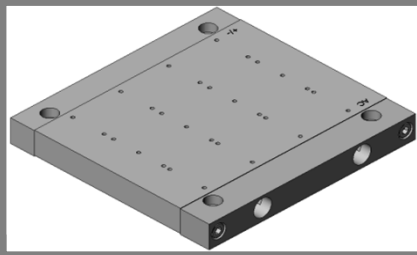


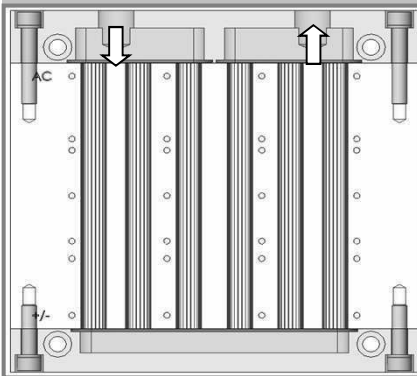
NHC 152 - SKiM63



For SKiM 63 / 93

Data sheet values measured with SKiM 63 + NHC

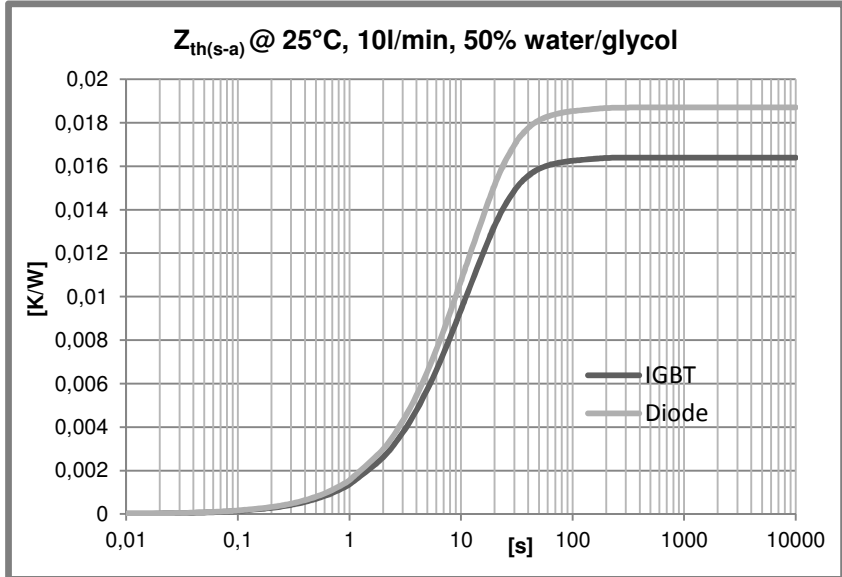
In- and outlet on the same side



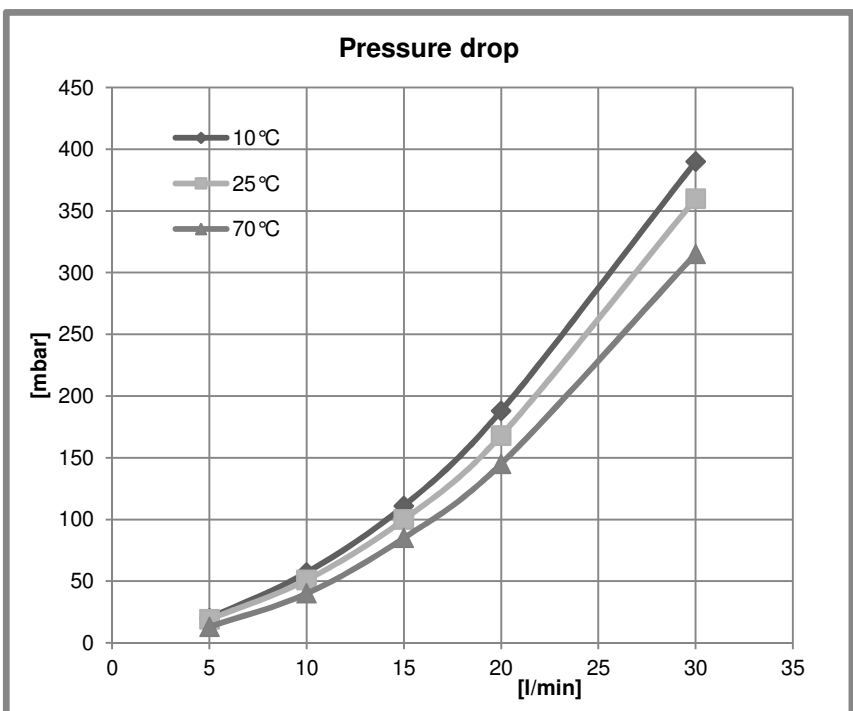
Cooling system:
Nominal pressure: 3bar
Test pressure: 6bar

