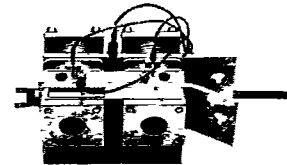


V_{DRM} V_{RSM} V_{RRM} V	$I_{RMS}^{1)}$ ($Vol_w = 4l/min, T_w = 40^\circ C, ED = 50\%, n = 10$)	
	1700 A	1900 A
1200	SKW 1000/12	SKW 1200/12
1400	SKW 1000/14	SKW 1200/14
1600	SKW 1000/16	SKW 1200/16

Antiparallel Thyristors with Non-Isolated Water Flow

SKW 1000
SKW 1200

T-25-21



Symbol	Conditions	SKW 1000	SKW 1200
$I_{RMS}^{1)}$ I_{TSM} i^2t	$Vol_w = 4l/min, T_w = 40^\circ C, ED = 100\%$ $T_{vj} = 40^\circ C$ $T_{vj} = 125^\circ C$ $T_{vj} = 40^\circ C$ $T_{vj} = 125^\circ C$	1000 A 8000 A 6800 A 320 000 A ² s 230 000 A ² s	1200 A 10 000 A 8500 A 500 000 A ² s 360 000 A ² s
$(di/dt)_{cr}$ $(dv/dt)_{cr}$ t_q I_H I_L	$f = 50 \dots 60 Hz$ $T_{vj} = 125^\circ C$ $T_{vj} = 125^\circ C; typ.$ $T_{vj} = 25^\circ C$ $T_{vj} = 25^\circ C; R_G = 33\Omega$		100 A/ μs 500 V/ μs 200 μs 300 mA 1500 mA
V_T $V_{T(TO)}$ r_T	$T_{vj} = 25^\circ C; (I_r = \dots); max.$ $T_{vj} = 125^\circ C$ $T_{vj} = 125^\circ C$	1,5 V (1500 A) 0,9 V 0,4 m Ω	2,1 V (2400 A) 1,1 V 0,4 m Ω
V_{GT} I_{GT} V_{GD} I_{GD}	$T_{vj} = 25^\circ C$ $T_{vj} = 25^\circ C$ $T_{vj} = 125^\circ C$ $T_{vj} = 125^\circ C$		3,5 V 200 mA 0,25 V 10 mA
R_{thjw} T_{vj} T_{stg} p_w w	$Vol_w = 4l/min$ max. min. ... max. max.	0,14 $^\circ C/W$ 125 $^\circ C$ 5 ... 85 $^\circ C$ 10 bar 2,25 kg	0,10 $^\circ C/W$ 125 $^\circ C$ 5 ... 85 $^\circ C$ 10 bar 2,25 kg
Case	→ page B 5–15		C 5

Features

- Compact units containing two high current thyristors with their cooling capsules

Typical Applications

- Large resistance welding equipment
- Large electroplating equipment

¹⁾ For $Vol_w = 2l/min$ and $T_w = 30^\circ C$ the same I_{RMS} values apply

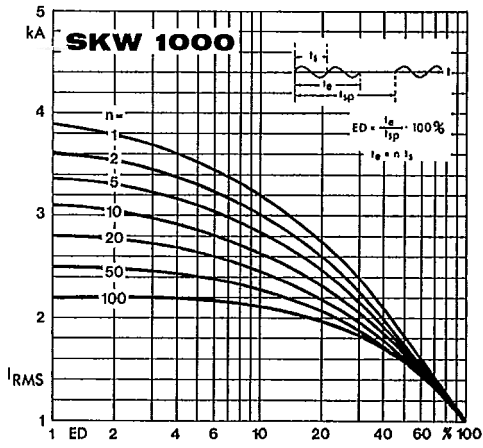


Fig. 1 a Rated rms current vs. duty cycle

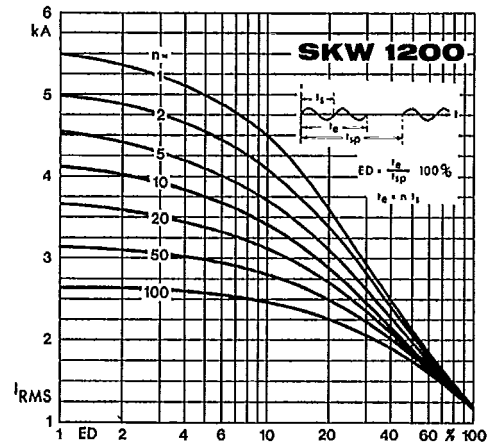


Fig. 1 b Rated rms current vs. duty cycle

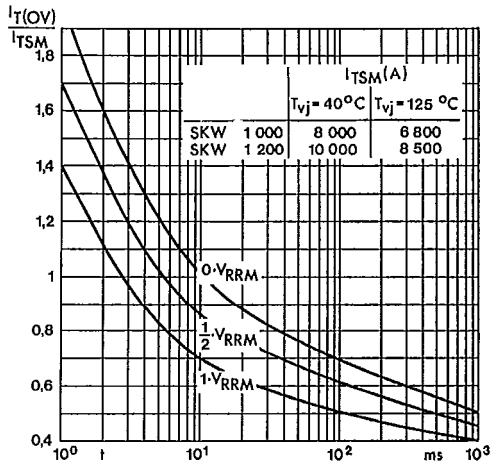


Fig. 2 Surge overload current vs. time

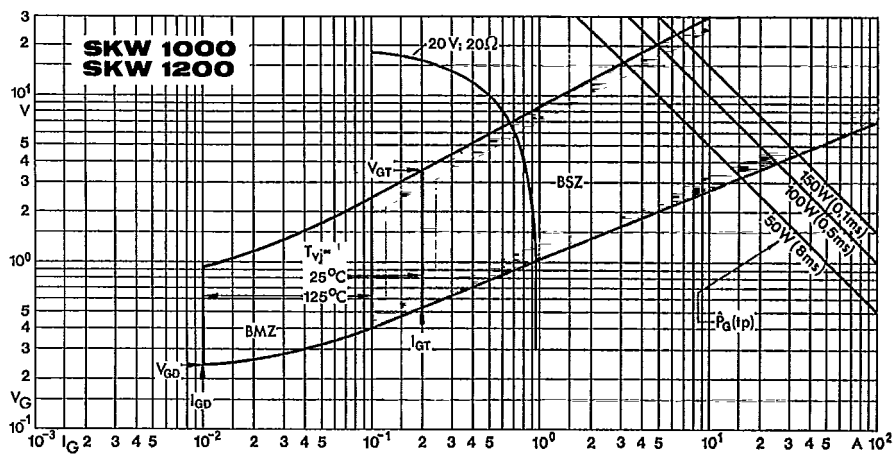


Fig. 8 Gate trigger characteristics