

THREE-PHASE THYRISTOR BRIDGE OPTOELECTRONIC MODULES MO24-63-12; MO24-100-12; MO24-160-12; MO24-200-12; MO24-250-12 MO24A-63-12; MO24A-100-12; MO24A-160-12; MO24A-200-12; MO24A-250-12 DATASHEET IN BRIEF

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

OVERALL DRAWINGS AND MODULE CIRCUIT

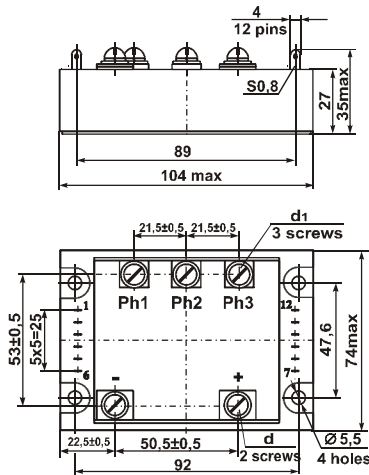


Figure 1

Product description	Figure	d	d ₁
MO24(A)-63-12	1	M5	M5
MO24(A)-100-12	1	M6	M5
MO24(A)-160-12	1	M6	M5
MO24(A)-200-12	2	M8	M6
MO24(A)-250-12	2	M8	M6

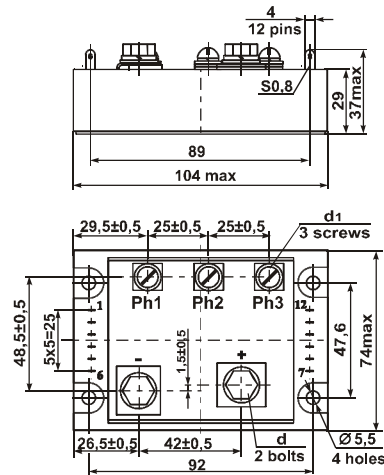
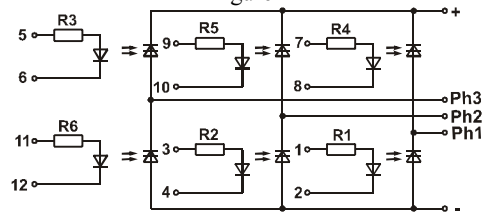


Figure 2



R1 – R6 – limiting resistors 100 Ω 0.125 W

T = 25 °C

BASIC CHARACTERISTICS

Product name	Pulse on-state voltage, U _{TM} , V		Off-state current I _D , mA		On-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	min	max	I _{BX} (mA)			
MO24-63-12	1.65	63	± 2.0	±1200	3.0	4.2	10	4000	100 / 10	max
MO24-100-12		100								1.0
MO24-160-12		160								0.5
MO24-200-12		200								0.35
MO24-250-12		250								0.2
										0.15

Note - Characteristics value of MO24 A modules are identical to the characteristics values of corresponding to the 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, 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 _T ** °C	
		min	max	min	max	max	t _{pul} , ms	min	max	of current (di _T / dt) _{cr} , A / μs	of voltage (du _R / dt) _{cr} , V / μs	min	max
MO24-63-12	± 1200	50*	840	0.2	63	300	10	10	30	150	1000	-40	+125
MO24-100-12					100	600							
MO24-160-12					160	1000							
MO24-200-12					200	1400							
MO24-250-12					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