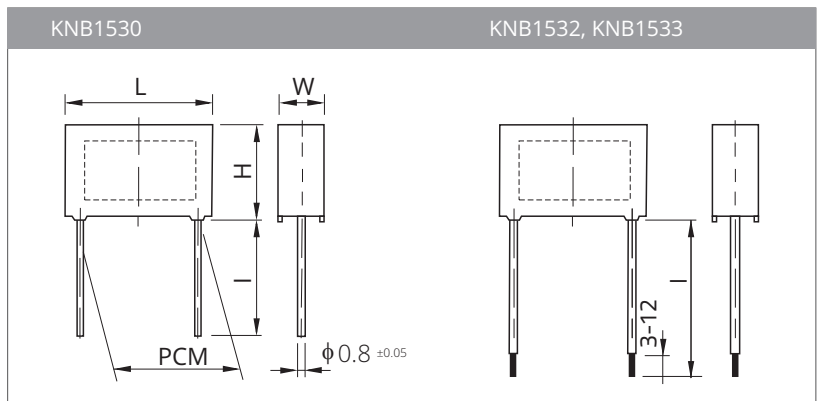
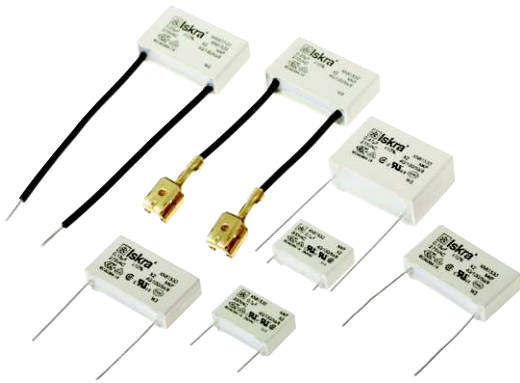


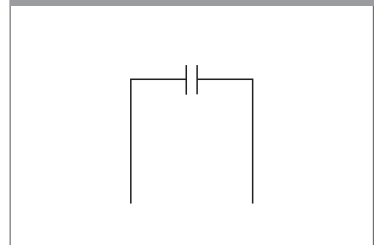
CAPACITORS

TYPE KNB1530, KNB1532, KNB1533

CLASS X2
275 V AC
300 V AC



ELECTRICAL CONNECTION



TECHNICAL DATA

■ CONSTRUCTION	POLYPROPYLENE FILM, METALLIZED
■ RATED VOLTAGE	275 VAC, 300 VAC
■ CAPACITANCE TOLERANCE	± 20 % FOR C ≤ 0.1 μF ± 10 % FOR C > 0.1 μF
■ CLIMATIC CATEGORY	40/100/56 ACC. TO IEC 60068-1
■ PASSIVE FLAMMABILITY	ACC. TO IEC 60384-14
■ TEMPERATURE RANGE	-40 ° TO +100 °C
■ TEST VOLTAGE	2635 V DC, 1s FOR C ≤ 1 μF 1700 V DC, 2s FOR 1 μF < C ≤ 2.2 μF 1600 V DC, 2s FOR C > 2.2 μF
■ MAX. PULSE RISE TIME du/dt, AT 390 V DC FOR 275 V AC AND 425 V DC FOR 300 V AC	900 V / μs FOR PCM = 10 mm 400 V / μs FOR PCM = 15 mm 200 V / μs FOR PCM = 22.5 mm 160 V / μs FOR PCM = 27.5 mm 100 V / μs FOR PCM = 37.5 mm
■ INSULATION RESISTANCE AT 20 °C, U _m = 100 V DC, t = 1 min	R _i ≥ 15000 MΩ FOR C ≤ 0.33 μF R _i × C _n ≥ 5000 s FOR C > 0.33 μF
■ DIELECTRIC LOSS TANδ AT F = 1 kHz AND 20 °C	1 × 10 ⁻³
■ SOLDERING	IEC 60068-2-20, MAX. 2s
■ RESISTANCE TO SOLDERING HEAT	IEC 60068-2-20, 260 °C ± 5 °C, 10s ± 1s
■ MAX. ALTITUDE	M6: 5 Nm; M8: 6 Nm
■ SELF INDUCTANCE	APPROX. 10 nH/cm OF CAPACITOR LENGTH AND TERMINALS
■ COMPLIES TO	IEC 60384-14, UL 60384-14 CSA 60384-14
■ APPLICATION	FOR USE IN PARALLEL WITH MAINS, FOR USE IN SERIES WITH MAINS AVAILABLE IN CUSTOM DESIGN (CD) VERSION

