

Half-wave and bridge rectifiers / Type 02_.000.6

Application

Rectifiers are used to connect DC consumers to alternating voltage supplies, for example electromagnetic brakes and clutches (ROBA-stop®, ROBA-quick®, ROBATIC®), electromagnets, electrovalves, contactors, switch-on safe DC motors, etc.

Function

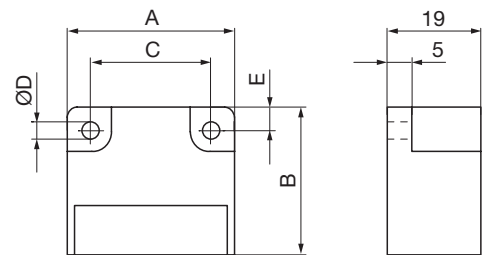
The AC input voltage (VAC) is rectified (VDC) in order to operate DC voltage units. Also, voltage peaks, which occur when switching off inductive loads and which may cause damage to insulation and contacts, are limited and the contact load reduced.



Electrical Connection (Terminals)

- 1 + 2 Input voltage
- 3 + 4 Connection for an external switch for DC-side switching
- 5 + 6 Coil
- 7 - 10 Free nc terminals (only for Size 2)

Dimensions (mm)



Size	A	B	C	ØD	E
1	34	30	25	3.5	4.5
2	54	30	44	4.5	5.0
3/4	64	30	54	4.5	5.0

Accessories: Mounting bracket set for 35 mm mounting rail acc. EN 60715, Article No. 1803201.

Order Number

___ / 0 2 ___ . 0 0 0 . 6



Size
1
to
4



4 Half-wave rectifier
5 Bridge rectifier

Technical Data

	Bridge rectifier		Half-wave rectifier			
	1/025	2/025	1/024	2/024	3/024	4/024
Calculation output voltage	VDC = VAC x 0.9		VDC = VAC x 0.45			
Type	1/025	2/025	1/024	2/024	3/024	4/024
Max. input voltage	230 VAC	230 VAC	400 VAC	400 VAC	500 VAC	600 VAC
Max. output voltage	207 VDC	207 VDC	180 VDC	180 VDC	225 VDC	270 VDC
Output current at ≤ 50 °C	2.5 A	2.5 A	3.0 A	4.0 A	4.0 A	4.0 A
Output current at max. 85 °C	1.7 A	1.7 A	1.8	2.4 A	2.4 A	2.4 A
Max. coil capacity at 115 VAC ≤ 50 °C	260 W	260 W	-	-	-	-
Max. coil capacity at 115 VAC up to 85 °C	177 W	177 W	-	-	-	-
Max. coil capacity at 230 VAC ≤ 50 °C	517 W	517 W	312 W	416 W	416 W	416 W
Max. coil capacity at 230 VAC up to 85 °C	352 W	352 W	187 W	250 W	250 W	250 W
Max. coil capacity at 400 VAC ≤ 50 °C	-	-	540 W	720 W	720 W	720 W
Max. coil capacity at 400 VAC up to 85 °C	-	-	324 W	432 W	432 W	432 W
Max. coil capacity at 500 VAC ≤ 50 °C	-	-	-	-	900 W	900 W
Max. coil capacity at 500 VAC up to 85 °C	-	-	-	-	540 W	540 W
Max. coil capacity at 600 VAC ≤ 50 °C	-	-	-	-	-	1080 W
max. coilistung bei 600 VAC up to 85 °C	-	-	-	-	-	648 W
Peak reverse voltage	1600 V	1600 V	2000 V	1600 V	2000 V	2000 V
Rated insulation voltage	320 VRMS	320 V _{RMS}	500 V _{RMS}	500 V _{RMS}	630 V _{RMS}	630 V _{RMS}
Pollution degree (insulation coordination)	1	1	1	1	1	1
Device fuses	To be included in the input feed line.					
Recommended microfuse switching capacity H <small>The microfuse corresponds to the max. possible connection capacity. If fuses are used corresponding to the actual capacities, the permitted limit integral I²t must be observed on selection.</small>	FF 3.15A	FF 3.15A	FF 4A	FF 5A	FF 5A	FF 5A
Permitted limit integral I²t	40 A²s	40 A²s	50 A²s	100 A²s	50 A²s	50 A²s
Protection	IP65 components, encapsulated / IP20 terminals					
Terminals	Cross-section 0.14 - 1.5 mm² (AWG 26-14)					
Ambient temperature	- 25 °C up to +85 °C					
Storage temperature	- 25 °C up to +105 °C					
Conformity markings	UL, CE	UL, CE	UL, CE	UL, CE	UL, CE	CE
Installation conditions	The installation position can be user-defined. Please ensure sufficient heat dissipation and air convection! Do not install near to sources of intense heat!					