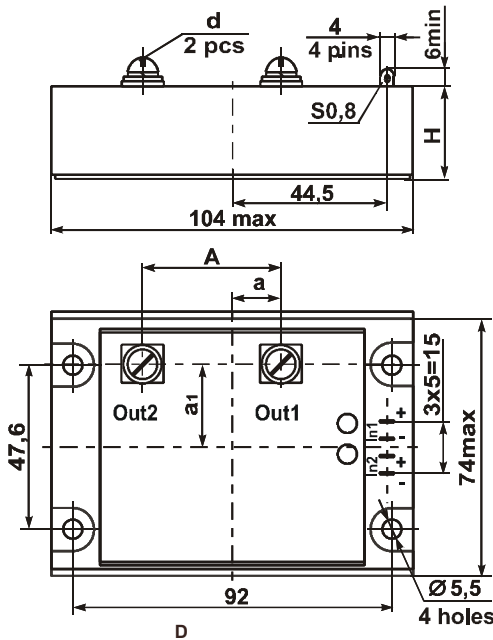# MO8D-(25, 40, 63, 80, 100, 125, 160, 200, 250)-12
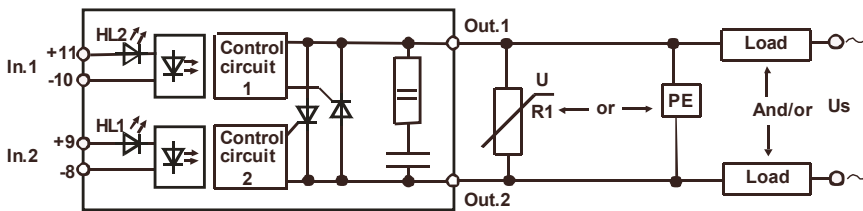## *DATASHEET IN BRIEF*

The optothyristor module of two opposite-connected thyristors with opto decoupling and separate control is intended for switching of power AC loads in single-phase networks.

OVERALL DRAWING AND INTERNAL CONNECTION CIRCUIT

Product description	d, mm	H, mm	A, mm	a, mm	a_1, mm
MO8D-25-12	screw M5	27	54	27	21
MO8D-40-12	screw M5	27	54	27	21
MO8D-63-12	screw M5	27	54	27	21
MO8D-80-12	screw M6	27	54	27	21
MO8D-100-12	screw M6	27	54	27	21
MO8D-125-12	screw M6	27	54	27	21
MO8D-160-12	screw M6	27	40	20	24
MO8D-200-12	bolt M8	29	40	14.5	24
MO8D-250-12	bolt M8	29	40	14.5	24

D – module
R1 – protective varistor of types FNR; JVR
   with classification voltage:

$$U\,cl = U_m^{rms} \cdot \sqrt{2} \cdot 1.1$$

$$U_{peak} > U_{cl} + 150\ V$$

Internal RC – circuit parameters:
   R = 10 Ω, C = 0.1 µF

BASIC PARAMETERS
T = 25 °C

Product name	On-state pulse voltage, U_t, V		Loss current on output, I_l, mA		On-state input current, I_{in}, mA				Isolation voltage at DC (peak value) U_{isol}, V		Isolation resistance input-output $R_{is.\ in-out}$, MΩ	Isolation resistance output-radiator $R_{is.\ out-rad}$, (MΩ)	Thermal junction-radiator resistance $R_{th\ j-r}$*, °C/W
	max	I, A	max	U, V	min	U_{in}, V	max	U_{in}, V	min	t, minute	min	min	max
MO8D-25-12		79											1.00
MO8D-40-12		126											0.70
MO8D-63-12		198											0.60
MO8D-80-12		251											0.45
MO8D-100-12	1.65	314	1	±1200	12	4			4000	1	100	10	0.30
MO8D-125-12		393					19	30					0.25
MO8D-160-12		503											0.18
MO8D-200-12		628											0.175
MO8D-250-12		785											0.169
* to thyristor													

MAXIMUM PERMISSIBLE OPERATING MODES

Product name	Thyristor voltage (amplitude value), U_A, V	Current in inverse-parallel connection, I_{rms}, A	Average current value through thyristor, I_{avr}*, A	On-state input voltage, $U_{in\ on}$, V		Off-state input voltage, $U_{in.\ off}$, V		Pulse current on output I_{pul} *, A		Root-mean-square current **, I, A	Switching voltage, U_{sw}, V		Rate of rise of output voltage dU/dt, V/µs	current, dI/dt, A/µs	Junction temperature, Tj***, ^{0}C	
	max	min	max	min	max	min	max	max	t_p, ms	max	min	max			min	max
MO8D-25-12		25	17					320		39						
MO8D-40-12		40	28					560		63						
MO8D-63-12		63	43					720		99						
MO8D-80-12		80	55					960		125						
MO8D-100-12	1200	100	60	4	30	- 3.5	0.8	1250	10	157	50	840	1000	150	-40	+125
MO8D-125-12		125	95					1600		188						
MO8D-160-12		160	110					3200		251						
MO8D-200-12		200	135					5000		314						
MO8D-250-12		250	170					6000		393						

* to thyristor
** with inverse-parallel thyristors
*** the modules are designed for operating in the equipment with using of coolers supporting transition temperature in the prescribed ranges

Precious metals are not contained.