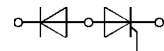


V_{RSM}	V_{RRM} V_{DRM}	I_d (P 3/120, $T_{amb} = 45\text{ °C}$)
V	V	70 A
1300	1200	SKNH 56/12 E
1500	1400	SKNH 56/14 E
1700	1600	SKNH 56/16 E
1900	1800	SKNH 56/18 E

SEMIPACK® 1 Modules with Thyristor and Free-Wheeling Diode

SKNH 56
SKNH 91 ¹⁾



SKNH

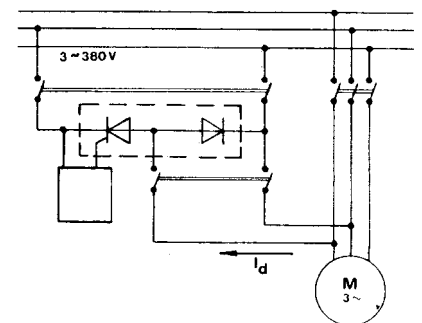
Symbol	Conditions	SKNH 56	Units
I_{TAV}	$T_{case} = 85\text{ °C}$	50	A
I_{TRMS}		max. 95	A
I_{TSM}	$T_{vj} = 25\text{ °C}$	1 500	A
	$T_{vj} = 125\text{ °C}$	1 250	A
i^2t	$T_{vj} = 25\text{ °C}$	11 000	A ² s
	$T_{vj} = 125\text{ °C}$	8 000	A ² s
t_{gd}	$T_{vj} = 25\text{ °C}$ $I_G = 1\text{ A}$ $di_G/dt = 1\text{ A}/\mu\text{s}$	1	μs
t_{gr}	$V_D = 0,67 \cdot V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 125\text{ °C}$	100	A/ μs
$(dv/dt)_{cr}$	$T_{vj} = 125\text{ °C}$	1000	V/ μs
t_q	$T_{vj} = 125\text{ °C}$; typ.	50 ... 150	μs
I_H	$T_{vj} = 25\text{ °C}$; max.	250	mA
I_L	$T_{vj} = 25\text{ °C}$; $R_G = 33\ \Omega$; max.	600	mA
V_T	$T_{vj} = 25\text{ °C}$; $I_T = 200\text{ A}$	1,65	V
$V_{T(TO)}$	$T_{vj} = 125\text{ °C}$	0,9	V
r_T	$T_{vj} = 125\text{ °C}$	3,5	m Ω
I_{DD} ; I_{RD}	$T_{vj} = 125\text{ °C}$; $V_{RD} = V_{RRM}$ $V_{DD} = V_{DRM}$	15	mA
V_{GT}	$T_{vj} = 25\text{ °C}$; d.c.	3	V
I_{GT}	$T_{vj} = 25\text{ °C}$; d.c.	150	mA
V_{GD}	$T_{vj} = 125\text{ °C}$; d.c.	0,25	V
I_{GD}	$T_{vj} = 125\text{ °C}$; d.c.	6	mA
R_{thjc}	sin. 180; per thyristor/per diode	0,64	$^{\circ}\text{C}/\text{W}$
	sin. 180; per module	0,32	$^{\circ}\text{C}/\text{W}$
R_{thch}	per thyristor/per module	0,2 / 0,1	$^{\circ}\text{C}/\text{W}$
T_{vj}		- 40 ... + 125	$^{\circ}\text{C}$
T_{stg}		- 40 ... + 125	$^{\circ}\text{C}$
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s/1 min	3600 / 3000	V~
M_1	to heatsink	5 (44 lb. in.) \pm 15 %	Nm
M_2	to terminals	5 (44 lb. in.) \pm 15 %	Nm
a		5 · 9,81	m/s ²
w	approx.	120	g
Case	→ page B 1 – 95	A 7	

