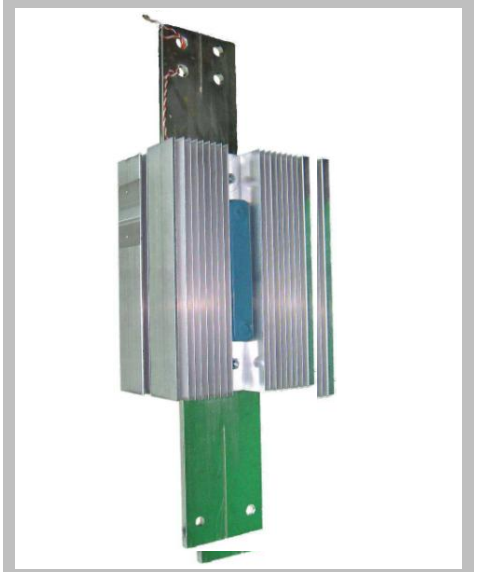
THYRISTOR MODULE – M2T…P

POWER BLOCK – photo1



POWER BLOCK – photo 2

POWER BLOCK – photo 3

SINGLE-ELEMENT THYRISTOR POWER BLOCK WITH HEAT SINK

Characteristics:

- single-element thyristor power module with double-sided cooling
- natural cooling

Application:

- rectifiers, inverters, power supplies
- power regulators DC
- power contactors
- soft-starter

Options:

- standard option (photo 1)
- with conductor rails (photo 2)
- with black anodized heat sink (photo 3)
- thermal protection
- RC system
- fuses
- forced cooling

Selection of power blocks:

Depending on the load of power block there are used different semiconductors. Size of the applied semiconductor is specified in Table 1.

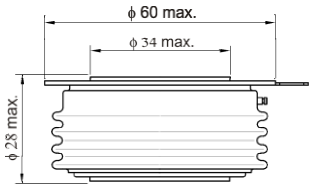
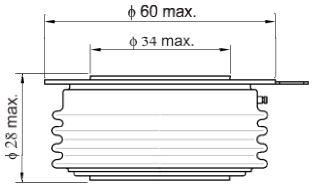
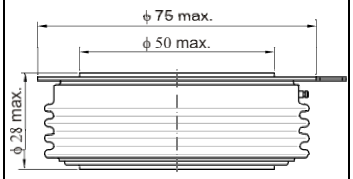
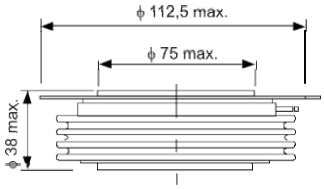
Working conditions:

Single-element power blocks are assigned to work in power electronic inverter systems:

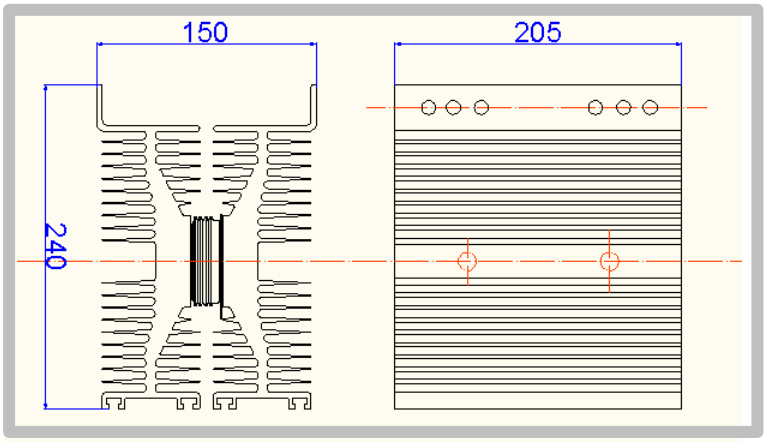
- temperature of ambient air: -10^0C – $+40^0$C;
- atmospheric pressure: 860hPa – 1060hPa;
- relative humidity not higher than 80% for temperature 40^0C
- cooling air without aggressive chemical agents nor conductive dust.

