

# Wkładki topikowe D typu DIAZED gR

**Typ:** DIAZED

**Charakterystyka:** gR

**Prąd znamionowy:** 2-200A

**Napięcie znamionowe:** 500V AC, 400V DC

**Zwarciova zdolność wyłączenia:** 100kA

**Wielkość:** DII-DV

**Wg normy:** IEC 60269-4, VDE 636-23 i 33, DIN 43653, 49515, 49522, 43620

**Zastosowanie:** ochrona półprzewodników

**Producent:** MERSEN (FERRAZ SHAWMUT)

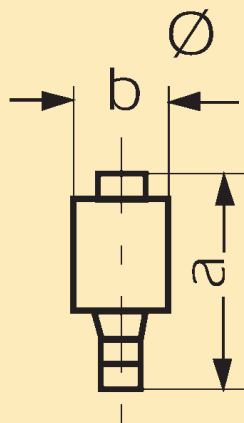


## D gR 500V AC/400V DC

Wielkość	Prąd znam. [A]	Przedtłukowe I <sup>2</sup> t [A <sup>2</sup> s]	I <sup>2</sup> t przy 380V (RMS) [A <sup>2</sup> s]	I <sup>2</sup> t przy 500V (RMS) [A <sup>2</sup> s]	Strata mocy P [W]	Waga (kg/100szt.)	Ilość w opak.	Nr artykułu
DII	2	1	2	3	1,8	3,1	5	Z212542E
DII	4	2	4	5	3,1	3,1	5	K213058E
DII	6	4	6	9	3,2	3,1	5	E214065E
DII	10	10	14	20	5,0	3,1	5	M214578E
DII	16	26	40	55	5,8	3,1	5	T215090E
DII	20	40	60	85	8,0	3,1	5	T215596E
DII	25	95	140	200	12,2	3,1	5	B216109E
DII	30					3,1	5	Y216612E
DIII	35	490	790	1100	14	5,3	5	K217129E
DIII	50	900	1480	2050	16	5,3	5	Q217640E
DIII	63	1580	2400	3200	19	5,3	5	Y218153E
D IV	80	3200	5200	7300	35	11,0	5	B201251E
D IV	100	5600	10100	14000	41	11,0	5	M201767E
D V	125						5	J207054E
D V	160						5	C211510E
D V	200						5	G212020E

## Wpływ temperatury na obciążalność bezpieczników gR DIAZED

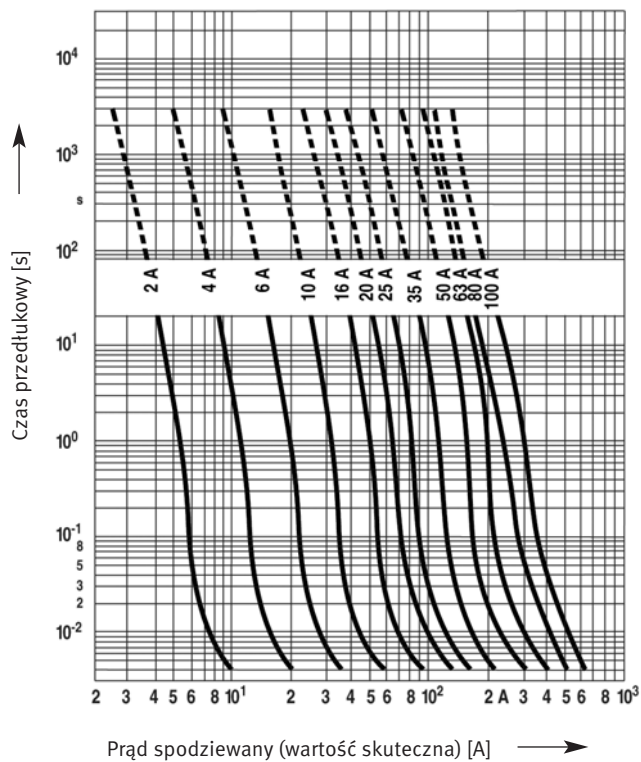
Temperatura otoczenia [°C] T	T ≤ 25	25 < T ≤ 30	30 < T ≤ 35	35 < T ≤ 40	40 < T ≤ 45	45 < T ≤ 50	50 < T ≤ 55
Maksymalne obciążenie bezpieczników (%)	100	94	88	82	75	67	58



