

THREE-PHASE THYRISTOR-DIODE BRIDGE MODULE

M23-63-16; M23-100-16; M23-160-16; M23-200-16; M23-250-16

DATASHEET IN BRIEF

A module of three-phase diode-thyristor bridge with control by three thyristors, connected to “positive” output, is intended for rectifying (converting of AC into pulsating direct voltage).

OVERALL DRAWING AND MODULE CIRCUIT

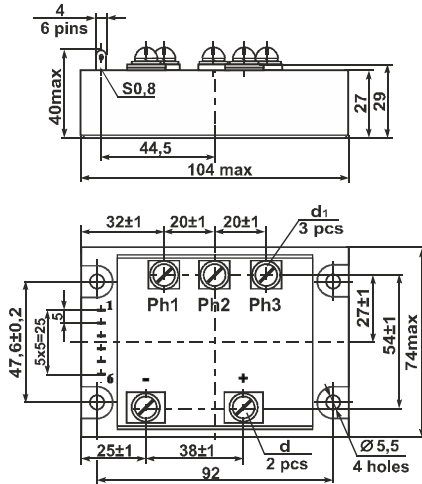


Figure 1

Product description	Fig.	d	d ₁	a, mm	h, mm	H, mm
M23-63-16	1	screw M5	screw M5	-	-	-
M23-100-16	2	screw M6	screw M5	24±1	27	29
M23-160-16	2	screw M6	screw M5	24±1	27	29
M23-200-16	2	bolt M8	screw M6	26±1	29	31
M23-250-16	2	bolt M8	screw M6	26±1	29	31

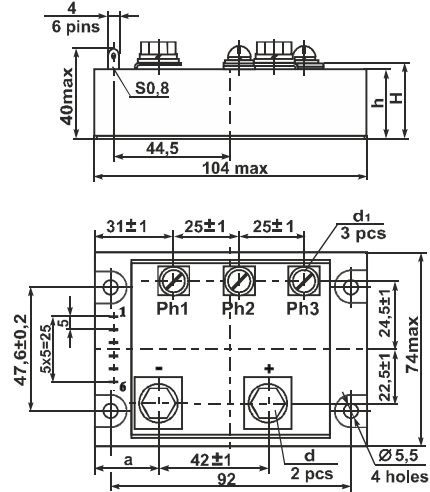
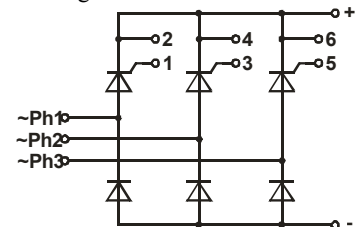


Figure 2



BASIC CHARACTERISTICS

Ta = 25 °C

Product name	Pulse voltage: open state thyristor/ direct diode, U _{TM} / U _{FM} , V		Blocking state current /valve DC, I _D / I _R , mA		Thyristor gate trigger DC voltage, U _{GT} , V	Thyristor gate trigger DC, I _{GT} , mA	Electric isolation strength at DC between radiator and outputs, U _{ISOL} , V		Thyristor non-trigger DC voltage, U _{GD} , V T _j = 125 °C	Thermal junction-radiator resistance R _{th(j-c)} , °C/W	
	max	I _O , A amplit. value	max	U _O , V			min	t, minute		thyristor	diode
M23-63-16	1.65	$\frac{\pi}{3} \cdot I_O$, 10 ms, 50 Hz, sinus	2.0	± 1600	3.0	200	4000	1	0.25	1.00	1.3
M23-100-16										0.50	0.6
M23-160-16										0.35	0.4
M23-200-16										0.20	0.3
M23-250-16										0.15	0.2

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Thyristor repetitive/non-repetitive pulse blocking state voltage, U _{RRM} / U _{DRM} , V	Average rectified current, I _O , A Tr=85 °C	Linear voltage (rms.), U _{lin} , V	Non-repetitive surge DC, I _{TSM} , A	Critical rate of rise of reverse voltage, (du _R / dt) _{cr} , V/μs	DC critical rate of rise, (di _T / dt) _{cr} , A/μs	Junction temperature T _{VJ} *, °C	
							min	max
M23-63-16	± 1600	63	1150	300	1000	150	- 40	+125
M23-100-16		100		600				
M23-160-16		160		1200				
M23-200-16		200		1400				
M23-250-16		250		1600				

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

Precious metals are not contained

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