RGB ELEKTRONIKA

Centrum automatyki przemysłowej

DATASHEET

SEMIKRON

SKB33/12

OTHER SYMBOLS:

SKB3312, SKB33 12, SKB33/12

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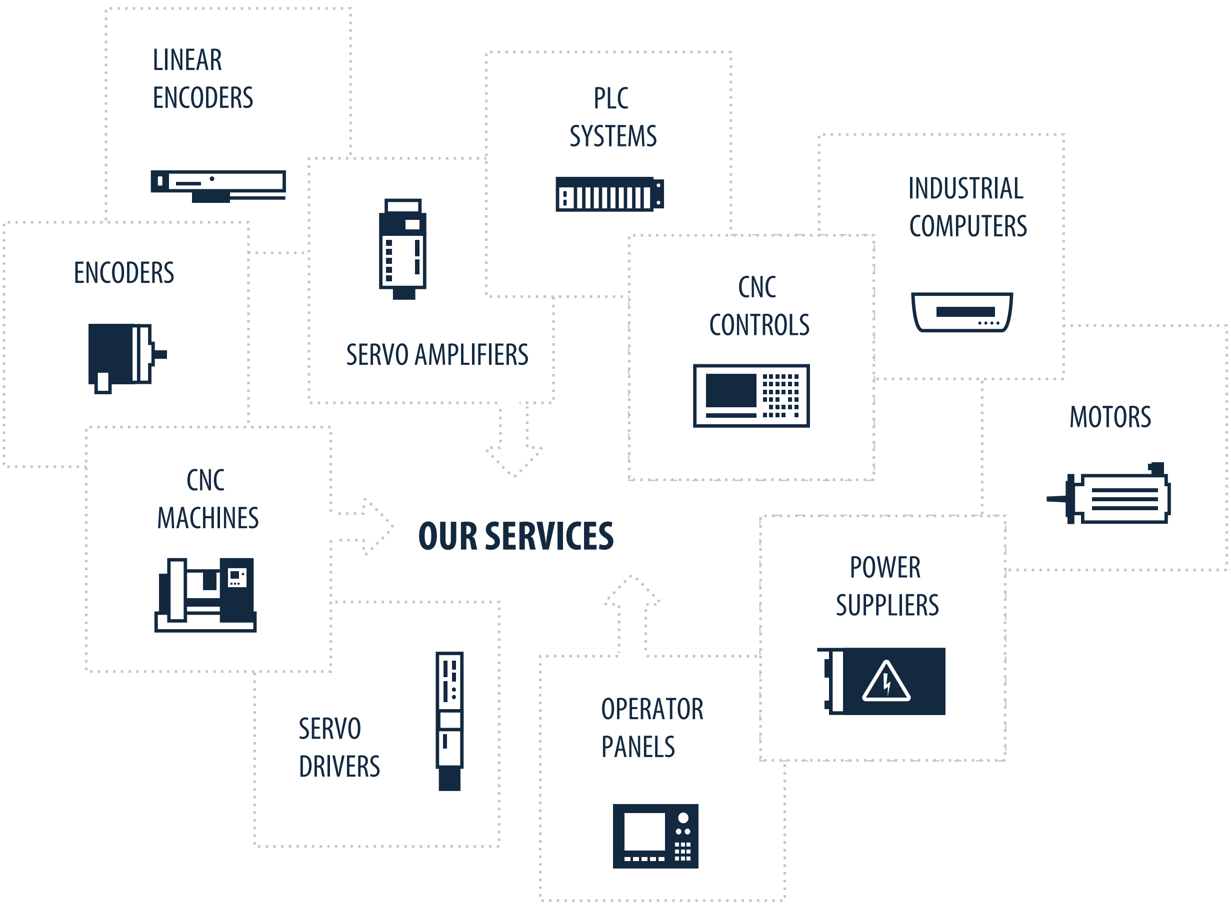
YOUR PARTNER IN MAINTENANCE

Repair **this product** with RGB ELEKTRONIKA

ORDER A DIAGNOSIS »



At our premises in Wrocław, we have a fully equipped servicing facility. Here we perform all the repair works and test each later sold unit. Our trained employees, equipped with a wide variety of tools and having several testing stands at their disposal, are a guarantee of the highest quality service.

