

AC CAPACITOR FOR CAPACITIVE DIVIDER

- **CLASS X2**
- **RELEVANT FOR** CAPACITIVE DIVIDER POWER SUPPLY, POWER METER EMERGENCY LIGHTING, THERMOSTAT, INTERFERENCE SUPPRESSION

AC CAPACITORS FOR CAPACITIVE DIVIDER - CLASS X2

APPLICATIONS

- CAPACITIVE DIVIDER POWER SUPPLY
- POWER METER
- EMERGENCY LIGHTING
- THERMOSTAT
- INTERFERENCE SUPPRESSION

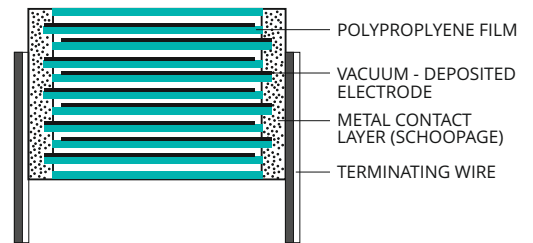
FEATURES

- FOR USE IN SERIES WITH THE MAINS
- HIGH CAPACITANCE STABILITY
- FOR HARSH ENVIRONMENT
- SELF-HEALING PROPERTIES





ELECTRICAL CONNECTION



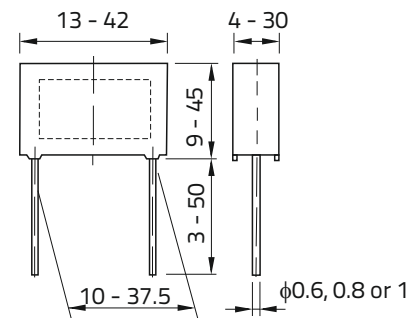
INTERNAL CONSTRUCTION



TYPE KNB1530 CD

RATED VOLTAGE	275 V	»	«	300 V
CAPACITANCE	0.01 μ F	»	«	10 μ F
LIFE EXPECTANCY	100 000 h			
CLIMATIC CATEGORY	40/100/56			
REFERENCE STANDARD	IEC/UL 60384-14			
APPROVALS	   			

DIMENSIONAL DRAWING



MARKING

 **Iskra**[®] KNB1530
 0,47 μ F \pm 10% X2 MKP
 275VAC 40/100/56/B





 IEC/UL 60384-14

CD J1

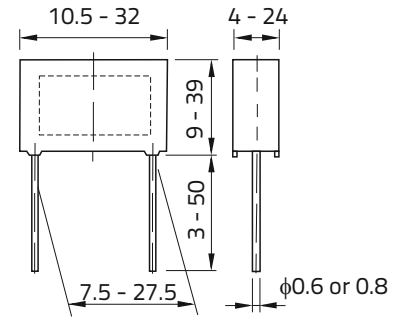
ADDITIONAL MARK

AC CAPACITORS FOR CAPACITIVE DIVIDER - CLASS X2



TYPE KNB1560 CD

RATED VOLTAGE	275 V	»	«	300 V
CAPACITANCE	0.01 μ F	»	«	6.8 μ F
LIFE EXPECTANCY	100 000 h			
CLIMATIC CATEGORY	40/110/56 40/125/56			
REFERENCE STANDARD	IEC/UL 60384-14			
APPROVALS				

DIMENSIONAL DRAWING




MARKING

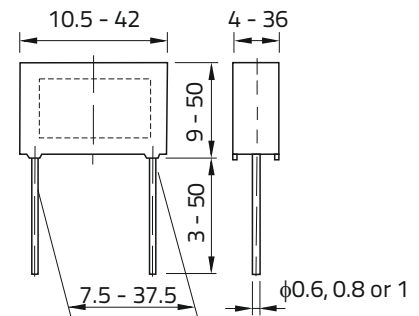
 **Iskra**[®] KNB1560
 0,47 μ F \pm 10% X2 MKP
 275VAC 40/110/56/B

 IEC/UL 60384-14 J1
 CD
 ↑
 ADDITIONAL MARK

TYPE KNB1580

INCLUDES ALL ADVANTAGES OF A CD VERSION.

