



# BATTERY STORAGE

CYLINDRICAL BATTERY PROTECTION FUSE LINKS

## gBat CYL 600V DC fuse links



## PROTECTING THE WORLD



RATED VOLTAGE  
600V DC

RATED CURRENT  
40A...80A

BREAKING CAPACITY  
50kA

STANDARDS  
IEC/EN 60269-1  
IEC 60269-7



## CYL gBat 600V DC fuse links for battery storage protection

Cylindrical gBat fuse links are specially designed to protect battery systems according to the Standard IEC60269-7.

They are capable of clearing all types of overcurrents, overloads and short-circuits, thus the fuse links protect the batteries as well as cables and all switchgear of installation.

These fuse links are designed and manufactured with the same techniques that semiconductor fuse links, which makes them very fast of operation in case of short-circuit and gives a good performance under continuous charge/discharge cycles.

They are optimized to have reduced power dissipations that allow the utilization in a wide range of fuse bases, disconnectors and fuse-switch-disconnectors.

→ Size 22x58 gBat 600V DC 40A to 80A

They are available in standard version as well as striker versions to be used in fuse bases with microswitch.

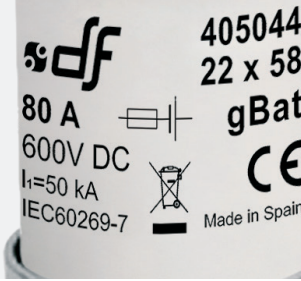
These fuse links can be used also as a protection in other DC applications, but it is very important to take into account the kind of load and the time-constant of circuit in order to have a correct application (consult us).

They are manufactured according to IEC/EN60269 Standards and comply with RoHS directive.



## Range

I <sub>n</sub>	REFERENCE		PACKING
	WITHOUT STRIKER	WITH STRIKER	
(A)			Uni /BOX
40	<b>405041</b>	<b>405141</b>	10/50
50	<b>405042</b>	<b>405142</b>	10/50
63	<b>405043</b>	<b>405143</b>	10/50
80	<b>405044</b>	<b>405144</b>	10/50



## Technical data

Rated voltage	600V DC L/R ≤ 3ms
Rated current	40A...80A
Rated breaking capacity	50kA
Utilization category	gBat
Maximum altitude *	2.000m
Storage temperature	-40°C ... 90°C
Operating temperature **	-40°C ... 80°C

\* For altitudes higher than 2.000m it is necessary to apply a derating in maximum current (*consult us*).  
 \*\* For ambient temperatures higher than 25°C it is necessary to apply a derating in maximum current.

## Standards

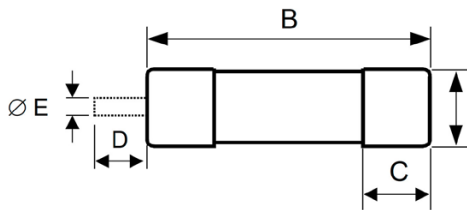
IEC/EN 60269-1  
 IEC 60269-7  
 RoHS Compliant



## Power dissipation

$I_n$	POWER LOSS $0,8 \cdot I_n$	POWER LOSS $I_n$	PREARcing $I_t^2$	PREARcing $I_t^2$
(A)	(W)	(W)	(A <sup>2</sup> S)	(A <sup>2</sup> S)
40	3,1	5,4	330	1400
50	3,8	6,8	590	2500
63	4,3	7,7	1050	4440
80	4,9	8,7	2360	9990

