



## **ECOFILL SB**

*Plastic case  
lighting capacitors*

## **IL**

*Metal case  
lighting capacitors*

CERT. N.9170 ICAR



UNI EN 29001 (ISO 9001)



CERT. N.FM 20375  
BS EN ISO 9001:1994

 **ICAR**  
*technology looking ahead*

# **ICAR:** *technology looking ahead*



## **THE CAPACITOR**

The heart of lighting capacitors is a very thin metallized polypropylene film that forms both its dielectric and its electrodes

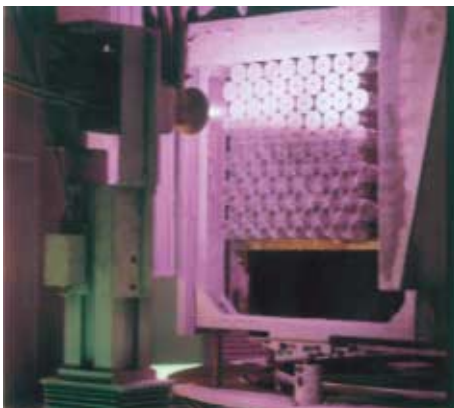
## **VERTICAL INTEGRATION**

As a forerunner in 1965 ICAR has introduced metallized polypropylene film technology. Metallizing, slitting, winding, spraying, finishing and testing are performed on-site using custom designed highly automated equipment.



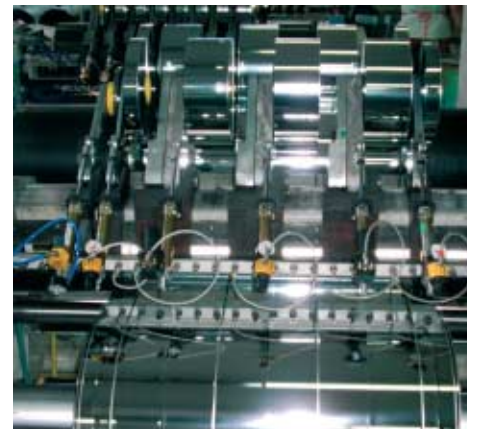
## **PROCESS CONTROL**

ICAR controls the whole manufacturing process. Comprehensive quality tests through all stages of production ensure the high reliability of all the components of the capacitors, as witness by company and product approvals.



## **THE SUCCESS**

Hundred of millions of our capacitors sold in over 60 countries world-wide speak for ICAR success.



## **INNOVATION**

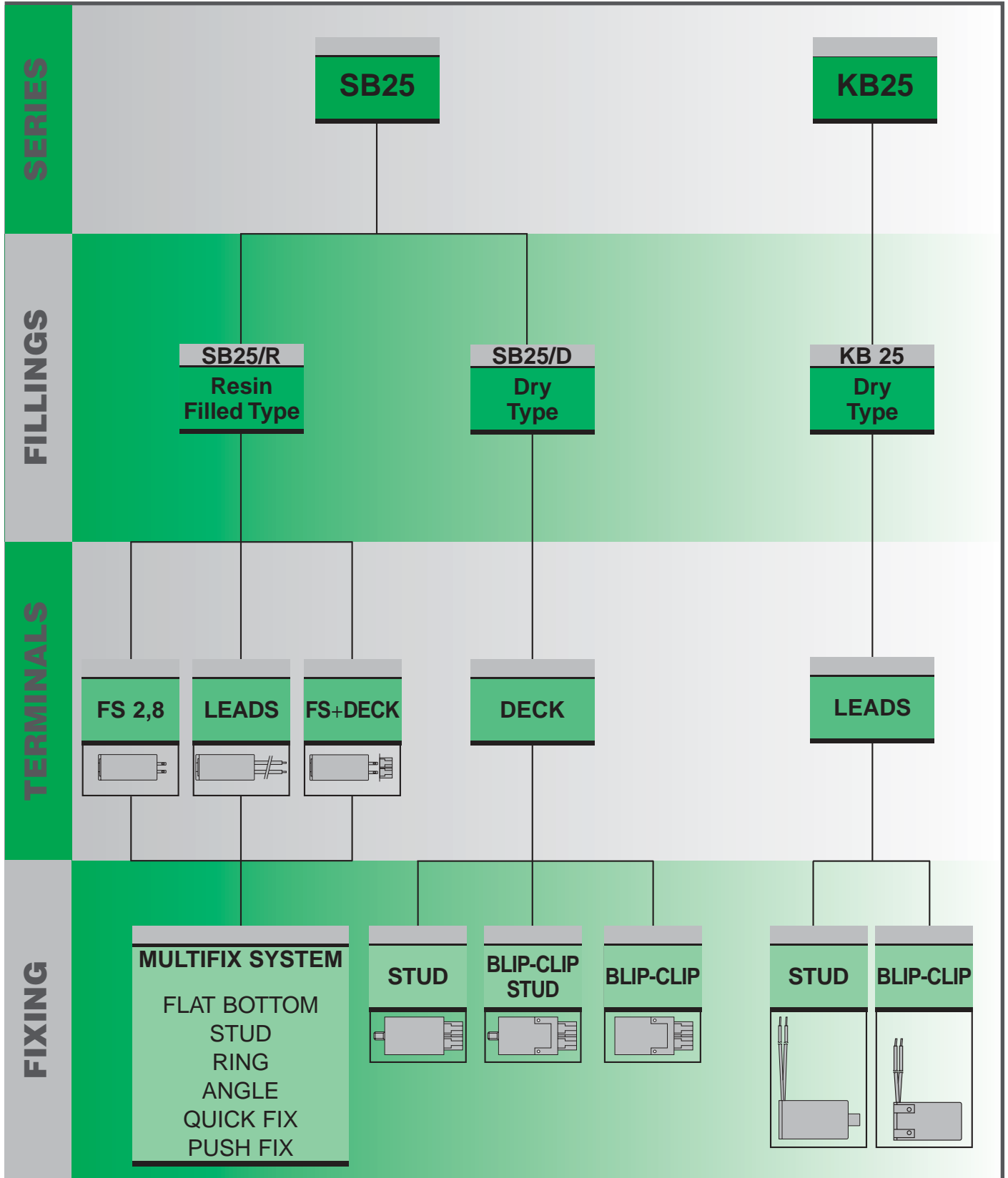
ICAR has been an innovator since 1946, and its continuous development in high-tech capacitors will lead to further innovations in the future.

