

Parameters	U.M.	Symbol/Value	Notes
Expected lifetime	[hrs]	3.000	@rated voltage, temperature and ripple current
Climatic category		40/105/56	-40°C / +105°C / 85% Relative Humidity
Voltage	[V]	V_R	500 - 550V
Capacitance	[μ F]	C	C_{10} rated value at t=0hrs
Capacitance tolerance	%	M = 20 %	Other capacitance on request as indicated in the data book
Series resistance	[m Ω]	ESR	ESR ₁₀ rated value at t=0hrs
Leakage Current	[mA]	$I_f=0,004 \cdot C \cdot V$	I_{f10} rated value at t=0hrs
I Ripple	[A]	I_R	Ripple current @ rated parameters
		$I_t=K_f \cdot K_t \cdot I_R$	I_t ripple current at a given T
		K_f	Frequency Correlation Factor See table below
		K_t	Temperature Correlation Factor See table below
End of Life values		$\Delta C/C_{10} \leq 30\%$	
		$ESR \leq 3 \cdot ESR_{10}$	
		$I_f \leq I_{f10}$	
Surge Voltage	[V]	$V_{surge}=1,1 \cdot V_R$	=500
		$V_{surge}=1,05 \cdot V_R$	>500V

Ripple Current Coefficient

	Hz	50	100	120	200	300	400	500	>1000
Kf	V>=500	0.78	1.00	1.02	1.06	1.08	1.09	1.32	1.37

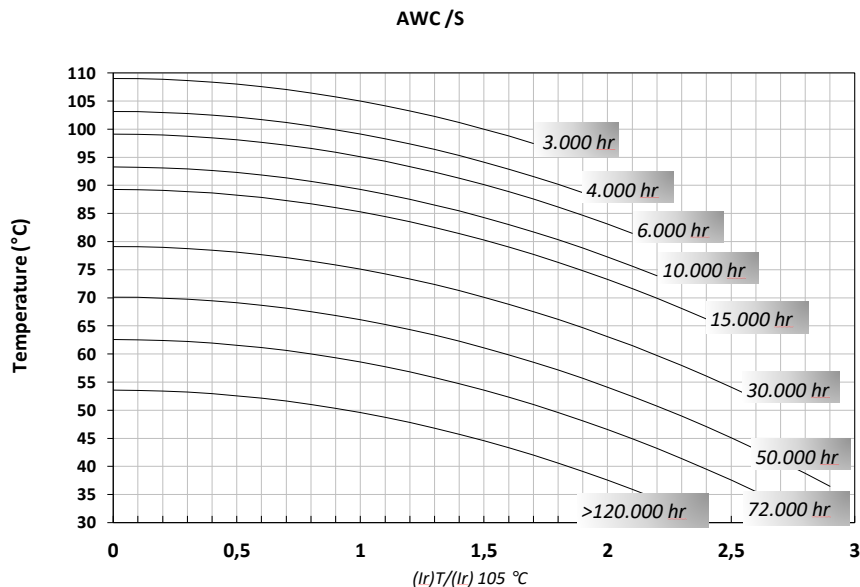
°C	40	55	65	75	85	95	105
Kt	2.50	2.40	2.20	2.00	1.80	1.30	1.00

Note: Superimposed alternating voltage summed to DC voltage must not exceed rated voltage, rated ripple current must not be exceeded and no reverse polarity is allowed

Ordering Code: Example – AWC561M500PN1

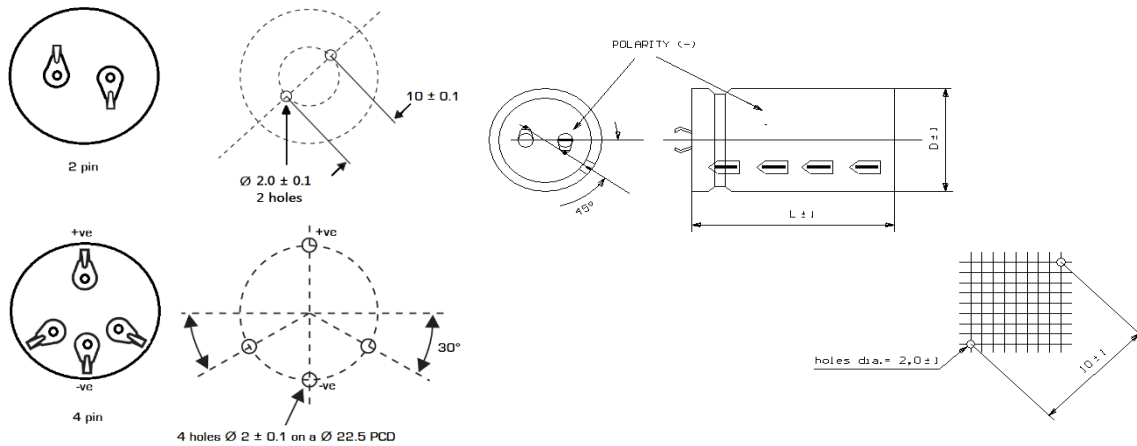
AWC	561	M	500	PN	1
Series	C with multiplying factor: 1=x10, 2=x100, 3=x1.000,	Tolerance	V_R	Size	1=sleeve 0=no sleeve

