

## ESTAdry DC-Capacitor

### NOMINAL RATINGS

Capacitance/tolerance	$C_N$	7250 $\mu$ F	0 %/+ 10 %
Rated DC voltage	$U_{NDC}$	2000 V	

### OVER VOLTAGES ACCORDING TO STANDARD

$1.1 \times U_N$	$U_1$	2200 V (30 % of the working time)
$1.15 \times U_N$	$U_2$	2300 V (30 min/day)
$1.2 \times U_N$	$U_3$	2400 V (5 min/day)
$1.3 \times U_N$	$U_4$	2600 V (1 min/day)
$1.5 \times U_N$	$U_6$	3000 V (30 ms; max. 1000 x per LT)

### CHARACTERISTICS

Maximum current	$I_{max.}$	240 $A_{RMS}$ <sup>(1)</sup>
Maximum peak current	$\hat{i}$	29.0 kA
Maximum surge current	$\hat{I}_S$	87.2 kA; 100 x per LT
Series resistance	$R_S$	< 0.5 m $\Omega$
Thermal resistance	$R_{th}$	0.1 K/W (hotspot-ambient)
Tangent of the loss angle	$\tan \delta_0$	$2 \times 10^{-4}$
Self inductance	$L_S$	< 200 nH

### ROUTINE TEST

Terminal/terminal	UT/T	3000 $V_{DC}$ , 10 s
Terminal/casing	UT/C	6000 $V_{AC}$ , 60 s

### OPERATING TEMPERATURE

Minimum temperature	$\theta_{min.}$	- 40 °C
Maximum temperature	$\theta_{max.}$	+ 70 °C
Maximum hotspot temp.	$\theta_{hs}$	+ 85 °C <sup>(1)</sup>

### STORAGE TEMPERATURE

Minimum temperature	$\theta_{min.}$	- 45 °C
Maximum temperature	$\theta_{max.}$	+ 85 °C

#### Note

<sup>(1)</sup> Calculation of hotspot temperature:

$$P_D = U_{RMS}^2 \times 2\pi f \times C_N \times \tan \delta_0 + I^2 \times R_S$$

$$\theta_{hs} = \theta_{amb} + R_{th} \times P_D$$

### TECHNOLOGY

Dielectric	Polypropylene; metallized selfhealing
Filling material	$N_2$ ; resin; dry

### BUSHINGS D-236

Amount	2
Flash over distance T/C	35 mm
Creepage distance	50 mm
Terminal	M12
Maximal torque	25 Nm
Height	52 mm

### MECHANICAL DATA

Dimensions	340 mm x 175 mm x 820 mm
Drawing	07-B-1255
Weight	63 kg
Casing material	Stainless steel, antimagnetic
Painting	RAL 7033
Mounting position	Every position

### LIFE EXPECTANCY

> 200 000 h

### FAILURE RATE

100 FIT

### STANDARD

IEC 61071-2007-1  
IEC 61881-2007-1

### SPECIFICATION

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### REFERENCE

5192-32814-xx-0

### DIMENSIONS