# SB SERIES

## PLASTIC CASE LIGHTING CAPACITORS



### PARALLEL COMPENSATION



# SB25 SERIES SB25/R

## PLASTIC CASE LIGHTING CAPACITORS



### 1 - RESIN FILLED



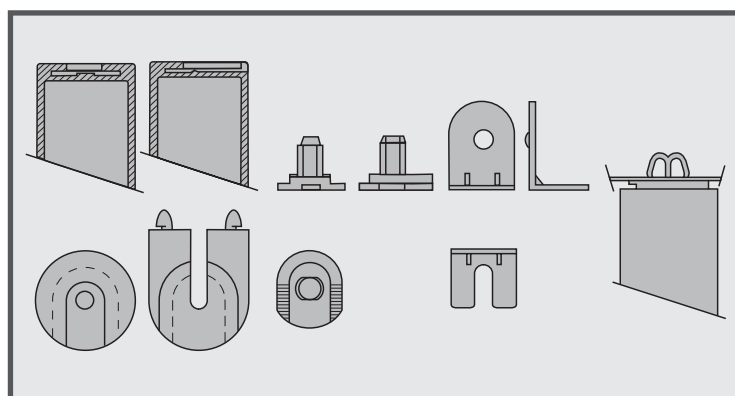
#### TECHNICAL FEATURES

Case	self-extinguish plastic	Temperature range	-40°C/+85°C
Dielectric	metallized polypropylene	Voltage test between terminals	$2U_n \times 2\text{sec}$
Safety	Type A	Voltage test between terminals & case	$2,5\text{KV} \times 2\text{sec}$
Capacitance tolerance	$\pm 5\% \pm 10\%$	Tan $\delta$ @ 50 Hz (only with FS 2.8)	$< 5 \times 10^{-4}$
Rated Voltage	280÷250 V	dv/dt typical	10 V/ $\mu\text{s}$
Frequency	50÷60 Hz		

# MULTIFIX



MULTIFIX is the easy fixing device.  
Use it as it is or choose your accessory.  
Any fixing can be fitted in.