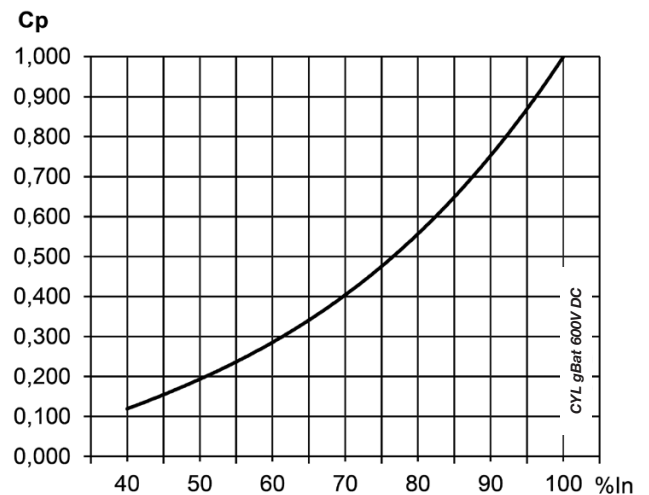
## Dimensions



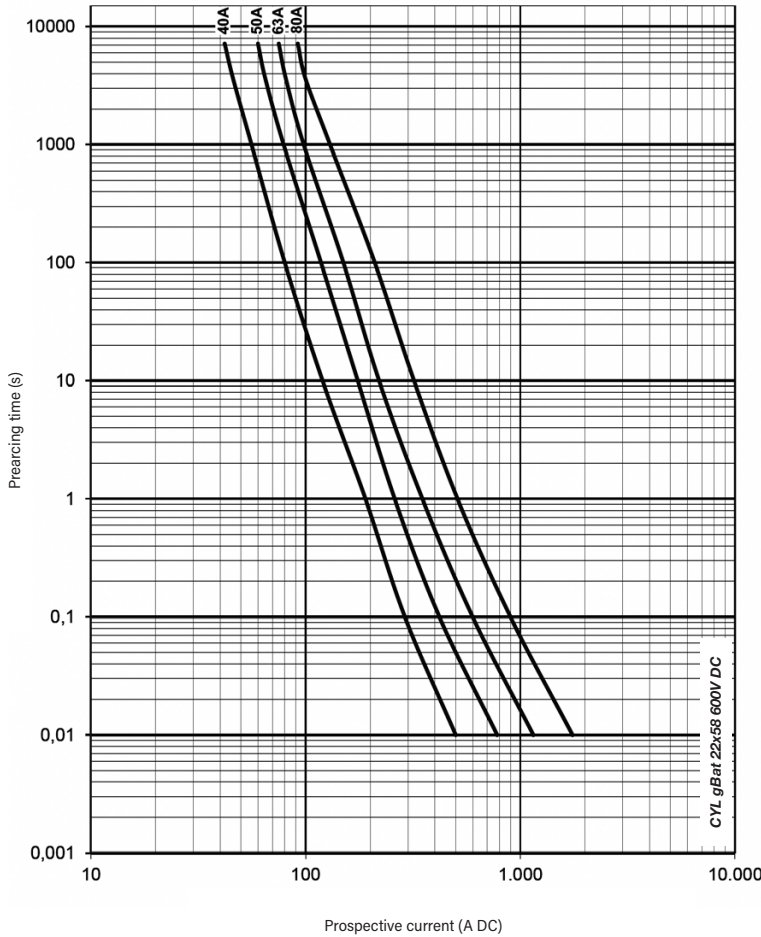
A	B	C	D	E
22,2	58	15,5	8	3,7

Weight 50gr

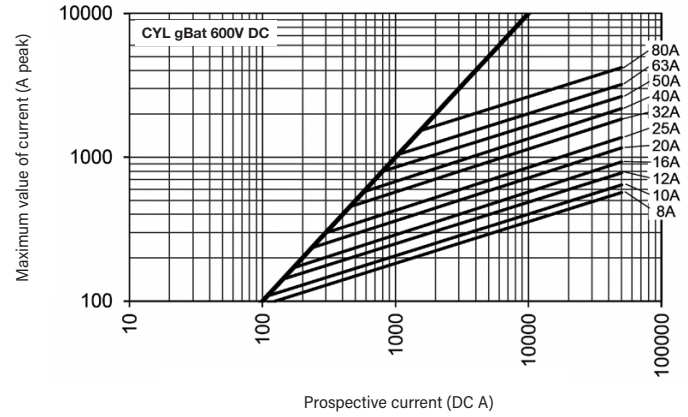
## Correction factor for power loss



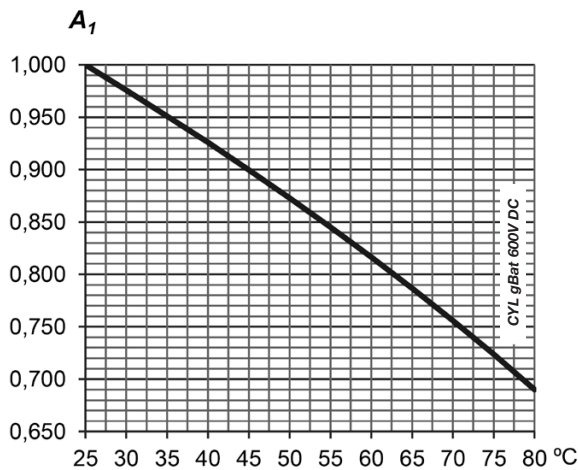
## t-I characteristics



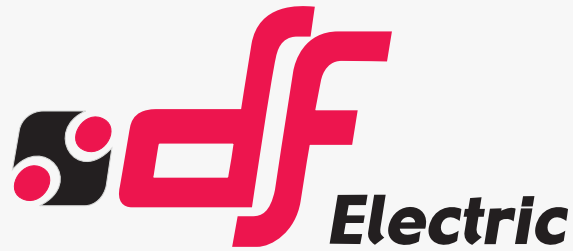
## Cut-off characteristics



## Ambient temperature derating factor



$t_a$ (°C)	$A_1$
25	1
30	0,98
35	0,95
40	0,92
45	0,90
50	0,87
55	0,85
60	0,82
65	0,79
70	0,76
75	0,72
80	0,69

