

SKNH 56, SKNH 91

V_{RSM}	V_{RRM} V_{DRM}	I_d (P 3/120, $T_{amb} = 45^\circ C$) 70 A
V	V	
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 91¹⁾



Symbol	Conditions	SKNH 56	Units
I_{TAV}	$T_{case} = 85^\circ C$	50	A
I_{TRMS}		max. 95	A
I_{TSM}	$T_{vj} = 25^\circ C$	1 500	A
	$T_{vj} = 125^\circ C$	1 250	A
i^2t	$T_{vj} = 25^\circ C$	11 000	A^2s
	$T_{vj} = 125^\circ C$	8 000	A^2s
t_{gd}	$T_{vj} = 25^\circ C$ $I_G = 1 A$ $dI_G/dt = 1 A/\mu s$	1	μs
t_{gr}	$V_D = 0,67 \cdot V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 125^\circ C$	100	$A/\mu s$
$(dv/dt)_{cr}$	$T_{vj} = 125^\circ C$	1000	$V/\mu s$
t_q	$T_{vj} = 125^\circ C$; typ.	50 ... 150	μs
I_H	$T_{vj} = 25^\circ C$; max.	250	mA
I_L	$T_{vj} = 25^\circ C$; $R_G = 33 \Omega$; max.	600	mA
V_T	$T_{vj} = 25^\circ C$; $I_T = 200 A$	1,65	V
$V_{T(TO)}$	$T_{vj} = 125^\circ C$	0,9	V
r_T	$T_{vj} = 125^\circ C$	3,5	$m\Omega$
$I_{DD}; I_{RD}$	$T_{vj} = 125^\circ C$; $V_{RD} = V_{RRM}$ $V_{DD} = V_{DRM}$	15	mA
V_{GT}	$T_{vj} = 25^\circ C$; d.c.	3	V
I_{GT}	$T_{vj} = 25^\circ C$; d.c.	150	mA
V_{GD}	$T_{vj} = 125^\circ C$; d.c.	0,25	V
I_{GD}	$T_{vj} = 125^\circ C$; d.c.	6	mA
R_{thjc}	sin. 180; per thyristor/per diode	0,60	$^\circ C/W$
R_{thch}	sin. 180; per module per thyristor/per module	0,30	$^\circ C/W$
T_{vj}		0,2 / 0,1	$^\circ C/W$
T_{stg}		-40 ... +125	°C
		-40 ... +125	°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	

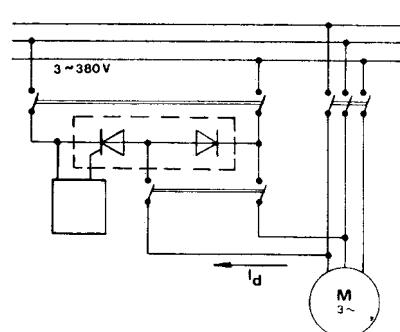
1) SKNH 91 available on request, electrical data see data sheet SKKH 91