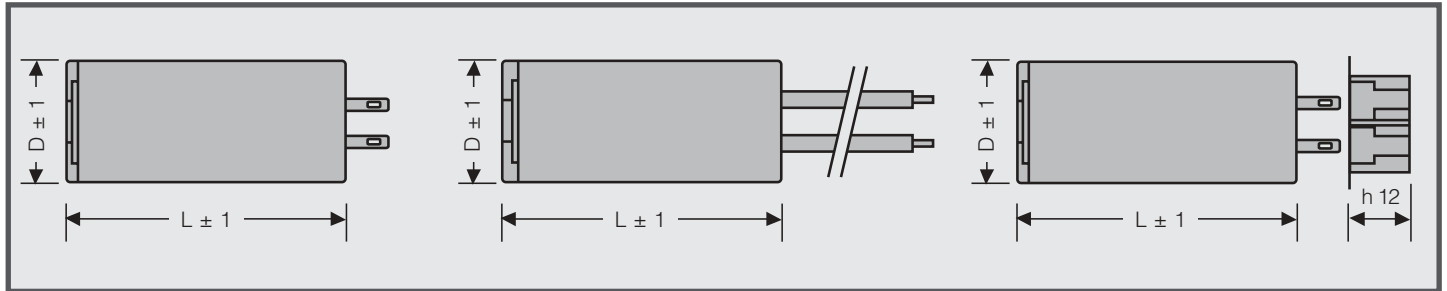


# SB25 SERIES SB25/R

## PLASTIC CASE LIGHTING CAPACITORS



### 1 - RESIN FILLED



SB 25/R - FS2,8			
CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	30	51	168
2,50	30	51	168
3,00	30	51	168
3,15	30	51	168
3,50	30	51	168
4,00	30	51	168
4,50	30	51	168
5,00	30	51	168
6,00	30	51	168
6,30	30	51	168
7,00	30	51	168
7,50	30	51	168
8,00	30	71	168
9,00	30	71	168
10,00	30	71	168
11,00	30	71	168
12,00	35	71	120
12,50	35	71	120
13,00	35	71	120
13,50	35	71	120
14,00	35	71	120
15,00	35	71	120
16,00	35	71	120
18,00	40	71	90
20,00	40	71	90
22,00	40	71	90
25,00	45	71	72
30,00	45	71	72
32,00	45	91	72
35,00	45	91	72
40,00	45	91	72
45,00	45	116	72
50,00	45	116	72
55,00	45	116	72
60,00	45	116	72
65,00	50	116	56

SB 25/R - LEADS			
CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	25	51	238
2,50	25	51	238
3,00	25	51	238
3,15	25	51	238
3,50	25	51	238
4,00	25	51	238
4,50	30	51	168
5,00	30	51	168
6,00	30	51	168
6,30	30	51	168
7,00	30	51	168
7,50	30	51	168
8,00	30	71	168
9,00	30	71	168
10,00	30	71	168
11,00	30	71	168
12,00	35	71	120
12,50	35	71	120
13,00	35	71	120
13,50	35	71	120
14,00	35	71	120
15,00	35	71	120
16,00	35	71	120
18,00	40	71	90
20,00	40	71	90
22,00	40	71	90
25,00	45	71	72
30,00	45	71	72
32,00	45	91	72
35,00	45	91	72
40,00	45	91	72
45,00	45	116	72
50,00	45	116	72
55,00	45	116	72
60,00	45	116	72
65,00	50	116	56

SB 25/R - FS DECK			
CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	30	51	168
2,50	30	51	168
3,00	30	51	168
3,15	30	51	168
3,50	30	51	168
4,00	30	51	168
4,50	30	51	168
5,00	30	51	168
6,00	30	51	168
6,30	30	51	168
7,00	30	51	168
7,50	30	51	168
8,00	30	71	168
9,00	30	71	168
10,00	30	71	168
11,00	30	71	168
12,00	35	71	120
12,50	35	71	120
13,00	35	71	120
13,50	35	71	120
14,00	35	71	120
15,00	35	71	120
16,00	35	71	120
18,00	40	71	90
20,00	40	71	90
22,00	40	71	90
25,00	45	71	72
30,00	45	71	72
32,00	45	91	72
35,00	45	91	72
40,00	45	91	72
45,00	45	116	72
50,00	45	116	72
55,00	45	116	72
60,00	45	116	72
65,00	50	116	56

# SB25 SERIES SB25/D

## PLASTIC CASE LIGHTING CAPACITORS



### 2 - DRY TYPE



#### TECHNICAL FEATURES

Case	self-extinguish plastic
Dielectric	metallized polypropylene
Safety	Type A
Capacitance tolerance	± 5% ± 10%
Rated Voltage	280÷250 V
Frequency	50÷60 Hz
Temperature range	-25°C/+85°C
Voltage test between terminals	2U <sub>n</sub> x 2sec
Voltage test between terminals & case	2,5KV x 2sec
Tan δ @ 50 Hz	< 5x10 <sup>-4</sup>
dv/dt typical	10 V/μs