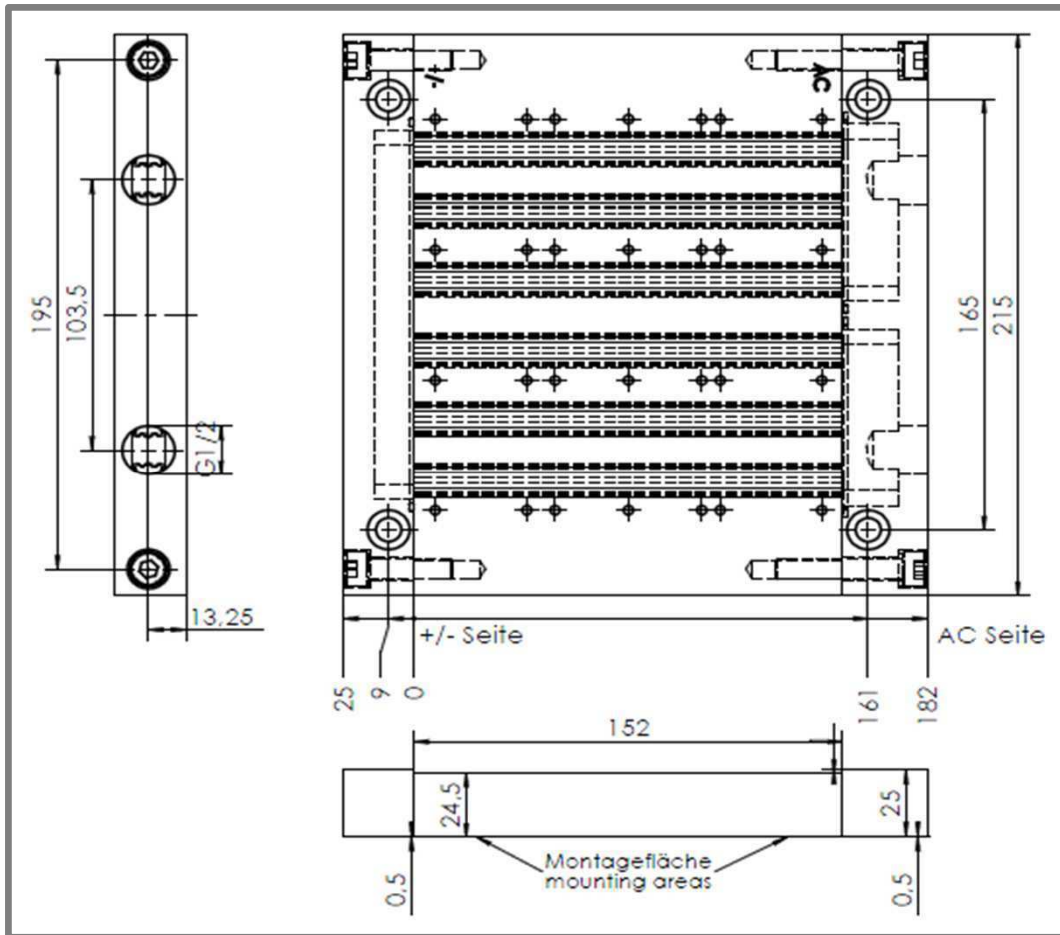
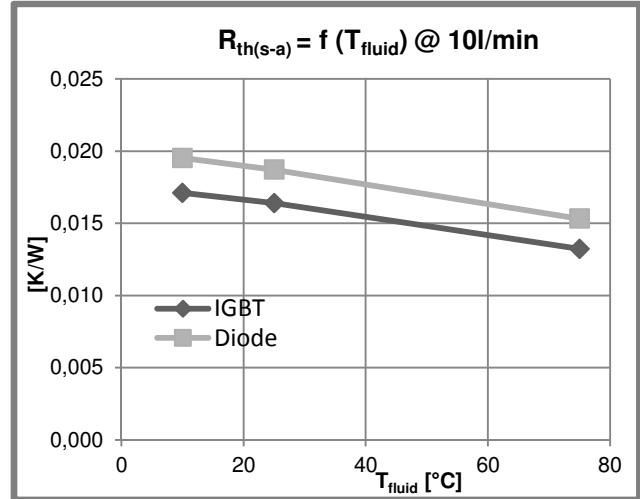
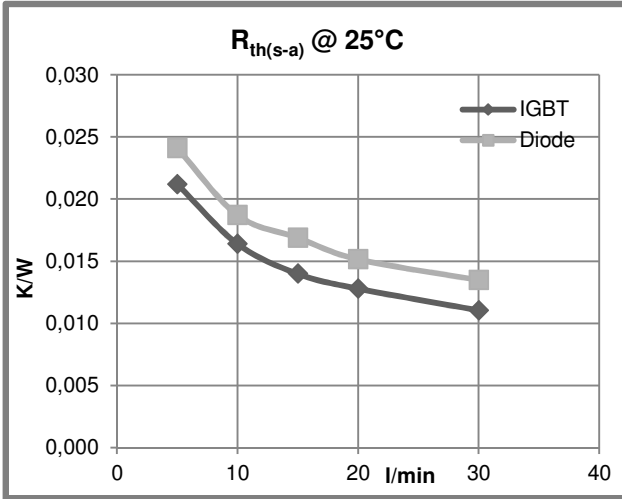
50 % glycol, 10 l/min
@ $T_{fluid}=25^{\circ}C$

