



32 67204A00
32 67304A00

Single-phase rectifier with integrated DC switching by voltage detection

Characterised by their compact design, these single-phase rectifiers with voltage detection are designed for installation in motor, brake or magnet terminal boxes. They work as full wave or half wave rectifiers, depending on the connection of the load. The switching behaviour will be

improved by detection of the mains voltage. The integrated switching transistor switches the load off if the mains voltage is lower than the specified threshold voltage. Due to this function the switch off time is extremely lower than with AC-switching. Various mounting and

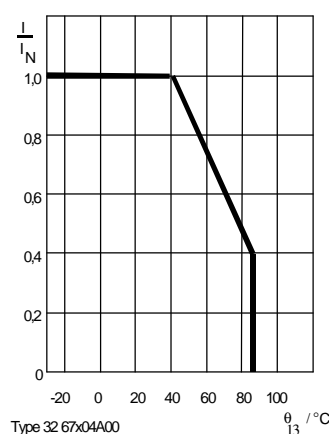
connection features and accessories make these rectifiers suitable for equally varied applications as the 32 07x2xA.. and 32 17x2xA.. series. All series are equivalent in terms of their mechanical design and connection features and thus fully interchangeable.

CE
These products meet the requirements of the **EMC Directive 89/336/EEC**. Compliance with the following standards is confirmed: EN 55011 (VDE 0875, part 11, 1992)
Group 1, class A disturbance voltage
Group 1, class B disturbance radiation
DIN EN 61000-4-3 (1997) test severity level 3,
DIN EN 61000-4-4 (1996) test severity level 3,
DIN EN 61000-4-5 (1996) test severity level 3
The products comply with the **Low Voltage Directive 73/23/EEC**. Compliance with the following standards is confirmed: HD 625.1 S1 (1996) EN 60529 (1991)
The products are considered components in the sense of the **Machinery Directive 98/37/EEC** and are not to be used until the machine in which they are to be incorporated is declared to conform to the requirements of the EC Directives.

Technical data

Rectification / DC side switching		full or half wave with internal DC-side switching by voltage detection		
Output voltage on terminals 6 and 5 (-; 2+)		$0.89 \cdot V_1$		
Output voltage on terminals 6 and 4 (-; 1+)		$0.445 \cdot V_1$		
Disconnection delay after switching off the AC input voltage		30 ms		
Disconnection voltage		approx. 400 V at 0,7 ADC		
Maximum permitted energy absorption of switching voltage limitation		28 J for 2 ms		
Type	Rated input voltage V_1 (tol.: $\pm 10\%$) (40 – 60 Hz) (VAC)	Max. current output I (ADC)	Max. threshold voltage V_{off} (VAC)	Terminals
304A00	220 – 415	0,7	190	6 screw terminals 1.5 mm ²
204A00	220 – 415	0,7	190	2 strands 0,34 ² 4 screw terminals 1,5 ²

Admissible current load at ambient temperature



Application hints

If these rectifiers are used together with brake-motors and connected parallel to the motor terminals, the voltage generated by the motor when running out, could slow down switching of the brake because the threshold

voltage of the rectifier is exceeded for a certain period of time. Active mechanical loads increase that problem. In this case rectifiers with current detection or standard

