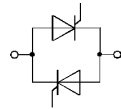


Antiparallel Thyristors with Non-Isolated Water Flow

SKW 1200 ²⁾
SKW 1700

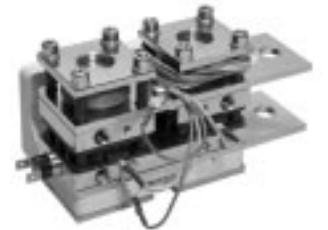


Features

- Compact units containing two high current thyristors connected in antiparallel
- All plastic material used carries Underwriters Laboratories flammability classification 94V-0
- for wall mounting

Typical Applications

- Large resistance welding equipment
- Large electroplating equipment



V_{DRM} V_{RSM} V_{RRM}	$I_{RMS}^{1)}$ ($Vol_w = 4$ l/min, $T_w = 40$ °C, ED = 50 %, n = 10)	
V	1900 A	2400 A
1200	SKW 1200/12	SKW 1700/12
1400	SKW 1200/14	SKW 1700/14
1600	SKW 1200/16	SKW 1700/16

Symbol	Conditions	SKW 1200	SKW 1700	Units
$I_{RMS}^{1)}$	$Vol_w = 4$ l/min, $T_w = 40$ °C, ED = 100 %	1200	1700	A
I_{TSM}	$T_{vj} = 40$ °C; 10 ms	10 000	15 000	A
	$T_{vj} = 125$ °C; 10 ms	8500	13 000	A
i^2t	$T_{vj} = 40$ °C; 8,3 ... 10 ms	500 000	1 125 000	A ² s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	360 000	845 000	A ² s
$(di/dt)_{cr}$	f = 50 ... 60 Hz	100		A/μs
$(dv/dt)_{cr}$	$T_{vj} = 125$ °C	500		V/μs
t_q	$T_{vj} = 125$ °C; typ.	200		μs
I_H	$T_{vj} = 25$ °C	300		mA
I_L	$T_{vj} = 25$ °C; $R_G = 33$ Ω	1500		mA
V_T	$T_{vj} = 25$ °C; ($I_T = \dots$); max.	2,1	1,75	V
		(2400)	(2400)	A
$V_{T(TO)}$	$T_{vj} = 125$ °C	1,1	0,92	V
r_T	$T_{vj} = 125$ °C	0,4	0,3	mΩ
V_{GT}	$T_{vj} = 25$ °C	3,5		V
I_{GT}	$T_{vj} = 25$ °C	200		mA
V_{GD}	$T_{vj} = 125$ °C	0,25		V
I_{GD}	$T_{vj} = 125$ °C	10		mA
R_{thjw}	$Vol_w = 4$ l/min	0,10	0,074	°C/W
T_{vj}	max.	125		°C
T_{stg}	min. ... max.	5 ... 85		°C
p_w	max.	10		bar
w		2,25	2,8	kg
Case		C 5	C 6	