$R_{th(s-a)}$ IGBT	$R_{th(s-a)}$ Diode
[K/W]	[K/W]
0,0164	0,0187



$Z_{th(s-a)}$	R_{th} IGBT [K/W]	tau [s]	R_{th} Diode [K/W]	tau [s]
1	0,0155	11	0,0177	33
2	0,0009	55	0,0010	165
3				
4				



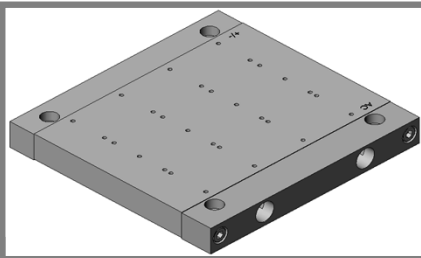


When R_{th} is required for 1 switch it have to calculate as follows:

$$R_{th(s-a)} \text{ per switch IGBT} = R_{th(s-a)} \text{ IGBT} \times 6 = 0,0164 \text{ K/W} \times 6 = 0,0984 \text{ K/W}$$

$$R_{th(s-a)} \text{ per switch Diode} = R_{th(s-a)} \text{ Diode} \times 6 = 0,0187 \times 6 = 0,1122 \text{ K/W}$$

NHC 152 - SKiM93



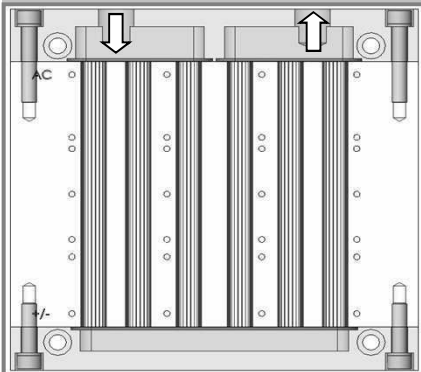
50 % glycol, 10 l/min
@ $T_{fluid}=25^{\circ}C$

