

# RECTICUR D gR

500VAC / 440VDC

## SEMICONDUCTOR PROTECTION FUSES

### IEC HIGH-SPEED D & DO 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.

Those D 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 fuse-links are available at the rated current range from 2A up to 200A.

#### TECHNICAL DATA OVERVIEW

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

#### 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

#### STANDARDS

- IEC 60 269-4
- DIN EN 60269-4 (VDE 0636-4)
- DIN VDE 0636-3



## PRODUCT RANGE

### RECTICUR IEC DIN TYPE D II

Catalog number	Item 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



DIIGR50V35

### RECTICUR IEC DIN TYPE D III

Catalog number	Item 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



DIVGR50V80

### RECTICUR IEC DIN TYPE D IV

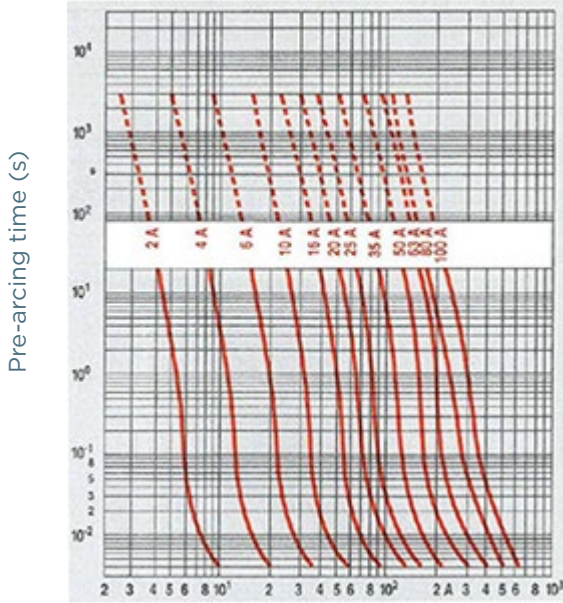
Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Operating I <sup>2</sup> t at Rated Voltage	Weight	Package
DIVGR50V80	B201251	500 V	440 V	80 A	3200 A <sup>2</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	Item 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
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

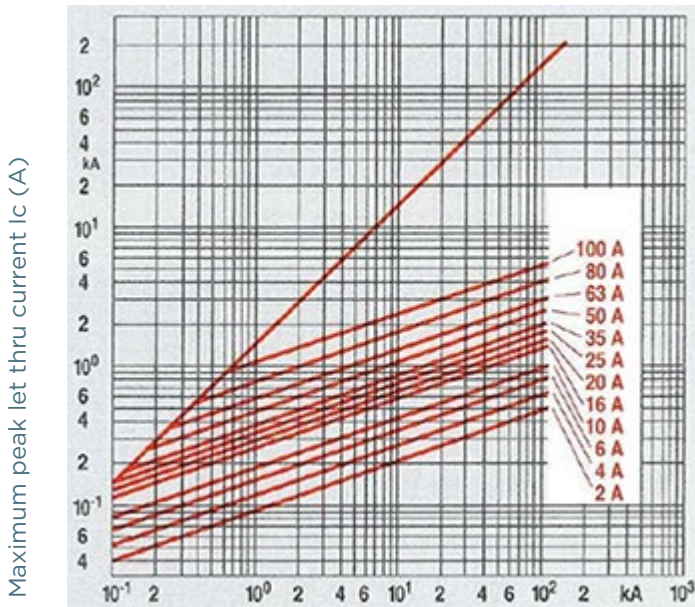
### RECTICUR DII DIII DIV DV



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

## CUT-OFF CURRENT CHARACTERISTIC

### RECTICUR DII DIII DIV DV



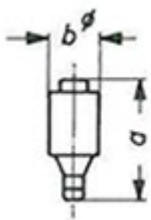
50 Hz RMS symmetrical prospective current Ip (A)

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# RECTICUR D gR

500VAC / 440VDC

## DIMENSIONS



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