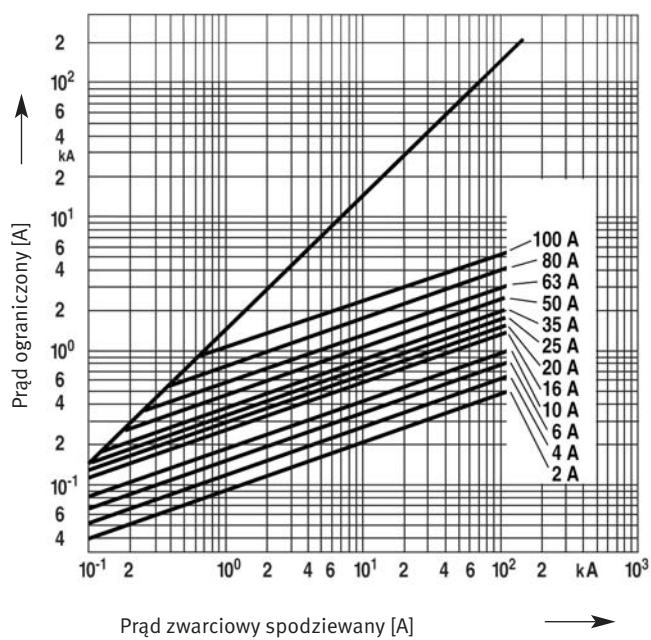
## Wymiary

Wielkość	a [mm]	bØ [mm]
DII	50	22
DIII	50	27
DIV	57	37

### Charakterystyka czasowo-prądowe



### Charakterystyka prądów ograniczonych



# RECTICUR D & D0 gR

500VAC / 440VDC & 440VAC (IEC)

## IEC High-Speed D & D0 Fuse-Links AC-DC Protection

The D fuse-system is the first generation of screw fuse-systems in the German DIN standard. It is still used in many installations. This D system comprises the sizes DII, DIII, DIV, DV.

The D0 fuse-system is the most modern of the screw systems in the German DIN standard. This system comprises the sizes D01, D02 and D03.

Those D & D0 ultra-fast acting "gR" ranges are dedicated to semi-conductor protection, in applications where fuse-links are accessible to non-trained persons and can also be changed by them.

They are used for the protection of components such as diodes, thyristors or AC/DC motor drives. The "R" stands for the English word Rectifier. D & D0 fuse-links are available at the rated current range from 2A up to 200A.

### Features & Benefits

- Insulated body suitable for high mechanical and thermal impacts
- Top and bottom contacts made of nickel-plated/silver-plated copper alloy
- Safe cut off short circuits and over currents due special design of fuse element
- Clear indication of operation condition due coloured indicator on top contact
- Low power dissipation
- Optimized size
- Resistant to aging

### Technical data overview

Voltage	440 - 500 VAC 440 VDC
Ampere Range (A)	2 ... 200 A
Size per Standard	DII, DIII, DIV, DV & D01, D02, D03
Speed/Characteristic	gR
I.R. AC (kA)	100 kA
Product Size	D01 to D03 & DII to DV



### Standards

IEC 60 269-4

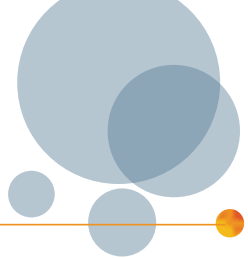
DIN EN 60269-4 (VDE 0636-4)

DIN VDE 0636-3



# RECTICUR D & D0 gR

500VAC / 440VDC & 440VAC (IEC)



