

# ARC FLASH & MULTIRISK PROTECTIVE CLOTHING

12 cal/cm<sup>2</sup> APC 1 and 25-40 cal/cm<sup>2</sup> APC 2 range

Simple and effective daily protection











SPECIALIST IN ELECTRICAL RISK PREVENTION

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SICAME GROUP

# **PROTECTIVE CLOTHING**

# **BETTER UNDERSTAND STANDARDS:**

4

(items certified in 2018



2018)

# IEC 61482-2

The standard defines the requirements for protection against thermal risks related to electric arcing, to avoid the risk of seconddegree burns. There are currently two methods of classification - the Arc Protection Class (APC) and the Arc Thermal Performance Value (ATPV).



### EN 1149-5

The standard characterizes protective constraints relating to electrostatic dissipation used in conjunction with a grounding system to prevent incendiary discharges.



# EN ISO 11611

The standard determines the classs of protection against welding hazards such as protection against heat, contact with a flame or small molten metal spatter.



# EN ISO 11612

The standard specifies the protective conditions against:

- flame spread (A),
- a source of heat emitted by convection (B), radiation (C), or contact (F),
- and/or molten metal spatter (D and E).

### NFPA 70E

The standard, issued by the National Fire Protection Association (NFPA), classifies PPE for protection against the thermal effects of arcing into 4 categories, using ASTM F1959 - test standard, and ASTM F1506 - product standard.

# Did you know?

The requirements of:

- EMPLOYERS' Directive 89/656/EEC SECTION II OBLIGATIONS Article 4 «All personal protective equipment must: a) be appropriate for the risks involved, without itself leading to any increased risk;
- b) correspond to existing conditions at the workplace;
- c) take account of ergonomic requirements and the worker's state of health;
- d) fit the wearer correctly after any necessary adjustment.»
- NFPA 70E: ARTICLE 110 General requirements for electrical safety-related work practices Paragraph 110.1 (G) Risk assessment process

«An electrical safety program must include a risk assessment procedure that addresses employee exposure to electrical hazards.»

# Efficiency that makes all the difference

### Anti-Panic ZIP!

Our «Red Anti-Panic ZIP» has been specially designed to enable you to quickly and easily remove the garment in the event of an accident. This original ZIP closure lets you remove your PPE (Personal Protective Equipment) up to twice as quickly as similar PPEs fitted with a standard ZIP. The red colour of the ZIP is an extra feature for a safer PPE: your jacket is properly worn when the Velcro secured flap is well-positioned, i. e. the red colour of the zip is not visible. No red visible = a PPE that is being worn correctly!



### A more hard-wearing collection!

The CAT'ARC collection has been designed in such a way as to maximise its useful life. CAT'ARC equipment combines two important features - a reinforced crotch that reduces tears, which are frequent in this area, and knee reinforcements to combat mechanical wear resulting from working in the kneeling position.





# Rapid identification of the protection provided!

It is very easy to identify the level of protection offered by your garment. Just look at the Standard pictograms on the sleeve. For even greater clarity, the levels of arc protection are written in full (ATPV and class of arc protection).

# 12 CAL/CM<sup>2</sup> APC 1 RANGE

# **12 CAL/CM<sup>2</sup> APC 1 JACKET AND TROUSERS**

The CAT'ARC jacket and trousers have been developed and tested in accordance with current standards whilst still being comfortable to wear and looking stylish.







class 1

EN 1149-5

NFPA 70E. ASTM F1959, ASTM F1506



#### **MULTI-RISK PROTECTION:**

CAT'ARC garments offer wide-ranging protection to wearers exposed to electric arc, heat/flames, welding and electrostatic thermal hazards.

#### **EVERYDAY COMFORT:**

the fabric and design of the garment have been selected in order to ensure that operators are able to wear the garments for a full working day.

### + PRODUCTS

#### FABRIC:

Fabric that offers safety, comfort and durability via the combination of a proven composition and design.

Composition: 80% flame retardant treated cotton /19% polyester /1 % anti-static.

Weight: 300 g/m<sup>2</sup>.

Weave: twill.

A high collar provides effective protection up to the neck.

A strong loop to hang a badge, alarm device for workers working alone, etc.

Cuffs that can be tightened to adjust to your body type.

A large number of pockets to ensure easy access to your tools.

An adjustable length of inner leg (76 or 82 cm).

