

## Модуль тиристорно-диодный АМКН 162 Н4



$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_{TRMS} = 250$ A (maximum value for continuous operation) $I_{TAV} = 162$ A (sin 180; $T_c = 77$ °C)	
2100 2300	2000 2200	AMKT 162-20E H4	AMKT 162-22E H4

Symbol	Conditions	Values	Units
$I_{TAV}$	sin. 180; $T_c = 85$ (100) °C	143 (101)	A
$I_{TSM}$	$T_{vj} = 25$ °C; 10 ms	5200	A
	$T_{vj} = 125$ °C; 10 ms	4800	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	135000	A <sup>2</sup> s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	115000	A <sup>2</sup> s
$V_T$	$T_{vj} = 25$ °C; $I_T = 500$ A	max. 1,65	V
$V_{T(TO)}$	$T_{vj} = 125$ °C	max. 0,95	V
$r_T$	$T_{vj} = 125$ °C	max. 2	mΩ
$I_{DD}; I_{RD}$	$T_{vj} = 125$ °C; $V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$	max. 60	mA
$t_{gd}$	$T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs	1	μs
$t_{gr}$	$V_D = 0,67 * V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 125$ °C	max. 200	A/μs
$(dv/dt)_{cr}$	$T_{vj} = 125$ °C	max. 1000	V/μs
$t_q$	$T_{vj} = 125$ °C ,	50 ... 150	μs
$I_H$	$T_{vj} = 25$ °C; typ. / max.	150 / 400	mA
$I_L$	$T_{vj} = 25$ °C; $R_G = 33$ Ω; typ. / max.	300 / 1000	mA
$V_{GT}$	$T_{vj} = 25$ °C; d.c.	min. 2	V
$I_{GT}$	$T_{vj} = 25$ °C; d.c.	min. 150	mA
$V_{GD}$	$T_{vj} = 125$ °C; d.c.	max. 0,25	V
$I_{GD}$	$T_{vj} = 125$ °C; d.c.	max. 10	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,16 / 0,08	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	0,17 / 0,085	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	0,19 / 0,095	K/W
$R_{th(c-s)}$	per thyristor / per module	0,1 / 0,05	K/W
$T_{vj}$		- 40 ... + 125	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	4800 / 4000	V~
$M_s$	to heatsink	5 ± 15 %	Nm
$M_t$	to terminal	5 ± 15 %	Nm
a		5 * 9,81	m/s <sup>2</sup>
m	approx.	175	g