Buy **this product** at RGB AUTOMATYKA

BUY »

SKB 33

V_{RSM} V	V_{RRM}, V_{DRM} V	I_D = 33 A (full conduction) (T_c = 62 °C)
300	200	SKB 33/02
500	400	SKB 33/04
700	600	SKB 33/06
900	800	SKB 33/08
1100	1000	SKB 33/10
1300	1200	SKB 33/12

Symbol	Conditions	Values	Units
I_D	T_a = 45 °C isolated [1]	6,5	A
	T_a= 45 °C; chassis [2]	14	A
	T_a= 45 °C; P1A/120	24	A
	T_a= 35 °C; P1A/120 F	32	A
I_{TSM}, I_{FSM}	T_{vj} = 25 °C; 10 ms	370	A
	T_{vj} = 130 °C; 10 ms	340	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	680	A²s
	T_{vj} = 130 °C; 8,3 ... 10 ms	580	A²s
V_T	T_{vj} = 25 °C; I_T=75 A	max. 2,4	V
$V_{T(TO)}$	T_{vj} = 130 °C;	max. 1	V
r_T	T_{vj} = 130 °C	max. 15	mΩ
I_{DD}; I_{RD}	T_{vj} = 130 °C; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}	max. 10	mA
t_{gd}	T_{vj} = 25 °C; I_G = 1 A; di_G/dt = 1 A/µs	1	µs
t_{gr}	V_D = 0,67 · V_{DRM}	1	µs
$(dv/dt)_{cr}$	T_{vj} = 130 °C	max. 200	V/µs
$(di/dt)_{cr}$	T_{vj} = 130 °C; f = 50 Hz	max. 50	A/µs
t_q	T_{vj} = 130 °C; typ.	80	µs
I_H	T_{vj} = 25 °C; typ. / max.	20 / 200	mA
I_L	T_{vj} = 25 °C; R_G = 33 Ω; typ. / max.	80 / 400	mA
V_{GT}	T_{vj} = 25 °C; d.c.	min. 3	V
I_{GT}	T_{vj} = 25 °C; d.c.	min. 100	mA
V_{GD}	T_{vj} = 130 °C; d.c.	max. 0,25	V
I_{GD}	T_{vj} = 130 °C; d.c.	max. 3	mA
$R_{th(j-c)}$	per thyristor / diode	2,6	K/W
	total	0,65	K/W
$R_{th(c-s)}$	total	0,06	K/W
T_{vj}		- 40 ... + 130	°C
T_{stg}		- 55 ... + 150	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 (2500)	V
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	3 ± 15 %	Nm
m		250	g
Case		G 16	

Controllable Bridge Rectifiers

SKB 33

Features

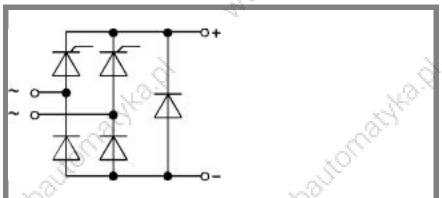
- Half controlled, single phase rectifier with freewheeling diode
- Isolated metal case with screw terminals
- Blocking voltage up to 1200 V
- High surge currents
- Easy chassis mounting

Typical Applications

- Power supplies for electronic equipment
- DC motors
- Field rectifiers for DC motors
- Battery charger rectifiers