$R_{th(s-a)}$ IGBT	$R_{th(s-a)}$ Diode
[K/W]	[K/W]
0,0118	0,0150

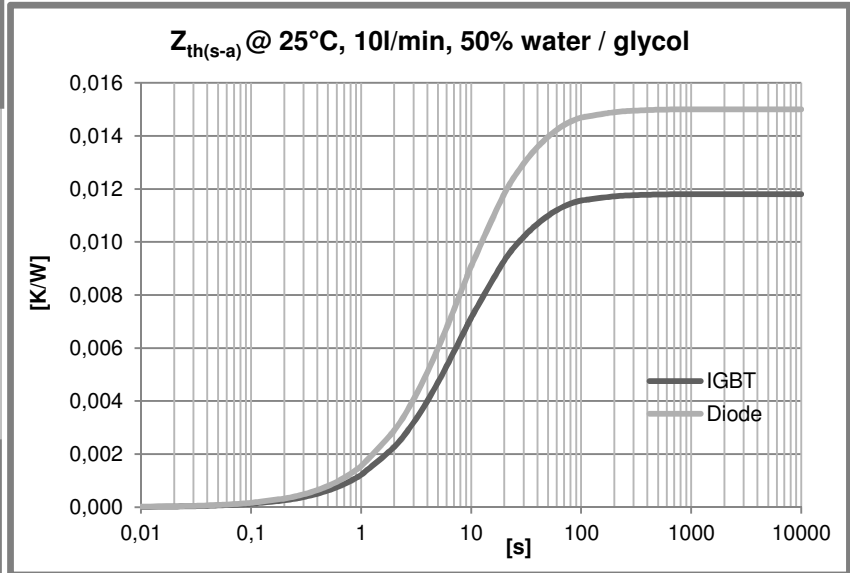
For SKiM 63 / 93

Data sheet values measured with SKiM 93 + NHC

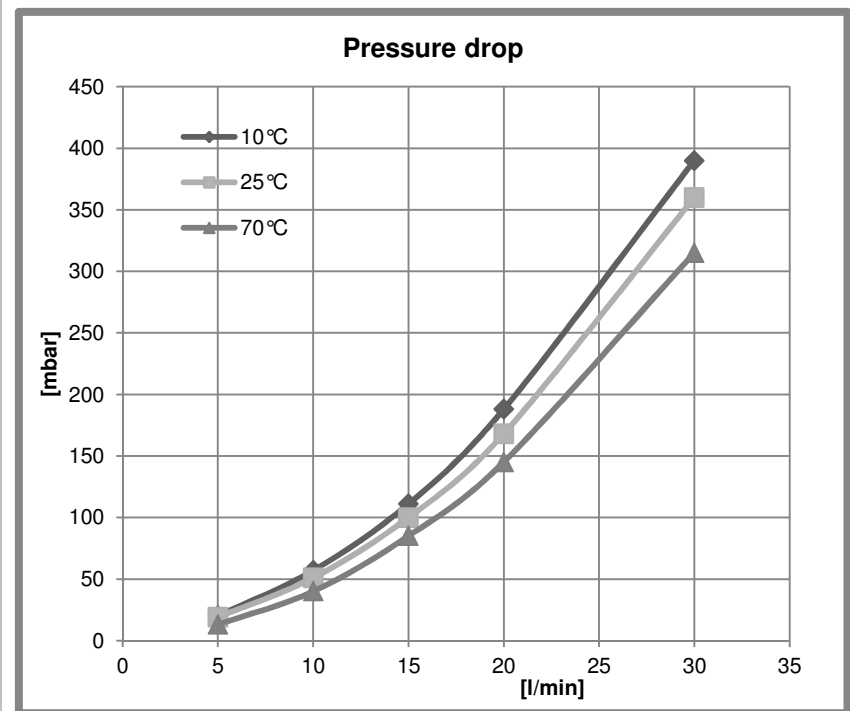
In- and outlet on the same side

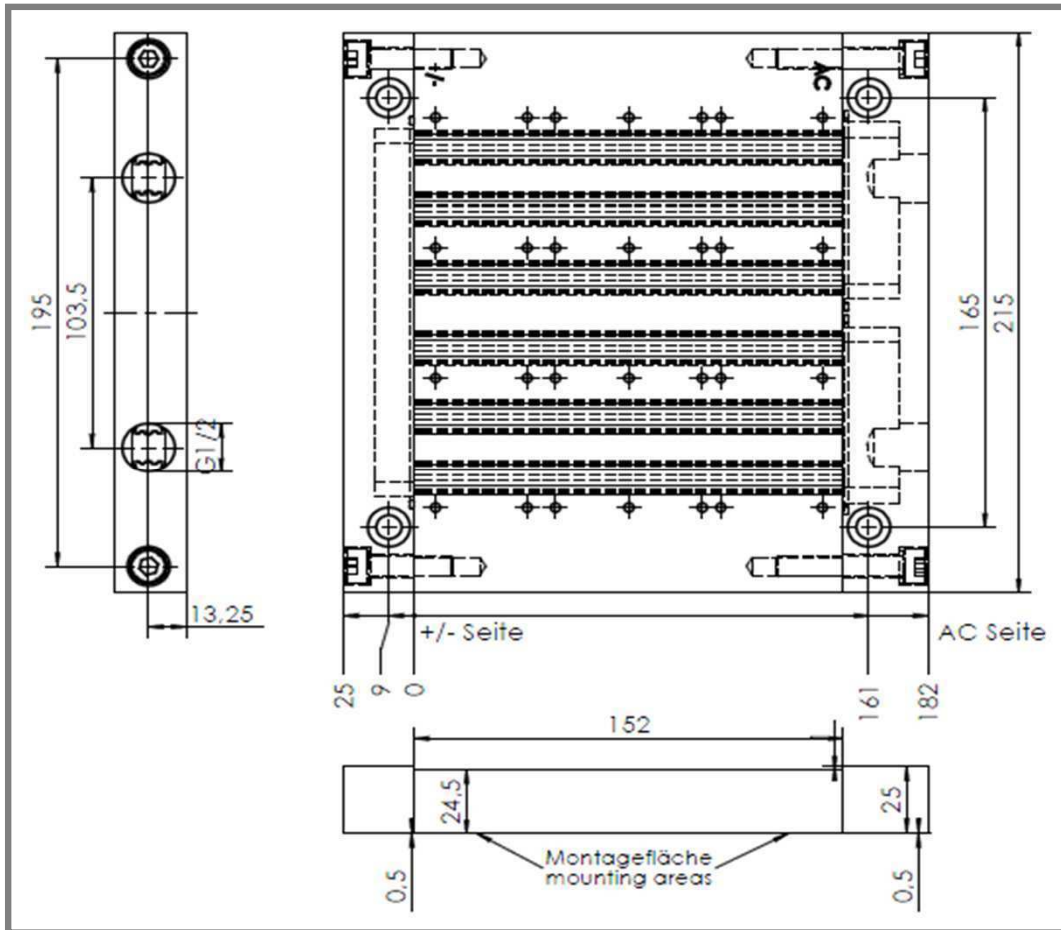
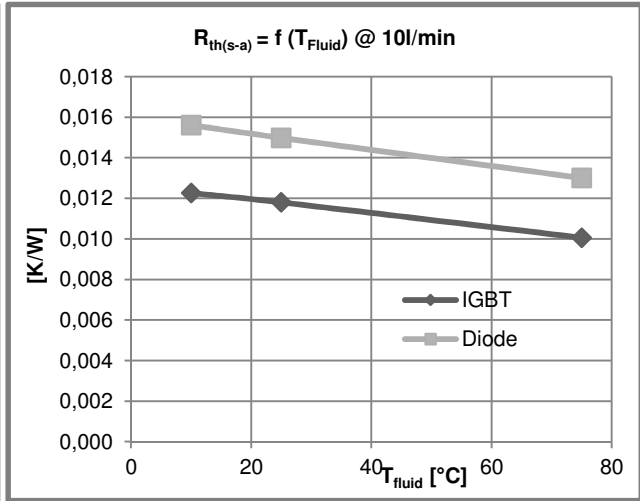
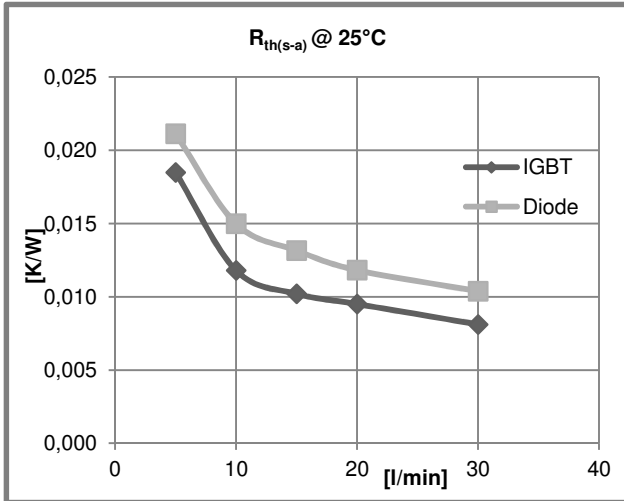


Cooling system:
Nominal pressure: 3bar
Test pressure: 6bar



$Z_{th(s-a)}$	R_{th} IGBT [K/W]	tau [s]	R_{th} Diode [K/W]	tau [s]
1	0,0073	6,42	0,0093	6,42
2	0,0042	25,52	0,0053	25,52
3	0,0003	149,3	0,0004	149,3
4				





When R_{th} is required for 1 switch it have to calculate as follows:

$$R_{th(s-a)} \text{ per switch IGBT} = R_{th(s-a)} \text{ IGBT} \times 6 = 0,0118 \text{ K/W} \times 6 = 0,0708 \text{ K/W}$$

$$R_{th(s-a)} \text{ per switch Diode} = R_{th(s-a)} \text{ Diode} \times 6 = 0,015 \times 6 = 0,0900 \text{ K/W}$$