimum rectifier resistance to contamination and humidity.

The rectifier is equipped with brackets for universal installation. Top-hat rail mounting is also possible.

Technische Daten

Principle of operation		Hybrid rectifier for half-wave and bridge rectified DC voltage					
Fast switching		DC offswitching over external protective contact					
Ambient temperature		-25 - 85°C	See derating diagram (at 80C° are 60% of the output DC available)				
Connections		Dual-row screw terminal, 4 pins each AWG 18 – 14 (max. 2.5mm ²)					
Type	Circuitry	Input 1 BA3 and BA4 (2W-)	Input 2 BA1 and BA2 (1W-)	Rated input voltage U ₁ (tol.: ±10%) (40 – 60Hz) (VAC)	Max. output current I _{oE} / I _H (ADC)	Housing L x W x H (mm)	Installation
32 07354A00	half-wave (1W)	0.445 * U ₁	open	0 – 690	3.5	43 x 55,5 x 45,5	screw brackets Ø 4.2mm
	bridge (2W)	bridged	0.89 * U ₁	0 - 460	4		
32 07355A00	half-wave (1W)	0.445 * U ₁	open	0 – 690	3.5	43 x 55,5 x 55,2	clip for 35 mm mounting rail to EN 50022
	bridge (2W)	bridged	0.89 * U ₁	0 - 460	4		

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:

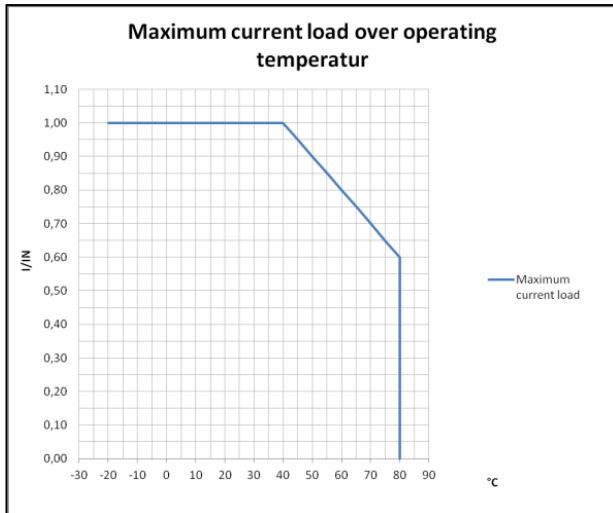
These products are considered components in the sense of Machinery Directive 2006/42/EC and must not be put into service until the machinery in which they are incorporated has been declared in conformity with the provisions of the EC Directives.

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



Protection:
IP 00 to EN 60529

Subject to change without notice.

Connection and operation

Rectifiers with DC side turn-off option are ideal for use with electromagnetic brakes of electric motors or with other electromagnetic devices. The technical specifications depend on the connected loads and on their electric and mechanical properties. If the rectifiers are used on electromagnetic brakes which are operated in parallel with the motor without DC side switching, brake engagement may be significantly delayed when the motor operates in generator mode after turn-off. The mechanical time constants during brake release or engagement must be taken into consideration. The maximum switching frequency of the rectifier merely defines a limit value for the permitted level of dissipated power in the rectifier. 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.

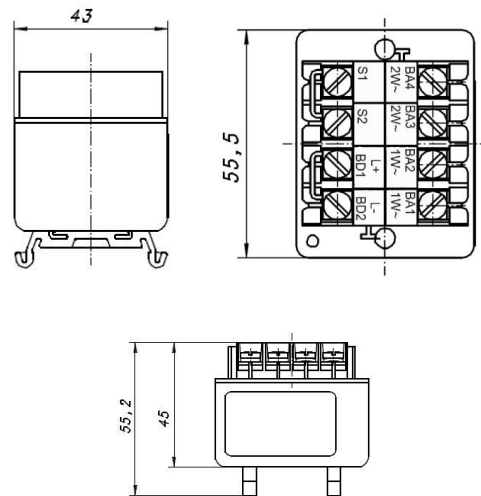
Attention!

Rectifier operation must take place in such a way that the connected load is not overloaded and that any use of the load other than its intended use is avoided. Check that the rectifier pinout is correct. Incorrect connection would cause irreversible damage. The rectifier is not short circuit proof. Output short-circuit to ground will destroy the rectifier.

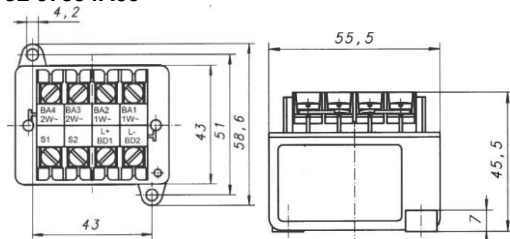
Connections

Terminal	Connection
BA1 1W~	input (VAC) for half-wave rectified DC voltage on output
BA2 1W~	input (VAC) for half-wave rectified DC voltage on output
BA3 2W~	input (VAC) for bridge rectified DC voltage on output
BA4 2W~	input (VAC) for bridge rectified DC voltage on output
S1	connection 1 for contactor for DC side turn-off
S2	connection 2 for contactor for DC side turn-off
L+ BD1	output for load +
L- BD2	output for load -

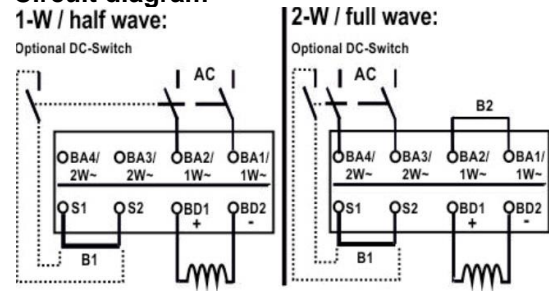
Dimensions (mm) 32 07355A00



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Circuit diagram



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