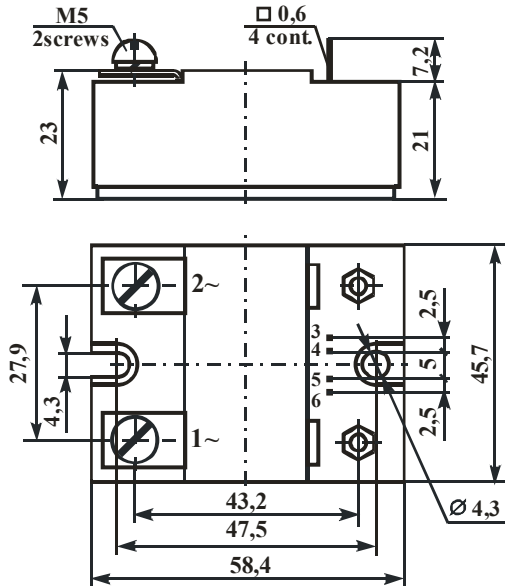




**THYRISTOR-THYRISTOR MODULES**  
**M8-25-12, M8-40-12, M8-63-12, M8-80-12, M8-100-12, M8-125-12**  
**DATASHEET IN BRIEF**

The thyristor module including two back-to-back thyristors with isolated control is intended for switching of powerful AC loads.

**OVERALL DRAWING AND INTERNAL CONNECTION CIRCUIT**



**BASIC CHARACTERISTICS**

T = 25 °C

Product name	Pulse on-state voltage, $U_{TM}$ , V		Repetitive peak off-state current, $I_{DRM}$ , mA		Repetitive peak reverse thyristor current, $I_{RRM}$ , mA		Gate trigger direct voltage, $U_{GT}$ , V	Gate trigger DC, $I_{GT}$ , mA	Electric isolation strength at DC through radiator and power outputs, $U_{ISOL}$ , V		Gate non-trigger direct voltage, $U_{GD}$ , (V) $T_j = 125^\circ\text{C}$	Thermal junction-cooler resistance, $R_{th(j-c)}$ , ( $^\circ\text{C}/\text{W}$ )
	max	$I_{OUT}$ , A amplit. value	max	$U_{DRM}$ , V	max	$U_{RRM}$ , V			max	$t$ , minute		
M8-25-12	1.65	$\pi \cdot I_{T(AV)}$ , 10 ms, 50 Hz, sinus	1.0	$\pm 1200$	1.0	$\pm 1200$	3.0	150	4000	1	0.25	1.00
M8-40-12												0.70
M8-63-12												0.60
M8-80-12												0.45
M8-100-12												0.30
M8-125-12								0.25				

**MAXIMUM ALLOWABLE OPERATING MODES**

Product name	Repetitive thyristor pulse reverse voltage/off-state, $U_{RRM} / U_{DRM}$ , V	Average on-state current with cooler $I_{T(AV)}^*$ , A, $T=85^\circ\text{C}$	Commutation voltage, $U_{com}$ , V	Surge on-state current, $I_{TSM}^*$ , A		Critical rate of rise of off-state voltage, $(du_d / dt)_{cr}$ , V/ $\mu\text{s}$	Critical rate of rise of on-state current, $(di_T / dt)_{cr}$ , A/ $\mu\text{s}$	Junction temperature, $T_{vj}^{**}$ , $^\circ\text{C}$	
				max	$t$ , ms			max	max
M8-25-12	$\pm 1200$	25	840	200	10	1000	150	-40	+125
M8-40-12				560					
M8-63-12				720					
M8-80-12				960					
M8-100-12				1350					
M8-125-12				2500					

\* the modules are designed to operate in equipment with using of coolers that support junction temperature in the prescribed ranges

Precious metals are not contained.

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