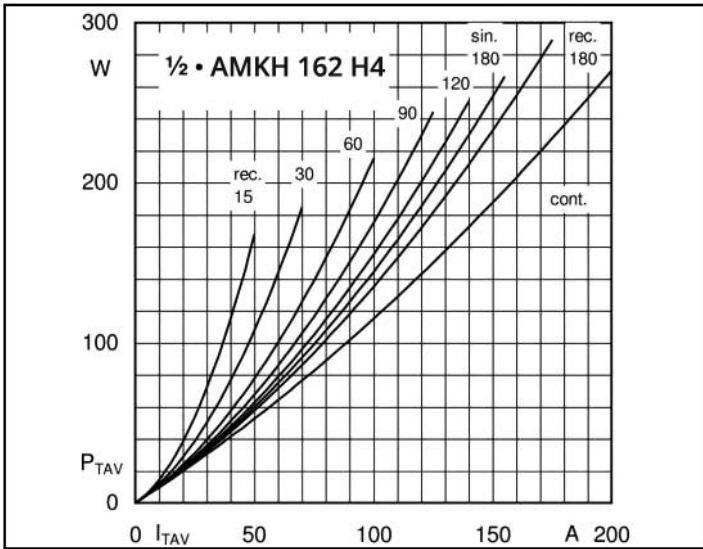


Fig. 1L Power dissipation per thyristor vs. on-state current

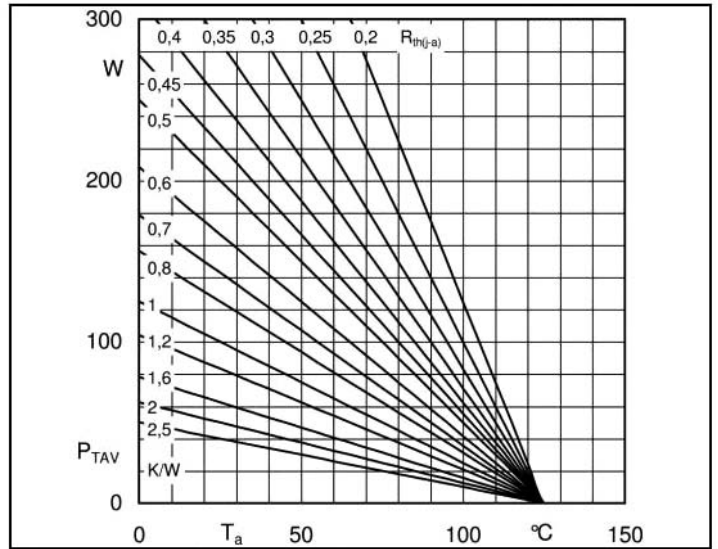


Fig. 1R Power dissipation per thyristor vs. ambient temp.

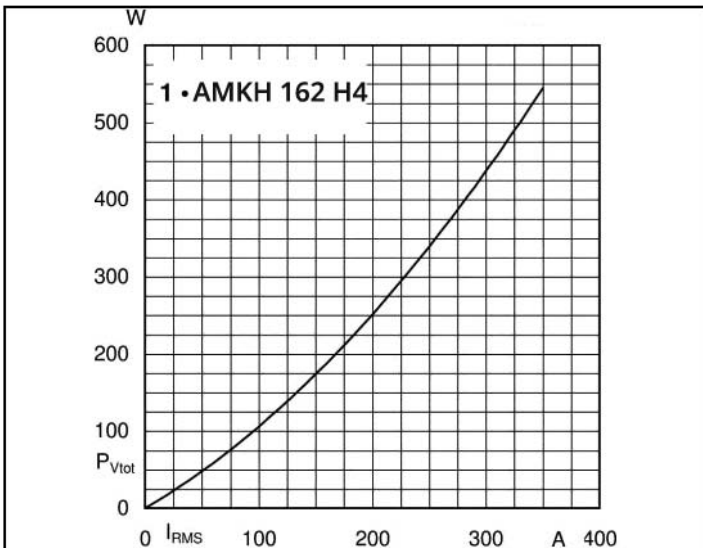


Fig. 2L Power dissipation per module vs. rms current

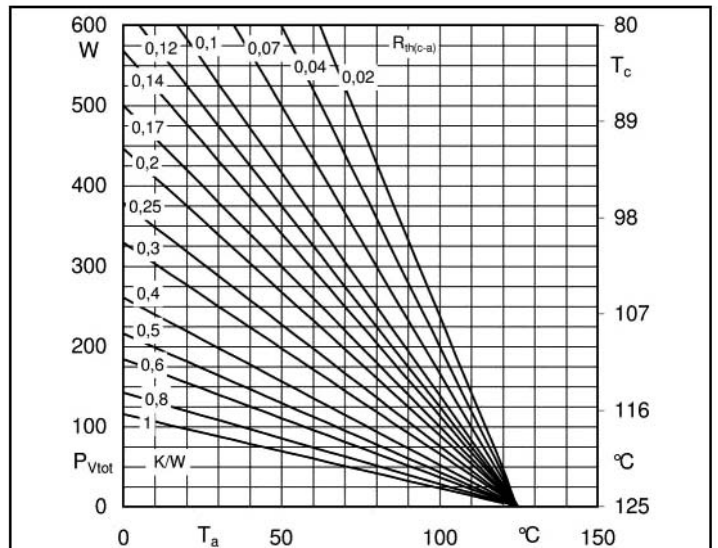


Fig. 2R Power dissipation per module vs. case temp.

