

EVAYA.673851.001 TU

Commercially produced modules. Available to order.

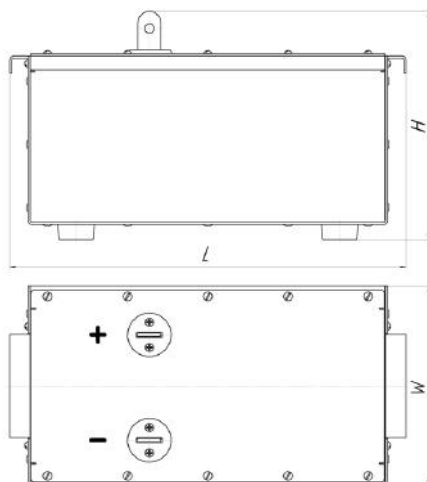


MAIN PARAMETERS

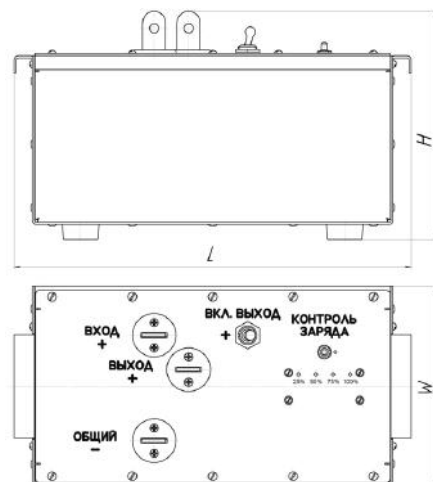
Name	Value
Rated voltage, V	16; 32; 48
Rated capacitance, F	18.3 ... 550
Capacitance tolerance (25°C, 50 Hz), %	±20
Maximum operating temperature Tenv, °C	+65
Minimal operating temperature Tenv, °C	-60

GENERAL VIEW DRAWING

Version 0



Version 1 & 2



OVERALL DIMENSIONS AND MASS OF SUPERCAPACITOR MODULES ITI

Name	Rated voltage, V	Rated capacitance, F	Dimensions, mm			Version	Mass, kg
			L±3	W±3	H±3		
ITI16C	16	55	346	175	199	0,1,2	10
ITI16C	16	78.3	346	175	219	0,1,2	10
ITI16C	16	113.3	311	240	275	0,1,2	16
ITI16C	16	166.7	311	240	275	0,1,2	18
ITI16C	16	250	311	240	275	0,1,2	19
ITI16C	16	366.7	311	240	275	0,1,2	19
ITI16C	16	550	311	240	313	0,1,2	20
ITI16C	16	783	311	240	378	0,1,2	22.5
ITI16H	16	550	400	298	260	0	20
ITI16H	16	783	400	338	260	0	24
ITI32C	32	27.5	346	310	199	0,1,2	20
ITI32C	32	39.2	346	310	219	0,1,2	20
ITI32C	32	56.7	451	300	275	0,1,2	26
ITI32C	32	83.3	451	300	275	0,1,2	26
ITI32C	32	125	451	300	275	0,1,2	28
ITI32C	32	183.3	451	300	275	0,1,2	28
ITI32C	32	275	451	300	313	0,1,2	30
ITI32C	32	391	451	300	378	0,1,2	35
ITI32H	32	275	400	298	404	0	25
ITI32H	32	391	400	338	404	0	30
ITI48C	48	18.3	451	340	199	0,1,2	25
ITI48C	48	26.1	451	340	219	0,1,2	25
ITI48C	48	37.8	654	302	275	0,1,2	34
ITI48C	48	55.6	654	302	275	0,1,2	34
ITI48C	48	83.3	654	302	275	0,1,2	37
ITI48C	48	122.2	654	302	275	0,1,2	37
ITI48C	48	183.3	654	302	313	0,1,2	40
ITI48C	48	261	654	302	378	0,1,2	47
ITI48H	48	183.3	400	298	557	0	27
ITI48H	48	261	400	338	557	0	35