### To place an order:

Reference	Description	Sizes available
AFG-2000-*	Jacket: 2 outside chest pockets – 2 lower pockets – central closure with an anti-panic zip covered by a velcro- secured flap – adjustable velcro-secured cuffs – 1 accessory loop – pictograms of the standards, visible on the outside of the garment	XS to 5XL
AFG-2001-*	Trousers: 2 Italian pockets – 2 mesh pockets – central closure with zip and rivet – elasticated waistband with loops – reinforcement at the crotch – knee reinforcements	XS to 5XL

\* to be completed by the size (see last page).

# **12 CAL/CM<sup>2</sup> APC 1 SWITCHING JACKET**

The CAT'ARC switching jacket has been especially designed to be use on top of the usual clothing\*, for short operations (e.g. current-breaking operations). This long jacket offers the protection required by the ORG. TST. IE (Organism of Live Working).

\* Caution, only the areas covered by the switching jacket are protected.



APC 1 ATPV 12 cal/cm<sup>2</sup>



A B1 C1 E2 F1



NFPA 70E, ASTM F1959, ASTM F1506





Adjustment system on the back of the hood.



An adjustable hood for a better protection of the head and the neck in case of a higher risk, to be wear with a visor or a helmet.

A high collar provides effective protection up to the neck.

A velcro fastening along the entire length : easy to open and close.

A back length of 121 cm to ensure an efficient protection of the operator until the knees.

Reference	Description	Sizes available	
AFG-2300-*	Switching jacket : 1 hood with rubber band and adjustment system with velcro on the back of the hood - 2 lower pockets - central closure with a velcro flap - adjustable velcro-secured cuffs - 1 accessory loop – pictograms of the standards, visible on the outside of the garment.	S, L, 2XL, 4XL	

# 12 CAL/CM<sup>2</sup> APC 1 RANGE



# 12 CAL/CM<sup>2</sup> APC 1 COVERALL

The CAT'ARC coverall offers the same performance as the jacket and trousers - multi-risk protection, everyday comfort and attractive design. It offers a total protective solution in a single garment.

IEC 61482-2 APC 1 ATPV 12 cal/cm<sup>2</sup>



A B1 C1 E2 F1



class 1

EN 1149-5

NFPA 70E, ASTM F1959, ASTM F1506

### To place an order:

Reference Description		Sizes available	
AFG-1001-*	Coverall: 2 outside chest pockets – 2 Italian pockets – 2 mesh pockets – central closure with anti-panic zip covered by a velcro-secured flap – adjustable velcro- secured cuffs – 1 accessory loop – elasticated belt with loops – reinforcement at the crotch – reinforcement at the knees – pictograms of the standards, visible on the outside of the garment	XS to 5XL	
* to be completed by the size (see last page)			

# 12 CAL/CM<sup>2</sup> APC 1 KITS

These complete ready-to-use kits provide comprehensive protection against the thermal effects of arcing - face, head and body protection. Transport and storage of the kits are made easy by the bags and covers provided.



MO-11000

Reference	Composition	Sizes available	Range	
KIT-ARC-A-01-JP*	1 CAT'ARC trouser jacket set, 1 white ABS electrician's helmet M0-182/1-B, 1 arc flash face shield M0-187, 1 storage bag for helmet and visor, 1 pair of colourless M0-11000 glasses, 1 arc flash protective hood M0-134, 1 carry bag.	S to 2XL	PRO	
KIT-ARC-A-01-C*	1 CAT'ARC coverall, 1 white ABS electrician's helmet M0-182/1-B, 1 arc flash face shield M0-187, 1 storage bag for helmet and visor, 1 pair of colourless M0-11000 glasses, 1 arc flash protective hood M0-134, 1 carry bag.	S to 2XL	PRO	
KIT-ARC-A-02-JP*	1 CAT'ARC trouser jacket set, 1 «arc flash» helmet with integrated visor MO-180-ARC-12, 1 storage bag for helmets, 1 carry bag.	S to 2XL	EXPERT	
KIT-ARC-A-02-C*	1 CAT'ARC coverall, 1 «arc flash» helmet with integrated visor M0-180-ARC-12, 1 storage bag for helmets, 1 carry bag.	S to 2XL	EXPERT	
	* to be completed by the size (see last page).			



# **COMPLEMENTARY PRODUCTS**

# BELT

The belt, tested to withstand an arc flash (IEC 61482-1-2 class 1 and ASTM F2621 12 cal/cm<sup>2</sup>), is the ideal accessory to complete the electrician equipment.