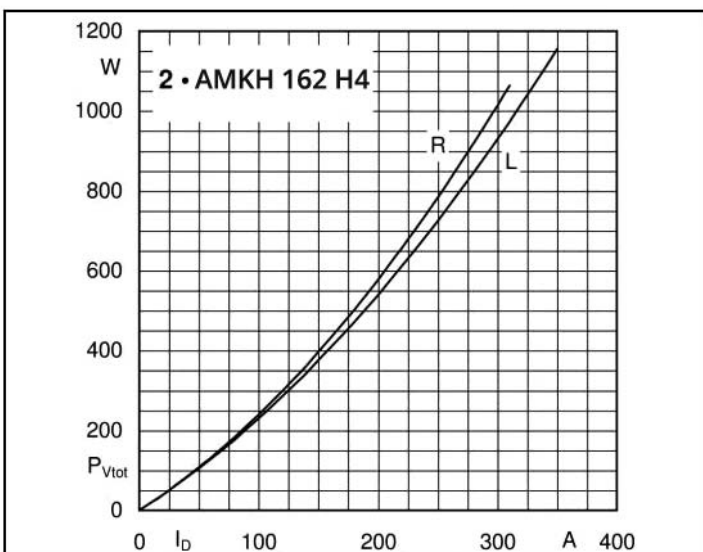


Fig. 3L Power dissipation of two modules vs. direct current

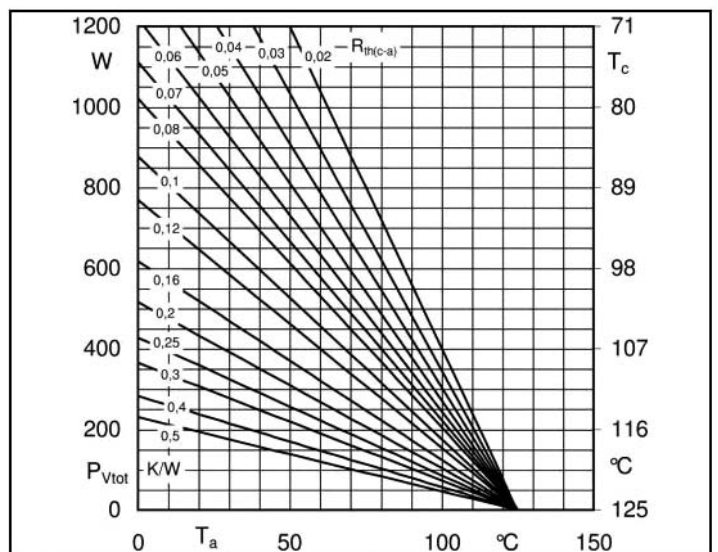
