DIODE-DIODE MODULES M4; M4A
25A, 40A, 63A, 80A, 100A, 125A, 160A, 200A, 250A; 12 class
DATASHEET IN BRIEF

A diode-diode module is intended for converting of AC to pulse DC (composed of single-phase and three-phase diode bridges).

OVERALL DRAWINGS

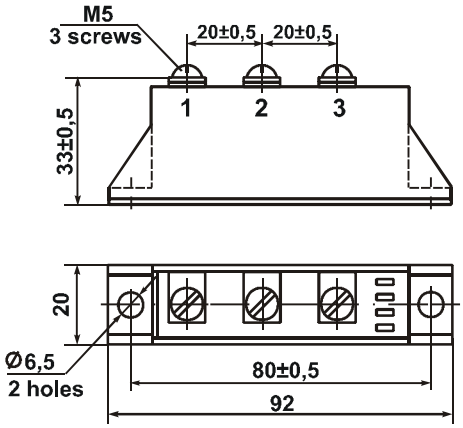


Figure 1 – Overall drawing of housing E1

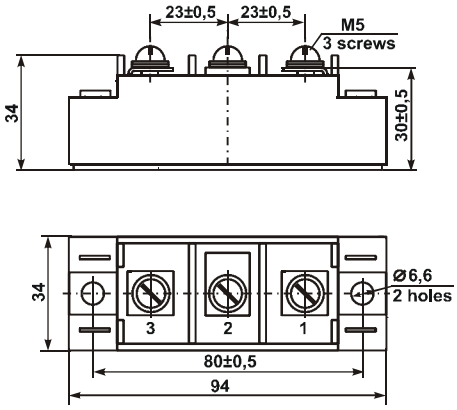


Figure 2– Overall drawing of housing E2

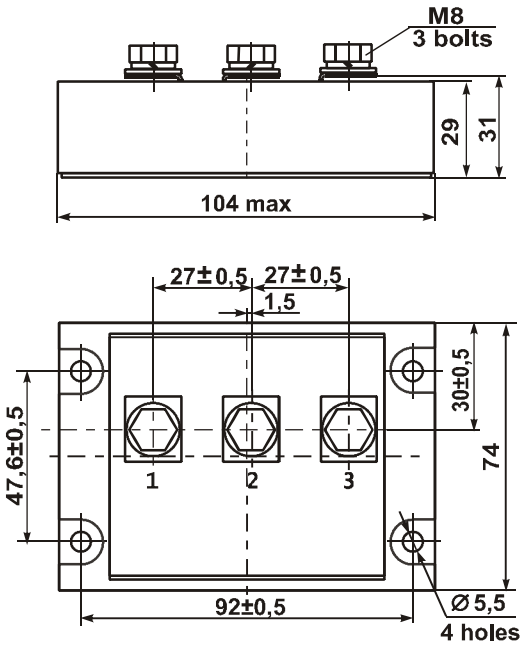


Figure 3 – Overall drawing of housing DM

TABLE OF OVERALL DRAWINGS

Module name	Figure	Module name	Figure
M4-25-12	1 or 2	M4A-25-12	1 or 2
M4-40-12	1 or 2	M4A-40-12	1 or 2
M4-63-12	1 or 2	M4A-63-12	1 or 2
M4-80-12	1 or 2	M4A-80-12	1 or 2
M4-100-12	2	M4A-100-12	2
M4-125-12	2	M4A-125-12	2
M4-160-12	2	M4A-160-12	2
M4-200-12	3	M4A-200-12	3
M4-250-12	3	M4A-250-12	3

Internal connection circuits

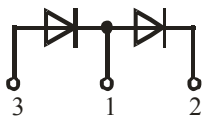


Figure 4 – Modules connection circuit
of type M4 – for currents 25 A ÷ 160 A
and of type M4A – for currents 200 A ÷ 250 A

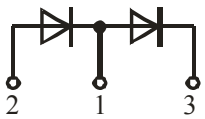


Figure 5 – Modules connection circuit of type
M4 – for currents 200 A ÷ 250 A
and of type M4A – 25 ÷ 160 A

BASIC CHARACTERISTICS

T_{amb} = 25 °C

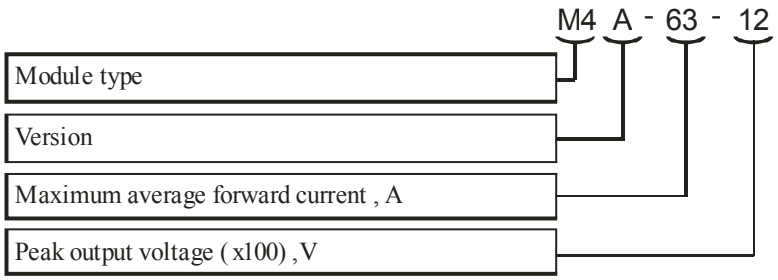
Product name	Pulse direct voltage, U_{FM}, V		Repetitive pulse reverse current, I_{RRM}, mA		Electric isolation strength at DC between radiator and power outputs, U_{ISOL}, V		Thermal junction to cooler resistance, Rth(j-c), (°C/W)
	max	I_O, A amplit. value	max	U_O, V	min	t, minute	max
M4(A)-25-12	1.65	$\pi \cdot I_{F(AV)}$, 10 ms, 50 Hz, sinus	1.0	1200	4000	1	0.8
M4(A)-40-12							0.7
M4(A)-63-12							0.55
M4(A)-80-12							0.45
M4(A)-100-12							0.3
M4(A)-125-12							0.25
M4(A)-160-12							0.22
M4(A)-200-12							0.19
M4(A)-250-12							0.15

MAXIMUM ALLOWABLE OPERATING MODES

Product name	Non-repetitive pulse reverse voltage U_{RSM}, V	Diode repetitive pulse reverse voltage/ in off-state, U_{RRM}, V	Diode average DC $I_{F(AV)}$, A	Diode root-mean-square DC I_{FRMS}, A	Diode surge DC $I_{F(SM)}$, A,	t, ms	Critical rate of rise of on-state current, (di_T / dt) cr, A/µs	Junction temperature, T_{VJ}**, °C	
	max	max	max	max	max		max	min	max
M4(A)-25-12	1300	1200	25	39	200	10	150	- 40	+125
M4(A)-40-12			40	63	560				
M4(A)-63-12			63	95	720				
M4(A)-80-12			80	125	960				
M4(A)-100-12			100	155	1350				
M4(A)-125-12			125	188	2500				
M4(A)-160-12			160	250	4000				
M4(A)-200-12			200	310	5000				
M4(A)-250-12			250	390	6000				
* the modules are designed to operate in equipment with using of coolers that support transition temperature in prescribed ranges									

Precious metals are not contained

MODULE DESCRIPTION



Note – when ordering the module you must specify the housing type (E1, E2, DM)

5 Naugorskoe shosse, Orel, 302020, Russia Tel. +7(4862) 44-03-44, Fax +7(4862) 47-02-12

E-mail: mail@electrum-av.com