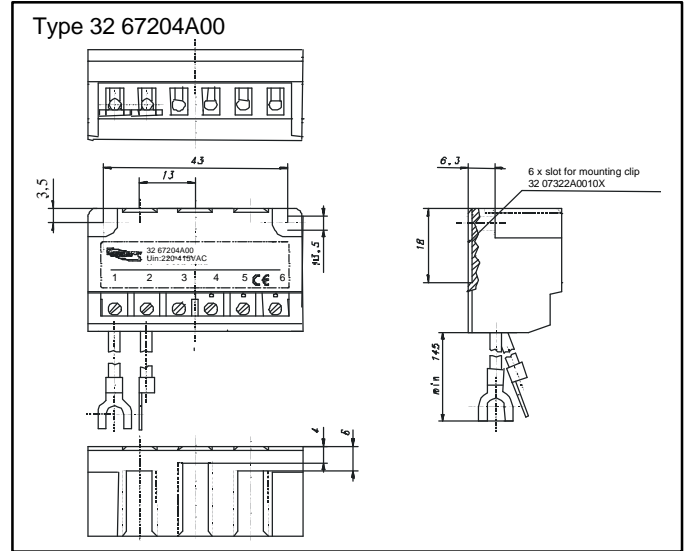
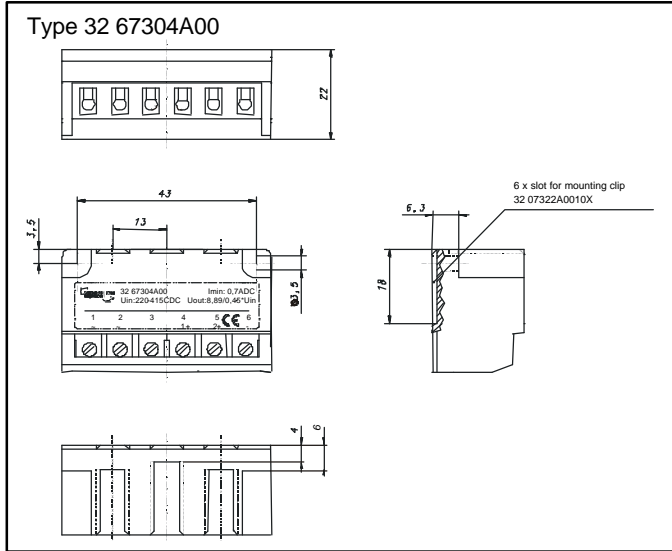
rectifiers in combination with external DC-side switching or external current relay are recommended.

Protection type:
as per EN 60529: IP 00

Specification subject to modifications without notice!
Please observe ordering data!

32 67204A00 / 32 67304A00

Dimensions (mm)



Accessories

Using a dovetail keyway, the clips or straps are to be connected with the rectifier in such a way that a flexible installation is ensured.

Clip: 32 07322A00101
Mounting clip for bores with a diameter of 4.3 mm
1 or 2 clips per rectifier

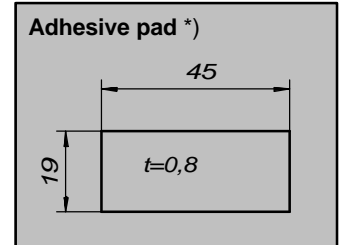
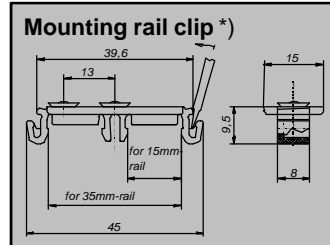
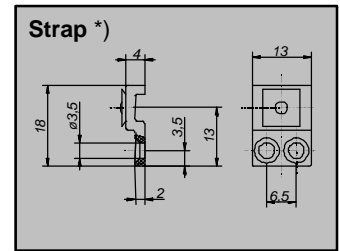
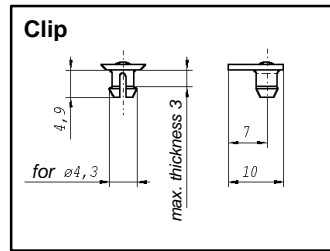
Strap *): 32 07322A00102
Mounting strap with a bore diameter of 4.2 mm for vertical or horizontal screwed mounting.
Alternative: installation in retention grooves.

(see dimensions)
1 or 2 straps per rectifier

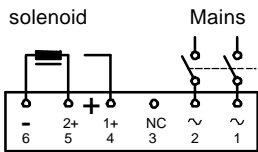
Mounting rail clip *): 32 07322A00103
Mounting clip for 35 and 15 mm mounting rails in accordance with EN 50022 and EN 50045
1 or 2 clips per rectifier

Adhesive pad *): 32 07322A00104
Double-sided adhesive tape for mounting on smooth surfaces
1 pad per rectifier

*) upon request



Connection diagram



- 1: A.C. Input
- 2: A.C. Input
- 3: N.C.
- 4: D.C. (1+); Half wave
- 5: D.C. (2+); Full wave
- 6: D.C. (-) GND

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Ordering example

- 2 – leads / terminals
- 3 – terminals

Rectifier with voltage detection

32 67 04A00