### To place an order:

Reference	Description	Sizes available	
AFG-BELT-*	Electrician belt : 1 belt made with fabric and plastic buckle	100 cm (for sizes XS, S, M) 110 cm (for sizes L, XL, 2XL) 120 cm (for sizes 3XL, 4XL, 5XL)	
* to be completed by the size.			

NF EN 60903 / IEC 60903 ASTM F2675 and IEC-61842-1-1 ATPV 12 cal/cm<sup>2</sup> IEC-61842-1-2 APC 2



# **INSULATING AND ARC FLASH GLOVES**

The CATU gloves CGM\*\* offer a three in one protection.

- Insulating, in compliance with IEC 60903 : available in different classs from class 00 to class 4.
- Mechanical protection : for working only with insulating gloves, the leather overgloves become superfluous.
- Protection against thermal risks related to electric arcing IEC 61482-1-1 ATPV 12 cal/cm<sup>2</sup> and IEC 61482-1-2 class 2 : it is no longer necessary to chose between the insulating protection and the arc flash protection.



#### To place an order:

Reference	Class	Voltage AC	Voltage DC	Category	Lenght	
CGM-00-(*)	00	≤ 500 V	≤ 750 V	RC	360 mm	
CGM-0-(*)	0	$\leq 1000$ V	≤ 1 500 V	RC	360 mm	
CGM-1-(*)	1	$\leq 7500\text{V}$	≤ 11 250 V	RC	360 mm	
CGM-2-(**)	2	$\leq 17000  \text{V}$	≤ 25 500 V	RC	360 mm	
CGM-3-(**)	3	$\leq 26500\mathrm{V}$	≤ 39 750 V	RC	360 mm	
CGM-4-(***)	4	$\leq 36000\mathrm{V}$	≤ 54 000 V	RC	410 mm	
(*) Deferences to be filled with size 07 to 12 (sizes 07 and 12 on request) (**) To be filled with						

rences to be filled with size 07 to12 (sizes 07 and 12 on request). (\*\*) To be filled with size 08 to 12. (\*\*\*) To be be filled with size 09 à 12.





# 25-40 CAL/CM<sup>2</sup> APC 2 RANGE

# 25-40 CAL/CM<sup>2</sup> APC 2 JACKET AND TROUSERS

The CAT'ARC 25-40 cal/cm<sup>2</sup> jacket and trousers have been developed to provide comfort and protection against the risk of burns due to an electric arc.



ATPV 40 cal/cm<sup>2</sup>



A1A2 B1 C2 F2

USAGE

**MULTI-RISK PROTECTION:** protection against thermal hazards from electric arc, heat and flame, welding and anti-static.

**OPTIMIZED COMFORT:** the garments are made of a set of soft, lightweight technical fabric with a tailored design, allowing the operator to work comfortably.



Anti-panic zip with double flap inside and outside for an optimal safety.

SO 11611

class 2

Cuffs that can be tightened to adjust to your body type.

Crotch reinforcement to limit the risk of tearing.

Knees reinforcement with improved comfort through foam.

(76 or 82 cm).

### + PRODUCTS

#### FABRIC :

Technical fabric combining the performance of different materials to provide comfort and protection to operators.

Composition: 70% Kermel, 29% Viscose FR, 1% AS.

Weight: 425 g/m<sup>2</sup>.

An adjustable lenght of inner leg

Reference	Description	Sizes available
AFG-4000-*	Jacket: 2 outside chest pockets - 2 bottom pockets - central closure with an anti-panic zip covered by a double flap inside and outside - adjustable cuffs by scratch - 1 accessory loop - pictograms of standards visible outside the garment	XS to 5XL
AFG-4001-*	Trousers: 2 italian pockets - 2 cargo pockets - central zip and button closure - elastic waistband with loops - reinforced crotch - comfort foam at knees	XS to 5XL

# 25-40 CAL/CM<sup>2</sup> APC 2 SWITCHING JACKET

The switching jacket\* has been designed for short operations, such as current-breaking operations. \*Please note that the switching jacket protects the covered areas.

IEC 61482-2 APC 2 ELIM 40 cal/cm<sup>2</sup> ATPV 40 cal/cm<sup>2</sup>

EN 1149-

Anti-panic zip.