Features

- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

Typical Applications

- Special modules for DC braking of AC induction motors



¹⁾ SKNH 91 available on request, electrical data see page B 1 – 51

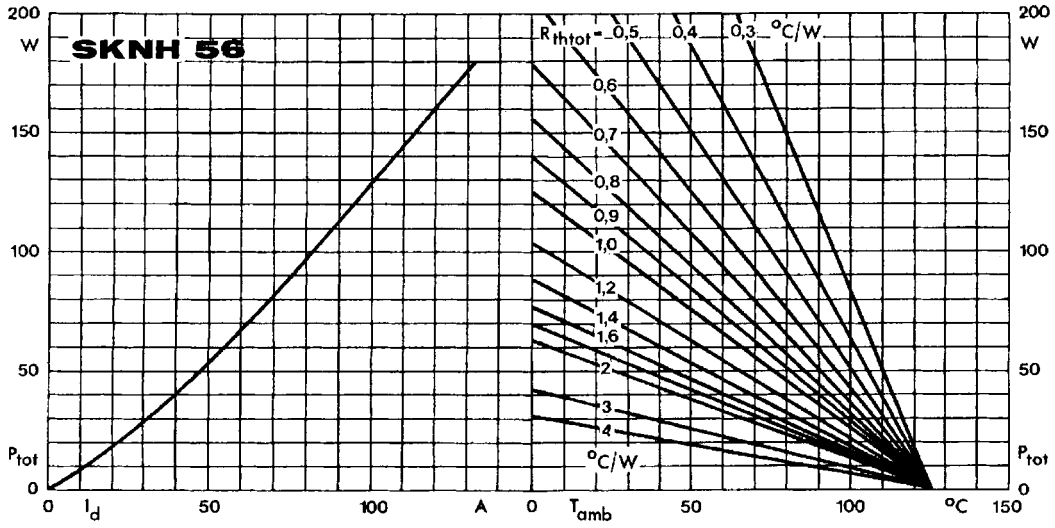


Fig. 17 Power dissipation vs. braking current and ambient temperature

Further diagrams see with type SKKT 56

SKKT 19 ... 105

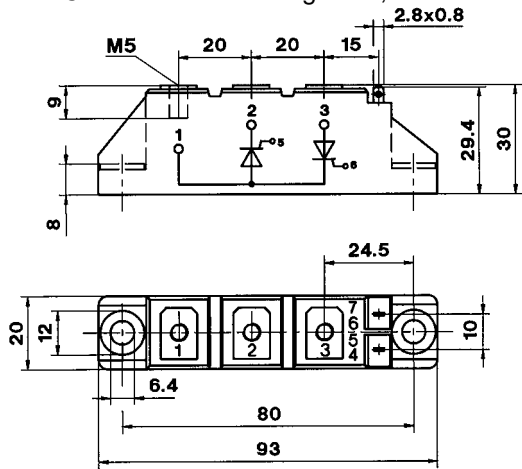
Case A 5

IEC 192-2: A 77 A

JEDEC: TO-240 AA

SEMIPACK® 1

UL recognized, file no. E 63 532



Dimensions in mm

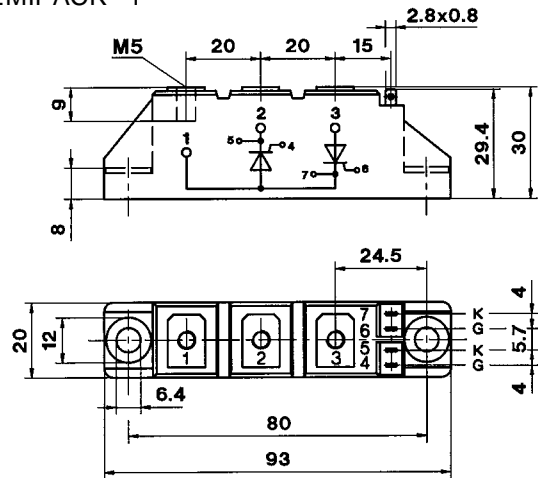
SKKT 20/ ... 106/

Case A 46

IEC 192-2: A 77 A

JEDEC: TO-240 AA

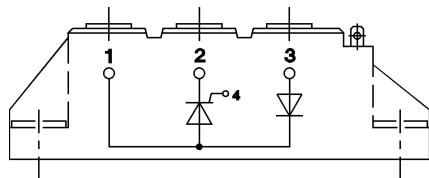
SEMIPACK® 1



Dimensions in mm

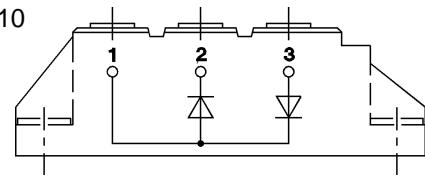
SKKH 26 ... 105

Case A 6



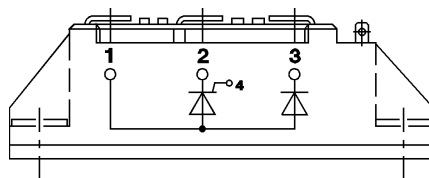
SKKD 26 ... 100

Case A 10



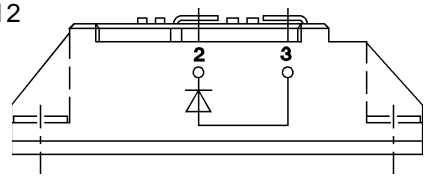
SKNH 56 ... 91

Case A 7



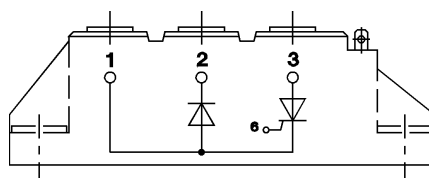
SKKE 81

Case A 12



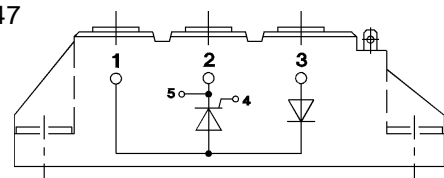
SKKL 56 ... 105

Case A 9



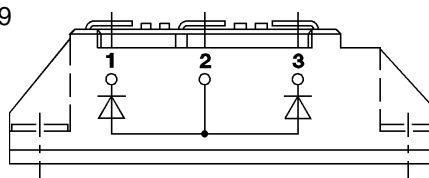
SKKH 27 ... 106

Case A 47



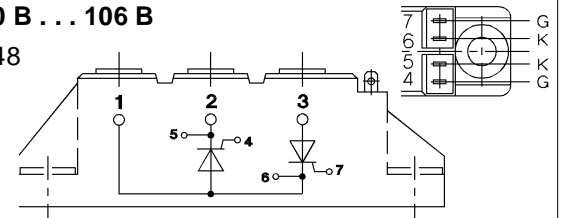
SKND 46 ... 81

Case A 19



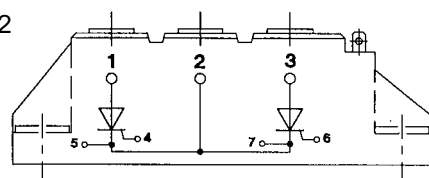
SKKT 20 B ... 106 B

Case A 48



SKMT 92

Case A 72



SKKL 42 ... 106

Case A 59

