

## THREE-PHASE THYRISTOR BRIDGE OPTOELECTRONIC MODULES MO24-63-16; MO24-100-16; MO24-160-16; MO24-200-16; MO24-250-16 MO24A-63-16; MO24A-100-16; MO24A-160-16; MO24A-200-16; MO24A-250-16 DATASHEET IN BRIEF

Three-phase bridge module is intended for rectifying (conversion of AC into pulsating direct voltage).

### OVERALL DRAWINGS AND MODULE CIRCUIT

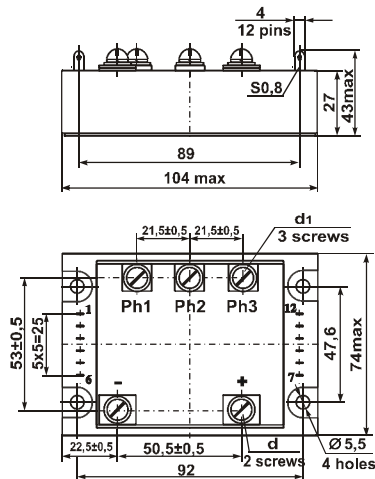


Figure 1

Product description	Figure	d	d
MO24(A)-63-16	1	M5	M5
MO24(A)-100-16	1	M6	M5
MO24(A)-160-16	1	M6	M5
MO24(A)-200-16	2	M8	M6
MO24(A)-250-16	2	M8	M6

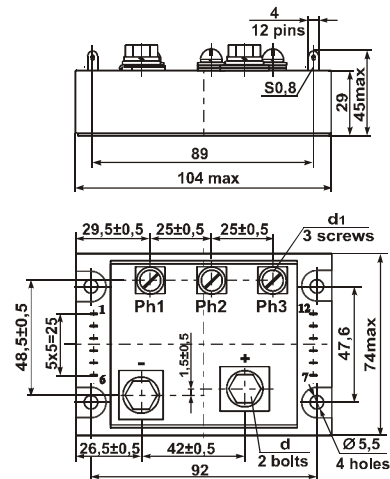
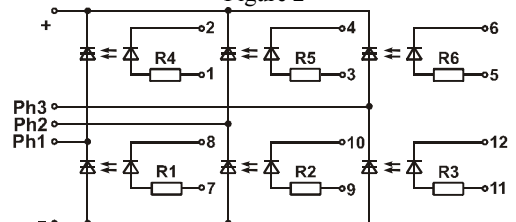


Figure 2



R1 – R6 – limiting resistors 100 Ω 0.125 W

T = 25 °C

### BASIC CHARACTERISTICS

Product name	Pulse open state voltage, $U_{TM}$ , V		Closed state current, $I_D$ , mA		Open state voltage on control input, $U_G$ , V		Electric isolation strength at DC between radiator and outputs $U_{ISOL}$ , V	Electric isolation resistance input/output-radiator $R_{ISOL}$ , MΩ	Thermal resistance junction-cooler (to thyristor) $R_{th(j-c)}$ , °C/W
	max	$I_O$ , A	max	$U_O$ , V	max	$I_{BX}$ (mA)			
MO24-63-16	1.65	63	± 2.0	±1600	5.5	10	4000	100 / 10	max
MO24-100-16		100							1.0
MO24-160-16		160							0.5
MO24-200-16		200							0.35
MO24-250-16		250							0.2
									0.15

Note- Characteristic value of MO24 A modules are identical to the characteristics values of corresponding MO24 modules

### MAXIMUM ALLOWABLE OPERATING MODES

Product name	Repetitive/non-repetitive pulse off-state thyristor voltage, $U_{RRM} / U_{DRM}$ , V	Linear voltage (rms) $U_r$ , V		Average rectified module current, $I_O$ , A (Trad = 90 °C)		Non-repetitive surge module DC, $I_{TSM}$ , A		Control current $I_G$ , mA		Critical rate of rise		Junction temperature $T_{j^{**}}$ , °C	
		min	max	min	max	max	$t_{pul}$ , ms	min	max	of current ( $di_T / dt$ ) <sub>cr</sub> , A / μs	of voltage ( $du_R / dt$ ) <sub>cr</sub> , V / μs	min	max
MO24-63-16	± 1600	50*	1150	0.2	63	300	10	10	30	150	1000	-40	+125
MO24-100-16					100	600							
MO24-160-16					160	1000							
MO24-200-16					200	1400							
MO24-250-16					250	1600							

\*12 V – for modules of type MO24A (the value of other modes of modules MO24A are identical to the mode values of corresponding to the modules MO23)

\*\* the modules are designed for operating in the equipment with using of coolers supporting transition temperature in the prescribed ranges