

## THREE-PHASE THYRISTOR BRIDGE MODULE M24-63-16; M24-100-16; M24-160-16; M24-200-16; M24-250-16

### DATASHEET IN BRIEF

A three-phase thyristor bridge module with control of six thyristors is intended for rectifying (converting of AC into pulsating direct voltage).

### OVERALL DRAWING AND MODULE CIRCUIT

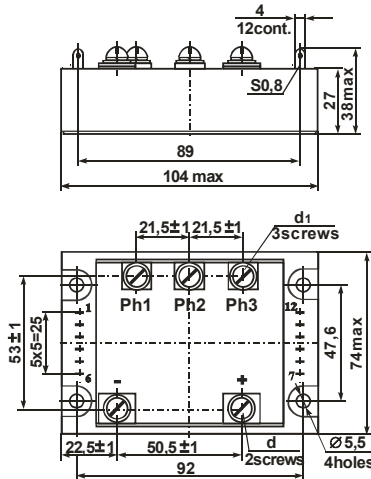


Figure 1

Product description	Fig.	d, mm	d <sub>1</sub> , mm
M24-63-16	1	M5	M5
M24-100-16	1	M6	M5
M24-160-16	1	M6	M5
M24-200-16	2	M8	M6
M24-250-16	2	M8	M6

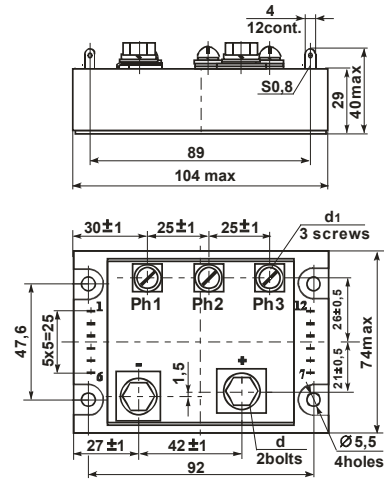
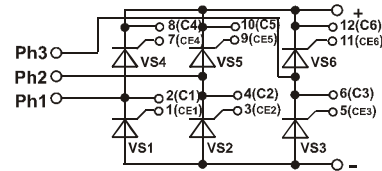


Figure 2



### BASIC CHARACTERISTICS

T = 25 °C

Product name	Pulse voltage in thyristor on-state, U <sub>TM</sub> /U <sub>FM</sub> ,		Current in thyristor off-state/rectifier reverse current, I <sub>D</sub> /I <sub>R</sub> , mA		Thyristor gate trigger DC voltage, U <sub>GT</sub> , V	Thyristor gate trigger DC, I <sub>GT</sub> , mA	Electric isolation strength at DC between radiator and outputs, U <sub>ISOL</sub> , V		Thyristor non-trigger DC voltage, U <sub>GD</sub> , V	Thermal junction-radiator resistance R <sub>th(j-c)</sub> , °C/W
	V max	I <sub>O</sub> , A amplit. value	max	U <sub>D</sub> /U <sub>R</sub> , V	max	max	min	t, minute	T <sub>j</sub> = 125 °C max	
M24-63-16	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
M24-100-16										0.50
M24-160-16										0.35
M24-200-16										0.20
M24-250-16										0.15

### MAXIMUM ALLOWABLE OPERATING MODES

Product name	Thyristor repetitive/non-repetitive pulse voltage off-state, U <sub>RRM</sub> / U <sub>DRM</sub> , V	Average rectified current, I <sub>O</sub> , A T <sub>rad</sub> =85 °C	Linear voltage (rms.), U <sub>lin</sub> , V	Non-repetitive surge DC, I <sub>TSM</sub> , A	Critical rate of rise of reverse voltage, (du <sub>R</sub> / dt) <sub>cr</sub> , V/μs	DC critical rate of rise, (di <sub>T</sub> / dt) <sub>cr</sub> , A/μs	Junction temperature T <sub>Vj</sub> ,* °C		
							min	max	
M24-63-16	± 1600	max	max	max	max	max	- 40	+125	
M24-100-16									63
M24-160-16									100
M24-200-16									160
M24-250-16									200
M24-250-16	250	1150	10	1000	150				

\*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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