1) Freely suspended or mounted on an insulator

2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm



SKB

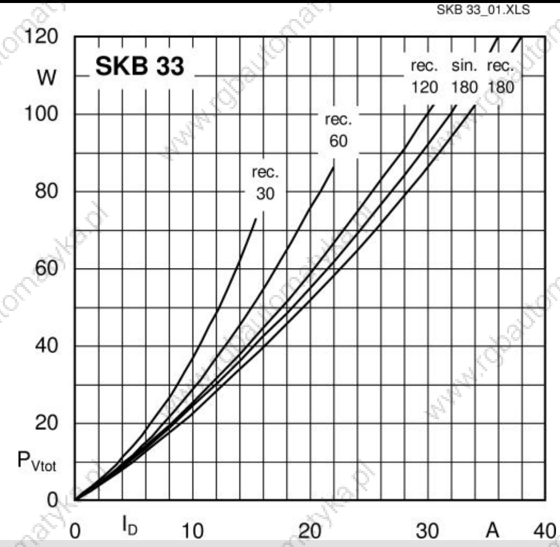


Fig. 1 Power dissipation vs. output current

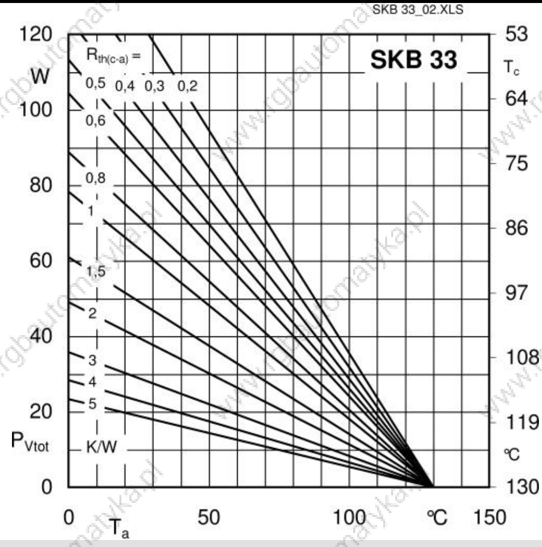


Fig. 2 Power dissipation vs. case temperature

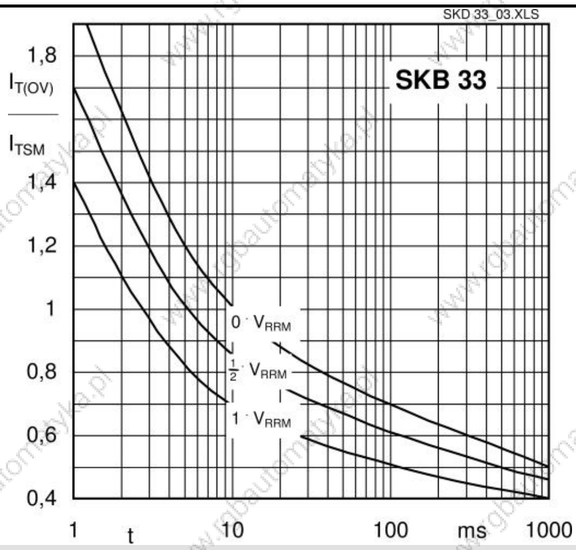


Fig. 5 Surge overload characteristics vs. time

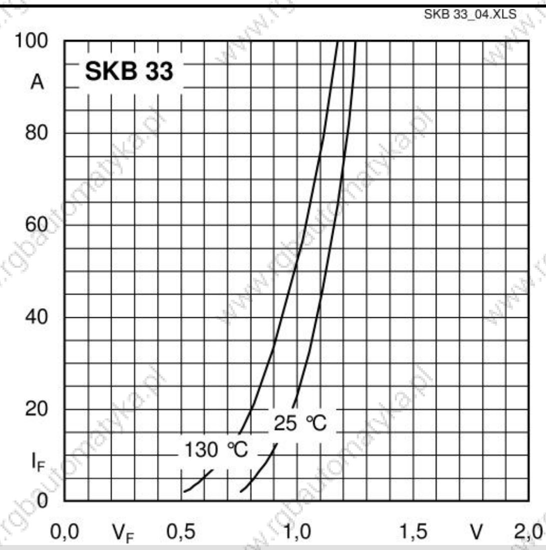