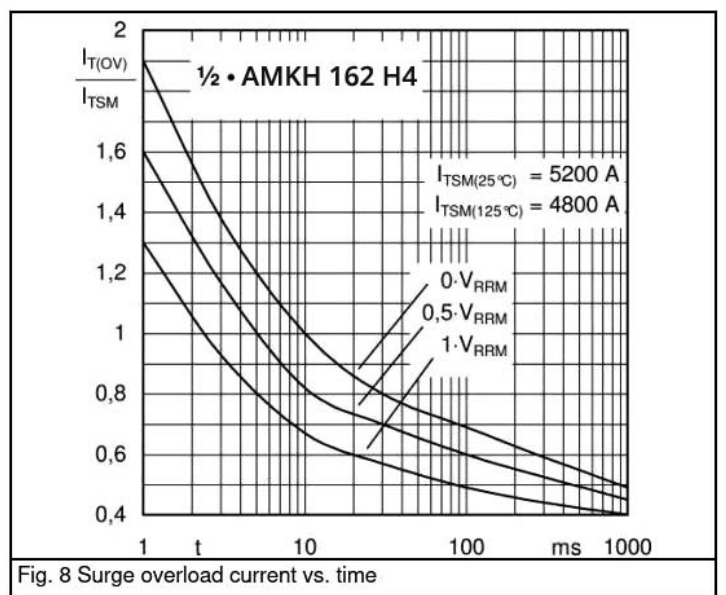
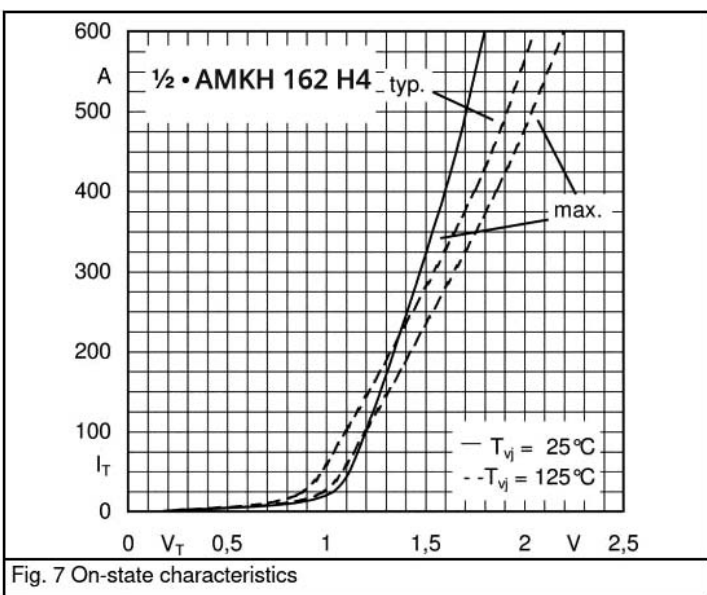
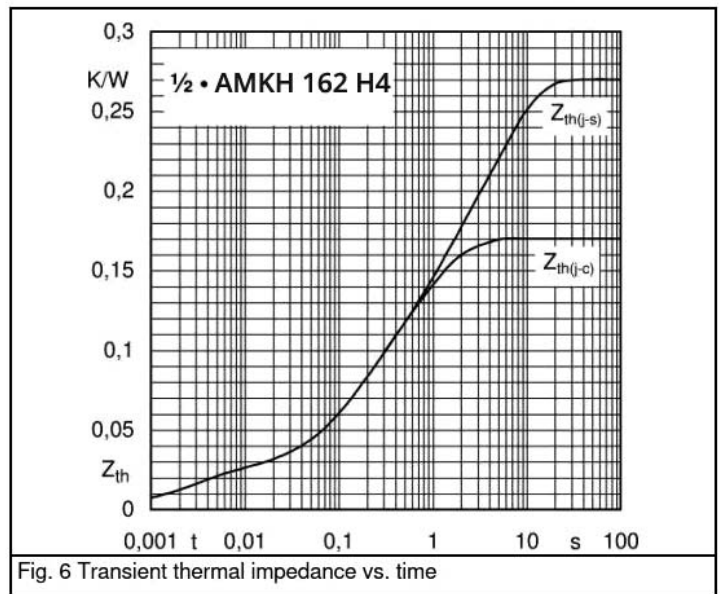
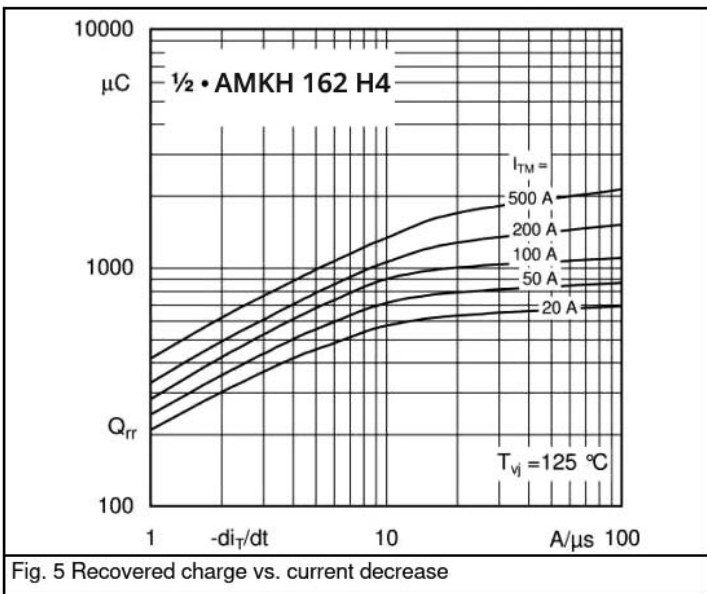
