SUPERCAPACITOR

K58-33

GENERAL PURPOSES

elecond.supercapacitor@elcudm.ru
+7 (34147) 4-25-01

EVAYA.673623.035 TU

Commercially produced capacitors. Available to order.

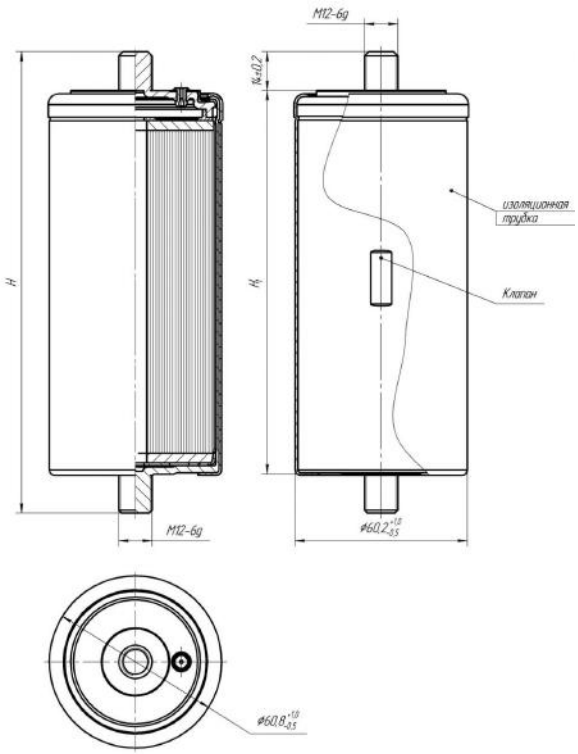
APPLICATION

- Maintaining of the equipment operation when voltage depression occurs;
- Safely shutdown of machineries;
- Maintaining "a bridge" when switching between the power supplies;
- Providing high discharging current in the equipment;
- Rapid electrical energy accumulation and further providing to the grid;
- Providing temporary electricity power for equipment while operating in autonomous mode;
- As an energy storage device in difficult remote equipment;
- As an power supply in single-use system;
- To improve the operational reliability of the equipment;
- Are used together with chemical and other current sources to extend the service life;

MAIN PARAMETERS

Name	Value
Rated voltage, V	2.7
Rated capacitance, F	1 500; 3 300
Capacitance tolerance, %	±20
Maximum operating temperature Tenv, °C	65
Minimal operating temperature Tenv, °C	-60
Maximum-permissible overvoltage, V	2.85

DIMENSIONAL DRAWING OF CAPACITOR



CAPACITORS OVERALL DIMENSIONS AND MASS

U_R, V	C_R, F	Size DxH, mm	Mass, g
2.7	1 500	60.8x113	400
2.7	3 300	60.8x166	600

CASE PROTECTION

Climatic version	Lacquer coating	Jacketing with insulating tube
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 25°C	-	-
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 35°C	+	-

CAPACITOR ELECTRIC PARAMETERS VALUE

U_R, V	C_R, F	I_{LEAK}, mA T=25°C, 72h	Maximum charging and discharging current, A (discharge within 1sec. from U_R to ½ U_R)	Stored energy, Wh	Specific stored energy, Wh/kg	Specific output, W/kg
2.7	1 500	5	375	1.519	0.38	437.4
2.7	3 300	10	700	3.341	5.57	486

CAPACITORS RELIABILITY

Reliability Operation modes	t_λ, hours	t_λ, cycles	λ, 1/hour, max
Maximum-permissible mode (U_R, Tenv=65°C)	1 500		$1x10^{-5}$
Maximum-permissible mode (charge to U_R, discharge to ½ U_R, Tenv=65°C)		30 000	$3x10^{-6}$
Typical operating mode (U_R, Tenv=25°C)	90 000		$2x10^{-6}$
Typical operating mode (charge to U_R, discharge to ½ U_R, Tenv=25°C)		500 000	$2x10^{-7}$

Gamma-rated time of capacitor storageability Tcy at y=95%, 15 years

EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K58-33 – 2.7V – 3 300 F ±20% – I EVAYA.673623.035 TU
CAPACITOR K58-33 – 2.7V – 3 300 F ±20% – IB EVAYA.673623.035 TU