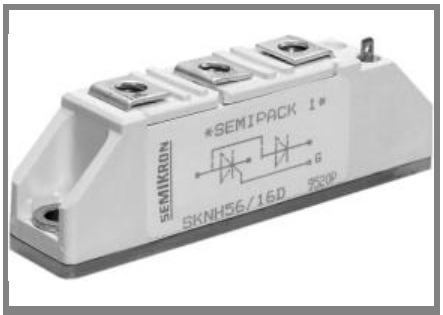
SKNH 91

THYRISTOR BRIDGE,SCR,BRIDGE



SEMIPACK® 1

Modules with Thyristor and Free-Wheeling Diode

SKNH 91

Features

- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532
- Electrical data see also data sheet SKKH 92

Typical Applications*

- Special modules for DC braking of AC induction motor

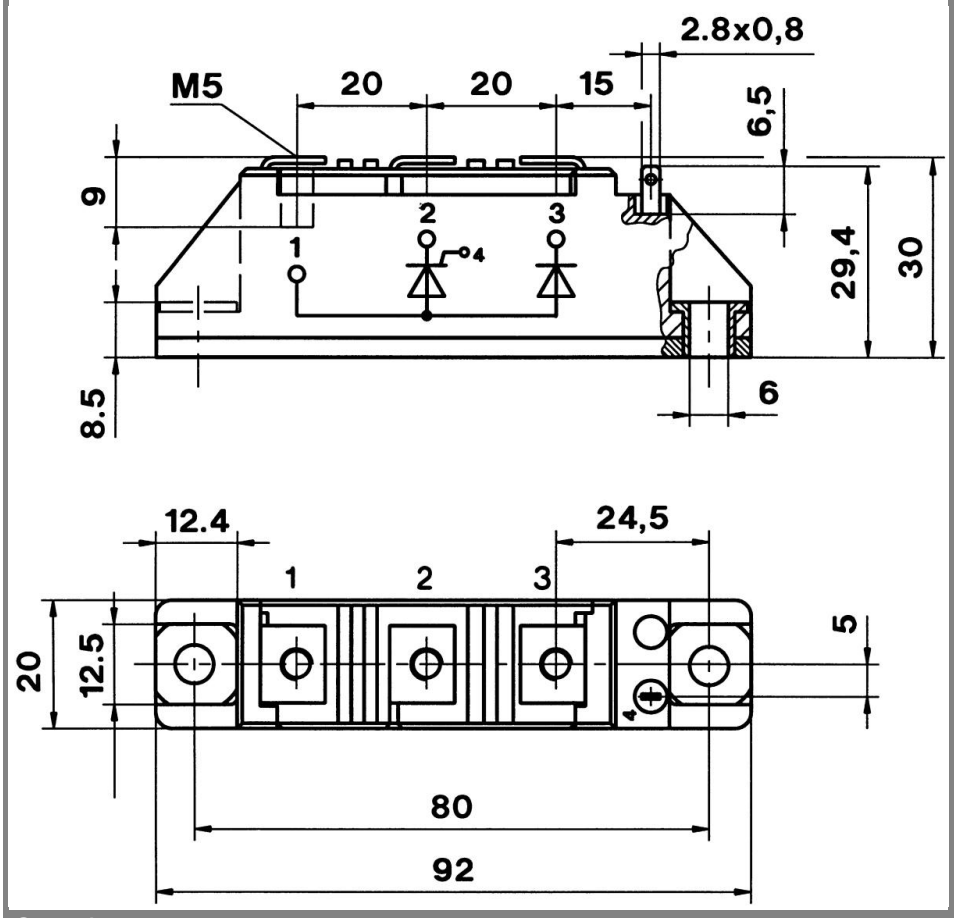
1) available on request

V_{RSM} V	V_{RRM}, V_{DRM} V	I_{TRMS} = 150 A (maximum value for continuous operation) I_{TAV} = 95 A (sin. 180; T_c = 85 °C)		
1300	1200	SKNH 91/12E		
1500	1400	SKNH 91/14E		
1700	1600	SKNH 91/16E		
1900	1800	SKNH 91/18E 1)		

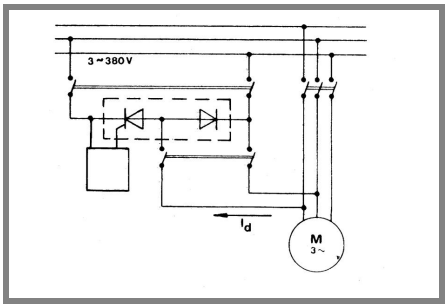
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; T_c = 85 (100) °C;	95 (68)	A
I_{TSM}	T_{vj} = 25 °C; 10 ms	2000	A
	T_{vj} = 125 °C; 10 ms	1750	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	20000	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	15000	A²s
V_T	T_{vj} = 25 °C; I_T = 300 A	max. 1,65	V
$V_{T(TO)}$	T_{vj} = 125 °C	max. 0,9	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. 20	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. 150	A/µs
$(dv/dt)_{cr}$	T_{vj} = 125 °C	max. 1000	V/µs
t_q	T_{vj} = 125 °C ,	100	µs
I_H	T_{vj} = 25 °C; typ. / max.	/ 250	mA
I_L	T_{vj} = 25 °C; R_G = 33 Ω; typ. / max.	/ 600	mA
V_{GT}	T_{vj} = 25 °C; d.c.	min. 3	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. 6	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,28 / 0,14	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	0,3 / 0,15	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	0,32 / 0,16	K/W
$R_{th(c-s)}$	per thyristor / per module	0,2 / 0,1	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.	3600 / 3000	V~
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	5 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	120	g
Case		A 7	

SKNH

Dimensions in mm



Case A 7



Typical application

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