RATED VOLTAGE	310 V			
CAPACITANCE	0.01 μ F	»	«	15 μ F
LIFE EXPECTANCY	100 000 h			
CLIMATIC CATEGORY	40/110/56			
REFERENCE STANDARD	IEC/UL 60384-14			
APPROVALS				

DIMENSIONAL DRAWING



MARKING

 **Iskra**[®] KNB1580
 0,47 μ F \pm 10% X2 MKP
 310VAC 40/110/56/B

 IEC/UL 60384-14 J1

NOTE: * IN PENDING

AC CAPACITORS FOR CAPACITIVE DIVIDER - CLASS X2

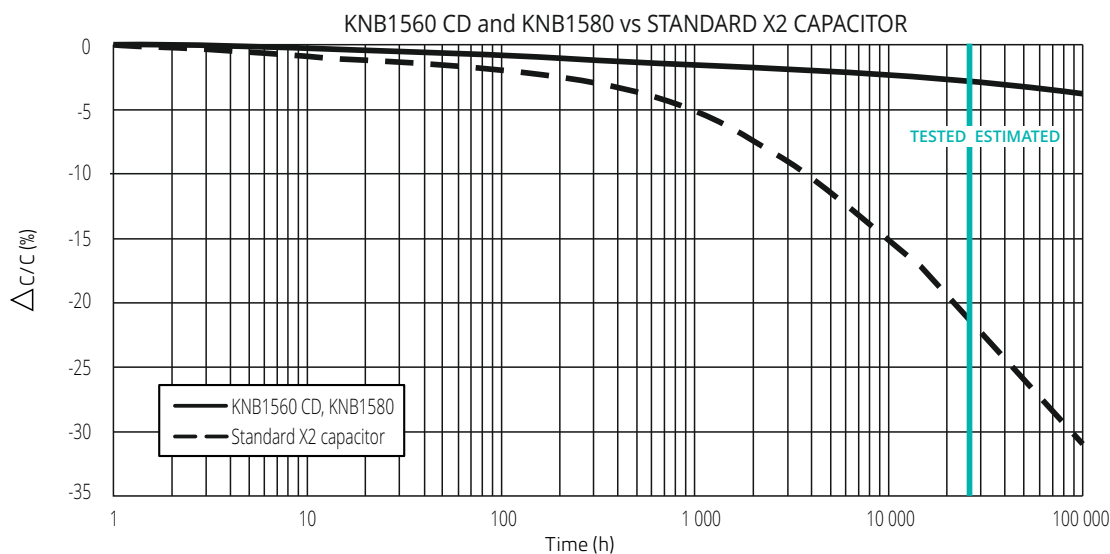
CLIMATIC TESTS

TEST CONDITIONS		PERFORMANCE	
DAMP HEAT STEADY STATE			
TEMPERATURE:	+40°C ± 2°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 2%
RELATIVE HUMIDITY (RH):	93% ± 2%	DF CHANGE ($\Delta tg\delta$):	≤ 10x10 ⁻⁴ AT 1 kHz
TEST DURATION:	56 DAYS	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
RAPID DAMP TEST			
TEMPERATURE:	+100°C ± 2°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 5%
RELATIVE HUMIDITY (RH):	98% ± 2%	DF CHANGE ($\Delta tg\delta$):	≤ 10x10 ⁻⁴ AT 1 kHz
VOLTAGE APPLIED:	385 VAC	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
TEST DURATION:	96 HOURS		
RELIABILITY TEST			
TEMPERATURE:	+60°C ± 2°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 5%
VOLTAGE APPLIED:	275 VAC	DF CHANGE ($\Delta tg\delta$):	≤ 10x10 ⁻⁴ AT 1 kHz
TEST DURATION:	2 000 HOURS	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
TEMPERATURE:	+25°C ± 5°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 5%
RELATIVE HUMIDITY (RH):	30% - 70%	DF CHANGE ($\Delta tg\delta$):	≤ 10x10 ⁻⁴ AT 1 kHz
VOLTAGE APPLIED:	230 VAC	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
TEST DURATION:	10 000 HOURS		
TEMPERATURE:	+85°C ± 2°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 10%
RELATIVE HUMIDITY (RH):	85% ± 2%	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
VOLTAGE APPLIED:	240 VAC		
TEST DURATION:	1000 HOURS*		
TEMPERATURE:	+40°C ± 2°C	CAPACITANCE CHANGE ($\Delta C/C$):	≤ 10%
RELATIVE HUMIDITY (RH):	93% ± 2%	INSULATION RESISTANCE:	≥ 50% OF INITIAL LIMIT
VOLTAGE APPLIED:	240 VAC		
TEST DURATION:	56 DAYS		

NOTE:

* IN PENDING

COMPARISON OF TYPICAL CAPACITANCE DROP AT ROOM CONDITIONS



THE GRAPHS ARE TO BE INTERPRETED AS FOLLOWS:

- THE REPORTED CAPACITANCE CHANGES ARE TO BE CONSIDERED AS AVERAGE CAPACITANCE DROPS.
- A HIGHER OPERATING VOLTAGE THEN 230 V AC AND MORE SEVERE AMBIENT CONDITIONS ($T_{amb} > 40\text{ °C}$, $RH > 60\%$) CAN INCREASE THE DROP OF CAPACITANCE AND SHORTEN LIFETIME OF A CAPACITOR.