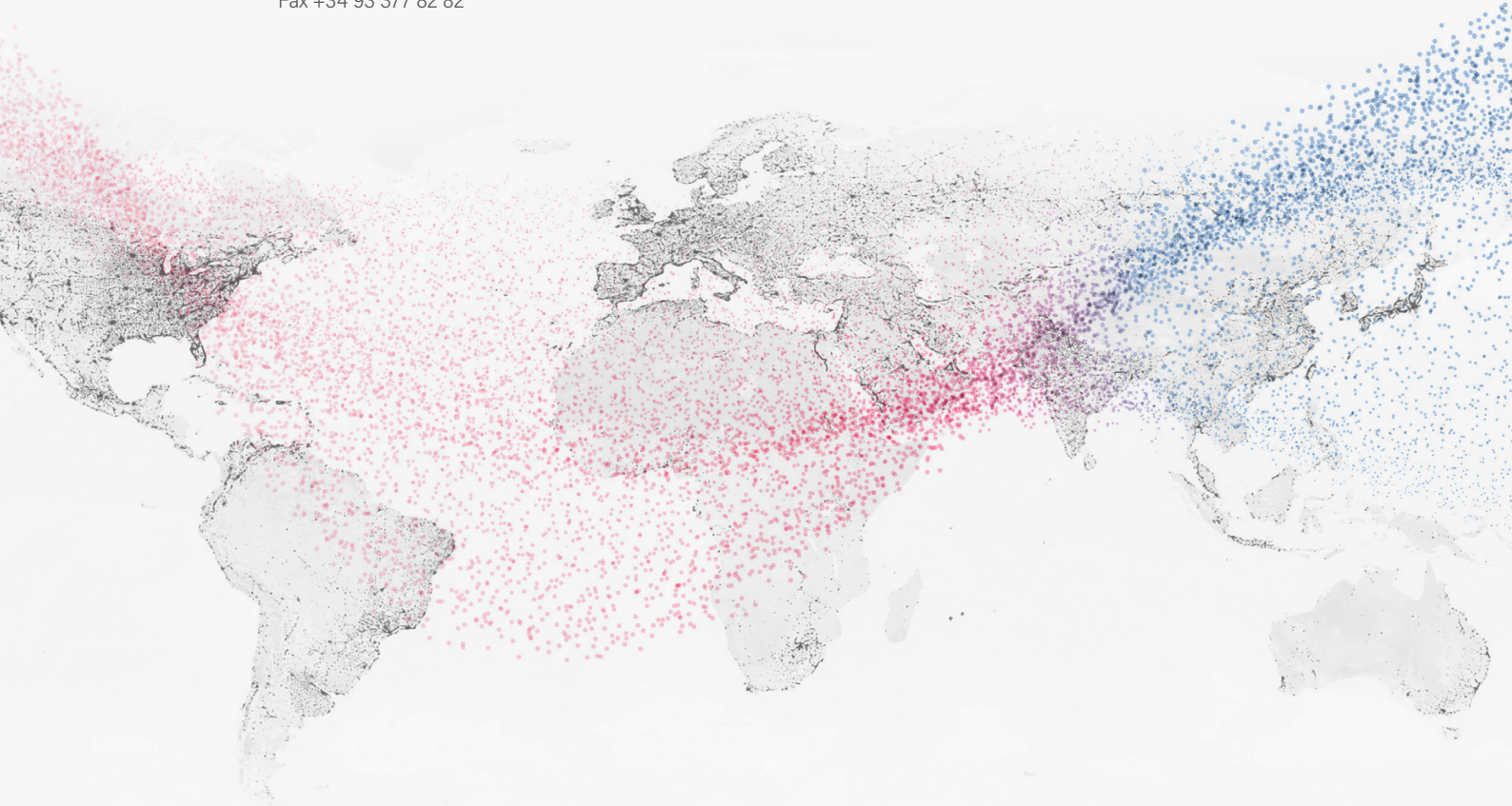


# PROTECTING THE WORLD

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The "electro technical expert" logo marked on the products included in this data sheet indicates that the installation of these products must be carried out by expert personnel with specialized knowledge.



To prevent electrical hazards, carry out the installation without voltage.



**Safety notice**  
Please capture the following QR code and read our safety notice carefully before installing our products.



The data reflected in this technical record are subject to the correct installation of the product in accordance with manufacturer's instructions, relevant installation standards and professional practices, maintained and used in applications for which they were made.

The products described in this document have been designed, developed and tested in accordance with specific standard. They are considered components that are integrated as part of installation, machine or equipment. The correct general operation of the referred product is responsibility of the manufacturer of the installation, machine or equipment.

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