EN 61048 / EN 61049



EN 61048 / EN 61049



EN 61048 / EN 61049

#### SB25/D-DECK -STUD

CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	30	53	250
2,50	30	53	250
3,00	30	53	250
3,15	30	53	250
3,50	30	53	250
4,00	30	53	250
4,50	30	53	250
5,00	30	53	250
6,00	30	53	250
7,00	30	53	250
7,50	30	69	200
8,00	30	69	200
9,00	30	69	200
10,00	30	69	200
11,00	30	93	140
12,00	30	93	140
12,50	30	93	140
14,00	30	93	140
15,00	30	93	140
16,00	30	93	140
18,00	35	93	80
20,00	35	93	80
22,00	35	93	80
25,00	35	93	80
30,00	40	93	60
32,00	40	93	60
35,00	40	93	60
40,00	40	93	60

#### SB25/D-DECK-BCo-STUD

CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	30	53	250
2,50	30	53	250
3,00	30	53	250
3,15	30	53	250
3,50	30	53	250
4,00	30	53	250
4,50	30	53	250
5,00	30	53	250
6,00	30	53	250
7,00	30	53	250
7,50	30	69	200
8,00	30	69	200
9,00	30	69	200
10,00	30	69	200
11,00	30	93	140
12,00	30	93	140
12,50	30	93	140
13,00	30	93	140
14,00	30	93	140
15,00	30	93	140
16,00	30	93	140

BCo = fixing:blip clip oriented

#### SB25/D-DECK-BC

CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm	
2,00	30	55	250
2,50	30	55	250
3,00	30	55	250
3,15	30	55	250
3,50	30	55	250
4,00	30	55	250
4,50	30	55	250
5,00	30	55	250
6,00	30	55	250
7,00	30	55	250
7,50	30	68	200
8,00	30	68	200
9,00	30	68	200
10,00	30	68	200
11,00	30	92	140
12,00	30	92	140
12,50	30	92	140
14,00	30	92	140
15,00	30	92	140
16,00	30	92	140
18,00	35	92	80
20,00	35	92	80
22,00	35	92	80
25,00	35	92	80

# KB25 SERIES KB25/D

## PLASTIC CASE LIGHTING CAPACITORS



### 2 - DRY TYPE



### TECHNICAL FEATURES

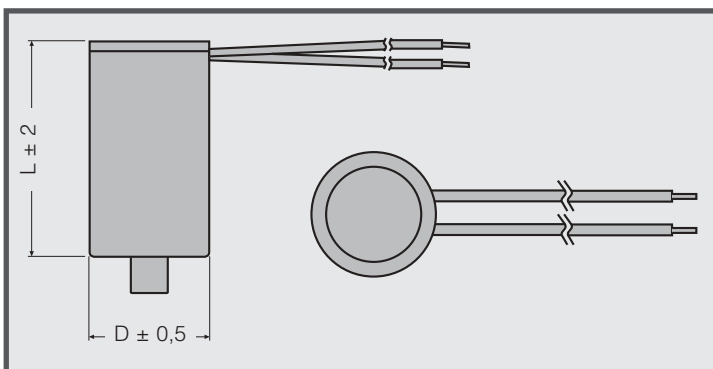
Case	self-extinguish
Dielectric	metallized polypropylene
Safety	Type A
Capacitance tolerance	$\pm 5 \pm 10\%$
Rated Voltage	280 ÷ 250 V
Frequency	50 ÷ 60 Hz
Temperature range	-25°C/+85°C
Voltage test between terminals	$2U_n \times 2\text{sec}$
Voltage test between terminals & case	2,5KV x 2sec
Tan $\delta$ @ 50 Hz	$< 5 \times 10^{-4}$
dv/dt typical	10 V/ $\mu\text{s}$