## Product range

### NEOZED RECTICUR IEC DIN TYPE D 01

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
D01GR44V2	M215038	440 V	2 A	3 A <sup>2</sup> s	100 kA	1.5 W	3 A <sup>2</sup> s	7 g	50
D01GR44V4	N218673	440 V	4 A	4 A <sup>2</sup> s	100 kA	2 W	5 A <sup>2</sup> s	7 g	50
D01GR44V6	B219191	440 V	6 A	5 A <sup>2</sup> s	100 kA	2.3 W	10 A <sup>2</sup> s	7 g	50
D01GR44V10	F219724	440 V	10 A	12 A <sup>2</sup> s	100 kA	2.2 W	25 A <sup>2</sup> s	7 g	50
D01GR44V16	N222169	440 V	16 A	40 A <sup>2</sup> s	100 kA	3.3 W	75 A <sup>2</sup> s	7 g	50

### NEOZED RECTICUR IEC DIN TYPE D 02

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
D02GR44V20	H222923	440 V	20 A	60 A <sup>2</sup> s	100 kA	4.3 W	110 A <sup>2</sup> s	13 g	25
D02GR44V25	R200713	440 V	25 A	90 A <sup>2</sup> s	100 kA	6 W	180 A <sup>2</sup> s	13 g	25
D02GR44V35	F201255	440 V	35 A	210 A <sup>2</sup> s	100 kA	8.4 W	410 A <sup>2</sup> s	13 g	25
D02GR44V50	R201771	440 V	50 A	830 A <sup>2</sup> s	100 kA	10 W	1650 A <sup>2</sup> s	13 g	25
D02GR44V63	Y207113	440 V	63 A	1300 A <sup>2</sup> s	100 kA	13.9 W	2500 A <sup>2</sup> s	13 g	25

### NEOZED RECTICUR IEC DIN TYPE D 03

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
D03GR44V80	G211514	440 V	80 A	2100 A <sup>2</sup> s	100 kA	17.6 W	4300 A <sup>2</sup> s	40 g	10
D03GR44V100	L212024	440 V	100 A	3300 A <sup>2</sup> s	100 kA	21 W	6600 A <sup>2</sup> s	40 g	10

### RECTICUR IEC DIN TYPE D II

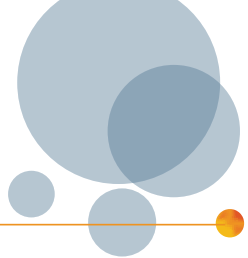
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
DIIGR50V2	Z212542	500 V	440 V	2 A	1 A <sup>2</sup> s	100 kA	1.8 W	3 A <sup>2</sup> s	30 g	5
DIIGR50V4	K213058	500 V	440 V	4 A	2 A <sup>2</sup> s	100 kA	3.1 W	5 A <sup>2</sup> s	30 g	5
DIIGR50V6	E214065	500 V	440 V	6 A	4 A <sup>2</sup> s	100 kA	3.2 W	9 A <sup>2</sup> s	30 g	5
DIIGR50V10	M214578	500 V	440 V	10 A	10 A <sup>2</sup> s	100 kA	5 W	20 A <sup>2</sup> s	30 g	5
DIIGR50V16	T215090	500 V	440 V	16 A	26 A <sup>2</sup> s	100 kA	5.8 W	55 A <sup>2</sup> s	30 g	5
DIIGR50V20	T215596	500 V	440 V	20 A	40 A <sup>2</sup> s	100 kA	7 W	85 A <sup>2</sup> s	30 g	5
DIIGR50V25	B216109	500 V	440 V	25 A	95 A <sup>2</sup> s	100 kA	8.2 W	200 A <sup>2</sup> s	30 g	5
DIIGR50V30	Y216612	500 V	440 V	30 A	100 A <sup>2</sup> s	100 kA	8.7 W	235 A <sup>2</sup> s	30 g	5

### RECTICUR IEC DIN TYPE D III

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
DIIGR50V35	K217129	500 V	440 V	35 A	490 A <sup>2</sup> s	100 kA	9.2 W	1100 A <sup>2</sup> s	50 g	5
DIIGR50V50	Q217640	500 V	440 V	50 A	900 A <sup>2</sup> s	100 kA	10 W	2050 A <sup>2</sup> s	50 g	5
DIIGR50V63	Y218153	500 V	440 V	63 A	1580 A <sup>2</sup> s	100 kA	14 W	3200 A <sup>2</sup> s	50 g	5