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

²⁾ Accessories → page B 4 – 18

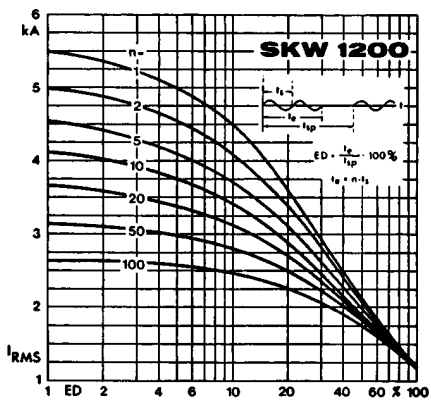


Fig. 1 a Rated rms current vs. duty cycle

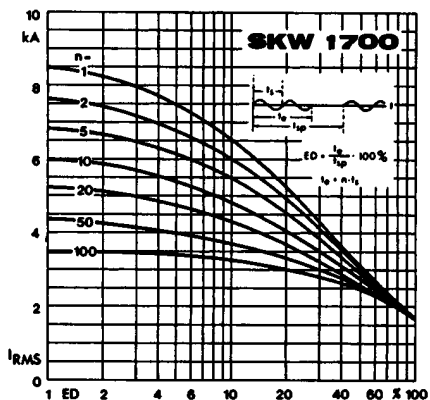


Fig. 1 b Rated rms current vs. duty cycle

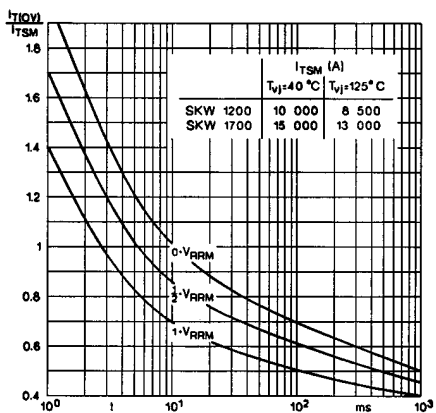


Fig. 2 Surge overload current vs. time

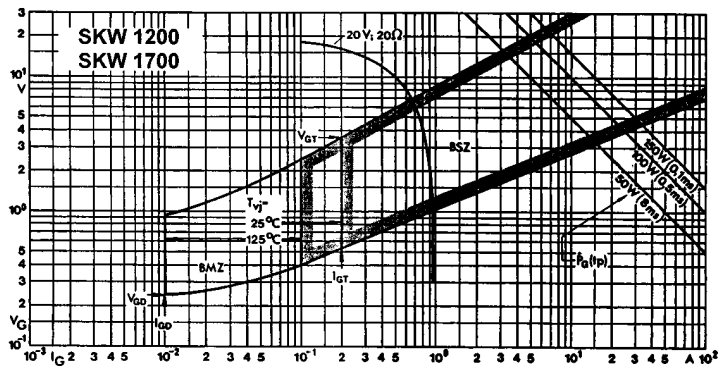
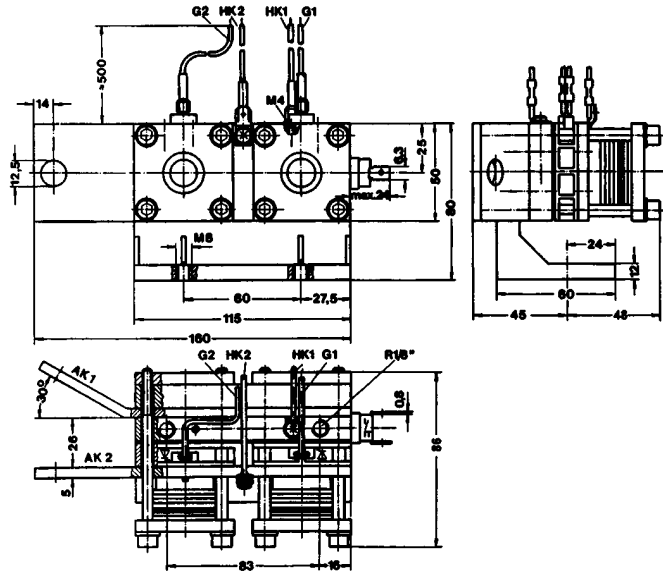


Fig. 8 Gate trigger characteristics

SKW 1200

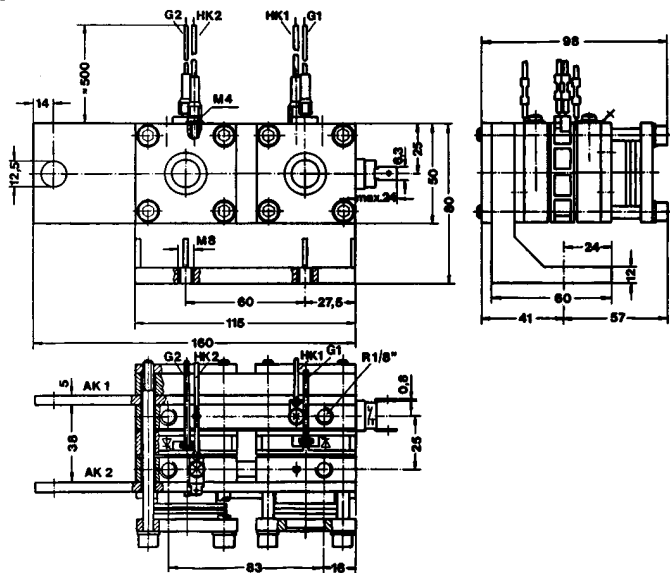
Case C 5



Dimensions in mm

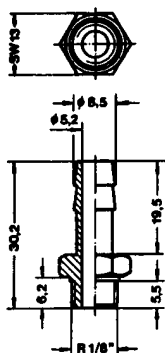
SKW 1700

Case C 6

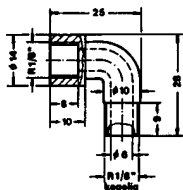


Dimensions in mm

Water connections

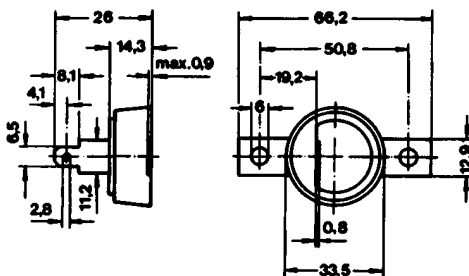


No. 32370300

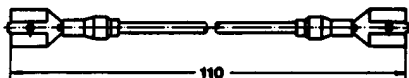


No. 32375200

ZnO varistors for the SKW elements



SKW	ZnO Varistor	Order No.
.. /12	V 420 PA 40 C	32355800
.. /14	V 480 PA 80 C	32355700
.. /16	V 575 PA 80 C	32343300



No. 32342800



M 4 x 8 Z 4-1 DIN 7985 No. 31947300

Mounting and connection of the ZnO varistor

