

DIODE MODULES

M4.1, M4.1A, M4.1B, M4.1C, M4.1D

25A, 40A, 63A, 80A, 100A, 125A, 160A, 200A, 250A; 16 class

DATASHEET IN BRIEF

A single diode module is intended for using composed of power converters.

OVERALL DRAWINGS

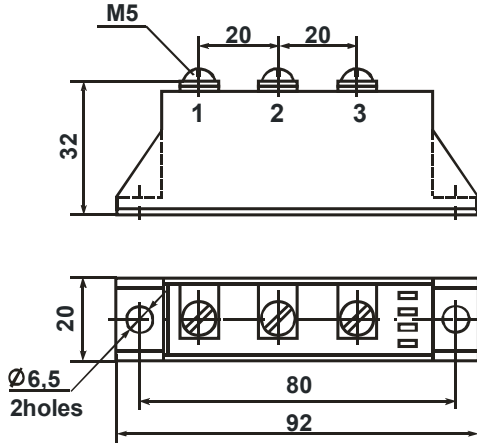


Figure 1 – Overall drawing of housing E1

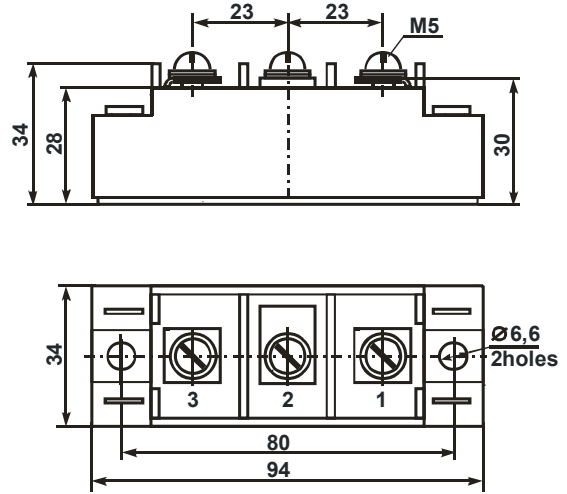


Figure 2 – Overall drawing of housing E2

M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 25 ÷ 80 A

M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 25 ÷ 160 A

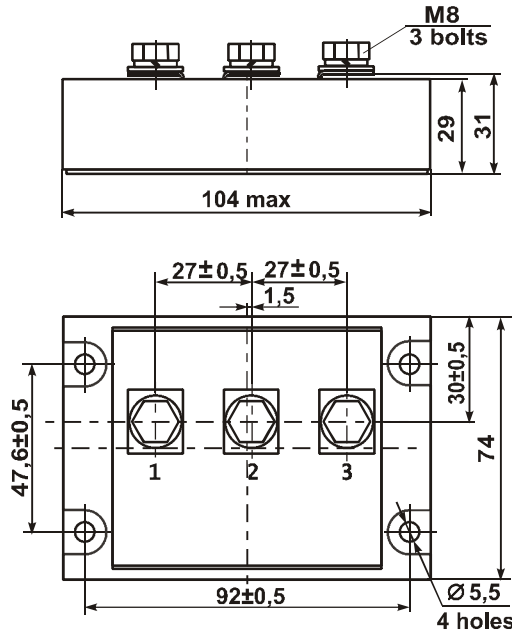


Figure 3 – Overall drawing of housing DM

M4.1, M4.1A; M4.1B, M4.1C, M4.1D – for currents: 200 ÷ 250 A

INTERNAL CONNECTION CIRCUITS

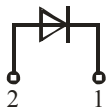


Figure 4 – Connection circuit M4.1

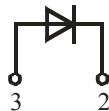


Figure 5 – Connection circuit M4.1A

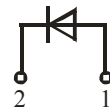


Figure 6 – Connection circuit M4.1B

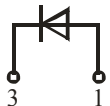


Figure 7 – Connection circuit M4.1C

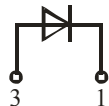


Figure 8 – Connection circuit M4.1D

BASIC CHARACTERISTICS

T = 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, $R_{th(j-c)}$, (°C/W)	
	max	I_o , A amplit. value	max	U_o , V	min	t, minute	max	
M4.1x-25-16	1.65	$\pi \cdot I_{F(AV)}$, 10 ms, 50 Hz, sinus	1.0	1600	4000	1	0.8	
M4.1x-40-16							0.7	
M4.1x-63-16							0.55	
M4.1x-80-16							0.45	
M4.1x-100-16							0.3	
M4.1x-125-16							0.25	
M4.1x-160-16							0.22	
M4.1x-200-16							0.19	
M4.1x-250-16							0.15	

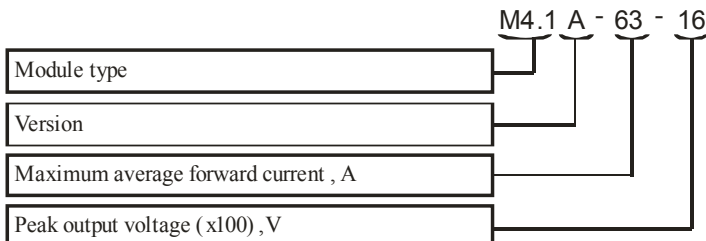
MAXIMUM ALLOWABLE OPERATING MODES

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		Critical rate of rise of on-state current, $(di_T / dt)_{cr}$, A/ μ s	Junction temperature, T_{vj}^{**} , °C	
					t, ms	max		min	max
M4.1x-25-16	1600	1600	25	39	200	10	150	- 40	+125
M4.1x-40-16			40	63	560				
M4.1x-63-16			63	95	720				
M4.1x-80-16			80	125	960				
M4.1x-100-16			100	155	1350				
M4.1x-125-16			125	188	2500				
M4.1x-160-16			160	250	4000				
M4.1x-200-16			200	310	5000				
M4.1x-250-16			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)

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