Configuration:

Table 1. Technical parameters

Type of module	Medium current of semiconductor $I_{T(AV)}$ [A]	Reverse voltage and blocking voltage of semiconductor U_{DRM}, U_{RRM} [V]	Overload current I_{TSM} [A]	Dimensions of applied semiconductor [mm]	Mass of block [kg]
M2T7P	450…650	400…2400	7000…10000		7,80
M2T8P	630…1000	400…8500	10000…24000		8,20
M2T9P	1000…2000	400…7500	20000…42000		10
M2T11P	1000…3200	400…6000	27000…65000		12

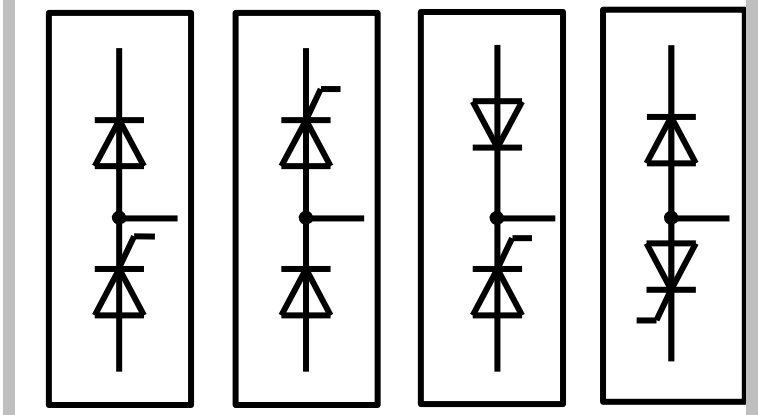
Scheme of power blocks — type M2T..P



Proper assembly and application of electrical corresponding power semiconductors are the most important factors influence quality, durability and reliability of power blocks.

DIODE-THYRISTOR MODULE – M1C…P

POWER BLOCK – photo 1



M1C **M1G** **M1K** **M1A**

DOUBLE-ELEMENT DIODE-THYRISTOR POWER BLOCK WITH HEATSINK

Characteristics:

- double-element diode-thyristor power module with double-sided cooling
- natural cooling

Application:

- rectifiers, inverters, power supplies
- DC power regulator
- power contactors
- soft-starter

Options:

- standard version (photo 1)
- with bus bars
- with black anodized heat sink
- thermal protection
- RC system
- fuse
- forced cooling

Selection of power blocks:

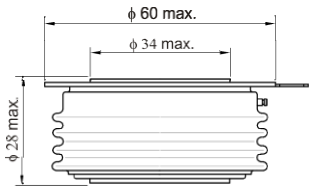
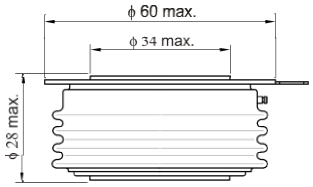
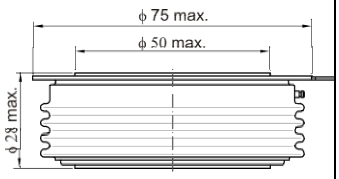
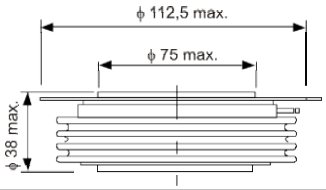
Depending on the load of power block there are used different semiconductors.
Size of the applied semiconductor is specified in Table 1.

Working conditions:

Double-element power blocks are assigned to work in power electronic inverter systems:

- temperature of ambient air: -10^0C – $+40^0$C;
- atmospheric pressure: 860hPa – 1060hPa;
- relative humidity not higher than 80% for temperature 40^0C;
- cooling air without aggressive chemical agents or conductive dust.

Table 1. Technical parameters

Type of module	Average current of semiconductor $I_{T(AV)}$ [A]	Repetitive peak reverse voltage of semiconductor U_{DRM}, U_{RRM} [V]	Non-repetitive surge current I_{TSM} [A]	Dimensions of applied semiconductor [mm]	Mass of block [kg]
M1C7P	450…650	400…2400	7000…10000		13,80
M1C8P	630…1000	400…8500	10000…24000		14,20
M1C9P	1000…2000	400…7500	20000…42000		16,40
M1C11P	1000…3200	400…6000	27000…65000		18,30

Scheme of power blocks — type M1C..P