Expected Lifetime Vs Temperature and Ripple Current



	Capacitance	Case	Diam	Height	Tan δ	ESRmax typ		Zmax	Iripple @100Hz		Ordering Code
	[μ F]@100Hz		[mm]	[mm]	[%]@100Hz	[m Ω]@100Hz	[m Ω]@10KHz	[A]@85°C	[A]@105°C	*= C, 2 Pins S, 4 Pins	
500	150	MB	30	40	0,19	1066	888	800	1.10	0,6	AW*151M500MB1
	220	MC	30	50	0,19	758	633	568	1.30	0,7	AW*221M500MC1
	220	NB	35	40	0,19	767	639	575	1.30	0,7	AW*221M500NB1
	270	NC	35	50	0,19	602	499	452	1.60	0,9	AW*271M500NC1
	330	NN	35	60	0,19	492	410	369	1.95	1,1	AW*331M500NN1
	390	PC	40	50	0,19	440	367	330	2.15	1,2	AW*391M500PC1
	470	PN	40	60	0,19	365	304	273	2.45	1,4	AW*471M500PN1
	560	PN	40	60	0,19	330	275	247	2.55	1,4	AW*561M500PN1
	680	PG	40	100	0,19	233	194	175	3.60	2,0	AW*681M500PG1
	680	QE	45	60	0,19	266	221	199	3.05	1,7	AW*681M500QE1
	820	PG	40	100	0,19	210	175	157	3.85	2,1	AW*821M500PG1
1000	QG	45	100	0,19	172	144	130	4.50	2,5	AW*102M500QG1	
550	150	MB	30	40	0,15	1022	851	766	1.15	0,6	AW*151M550MB1
	220	NB	35	40	0,15	727	606	545	1.45	0,8	AW*221M550NB1
	270	NC	35	50	0,15	592	494	444	1.70	0,9	AW*271M550NC1
	330	NN	35	60	0,15	470	392	353	1.90	1,1	AW*331M550NN1
	330	PC	40	50	0,15	484	399	363	1.95	1,1	AW*331M550PC1
	390	PN	40	60	0,15	407	339	305	2.20	1,2	AW*391M550PN1
	470	PN	40	60	0,15	354	295	265	2.55	1,4	AW*471M550PN1
	560	QN	45	60	0,15	283	236	212	2.95	1,6	AW*561M550QN1
	680	PG	40	100	0,15	233	192	175	3.65	2,0	AW*681M550PG1
	820	PG	45	100	0,15	191	159	143	4.20	2,3	AW*821M550PG1



Technical Drawing

Dimension, Quantity and Weight for Box

Case		Connections			Packaging	
Code	DxL (mm)	PINS			Pcs/Box	Weight/Box (Kg)
		AWC	AWS	Lenght		
MB	30x40	2		6.3	254	4-6
MC	30x50	2		6.3	254	4-6
NB	35x40	2	4	6.3	100	6-8
NC	35x50	2	4	6.3	100	6-8
NN	35x60	2	4	6.3	100	5-7
NE	35x75	2	4	6.3	50	6-8
PB	40x40	2	4	6.3	126	9-10
PC	40x50	2	4	6.3	126	9-10
PN	40x60	2	4	6.3	63	9-10
PE	40x75		4	6.3	63	7-9
PG	40x100		4	6.3	63	9-10
PH	40x105		4	6.3	48	8-10
QC	45x50		4	6.3	96	6-8
QN	45x60		4	6.3	48	6-8
QE	45x75		4	6.3	48	7-9
QG	45x100		4	6.3	48	8-10
QH	45x105		4	6.3	48	8-10
RE	50x75		4	6.3	48	8-10
RG	50x100		4	6.3	48	8-10
RH	50x105		4	6.3	48	8-10

All dimensions in mm, torque in Nm, weight in kg

