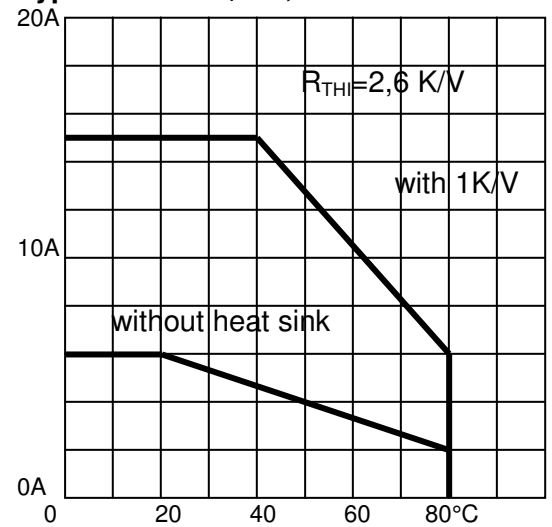
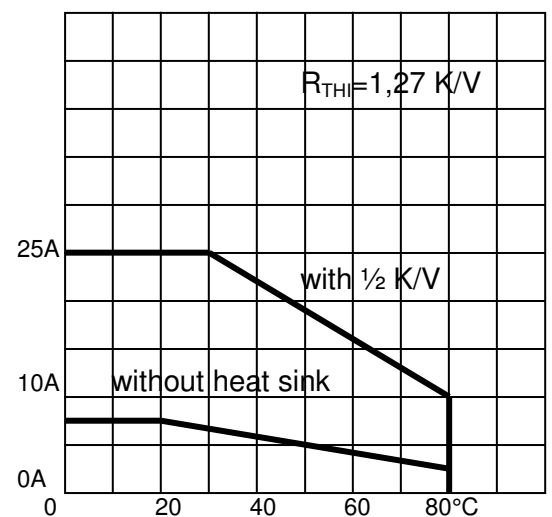
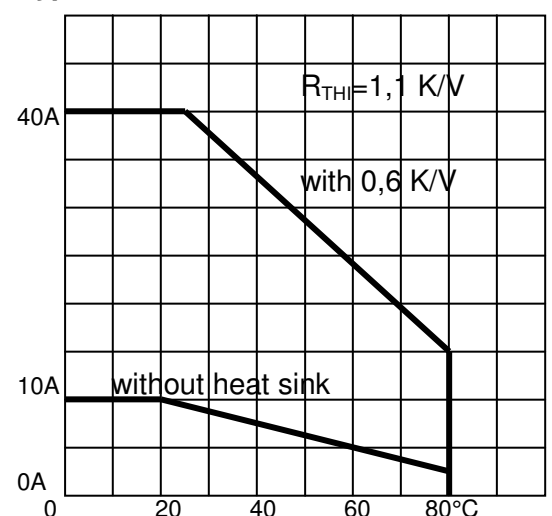


SSR with red function-LED

Type:	15A	25A	40A
Input DC voltage/ type:	AP021/15	AP022/25	AP023/40
<i>nominal voltage</i>	3...32VDC		
<i>min. ON voltage</i>	3VDC		
<i>max. OFF voltage</i>	1,0VDC		
<i>input resistance</i>	2,2 KOhm + LED		
Input AC voltage/ type:	AP024/15	AP025/25	AP026/40
<i>nominal voltage</i>	80...280VAC		
<i>min. ON voltage</i>	80VAC		
<i>max. OFF voltage</i>	10VAC		
<i>input resistance</i>	35 KOhm +/-10%		
Output:			
<i>max. current</i>	15A	A25	40A
<i>current peak (50/60Hz)</i>	180/188	300/315	400/420
<i>nominal voltage</i>	240V _{eff}		
<i>range</i>	24...280V _{eff}		
<i>max. suspension</i>	+/-600V		
<i>max. leakage</i>	8mA _{eff}		
<i>critical voltage increase</i>	200V/us		
<i>critical conductance</i>	200V/us		
<i>min. load (mArms)</i>	50	100	100
Other data:			
<i>isolation voltage inp./outp.</i>	2500Vrms		
<i>isolation voltage baseplate</i>	2500Vrms		
<i>range of frequency</i>	47...63 Hz		
<i>switch time</i>	max. 10ms		
<i>ambient temperatur</i>	-20...+80°C		
<i>stocking temperature</i>	-40...+100°C		
<i>dimensions LxWxH</i>	55x43x26		

Load at ambient temperature
Type 15A $P_V = 1,35 \text{ V/A}$

Type 25A $P_V = 1,30 \text{ V/A}$

Type 40A $P_V = 1,25 \text{ V/A}$


The Solid State Relays should be fixed with heat conduction paste at the heat sink.

Following calculation for the heat sink dimension:

$$R_{KK} < \frac{110^\circ\text{C} - T_U}{I \times P_V} - R_{THI}$$

T_U = ambient temperature

I = effective load current (A)

R_{KK} = thermal resistance heat sink

P_V = power loss (Watt / A)

R_{THI} = thermal internal resistance of SSR