

DC LINK CAPACITORS

TYPE KNG2047 - KNG3047, KNG2048 - KNG3048



APPLICATIONS

- **HYBRID VEHICLES**
- **WIND PLANTS**
- **ELECTRIC ENERGY GENERATION** FROM SEA WAVES
- **MEDICAL EQUIPMENT**
- **INDUSTRIAL EQUIPMENT**
- **CAR ELECTRONICS**
- **RAILWAYS AND TURBINES** (GENERATOR)
- **FREQUENCY INVERTERS**
- **ELEVATORS**
- **WELDERS**

REFERENCE STANDARDS

- **IEC 61071**
- **UL 810**(CONSTRUCTION ONLY) FILE No.: E196169

SPECIFICATIONS

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|--------------------------------------|---|
| • CAPACITANCE RANGE | SEE TABLE |
| • CAPACITANCE TOLERANCE | $\pm 10\%$, ON REQUEST $\pm 5\%$ |
| • VOLTAGE RANGE | MAX. 2200 V DC |
| • DISSIPATION FACTOR $TAN(\Delta_0)$ | $< 2 \times 10^{-4} / 1 \text{ kHz}$ |
| • SERIES RESISTANCE | $< 3 \text{ mW} / 1 \text{ kHz}$ |
| • DIELECTRIC | SELF-HEALING MPP, ALUMINIUM CASE, WITHOUT OVERPRESSURE DEVICE |
| • TEMPERATURE COEFFICIENT | -2.3% FROM -20 °C TO +70 °C |
| • OPERATING TEMPERATURE | -40 °C TO 85 °C (HOT SPOT) |
| • INDUCTANCE | $< 70 \text{ nH}$ |
| • TEST VOLTAGE | TERMINAL TO TERMINAL = $1.5 U_{NDC}$, 10 s ; TERMINAL TO CASE 3.6 kV AC, 2 s |
| • CASING MATERIAL | ALUMINIUM |
| • CAP | UL 94 V-0 |
| • FILLING | EPOXY RESIN DRY, UL 94 V-0 |
| • TERMINALS | M6x10 INTERNAL THREADS; M8 SCREW |
| • TORQUE OF TERMINALS | M6: 5 Nm; M8: 6 Nm |
| • BASE STUD | M12 x 16, TORQUE 10 Nm |
| • MAX. ALTITUDE | 4000 m |
| • MAX. HOT SPOT TEMPERATURE | 85 °C |
| • CLIMATIC CATEGORY | 40/85/21 ACCORDING TO IEC 68/1 |
| • LIFETIME EXPECTANCY | 100 000 HOURS AT U_{NDC} , $\theta_{HS} = 70 \text{ °C}$ |

FEATURES

- **USED IN DC-LINK CIRCUITS**, CAN REPLACE ELECTROLYTIC CAPACITOR
- **LOW ESR**, HIGH RIPPLE CURRENT HANDLING CAPABILITIES
- **LOW ESL**
- **SELF-HEALING** PROPERTIES
- LONG **LIFETIME**
- **ALUMINIUM CASE**, FILLED WITH EPOXY RESIN



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GENERAL CHARACTERISTICS

CAPACITANCE RANGE									
U_{NDC} (V DC)	C_N (μ F)	I_{max} (A)	\hat{I} (kA)	\hat{I}_s (kA)	R_s (mW)	L_s (nH)	R_{th} (K/W)	D x H (mm)	P (mm)
600	600	30	3.3	9.9	1.4	40	5.1	85x95	32
	650	30	3.6	10.9	1.3	40	5.1	85x95	32
	900	30	3.7	11.1	1.9	60	4.5	85x125	32
	900	60	7.1	21.2	1.2	60	4.2	85x142	32
	1050	60	7.2	21.5	1.3	70	3.9	85x155	32
	1280	60	7.1	21.4	1.5	70	2.6	85x185	32
	1740	60	7.1	21.4	1.6	80	2.4	85x235	32
700	460	35	2.3	6.9	1.4	40	5.1	85x95	32
	620	35	3.1	9.3	1.9	60	4.5	85x125	32
	640	55	4.4	13.4	1.5	60	4.2	85x142	32
	750	55	4.5	13.5	1.6	70	3.9	85x155	32
	920	55	4.6	13.8	1.7	80	2.6	85x185	32
	1240	60	4.7	18.8	1.6	80	2.4	85x235	32
	1700	65	8.8	26.5	1.3	70	2.1	116x185	50
900	370	30	2.2	6.6	1.8	40	5.5	85x95	32
	480	55	4.0	12.0	1.2	60	4.9	85x142	32
	500	55	4.1	12.3	1.2	40	4.9	85x142	32
	560	55	4.2	12.6	1.3	60	4.0	85x155	32
	680	55	4.3	12.9	1.3	70	3.2	85x185	32
	950	60	5.7	17.1	1.4	70	2.7	85x235	32
	1100	50	8.1	24.3	1.3	60	2.5	116x155	50
1100	230	30	2.1	6.3	2.1	40	4.5	85x95	32
	320	55	3.3	10.0	1.2	60	2.8	85x142	32
	360	55	3.2	10.0	1.2	60	2.6	85x155	32
	410	65	3.7	11.0	1.1	45	2.5	85x155	32
	420	65	3.7	11.0	1.1	45	2.5	85x155	32
	450	60	4.0	12.0	1.1	70	2.4	85x185	32
	610	60	5.3	15.9	1.2	70	2.3	85x235	32
	760	70	7.4	22.2	1.1	60	1.8	116x155	50
1350	160	35	3.1	9.3	2.1	40	4.1	85x95	32
	220	55	3.2	9.6	1.4	60	3.7	85x142	32
	250	55	3.5	10.5	1.3	60	3.5	85x155	32
	310	55	3.4	10.0	1.3	70	3.2	85x185	32
	420	60	3.5	10.5	1.4	70	2.7	85x235	32
	530	60	7.2	21.6	1.4	60	2.0	116x155	50
1500	130	30	1.5	4.5	2.3	40	4.2	85x95	32
	180	55	3.5	10.5	1.3	50	3.7	85x142	32
	220	55	4.0	12.0	1.3	60	3.5	85x155	32
	260	55	4.1	12.3	1.4	60	3.2	85x185	32
	360	60	3.6	10.8	1.6	70	2.7	85x235	32
	460	60	3.1	9.3	1.7	60	2.0	116x155	50
1800	90	30	1.6	4.8	2.5	60	4.6	85x95	32
	140	55	2.0	6.0	2.4	70	3.5	85x155	32
	240	60	2.9	8.7	1.7	70	2.7	85x235	32
	350	50	3.0	9.0	2.0	70	2.0	116x185	50
2200	75	20	0.5	1.5	5.0	60	5.8	85x125	32
	90	40	0.5	1.5	2.5	60	4.5	85x185	32
	150	40	0.5	1.5	2.5	70	3.3	85x235	32
	220	40	0.6	1.8	2.3	70	2.7	116x185	50

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DIMENSIONS