EN 61048 / EN 61049

### KB25/D-LEADS-STUD

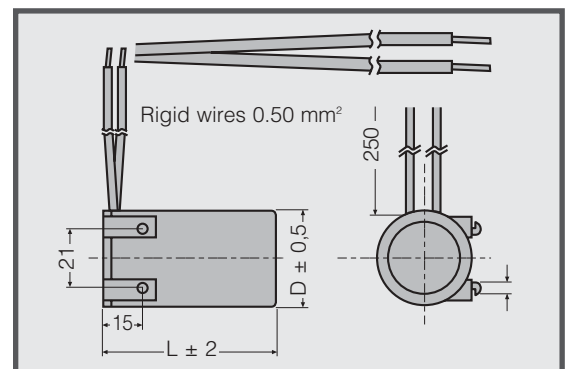
CAP [uF]	DIMENSIONS		Q.TY (BOX)	CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm			D mm	L mm	
2,00	28	54	200	12,00	36	67	120
2,50	28	54	200	12,50	36	67	120
3,00	28	54	200	14,00	36	67	120
3,15	28	54	200	15,00	36	67	120
3,50	28	54	200	16,00	36	92	80
4,00	28	54	200	18,00	36	92	80
4,50	28	54	200	20,00	36	92	80
5,00	28	54	200	22,00	36	92	80
6,00	28	54	200	25,00	40	92	60
7,00	28	67	170	30,00	40	92	60
7,50	32	67	150	32,00	45	92	60
8,00	32	67	150	35,00	45	92	60
9,00	32	67	150	40,00	45	92	60
10,00	32	67	150	45,00	50	93	50
11,00	32	67	150	50,00	50	93	50



EN 61048 / EN 61049

### KB25/D-LEADS-BLIP CLIP

CAP [uF]	DIMENSIONS		Q.TY (BOX)	CAP. [uF]	DIMENSIONS		Q.TY (BOX)
	D mm	L mm			D mm	L mm	
2,00	28	54	200	8,00	32	67	150
2,50	28	54	200	9,00	32	67	150
3,00	28	54	200	10,00	32	67	150
3,15	28	54	200	11,00	32	67	150
3,50	28	54	200	12,00	36	67	120
4,00	28	54	200	12,50	36	67	120
4,50	28	54	200	14,00	36	67	120
5,00	28	54	200	15,00	36	67	120
6,00	28	54	200	16,00	36	92	80
7,00	28	67	170	18,00	36	92	80
7,50	32	67	150	20,00	36	92	80



# IL SERIES

## METAL CASE LIGHTING CAPACITORS



### 1 - PARALLEL COMPENSATION



#### TECHNICAL FEATURES

Case	aluminium
Dielectric	metallized polypropylene
Safety	Type B - FP
Capacitance tolerance	± 5% ± 10%
Frequency	50÷60 Hz
Temperature range	-40°C/+100°C
Voltage test between terminals	2U <sub>n</sub> x 2sec
Voltage test between terminals & case	2,5KV x 2sec
Tan δ @ 50 Hz	< 5x10 <sup>-4</sup>
dv/dt typical	10 V/μs

#### IL 1 (FP)



AC 280 V 50/60 Hz  
-40°C/+100°C TYPE B

CAP [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)	CAP. [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)
2,00	30	63	100	13,00	35	78	81
2,50	30	63	100	14,00	30	103	100
3,00	30	63	100	14,00	35	78	81
3,15	30	63	100	15,00	30	103	100
3,50	30	63	100	15,00	35	103	81
4,00	30	63	100	16,00	35	103	81
4,50	30	63	100	18,00	35	103	81
5,00	30	63	100	20,00	35	103	81
6,00	30	78	100	22,00	40	103	64
6,30	30	78	100	25,00	40	103	64
7,00	30	78	100	30,00	40	103	64
8,00	30	78	100	32,00	45	128	50
9,00	30	78	100	35,00	45	128	50
10,00	30	78	100	40,00	45	128	50
11,00	30	103	100	45,00	45	128	50
11,00	35	78	81	50,00	45	128	50
12,00	30	103	100	52,00	55	128	36
12,00	35	78	81	55,00	55	128	36
12,50	30	103	100	60,00	55	128	36
12,50	35	78	81	65,00	55	128	36
13,00	30	103	100	70,00	55	128	36

#### IL 5 (FP)



AC 250 V 50/60 Hz  
-40°C/+100°C TYPE B

CAP [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)	CAP. [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)
4,50	30	63	100	14,00	30	78	100
5,00	30	63	100	15,00	30	103	100
6,00	30	63	100	15,00	35	78	81
6,30	30	63	100	16,00	30	103	100
7,00	30	63	100	16,00	35	78	81
8,00	30	63	100	18,00	30	103	100
9,00	30	63	100	18,00	35	78	81
10,00	30	78	100	20,00	30	103	100
11,00	30	78	100	20,00	35	78	81
12,00	30	78	100	22,00	30	103	100
12,50	30	78	100	22,00	35	78	81
13,00	30	78	100	25,00	35	103	81

