

Dimension Sheet for Half-wave Rectifiers and Bridge Rectifiers Type 02_.000.6

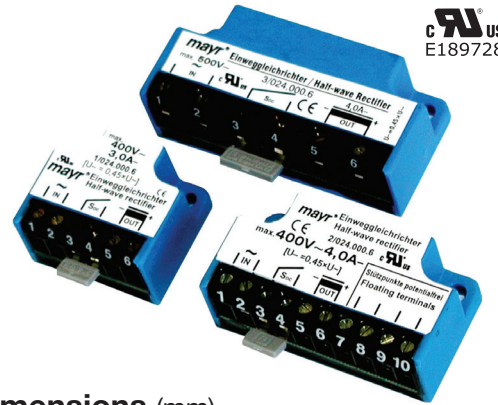
(M.02+0006.EN)

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.



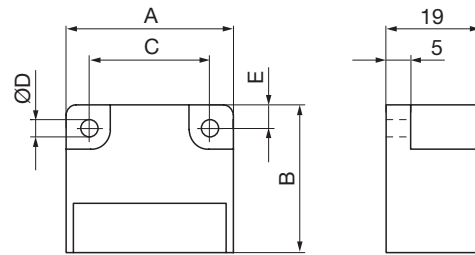
Electrical Connection (Terminals)

- 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)

Order Number

_	/	0	2	_	.	0	0	0	.	6
▲				▲						
Size 1 up to 4				4						Half-wave rectifier
				5						Bridge rectifier

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 rail acc. EN 60715: Article-No. 1803201

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									
Max. input voltage		± 10 %	U _{AC} [VAC]	230	230	400	400	500	600
Max. output voltage			U _{DC} [VDC]	207	207	180	180	225	270
Output current at		≤ 50 °C	I _{RMS} [A]	2.5	2.5	3.0	4.0	4.0	4.0
		max. 85 °C	I _{RMS} [A]	1.7	1.7	1.8	2.4	2.4	2.4
Max. coil nominal capacity at	U _{AC} = 115 VAC	≤ 50 °C	P _N [W]	260	260	-	-	-	-
		up to 85 °C	P _N [W]	177	177	-	-	-	-
	U _{AC} = 230 VAC	≤ 50 °C	P _N [W]	517	517	312	416	416	416
		up to 85 °C	P _N [W]	352	352	187	250	250	250
	U _{AC} = 400 VAC	≤ 50 °C	P _N [W]	-	-	540	720	720	720
		up to 85 °C	P _N [W]	-	-	324	432	432	432
	U _{AC} = 500 VAC	≤ 50 °C	P _N [W]	-	-	-	-	900	900
		up to 85 °C	P _N [W]	-	-	-	-	540	540
U _{AC} = 600 VAC	≤ 50 °C	P _N [W]	-	-	-	-	-	1080	
	up to 85 °C	P _N [W]	-	-	-	-	-	648	
Peak reverse voltage			[V]	1600	1600	2000	1600	2000	2000
Rated insulation voltage			U _{RMS} [V _{RMS}]	320	320	500	500	630	630
Pollution degree (insulation coordination)				1	1	1	1	1	1
Device fuses		To be included in the input voltage 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 3.15 A	FF 3.15 A	FF 4 A	FF 5 A	FF 5 A	FF 5 A
Permitted limit integral		I ² t	[A ² s]	40	40	50	100	50	50
Protection		IP65 components, encapsulated / IP20 terminals							
Terminals		Cross-section 0.14 – 1.5 mm ² (AWG 26 – 14)							
Ambient temperature			[°C]	-25 up to +85					
Storage temperature			[°C]	-40 up to +85					
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!							