CAPACITORS

TYPE KNB1530, KNB1532, KNB1533

ø 0.6 mm FOR PCM = 10 mm
ø 0.8 mm FOR PCM > 10 mm




CASING: THERMOPLASTIC
(PP OR ON REQUEST PBT HF)
SEALED WITH SYNTHETICAL RESIN

THERMOPLASTIC MATERIAL IS SELF-EXTINGUISHING ACCORDING TO UL 94, CLASS V-0

TERMINALS

TYPE	TERMINAL LENGTH	TYPE OF TERMINALS
KNB1530	3 ^{+0.5} , 4 ^{+0.5} , 6 ⁻¹ , 9 ⁺¹ , 15 ⁺² , 20 ⁺² , 25 ⁺⁵ , 30 ⁺⁵ , 50 ⁺⁵ mm, OTHER ON REQUEST	TINNED COPPER WIRE
KNB1532	20 TO 200 mm	INSULATED STRANDED WIRE 0.5 mm ²
KNB1533	20 TO 200 mm	INSULATED STRANDED WIRE 0.8 mm ² , END TERMINALS ON REQUEST

STANDARD VALUES KNB1530, KNB1532, KNB1533, 275 V AC, CLASS X2

CAPACITANCE C (µF)	DIMENSIONS					FOR CAPACITORS WITH INSULATED LEADS ON REQUEST	
	L (mm)	H (mm)	W (mm)	PCM (mm)		 UL 60384-14 CSA 60384-14 275 V AC	 IEC 60384-14 275 V AC
0.01*	13	9.5	4.3	10	●	●	●
0.015*	13	10.5	5	10	●	●	●
0.022*	13	11.5	6	10	●	●	●
0.01	18	11	5.5	15	●	●	●
0.015	18	11	5.5	15	●	●	●
0.022	18	11	5.5	15	●	●	●
0.033	18	11	5.5	15	●	●	●
0.047	18	11	5.5	15	●	●	●
0.068	18	12	6	15	●	●	●
0.1*	18	12	6	15	●	●	●
0.1	18	13	7	15	●	●	●
0.12	18	13.5	7.5	15	●	●	●
0.15*	18	14.5	9	15	●	●	●
0.22*	18	19	10	15	●	●	●
0.33*	18	20	12.5	15	●	●	●
0.15	27	15	6.5	22.5	●	●	●
0.22	27	16.5	7	22.5	●	●	●
0.27	27	18.5	8.5	22.5	●	●	●
0.33	27	18.5	8.5	22.5	●	●	●
0.47	27	20	10.5	22.5	●	●	●
0.47*	26	22	9.5	22.5	●	●	●
0.47	32	20	11	27.5	●	●	●
0.56	31.5	19	10	27.5	●	●	●
0.68	32	20	11	27.5	●	●	●
1	32	24.5	15	27.5	●	●	●
1*	31.5	22	13	27.5	●	●	●
1.5	32	28	18	27.5	●	●	●
2.2	32	33	20	27.5	●	●	●
1.5	41.5	23	14	37.5	●	●	●
2.2	41.5	26	18	37.5	●	●	●
2.2	41.5	31	18	37.5	●	●	●