ITI MODULES ELECTRIC PARAMETERS VALUES

Name	Rated voltage, V	Rated capacitance, F	Maximum charging and discharging current , A (discharge within 1sec. from U to ½U)	rated direct current, A			specified cumulative capacity , Wh
				charging/ discharging	useful current	discharging current	
ITI16C	16	55	30	3.3	14.1	6.6	1.96
ITI16C	16	78.3	35	4.7	14.1	6.6	2.78
ITI16C	16	113.3	45	6.8	14.1	6.6	4.03
ITI16C	16	166.7	60	10	14.1	6.6	5.93
ITI16C	16	250	70	15	14.1	6.6	8.89
ITI16C	16	366.7	90	22	14.1	6.6	13.04
ITI16C	16	550	500	33	14.1	6.6	19.56
ITI16C	16	783	500	47	14.1	6.6	27.84
ITI16H	16	550	500	33	-	-	19.56
ITI16H	16	783	500	47	-	-	27.84
ITI32C	32	27.5	30	3.3	7.8	3.1	3.91
ITI32C	32	39.2	35	4.7	7.8	3.1	5.58
ITI32C	32	56.7	45	6.8	7.8	3.1	8.06
ITI32C	32	83.3	60	10	7.8	3.1	11.85
ITI32C	32	125	70	15	7.8	3.1	17.78
ITI32C	32	183.3	90	22	7.8	3.1	26.07
ITI32C	32	275	500	33	7.8	3.1	39.11
ITI32C	32	391	500	47	7.8	3.1	55.61
ITI32H	32	275	500	33	-	-	39.11
ITI32H	32	391	500	47	-	-	55.61
ITI48C	48	18.3	30	3.3	6.5	4	5.86
ITI48C	48	26.1	35	4.7	6.5	4	8.35
ITI48C	48	37.8	45	6.8	6.5	4	12.1
ITI48C	48	55.6	60	10	6.5	4	17.79
ITI48C	48	83.3	70	15	6.5	4	26.66
ITI48C	48	122.2	90	22	6.5	4	39.1
ITI48C	48	183.3	500	33	6.5	4	58.66
ITI48C	48	261	500	47	6.5	4	83.52
ITI48H	48	183.3	500	33	-	-	58.66
ITI48H	48	261	500	47	-	-	83.52

Notes:

- 1** Maximum-permissible charging current value for current sources version 0 and 2, for current sources version 1 – without using DC/DC converter; maximum-permissible discharging current value for current sources version 0 and 1, for current sources version 2 – without using DC/DC converter.
- 2** Rated charging direct current (DC) and discharging current for current sources version 0, for current sources version 1 and 2 – without using DC/DC converter.
- 3** Rated consumption DC value for current sources version 1 through DC/DC converter.
- 4** Rated discharging DC value for current sources version 2 through DC/DC converter.
- 5** Determined from the formula $PS = \frac{1}{2} \cdot C \cdot U^2 / 3600$

CAPACITORS RELIABILITY

Reliability Operation modes	t_{λ} , hours	t_{λ} , cycles	λ , 1/hour, max
Maximum-permissible mode (U_R , $T_{env}=65^{\circ}C$)	1 500		5×10^{-4}
Maximum-permissible mode (charge to U_R , discharge to $\frac{1}{2}U_R$, $T_{env}=65^{\circ}C$)		30 000	5×10^{-5}
Typical operating mode (U_R , $T_{env}=25^{\circ}C$)	90 000		2×10^{-5}
Typical operating mode (charge to U_R , discharge to $\frac{1}{2}U_R$, $T_{env}=25^{\circ}C$)		500 000	2×10^{-5}

Gamma-rated time of capacitor storageability T_{cy} at $\gamma=95\%$, 25 years

EXAMPLE OF REFERENCE DESIGNATION

Supercapacitor-based current source ITI16H – 0 – 16V – 783F $\pm 20\%$ – B EVAYA.673851.001 TU

Supercapacitor-based current source ITI32C – 1 – 32V – 125F $\pm 20\%$ – I EVAYA.673851.001 TU

Supercapacitor-based current source ITI48C – 2 – 48V – 261F $\pm 20\%$ – B – I EVAYA.673851.001 TU