Fig. 9 Forward characteristics of a diode arm

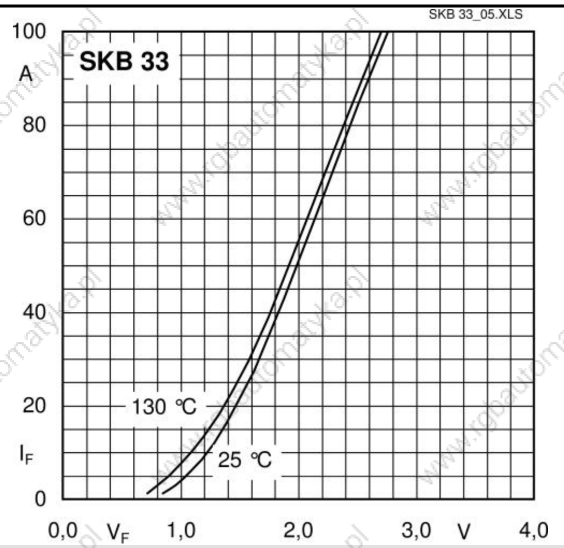


Fig. 10 On-state characteristics of a thyristor arm

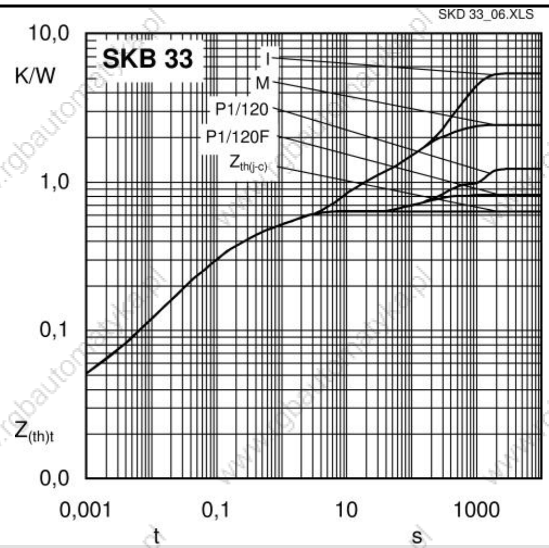


Fig. 12 Transient thermal impedance vs. time

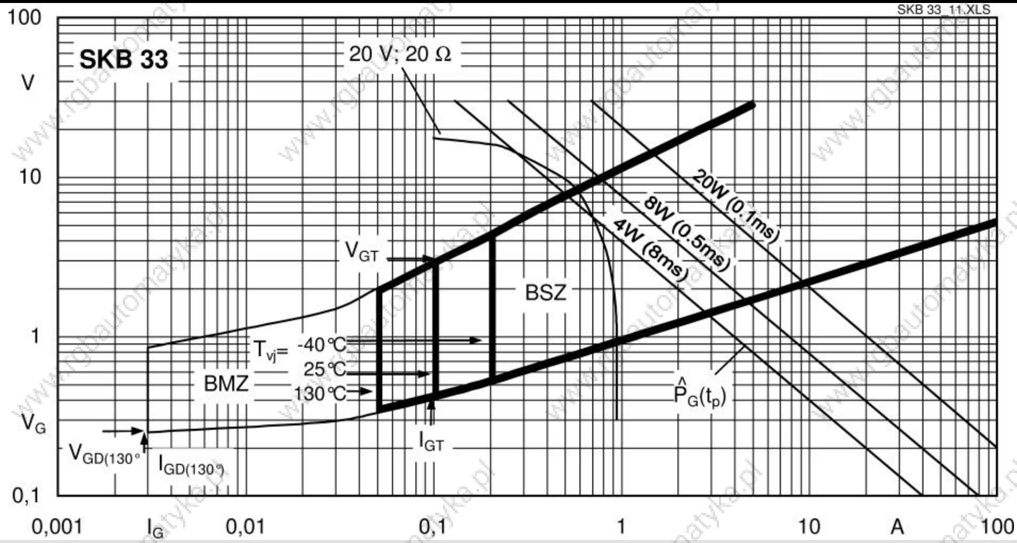
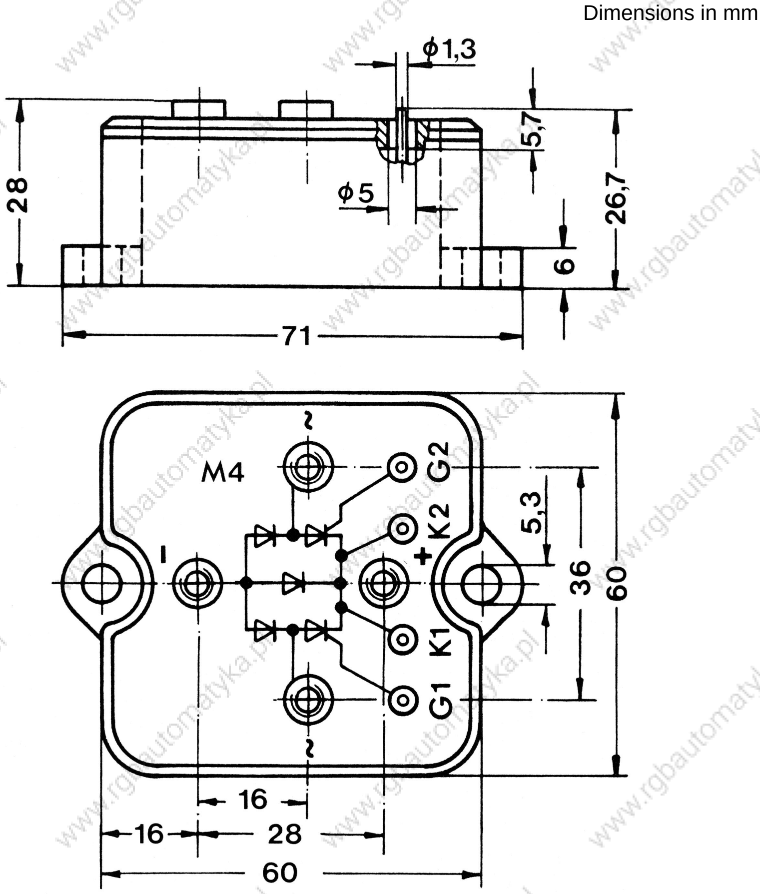


Fig. 11 Gate characteristics of a thyristor device



Case G 16

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