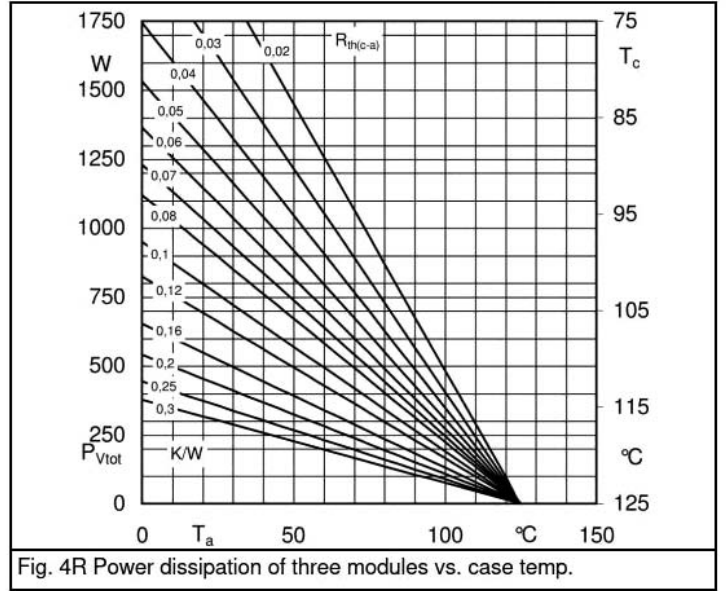
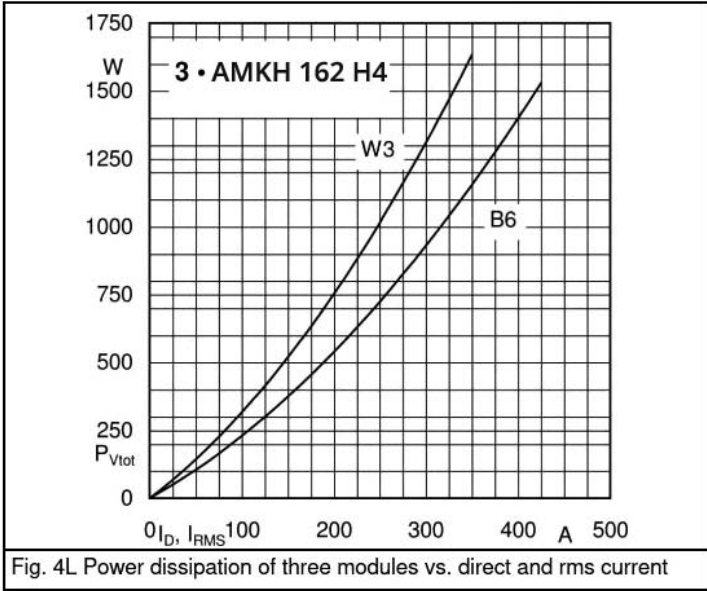
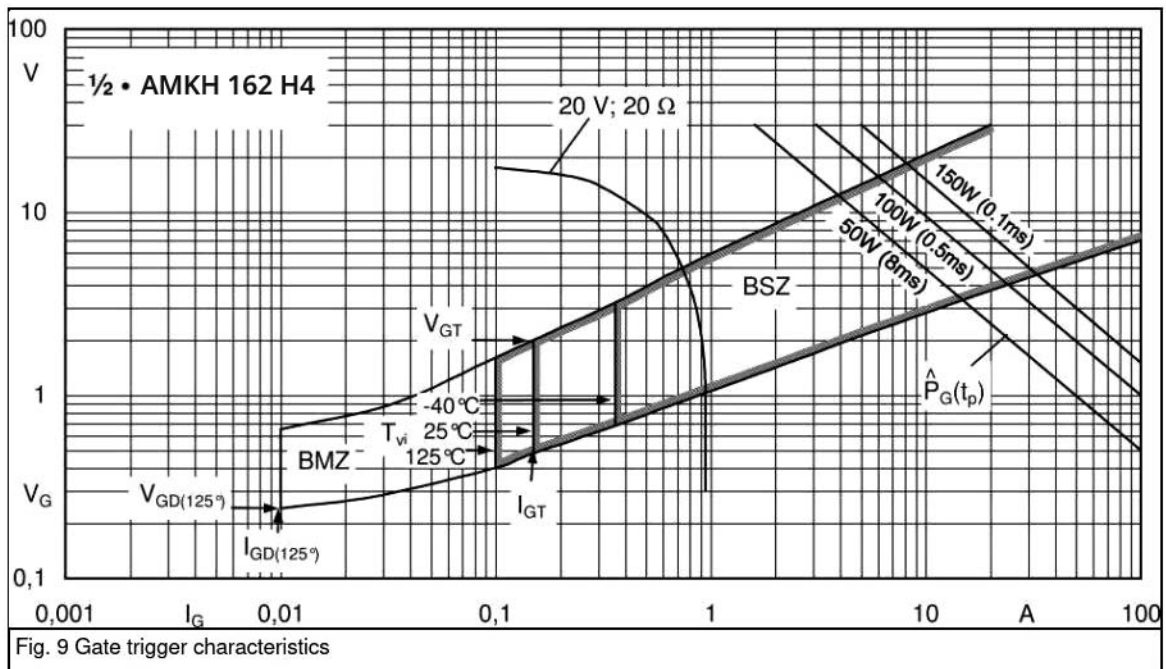
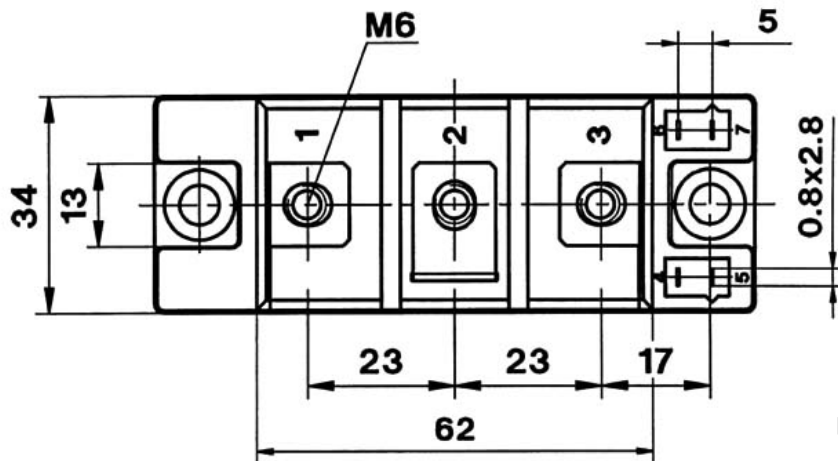
