

## THREE-PHASE THYRISTOR-DIODE BRIDGE MODULE MO23-63-16; MO23-100-16; MO23-160-16; MO23-200-16; MO23-250-16 MO23A-63-16; MO23A-100-16; MO23A-160-16; MO23A-200-16; MO23A-250-16

### TICKET

Three-phase thyristor-diode bridge module with opto decoupling with thyristors control connected to “positive” output is intended for rectifying (conversion of AC into pulsating DC voltage).

### OVERALL DRAWINGS AND MODULE CIRCUIT

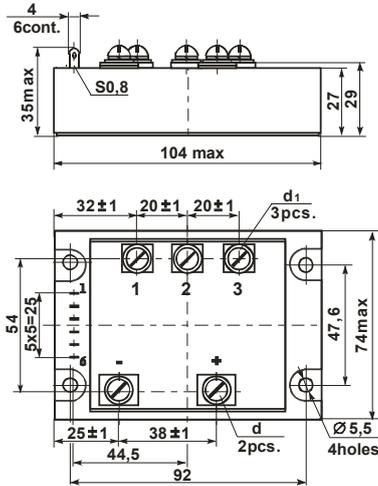


Figure 1

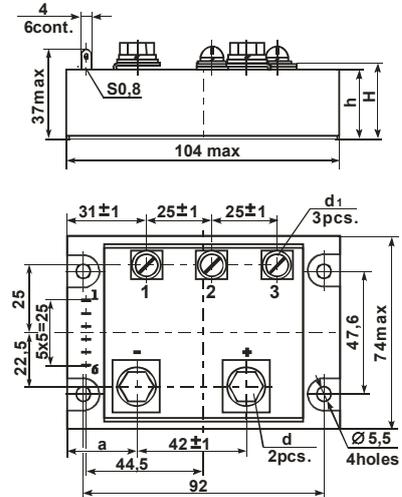
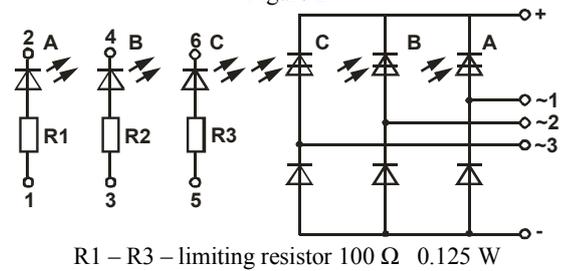


Figure 2

Product description	Figure	d	d <sub>1</sub>	a, mm	h, mm	H, mm
MO23(A)-63-16	1	screw M5	screw M5	-	-	-
MO23(A)-100-16	2	screw M6	screw M5	24±1	27	29
MO23(A)-160-16	2	screw M6	screw M5	24±1	27	29
MO23(A)-200-16	2	bolt M8	screw M6	26±1	29	31
MO23(A)-250-16	2	bolt M8	screw M6	26±1	29	31



R1 – R3 – limiting resistor 100 Ω 0.125 W

### BASIC CHARACTERISTICS

T = 25 °C

Product name	Peak voltage in thyristor on-state / direct diode peak voltage, U <sub>TM</sub> / U <sub>FM</sub> , V		Bridge port current (closed state), I <sub>D</sub> , mA		Open state voltage on control input U <sub>Gon</sub> , V		Electric isolation at DC, U <sub>ISOL</sub> , V	Isolation resistance between: power outputs and controlling outputs/ power outputs and radiator, R <sub>ISOL</sub> , MΩ	Thermal resistance junction-housing radiator R <sub>thjc</sub> , °C/W	
	max	I <sub>OUT</sub> , A	max	U <sub>OUT</sub> , V	max	I <sub>Gon</sub> , mA			min	min
MO23-63-16	1.65	63	± 2.0	± 1600	5.5	10	4000	100 / 10	1.0	1.3
MO23-100-16		100							0.5	0.6
MO23-160-16		160							0.35	0.4
MO23-200-16		200							0.2	0.3
MO23-250-16		250							0.15	0.2

Note- Characteristics value of MO23A modules are identical to the characteristics values of corresponding MO23 modules

### MAXIMUM ALLOWABLE OPERATING MODES

Product name	Linear voltage (rms), U <sub>lin</sub> , V		Average rectified module current, I <sub>o</sub> , A		Non-repetitive surge DC I <sub>F(SM)</sub> I <sub>T(SM)</sub> , A		Control current I <sub>G</sub> , mA		Critical rate of rise		Junction temperature, T <sub>VJ</sub> *, °C	
	min	max	min	max	max	t, ms	min	max	open state current, (di <sub>T</sub> / dt) cr, A/μs	closed state voltage, (du <sub>a</sub> / dt)cr, V/μs	min	max
MO23-63-16	50*	1150	0.2	63	300	10	10	30	150	1000	-40	+125
MO23-100-16				100	600							
MO23-160-16				160	1200							
MO23-200-16				200	1400							
MO23-250-16				250	1600							

\*\*12 V– for modules of type MO23A (the value of other modes of modules MO20A are identical to the mode values of corresponding modules MO23)

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

Precious metals are not contained

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