


<b>Ordering code:</b>	OBIC 90-47.0 cv5 (K)
<b>Applications:</b>	MKP-1 AC / DC capacitor for general use in power electronics also for nonsinusoidal voltages and currents
<b>Standard:</b>	acc. to IEC 61071:2017
<b>Approval mark:</b>	 UL 810 - protected 10,000 AFC +85°C CSA C22.2 No. 190 660Vac - tested up to ambient 46°C

**Characteristics**

Rated capacitance	<b>C<sub>N</sub></b>	47 µF ±10%
Rated a.c. voltage	<b>U<sub>N AC</sub></b>	1270 V a.c.
Rated d.c. voltage	<b>U<sub>N DC</sub></b>	1960 V d.c.
Max. rms voltage (sinusoidal)	<b>U<sub>rms</sub></b>	900 V
Non-recurrent surge voltage	<b>U<sub>s</sub></b>	2940 V
Rated energy	<b>E<sub>N</sub></b>	90.3 Ws
Maximum current	<b>I<sub>max</sub></b>	80 A
Maximum peak current	<b>I<sub>̂</sub></b>	3.2 kA
Maximum surge current	<b>I<sub>s</sub></b>	9.6 kA
Series resistance	<b>R<sub>s</sub></b>	0.7 mΩ
Dielectric dissipation factor	<b>tanδ<sub>o</sub></b>	2 x 10 <sup>-4</sup>
Self discharge time constant	<b>C x R<sub>is</sub></b>	>25000 s
Self inductance	<b>L<sub>e</sub></b>	160 nH

**Thermal characteristics**

Lowest operating temperature	<b>Θ<sub>min</sub></b>	-40 °C
Maximum operating temperature	<b>Θ<sub>max</sub></b>	85 °C
Storage temperature	<b>Θ<sub>storage</sub></b>	-40..+85 °C
Thermal resistance	<b>R<sub>th</sub></b>	2.7 K/W

**Routine test voltages**

Voltage test between terminals	<b>U<sub>TT</sub></b>	2940 V DC/10s
Voltage test terminals to case	<b>U<sub>TC</sub></b>	3500 V AC/10s

**Statistical lifetime**

<b>Failure rate</b>	>200000 h
at Θ <sub>hotspot</sub>	<100 FIT*
	≤70 °C

\* See FIT-RATE diagram on p.4

**Dimensions**

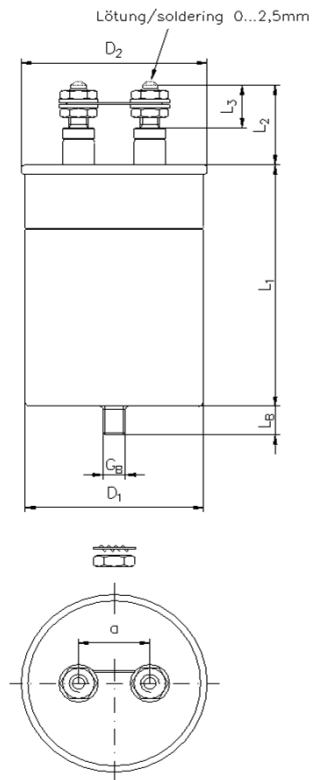
Rated diameter	<b>D<sub>1</sub></b>	95 (±1)	mm
Maximum diameter	<b>D<sub>2</sub></b>	99.5 (±0.5)	mm
Length of the case	<b>L<sub>1</sub></b>	176 (±2)	mm
Length of the terminals	<b>L<sub>2</sub></b>	47 (±2)	mm
Length of the terminals	<b>L<sub>3</sub></b>	25 (±1)	mm
Distance btw. terminals	<b>a</b>	38 (±1)	mm
Terminal		M10 x20	mm
Base mounting stud	<b>G<sub>B</sub>xL<sub>B</sub></b>	M12x16 (+1)	mm
Clearance in air	<b>L</b>	17	mm
Creepage distance	<b>K</b>	20	mm

**Approx. weight** 1.3 kg

**Mechanical characteristics**

Dielectric	metallized polypropylene capacitor, selfhealing
Construction	aluminium can, flanged copper (folded edge)
Protection	protected, BAM™ (overpressure break action mechanism)
Terminals	screw terminals on ceramic insulators M10
Impregnant	liquid impregnant, no PCB
Fire load	52MJ

**Outline drawing**



**Permitted power losses during continuous operation**

