

SEMIPACK[®] 1

Modules with Thyristor and Free-Wheeling Diode

SKNH 56

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 57

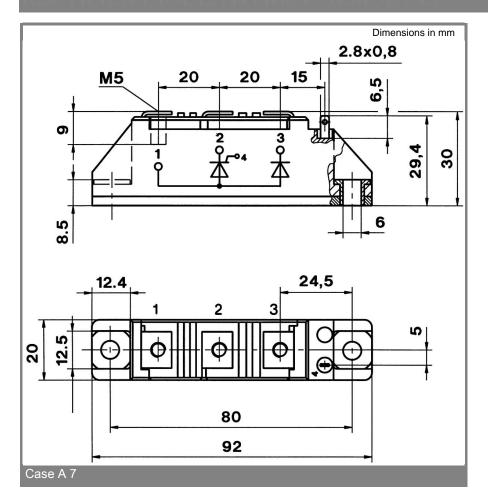
Typical Applications

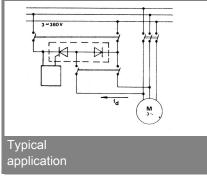
 Special modules for DC braking of AC induction motors

V_{RSM}	V_{RRM}, V_{DRM}	I _{TRMS} = 95 A (maximum value for continuous operation)		
V	V	I _{TAV} = 50 A (sin. 180; T _c = 85 °C)		
1300	1200	SKNH 56/12E		
1500	1400	SKNH 56/14E		
1700	1600	SKNH 56/16E		
1900	1800	SKNH 56/18E		

Symbol	Conditions	Values	Units
I _{TAV}	sin. 180; T _c = 85 (100) °C;	50 (35)	Α
I _D	P3/120; T _a = 45 °C;	70	Α
I _{TSM}	T _{vi} = 25 °C; 10 ms	1500	Α
TOW	T _{vi} = 125 °C; 10 ms	1250	Α
i²t	T _{vi} = 25 °C; 8,3 10 ms	11000	A²s
	T _{vi} = 125 °C; 8,3 10 ms	8000	A²s
V _T	T _{vi} = 25 °C; I _T = 200 A	max. 1,65	V
V _{T(TO)}	T _{vi} = 125 °C	max. 0,9	V
r _T	T _{vi} = 125 °C	max. 3,5	mΩ
I_{DD} ; I_{RD}	$T_{vj} = 25 \text{ °C}; V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$	max. 15	mA
t _{gd}	T_{vj} = 25 °C; I_G = 1 A; di_G/dt = 1 A/ μ s	1	μs
t_{gr}	$V_{D} = 0.67 * V_{DRM}$	2	μs
(di/dt) _{cr}	T _{vi} = 125 °C	max. 100	A/µs
(dv/dt) _{cr}	T _{vi} = 125 °C	max. 1000	V/µs
t _q	T _{vi} = 125 °C	50 150	μs
I _H	T _{vi} = 25 °C; typ. / max.	/ 250	mA
IL	$T_{vj} = 25 {}^{\circ}\text{C}; R_{G} = 33 \Omega; \text{typ. / max.}$	/ 600	mA
V _{GT}	T _{vi} = 25 °C; d.c.	min. 3	V
I_{GT}	$T_{vi} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 150	mA
V_{GD}	$T_{vj} = 125 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
I_{GD}	T _{vj} = 125 °C; d.c.	max. 6	mA
R _{th(j-c)}	cont.; per thyristor / per diode	0,57	K/W
R _{th(j-c)}	sin. 180; per thyristor / per diode	0,6	K/W
R _{th(j-c)}	sin. 180; per module	0,3	K/W
R _{th(c-s)}	per thyristor / per module	0,2 / 0,1	K/W
T _{vi}		- 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,	to terminals	5 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	120	g
Case		A 7	







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