Reference	Description	Sizes available	
AFG-4300-*	Switching jacket: 2 outside chest pockets - 2 bottom pockets - central closure with an anti-panic zip covered by a double flap inside and outside - adjustable cuffs by scratch - 1 accessory loop - pictograms of standards visible outside the garment	S, L, 2XL, 4XL	
* to be completed by the size (see last page)			

# **25-40** cal/cm<sup>2</sup> **APC 2** Range

# 25-40 CAL/CM<sup>2</sup> APC 2 HOOD WITH FACE SHIELD

The CAT'ARC hood provides complete protection for the face and head in the event of an arc hazard: ATPV 25-40 cal/cm<sup>2</sup> and APC 2.



Grey visor for better color recognition.

Easily identifiable arc protection level on the outside of the hood.

ASSEMBLED ON A MO-182/1 HELMET WITH A CLIP SYSTEM.

### To place an order:

Reference	
AFG-HOOD-4	ŀ

**Description** Hood with face shield

# 25-40 CAL/CM<sup>2</sup> APC 2 KITS

The CAT'ARC 25-40 cal/cm<sup>2</sup> APC 2 kits are equipped with a range of PPE to protect the head, face and body in the event of an electric arc.



### To place an order:

Sara-

Reference	Reference Composition		
KIT-ARC-D-01-JP-*	1 set of CAT'ARC 25-40 cal/cm <sup>2</sup> APC 2 jacket and trousers, 1 electrician helmet MO-182/1-B, 1 hood with face shield , 1 pair of clear glasses MO-11000, 1 carrying bag M-87295	XS to 5XL	EXPERT
KIT-ARC-D-01-SJ-*	1 CAT'ARC 25-40 cal/cm <sup>2</sup> APC 2 switching jacket, 1 electrician helmet M0-182/1-B, 1 hood with face shield, 1 pair of clear glasses M0-11000, 1 carrying bag M-87295	S, L, 2XL, 4XL	EXPERT
		* to be completed by the size (s	ee last page).

NF EN 60903 / IEC 60903 🔗 ASTM F2675 and IEC-61842-1-1

ATPV 40 cal/cm<sup>2</sup>

IEC-61842-1-2 APC 2



# INSULATING GLOVES WITH ARC FLASH PROTECTION 40 CAL/CM<sup>2</sup> APC 2

**COMPLEMENTARY PRODUCTS** 

Wellfit: comfortable, soft, supple, durable and ergonomic with high flexibility to ease the work. Convenient to any hand shape.

### To place an order:

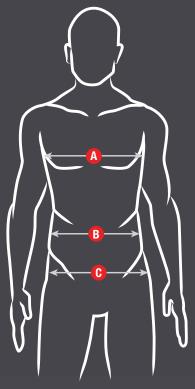
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	\V/ellfit.

Reference	Class	Voltage AC	Voltage DC	Category	Lenght
CGM-4-***-ARC-40	4	≤ 36 000 V	≤ 54 000 V	RC	410 mm
(***) References to be filled with size 09 to 12.					



CATU provides the possibility of CAT'ARC garment customization to create a unique product with your logo. Minimum order quantity is only 10 pieces.

# **SIZE CHART**



# A CHEST MEASUREMENT: Measured around the widest part of the chest, holding the tape measure absolutely horizontal.

- **B** WAIST MEASUREMENT: Measured under the navel, holding the tape measure absolutely horizontal.
- C HIP MEASUREMENT: Measured at the widest point of the hips, holding the tape measure absolutely horizontal.

Size to order	XS	S	М	L	XL	2XL	3XL	4XL	5XL
A - Maximum chest measurement (cm)	90	94	98	101	105	109	113	117	121
C - Maximum hip measurement (cm)	92	94	98	102	106	110	113	117	121
The sheat measurement defines the size of the measurement or low or the his measurement is less than an equal to the measurement shows in the table									

The chest measurement defines the size of the garment as long as the hip measurement is less than or equal to the measurement shown in the table. If not, choose the next size up.

# TROUSERS

JACKET AND SWITCHING JACKET

Size to order	XS	S	М	L	XL	2XL	3XL	4XL	5XL
C - Maximum hip measurement (cm)	90	94	98	102	106	110	113	117	121

# COVERALL

Size to order	XS	S	М	L	XL	2XL	3XL	4XL	5XL
A - Maximum chest measurement (cm)	90	94	98	101	105	109	113	117	121
B - Maximum waist measurement (cm)	92	96	100	104	108	111	115	119	123
C - Maximum hip measurement (cm)	102	106	110	113	117	121	125	129	133
The chest measurement defines the size of the garment as long as the waist measurement and the hip measurement are less than or equal to the measurements shown in									

the table. If not, choose the next size up.



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