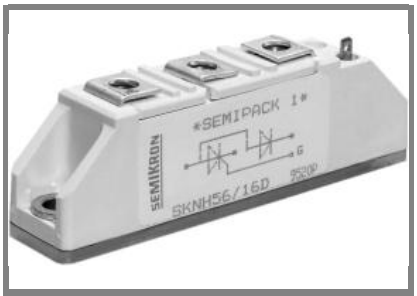
SKNH 56



SEMIPACK® 1

Modules with Thyristor and Free-Wheeling Diode

SKNH 56

Features

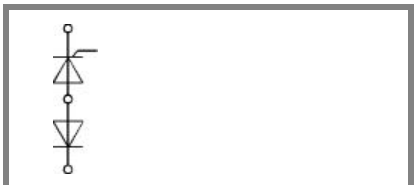
- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532
- Electrical data see also data sheet SKKH 57

Typical Applications

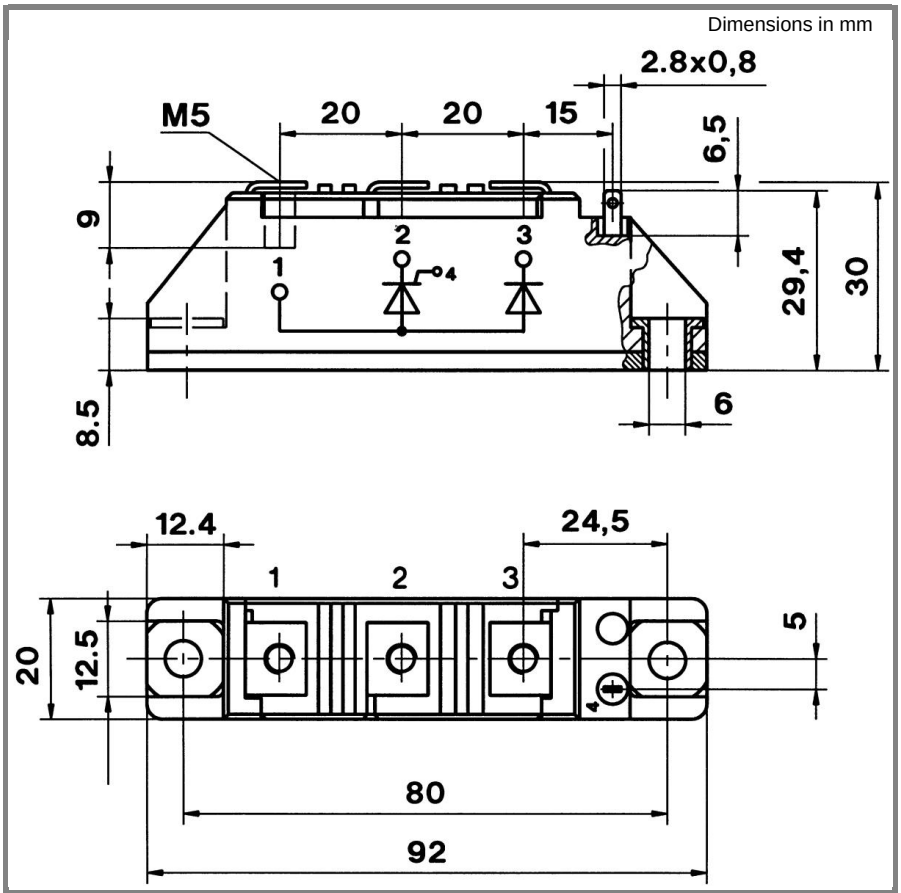
- Special modules for DC braking of AC induction motors

V_{RSM} V	V_{RRM}, V_{DRM} V	I_{TRMS} = 95 A (maximum value for continuous operation) 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		

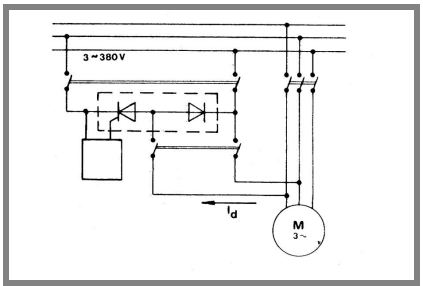
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; T_c = 85 (100) °C	50 (35)	A
I_D	P3/120; T_a = 45 °C;	70	A
I_{TSM}	T_{vj} = 25 °C; 10 ms	1500	A
	T_{vj} = 125 °C; 10 ms	1250	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	11000	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	8000	A²s
V_T	T_{vj} = 25 °C; I_T = 200 A	max. 1,65	V
$V_{T(TO)}$	T_{vj} = 125 °C	max. 0,9	V
r_T	T_{vj} = 125 °C	max. 3,5	mΩ
I_{DD}; I_{RD}	T_{vj} = 25 °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/µs	1	µs
t_{gr}	V_D = 0,67 * V_{DRM}	2	µs
$(di/dt)_{cr}$	T_{vj} = 125 °C	max. 100	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.	/ 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 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_{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



Case A 7



Typical application

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