The frequency dependence of the ripple current has not been taken into account in the procedure described above. This must be introduced into the calculation in the form of an additional factor.

For each series precise curves for conversion factor $I_{AC,f}$ /$I_{AC,100\ Hz}$ versus frequency f are given in the individual data sheets.

The following examples illustrate the calculation procedure, using the data of a capacitor of the B43564/B43584 series. For this type series, the upper category temperature is +85 °C. As an example, a capacitor with the following ratings has been selected from the data sheets:

Series B43564 / B43584

V_R	C_R	Case	ESR_{typ}	ESR_{max}	Z_{max}	$I_{AC,max}$	$I_{AC,R}$	$I_{AC,R}$ (B)	Ordering code
	100Hz	dimensions	100 Hz	100 Hz	10 kHz	100 Hz	100 Hz	100 Hz	
	20 °C	d × l	20 °C	20 °C	20 °C	40 °C	85 °C	85 °C	
VDC	µF	mm	mΩ	mΩ	mΩ	A	A	A	
400	6800	76.9×143.2	18	27	20	46	17.1	29.7	B435*4A9688M00#

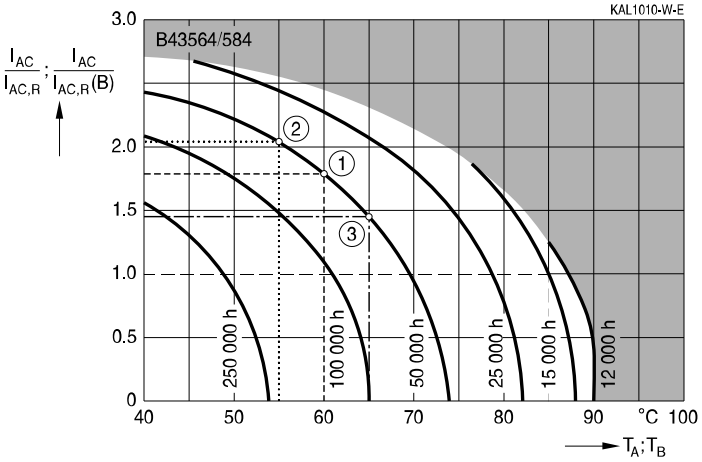

Figure 20
Useful life versus ambient temperature T_A for natural cooling
and capacitor base temperature T_B for base cooling (series B43564/B43584)