## **GE Energy**

## **Capacitor & Power Quality Products**

## **Capacitor Unit Details**

Rated Voltage  14400 V  60 Hz    KVAR at Rated Voltage  300 kVAR    Rated Capacitance  3.84 μF    Manufacturing tolerance for capacitor unit kvar  -0% to +10%    Capacitor Unit BIL  95/95 kV    Bushing Leakage Distance (Nominal)  12/12 in  305/305 mm    Number of Film Layers per Pad  2    Total Film Pad Thickness  1.20 mil	Capacitor Part Number:	<u>59L114WC10</u>
Rated Capacitance3.84 μFManufacturing tolerance for capacitor unit kvar-0% to +10%Capacitor Unit BIL95/95 kVBushing Leakage Distance (Nominal)12/12 inNumber of Film Layers per Pad22Total Film Pad Thickness1.20 mil2Dry Space Factor30.1 %Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test30400 VAC10 sec30960 VAC10 sec30960 VAC10 sec30960 VAC10 sec30960 VAC10 sec30960 VAC10 sec30960 V10 s	Rated Voltage	14400 V 60 Hz
Manufacturing tolerance for capacitor unit kvar-0% to+10%Capacitor Unit BIL95/95 kVBushing Leakage Distance (Nominal)12/12 in305/305 mmNumber of Film Layers per Pad2Total Film Pad Thickness1.20 milDry Space Factor30.1 %Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test30400 VACDielectric Test30960 VAC	KVAR at Rated Voltage	300 kVAR
Capacitor Unit BIL95/95 kVBushing Leakage Distance (Nominal)12/12 in305/305 mmNumber of Film Layers per Pad22Total Film Pad Thickness1.20 mil2Dry Space Factor30.1 %30.1 %Number of Series Sections730.1 %Number of Parallel Packs per Section23Section Voltage2057 Volts3Volts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Rated Capacitance	3.84 µF
Bushing Leakage Distance (Nominal)12/12 in305/305 mmNumber of Film Layers per Pad2Total Film Pad Thickness1.20 milDry Space Factor30.1 %Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test30400 VACDielectric Test30960 VAC	Manufacturing tolerance for capacitor unit kvar	-0% to +10%
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Total Film Pad Thickness1.20 milDry Space Factor30.1 %Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test30960 VACDielectric Test30960 VAC	Bushing Leakage Distance (Nominal)	12/12 in 305/305 mm
Dry Space Factor30.1 %Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Number of Film Layers per Pad	2
Number of Series Sections7Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test30400 VACDielectric Test30960 VAC	Total Film Pad Thickness	1.20 mil
Number of Parallel Packs per Section2Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Dry Space Factor	30.1 %
Section Voltage2057 VoltsVolts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VAC10 secDielectric Test30960 VAC10 sec	Number of Series Sections	7
Volts/mil stress (film only)1714 Volts/milVolts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Number of Parallel Packs per Section	2
Volts/mil stress (film and fluid)1317 Volts/milDischarge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Section Voltage	2057 Volts
Discharge Resistor Rating10.38 MΩWeight67.4 Lbs30.6 kgGallons of Dielectric Fluid2.46 GalGround Test34000 VACDielectric Test30960 VAC	Volts/mil stress (film only)	1714 Volts/mil
Weight  67.4 Lbs  30.6 kg    Gallons of Dielectric Fluid  2.46 Gal  2.46 Gal    Ground Test  34000 V  AC  10 sec    Dielectric Test  30960 V  AC  10 sec	Volts/mil stress (film and fluid)	1317 Volts/mil
Gallons of Dielectric Fluid  2.46 Gal    Ground Test  34000 V  AC  10 sec    Dielectric Test  30960 V  AC  10 sec	Discharge Resistor Rating	10.38 MΩ
Ground Test  34000 V  AC  10 sec    Dielectric Test  30960 V  AC  10 sec	Weight	67.4 Lbs 30.6 kg
Dielectric Test 30960 V AC 10 sec	Gallons of Dielectric Fluid	2.46 Gal
	Ground Test	34000 V AC 10 sec
Manufactured with Folded edges (Y/N) Yes	Dielectric Test	30960 V AC 10 sec
	Manufactured with Folded edges (Y/N)	Yes

## Additional Comments:

- Case thickness: Sides: 0.042", Cover: 0.05", Bottom: 0.09".
- Average losses of a stabilized unit in service is 0.1 W/kvar.
- Paint is an epoxy primer w/ urethane top coat meeting ANSI C57.12.31-2010 Pole Mounted Equipment .
- Internal elements will be extended foil and connected using ultrasonic welding.
- Capacitor unit operating temperature range is -50 to +50 deg. C.
- Maximum Bushing Torque 25 Ft-Lbs or 34 N-m.
- Percent Alteration on Surface Altered Film is 10% (avg.).
- Fluid Type (Non PCB) is DIELEKTROL VIIa, with a Dielectric Constant of 2.62.