Made in ITALY  
 IL 1 XX0  
 XX uF ± 10%  
 AC 280 V -40°C/100°C  
 50÷60 Hz  
 TYPE B (FP) XX

Made in ITALY  
 IL 5 XX0  
 XX uF ± 10%  
 AC 250 V -40°C/100°C  
 50÷60 Hz  
 TYPE B (FP) XX



# IL SERIES

## METAL CASE LIGHTING CAPACITORS



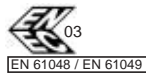
### 2 - SERIES COMPENSATION



#### TECHNICAL FEATURES

Case	aluminium
Dielectric	metallized polypropylene
Safety	Type B - FP
Capacitance tolerance	$\pm 3 \pm 4\%$
Frequency	50÷60 Hz
Temperature range	-40°C/+100°C
Voltage test between terminals	$2U_n \times 2\text{sec}$
Voltage test between terminals & case	2,5KV x 2sec
Tan $\delta$ @ 50 Hz	$< 5 \times 10^{-4}$
dv/dt typical	10 V/ $\mu\text{s}$

IL 45 (FP)

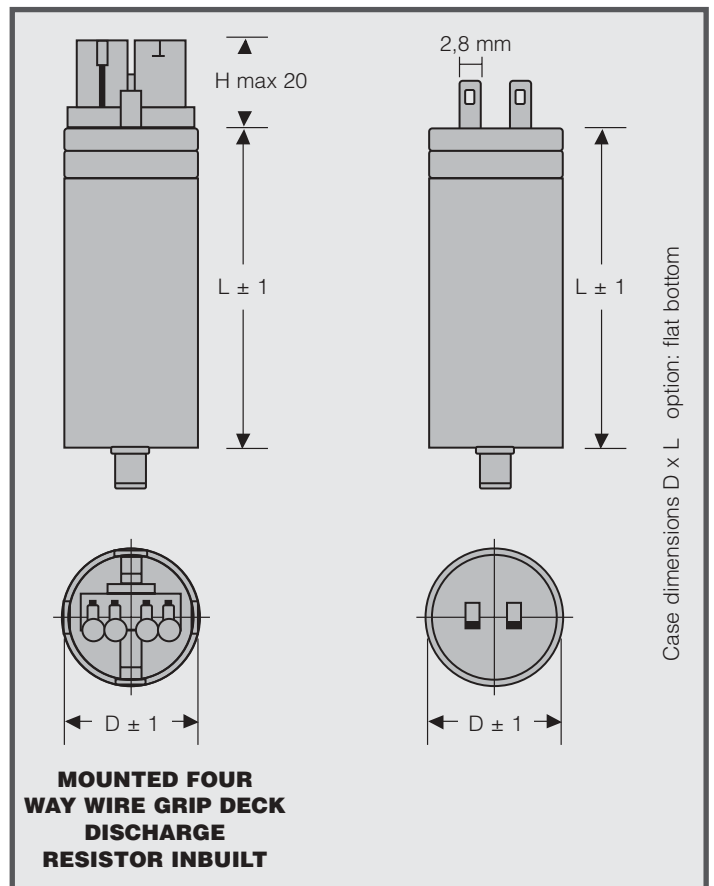
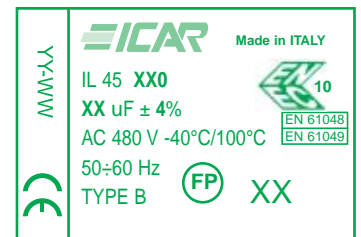


AC 480 V 50/60 Hz  
-40°C/+100°C TYPE B

CAP. [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)	CAP. [uF]	DIMENSIONS D mm	L mm	Q.TY (BOX)
2,6	25	78	144	5	30	78	100
2,7	25	78	144	5,3	30	78	100
2,9	25	78	144	5,4	30	103	100
3	25	78	144	5,5	30	103	100
3,2	30	78	100	5,6	30	103	100
3,3	30	78	100	5,7	30	103	100
3,4	30	78	100	6,8	30	103	100
3,6	30	78	100	7,2	30	103	100
3,9	30	78	100	7,8	30	103	100
4	30	78	100	8	30	103	100
4,1	30	78	100	8,4	35	103	81
4,2	30	78	100	8,7	35	103	81
4,4	30	78	100				
4,6	30	78	100				

#### SAFETY LINE

All IL series capacitors are equipped with overpressure safety device (FP). Total elongation is about 7 mm after overpressure disconnecter release. Do not use of rigid connections.









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