# RECTICUR D & D0 gR

500VAC / 440VDC & 440VAC (IEC)



## Product range

### RECTICUR IEC DIN TYPE D IV

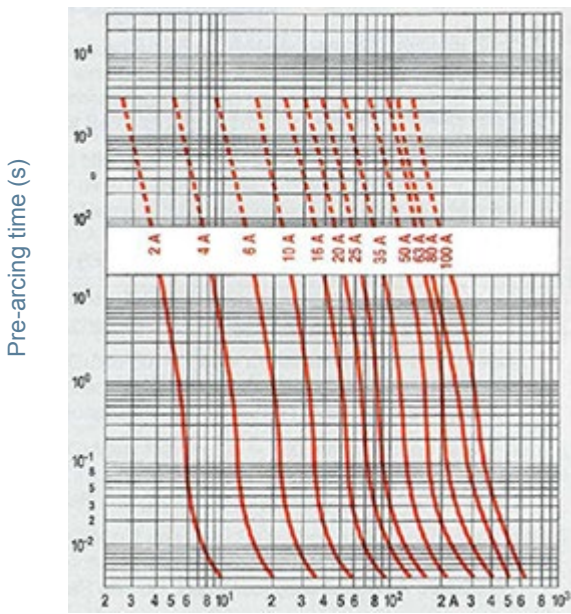
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current $I_n$	Pre-arcing $I^2t$	Rated breaking capacity AC	Power dissipation at $I_n$	Operating $I^2t$ at Rated Voltage	Weight	Package
DIVGR50V80	B201251	500 V	440 V	80 A	3200 A <sup>2</sup> s	100 kA	18 W	7300 A <sup>2</sup> s	110 g	5
DIVGR50V100	M201767	500 V	440 V	100 A	5600 A <sup>2</sup> s	100 kA	22 W	14000 A <sup>2</sup> s	110 g	5

### RECTICUR IEC DIN TYPE D V

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current $I_n$	Pre-arcing $I^2t$	Rated breaking capacity AC	Power dissipation at $I_n$	Operating $I^2t$ at Rated Voltage	Weight	Package
DVGR50V125	J207054	500 V	440 V	125 A	5800 A <sup>2</sup> s	100 kA	26 W	15000 A <sup>2</sup> s	210 g	5
DVGR50V160	C211510	500 V	440 V	160 A	6100 A <sup>2</sup> s	100 kA	30 W	16000 A <sup>2</sup> s	210 g	5
DVGR50V200	G212020	500 V	440 V	200 A	7200 A <sup>2</sup> s	100 kA	37 W	21000 A <sup>2</sup> s	210 g	5

## Time current characteristic curves

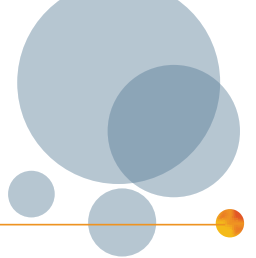
### RECTICUR D01 D02 D03



RMS value of prospective current (A) +/- 8%

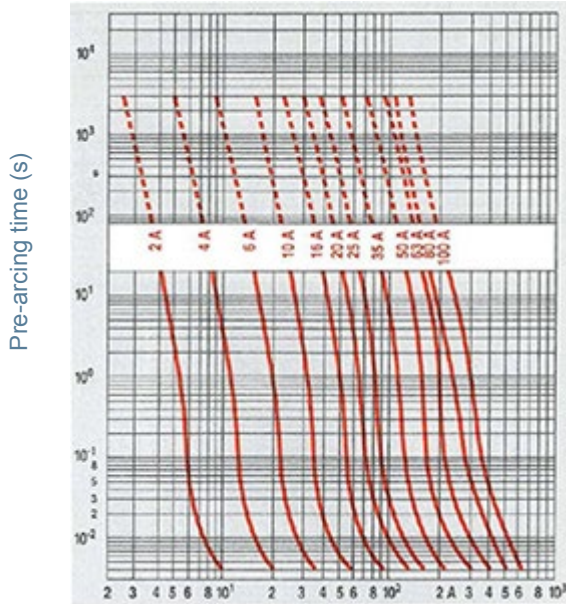
# RECTICUR D & D0 gR

500VAC / 440VDC & 440VAC (IEC)