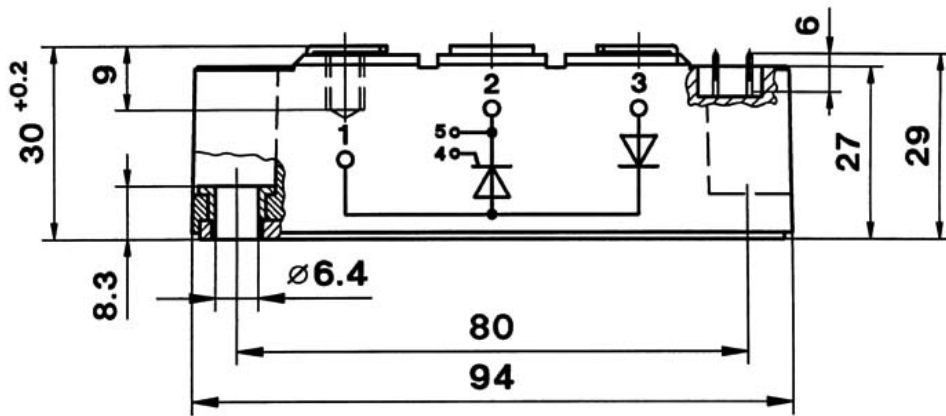


Fig. 3R Power dissipation of two modules vs. case temp.





### DIMENSIONS



Dimensions in mm

### TOPOLOGY OF INTERNAL CONNECTION