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



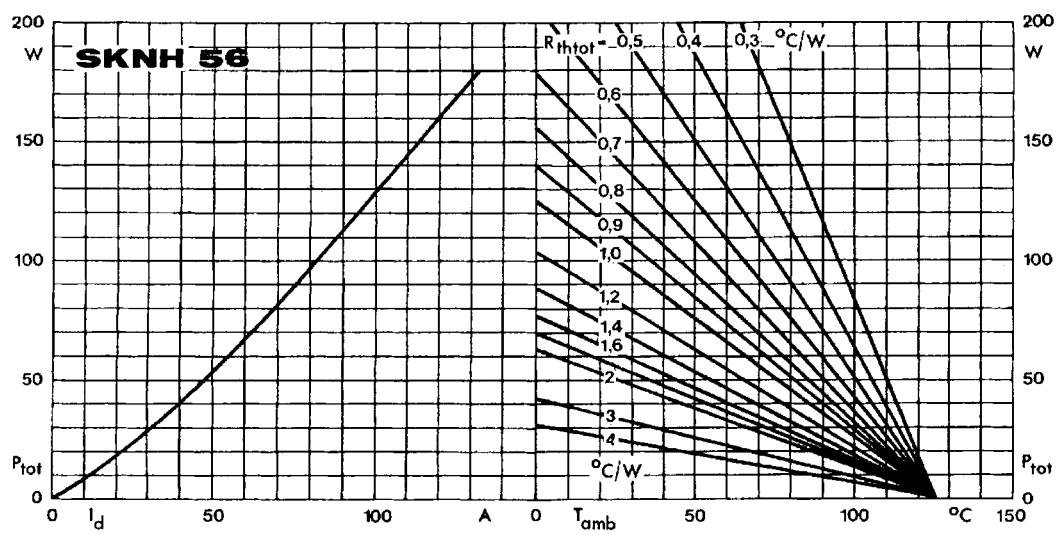
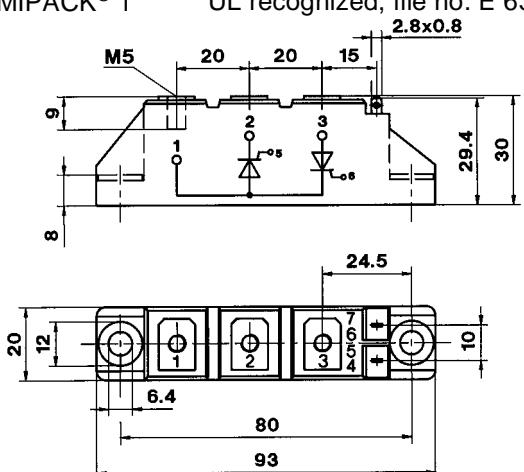
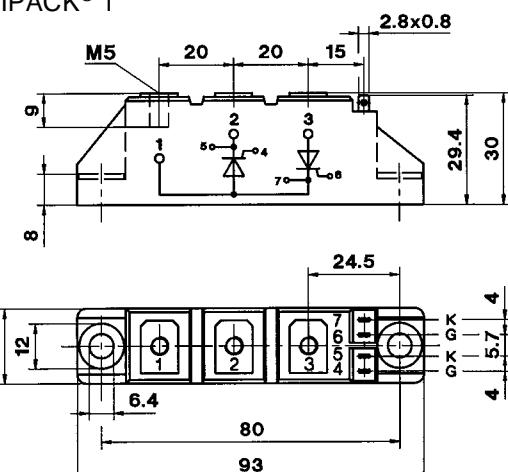
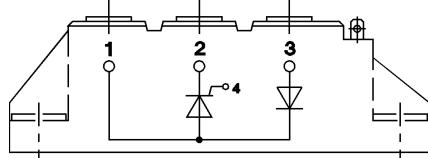
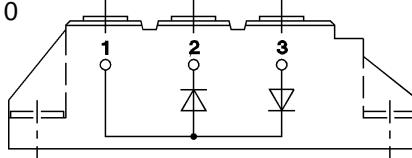
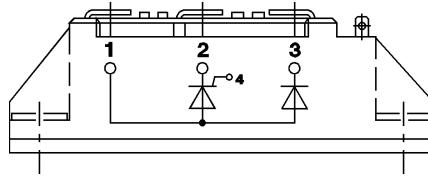
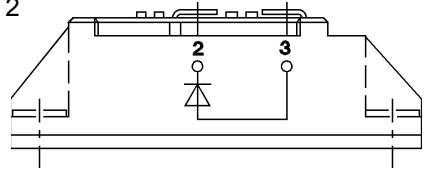
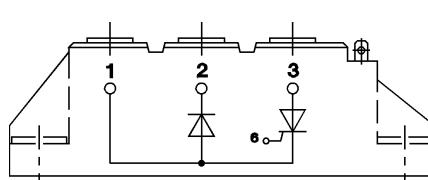
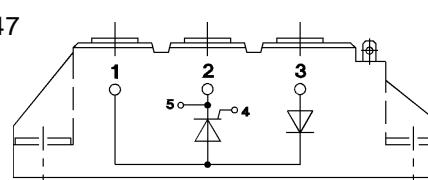
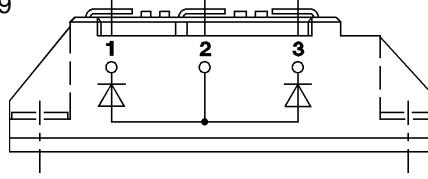
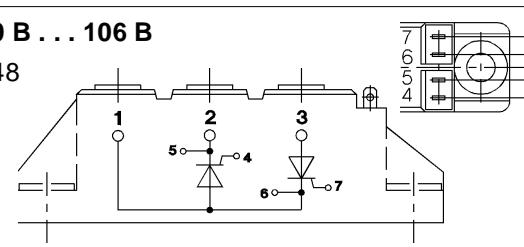
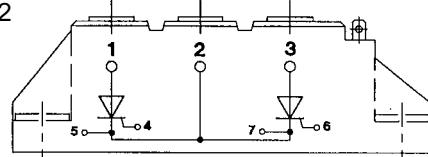


Fig. 17 Power dissipation vs. braking current and ambient temperature

Further diagrams see with type SKKT 56

<p>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</p>  <p>Dimensions in mm</p>	<p>SKKT 20/ ... 106/ Case A 46 IEC 192-2: A 77 A JEDEC: TO-240 AA SEMIPACK® 1</p>  <p>Dimensions in mm</p>
<p>SKKH 26 ... 105 Case A 6</p> 	<p>SKKD 26 ... 100 Case A 10</p> 
<p>SKNH 56 ... 91 Case A 7</p> 	<p>SKKE 81 Case A 12</p> 
<p>SKKL 56 ... 105 Case A 9</p> 	<p>SKKH 27 ... 106 Case A 47</p> 
<p>SKND 46 ... 81 Case A 19</p> 	<p>SKKT 20 B ... 106 B Case A 48</p> 
<p>SKMT 92 Case A 72</p> 	<p>SKKL 42 ... 106 Case A 59</p> 