## Time current characteristic curves

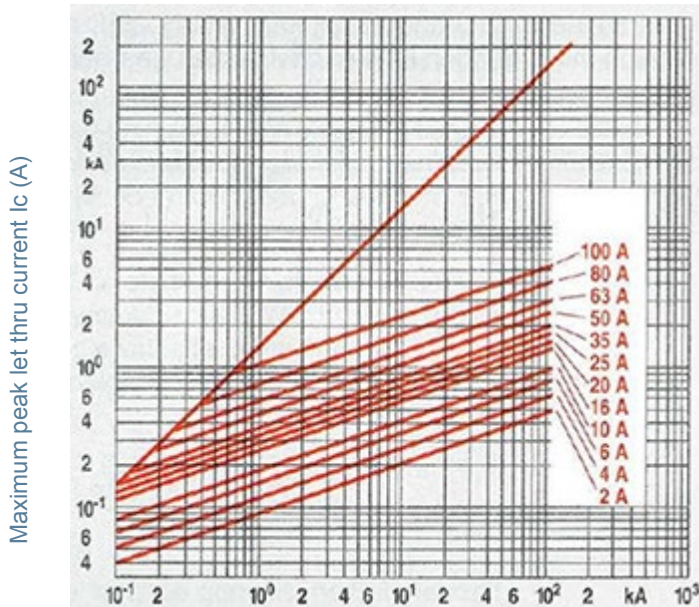
RECTICUR DII DIII DIV DV



RMS value of prospective current (A) +/- 8%

## Cut-off current characteristic

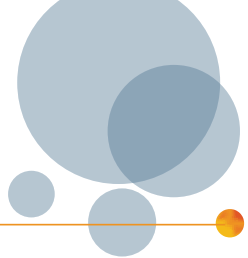
RECTICUR D01 D02 D03



50 Hz RMS symmetrical prospective current  $I_p$  (A)

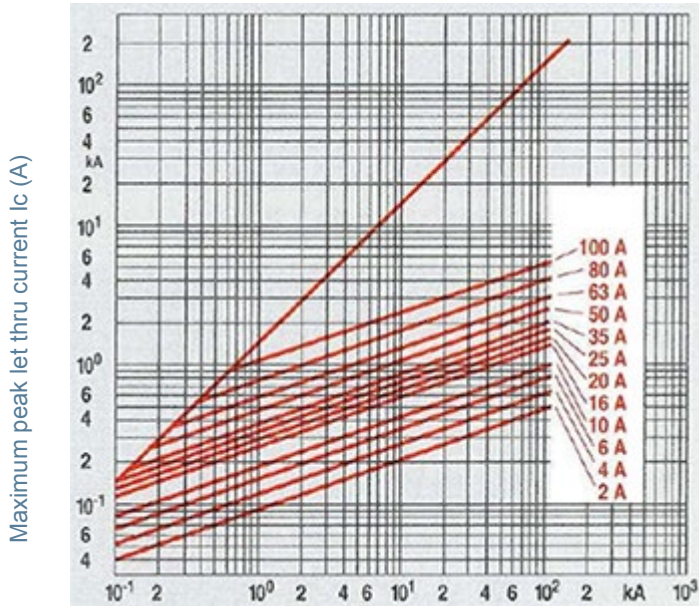
# RECTICUR D & D0 gR

500VAC / 440VDC & 440VAC (IEC)



## Cut-off current characteristic

RECTICUR DII DIII DIV DV



50 Hz RMS symmetrical prospective current  $I_p$  (A)

## Dimensions

Size (mm)	a	b ø
D01	36	11
D02	36	15,3
D03	43	22,5

Size (mm)	a	b ø
DII	50	22
DIII	50	27
DIV	63	37
DV	63	45