



33 43310A03

Technical specifications

Type 33 433..	10A03	11A03
Rectifier type	full wave rectifier synchronous switched	
Input voltage	230 / 115 VAC \pm 10%	
Frequency	40 – 60 Hz	
Output voltage:		
Overexcitation	205/102 VDC	
Holding voltage adjustable at 50 Hz	20 – 115 VDC bei 230 VAC 10 – 55 VDC bei 115 VAC	
Maximum output current:		
with overexcitation	4 ADC	8 ADC
holding current	2 ADC	4 ADC
Overexcitation time adjustable	0.15 – 3 s	
Min. recovery time	400 ms	
Required relay output for powerless switching	15 mA / 115 / 230 VAC potential separated	
Fuse: Fine wire fuse 5 x 20 as per DIN 41571	T2 E/250 V	M6,3 D/250 V
Connection	16-pole plug in screw terminals, 2,5 mm ² fine wire	
Ambient temperature	0 – 70 °C See diagram 2 for derating	
Protection as per EN 60529	IP 00	

**Specification subject to change without notice.
Please observe ordering data!**

CE

EMC Directive 2004/108/EEC:

Compliance with the following standards is confirmed:
 EN 50081-2 (Emission):
 EN 55011 (VDE 0875, part 11, 1992)
 Group 1, Class A conducted interference
 Group 1, Class B radiated interference
 EN 61000-6-2 (Immunity):
 EN 61000-4-3 (1997) severity level 3
 EN 61000-4-4 (1996) severity level 3
 EN 61000-4-5 (1996) severity level 3

Single-phase overexcitation rectifier

The single-phase overexcitation rectifiers specified below are designed to increase the attractive force, to reduce the attraction time of actuating solenoids, to reduce the coupling and disconnection times of clutches and brakes and to reduce the power consumption of clutches, brakes and actuating solenoids.

In order to increase the attractive force of actuating solenoids, the coil is overexcited during the overexcitation time applying a full wave rectified voltage. Afterwards, the rectifier changes over to the selected holding voltage, that shouldn't be higher than the specified nominal voltage of the solenoid. To lower the power consumption the nominal voltage of the solenoid should be not lower than the overexcitation voltage to achieve the nominal attractive force. The holding voltage can be adjusted depending of the dimensioning of the solenoid to a lower value than nominal. Owing to this power saving effect the switch off time will be reduced without the necessity of DC-side switching due to the lower magnetic energy. An integrated protective circuit allows DC side switching, thus reducing fall times, coupling times and disconnection times. The integrated compensation of input voltage changes provides a better stabilized output voltage. The rectifier is designed for powerless switching on and off. Overexcitation can be disabled, to use this device as variable DC-voltage supply for different applications. Due to their compact plastic housing, these rectifiers can be mounted on top-hat rails in switch cabinets. Plug-in screw terminals ensure simple installation.

Low Voltage Directive 2006/95/EEC:

Compliance with the following standards is confirmed:
 HD 625.1S1 (1996), (VDE 0110) insulation coordination, EN 60529 (1991) 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

The specified products comply with Directive 2002/95/EC (ROHS).