* MINI SIZE MARKING WITH 

● APPROVALS IN USE

CAPACITORS

TYPE KNB1530, KNB1532, KNB1533

STANDARD VALUES KNB1530, KNB1532, KNB1533, 300 V AC, CLASS X2

CAPACITANCE C (µF)	L (mm)	H (mm)	W (mm)	PCM (mm)	 IEC 60384-14 300 V AC	FOR CAPACITORS WITH INSULATED LEADS ON REQUEST	
						 UL 60384-14 CSA 60384-14 300 V AC	 IEC 60384-14 300 V AC
0.01	13	9	4	10	●	●	●
0.015	13	9	4	10	●	●	●
0.022	13	10.5	5	10	●	●	●
0.033	13	11.5	6	10	●	●	●
0.047	13	13.5	6	10	●	●	●
0.01	18	11	5	15	●	●	●
0.015	18	11	5	15	●	●	●
0.022	18	11	5	15	●	●	●
0.033	18	11	5	15	●	●	●
0.047	18	11	5	15	●	●	●
0.068	18	11	5.5	15	●	●	●
0.1	18	12	6	15	●	●	●
0.12	18	13	7	15	●	●	●
0.15	18	13.5	7.5	15	●	●	●
0.22	18	16.5	8.5	15	●	●	●
0.27	18	18.5	11	15	●	●	●
0.33	18	18.5	11	15	●	●	●
0.1	26.5	14	6	22.5	●	●	●
0.15	26.5	14	6	22.5	●	●	●
0.22	27	15	6.5	22.5	●	●	●
0.33	26.5	16.5	8.5	22.5	●	●	●
0.47	26.5	18.5	10	22.5	●	●	●
0.56	27	20	10.5	22.5	●	●	●
0.33	31.5	16	7.5	27.5	●	●	●
0.47	32	17	9	27.5	●	●	●
0.68	32	18.5	11	27.5	●	●	●
1	31.5	22	13	27.5	●	●	●
1.5	31.5	26.5	17	27.5	●	●	●
2.2	31.5	32	18	27.5	●	●	●
2.7	31.5	32	18	27.5	●	●	●
3.3	31.5	32	18	27.5	●	●	●
3.3	31.5	33	20	27.5	●	●	●
3.9	31.5	33	20	27.5	●	●	●
4.7	32	39	24	27.5	●	●	●
5.6	32	39	24	27.5	●	●	●
1.5	41.5	22	14	37.5	●	●	●
2.2	41.5	27	16	37.5	●	●	●
2.2	41.5	26	18	37.5	●	●	●
3.3	41.5	26	18	37.5	●	●	●
3.9	41.5	31	18	37.5	●	●	●
4.7	41.5	32	19	37.5	●	●	●
5.6	41.5	38	21	37.5	●	●	●
6.8	41.5	38	21	37.5	●	●	●
8.2	41.5	43	28	37.5	●	●	●
10	41.5	43	28	37.5	●	●	●
10	42	45	30	37.5	●	●	●

* MINI SIZE MARKING WITH 

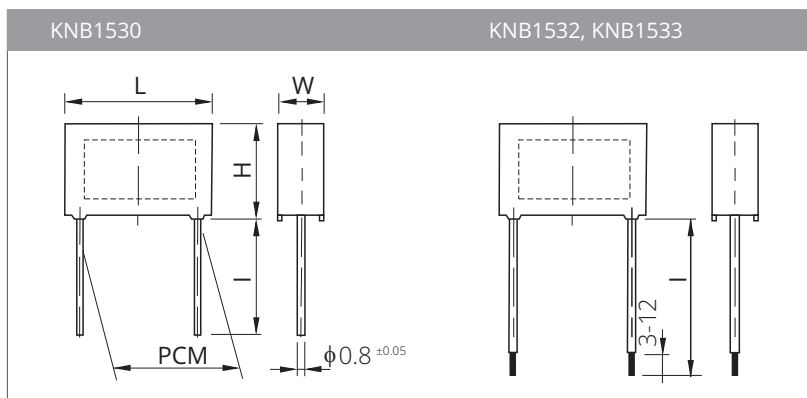
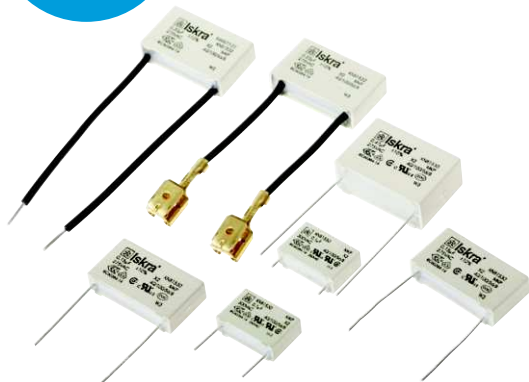
● APPROVALS IN USE

NOTE:

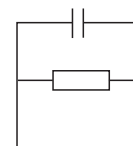
APPROVAL CQC ONLY FOR PBT HF CASE

CAPACITORS WITH DISCHARGE RESISTOR TYPE KNB1530, KNB1532, KNB1533

CLASS X2
275 V AC
300 V AC



ELECTRICAL CONNECTION



TECHNICAL DATA

■ CONSTRUCTION: - CAPACITOR - RESISTOR	POLYPROPYLENE FILM, METALLIZED METALOXIDE FILM
■ RATED VOLTAGE	275 V AC, 300 V AC
■ CAPACITANCE TOLERANCE	$\pm 20\%$ FOR $C \leq 0.1 \mu\text{F}$ $\pm 10\%$ FOR $C > 0.1 \mu\text{F}$
■ RESISTANCE TOLERANCE	$\pm 5\%$
■ RESISTANCE POWER	0.6 W
■ CLIMATIC CATEGORY	40/100/56 ACC. TO IEC 60068-1
■ PASSIVE FLAMMABILITY	ACC. TO IEC 60384-14
■ TEMPERATURE RANGE	-40 ° to +100 °C
■ TEST VOLTAGE	2635 V DC, 1 s
■ MAX. PULSE RISE TIME du/dt , AT 425 V DC	400 V / μs FOR PCM = 15 mm 200 V / μs FOR PCM = 22.5 mm 160 V / μs FOR PCM = 27.5 mm 100 V / μs FOR PCM = 37.5 mm
■ INSULATION RESISTANCE AT 20 °C, $U_m = 100$ V DC, $t = 1$ min	$R_i \geq 15000 \text{ M}\Omega$ FOR $C \leq 0.33 \mu\text{F}$ $R_i \times C_n \geq 5000 \text{ s}$ FOR $C > 0.33 \mu\text{F}$
■ DIELECTRIC LOSS $\text{TAN}\delta$ AT $F = 1$ kHz AND 20 °C	1×10^{-3}
■ SOLDERING	IEC 60068-2-20, max. 2 s
■ RESISTANCE TO SOLDERING HEAT	IEC 60068-2-20, 260 °C ± 5 °C, 10 s ± 1 s
■ SELF INDUCTANCE COMPLIES TO	APPROX. 10 nH/cm OF CAPACITOR LENGTH AND TERMINALS IEC 60384-14, CSA 60384-14
■ APPLICATION	FOR USE IN PARALLEL WITH MAINS, FOR USE IN SERIES WITH MAINS AVAILABLE IN CUSTOM DESIGN (CD) VERSION

CAPACITORS WITH DISCHARGE RESISTOR

TYPE KNB1530, KNB1532, KNB1533



CASING: THERMOPLASTIC
(PP OR ON REQUEST PBT HF)
SEALED WITH SYNTHETICAL RESIN

THERMOPLASTIC MATERIAL AND SYNTHETICAL RESIN ARE SELF-EXTINGUISHING ACCORDING TO UL 94. CLASS V-0.

TERMINALS

TYPE	TERMINAL LENGTH	TYPE OF TERMINALS
KNB1530	3 ^{+0.5} , 4 ^{+0.5} , 6 ⁻¹ , 9 ⁺¹ , 15 ⁺² , 20 ⁺² , 25 ⁺⁵ , 30 ⁺⁵ , 50 ⁺⁵ mm, OTHER ON REQUEST	TINNED COPPER WIRE
KNB1532	20 TO 200 mm	INSULATED STRANDED WIRE 0.5 mm ²
KNB1533	20 TO 200 mm	INSULATED STRANDED WIRE 0.8 mm ² , END TERMINALS ON REQUEST



STANDARD VALUES KNB1530, KNB1532, KNB1533, 275 V AC, CLASS X2, WITH DISCHARGE RESISTOR

CAPACITANCE C (μF)	RESISTANCE R (kΩ)	DIMENSIONS				 IEC 60384-14 275 V AC	 CSA 60384-14 275 V AC
		L (mm)	H (mm)	W (mm)	PCM (mm)		
0.047	470 TO 2700	18	13	7	15	●	●
0.068		18	13	7	15	●	●
0.1		18	14.5	9	15	●	●
0.15		27	16.5	7	22.5	●	●
0.22		26.5	16.5	8.5	22.5	●	●
0.22		27	18.5	8.5	22.5	●	●
0.33		26.5	18.5	10	22.5	●	●
0.47		26.5	20.5	11	22.5	●	●
0.47		32	20	11	27.5	●	●

RESISTANCE VALUES ACCORDING TO IEC 60063 RANGE E12.

● APPROVALS IN USE

STANDARD VALUES KNB1530, KNB1532, KNB1533, 300 V AC, CLASS X2, WITH DISCHARGE RESISTOR

CAPACITANCE C (μF)	RESISTANCE R (kΩ)	DIMENSIONS				 IEC 60384-14 300 V AC	 CSA 60384-14 300 V AC
		L (mm)	H (mm)	W (mm)	PCM (mm)		
0.047	470 TO 2700	18	12	6	15	●	●
0.068		18	13	7	15	●	●
0.1		18	13.5	7.5	15	●	●
0.15		18	16.5	8.5	15	●	●
0.22		18	18.5	9	15	●	●
0.33		18	20	12.5	15	●	●
0.15		27	15	6.5	22.5	●	●
0.22		27	16.5	7	22.5	●	●
0.33		27	18.5	8.5	22.5	●	●
0.47	27	20	10.5	22.5	●	●	
0.47	31.5	19	10	27.5	●	●	

RESISTANCE VALUES ACCORDING TO IEC 60063 RANGE E12.

● APPROVALS IN USE