



100 CAL ARC SUIT











DH-ARC100-SHV

DW-ARC100-J

DG-ARC100

DW-ARC100-BP

## Description

The Dromex® Arc product range is designed to protect the user from the hazards of heat and to reduce total burn injury when working in environments exposed to electric Arc hazards.

Dromex® Arc garments are manufactured with our exclusive Dromex® A.P.T™ (Arc Protective Technologies) fabric blend which has been carefully developed by our team along with industry experts and professionals to ensure specialised Arc safety and global standards are met.

Our Dromex® A.P.T™ fabric and garments have been tested to NFPA, ASTM, EN. SABS and IEC standards.

The Dromex A.P.T™ 100 cal attire, is an innovative lightweight 3 layer fabric construction (14 oz outer, 7.5oz (250gsm) Inherent FR Meta Aramid interlining and 14 oz inner) designed for user comfort and is suitable for use in category 4 ARC related hazards.

This 100 cal Arc Switching Suit consists of the following:

### Jacket features:

- Collared jacket with internal hanger loop.
- YKK Concealed Vizlon zip with 25mm flame retardant Hook and Loop closure.
- Sleeves feature a flame retardant knitted cuff providing an effective seal when used with gloves and prevents sleeves from rolling upwards.

- Right sleeve with Dromex® Arc heat transfer print.
- Dromex® Arc heat transfer print and ATPV 100 cal/cm<sup>2</sup> Embroidery below print on the left chest of jacket for garment ATPV classification.

#### Bib and Brace features:

- Adjustable brace with black flame retardant nylon clips.
- · Adjustable tabs with flame retardant Hook and Loop closure at waist (25mm x 150mm).
- All stress area seams are triple needle topstitched for added durability.
- ATPV 100 cal/cm<sup>2</sup> embroidery on back left centre panel for garment ATPV
- Right back panel with Dromex® Arc heat transfer print.
- Double needle topstitched on the footwear allowance region for added
- Flame retardant Hook and Loop adjustable tabs (25mm x 150mm) above leg hem providing an ideal fit around the leg, easily accommodating ankle boots etc.

#### Switching Hood features:

- Integrated Category 4, 100 cal/cm<sup>2</sup> clear view visor attached to electrical arc hard hat.
- Centre back with opening and flap with flame retardant Hook and Loop closure to allow for air ventilation system.
- ATPV 100 cal/cm<sup>2</sup>embroidery on bottom left of hood for garment ATPV classification.
- Side flaps with flame retardant Hook and Loop closure.

#### Arc Visor

• The Category 4, 100 cal/cm<sup>2</sup> clear view Arc visor consists of three polycarbonate layers offering true vision technology.

These garments are suitably used in the following industries:

- Substations and switchrooms
- Utilities and power generators
- Industrial electrical maintenance and installations
- Mining, chemical and refineries

Dromex® A.P.T™ fabrics are Arc flash protective, self-extinguishing, heat resistant and all garments are sewn with inherent flame retardant thread.

#### **Special Instructions**

Note: For electric Arc exposures, wear the correct number of flame resistant clothing layers as dictated by an electric Arc hazard analyst.

In potentially explosive environments, proper grounding procedures must be used for protection against electrostatic spark ignition.

Do not put on or remove garments when in a potentially explosive environment. None of the materials or processes used in the manufacture of these products are known to be harmful to the wearer.

The manufacturer has examined under the system for ensuring quality of production by means of monitoring and inspection.

These Arc flash jackets, bib pants and hoods are designed to accommodate the basic safety requirements and standards for Personal Protective Equipment. The information contained herein is intended to assist the wearer in the selection of Personal Protective Equipment.

Actual conditions of use cannot be directly simulated in a test environment therefore it is the responsibility of the end user and not the manufacturer or supplier to determine the Arc flash suitability for the intended use.

Arc flash protective jackets, bib pants and hoods should be thoroughly inspected before use to ensure no damage is present (such as holes or burn holes).

If exposed to an Arc Flash incident, the garment must be replaced immediately.

## Specifications

Sky blue pocketless jacket, bib, brace, jacket and Style:

hood with integrated Arc visor, Arc protective

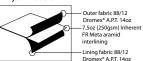
hard hat & fresh air ventilation system (standard).

Fabric composition: 88% Cotton 12% Nylon.

Mass: 14oz Outer, 7.5oz (250gsm) Meta Aramid FR

mat interlining and 14oz Inner (lining)

### 3 Layer Arc Suit











DW-ARC100-J DW-ARC100-SHV DG-ARC100

Accessories:

Battery operated, switching hood air ventilation Fan system:

> system compatible with the Dromex® Arc flash 100 cal hood assembly

Materials: Fan housing - ABS Hose - Polypropylene

> Suspension - Polyester Zip - Nylon

Battery type (not included): Alkaline Manganese Battery 6LR61 9V.

Battery run time duration: 850 minutes

Fan weight:  $226g \pm 2g$  when fitted with batteries





· Arc bag:

Dromex® part number, DW-ARCBAG 600D Oxford fabric Arc shoulder bag with carry straps, accommodates the storage of your jacket, bib pants, hood and gloves.





Additional: Arc clothing must be worn with additional and

correctly selected Arc PPE to ensure complete protection against the hazards of Arc Flash. Refer to table "Arc Flash PPE Categories" for

further compatible PPE.

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## Sizes Available

Jacket: S-5XL

Size	Nominal measurements of finished garment (cm)				
designation	Chest circumference	Back length	Back width	Sleeve length	
S	94	70	36	47	
M	99	71	38	47	
L	104	72	40	48	
XL	109	73	42	48	
2XL	114	74	44	49	
3XL	119	74.5	46	49	
4XL	124	75	48	50	
5XL	129	75.5	50	50	

Bib & Brace: S-5XL

Size	Nominal measurements of finished garment (cm)			
designation	Waist extended	Outside leg length	Inside leg length	
S	80	102	78	
M	85	104	79	
L	90	106	80	
XL	95	108	81	
2XL	100	110	82	
3XL	105	110	82	
4XL	110	111	82	
5XL	115	111	82	

## **Compliance & Conformity**

- Complies to marking SANS 724, Personal Protective Equipment and protective clothing against the thermal hazards of an electric Arc.
- IEC 61482-1-1 Live working Protective clothing against the thermal hazards of an electric Arc - Open Arc Test Method. It determines the Arc Thermal Protection Value (ATPV level) of the garment. The basic principle is that the ATPV of the garment must be higher than the Arc Flash energy.
- IEC 61482-1-2, Live working Protective clothing against the thermal hazards of an electric Arc - Box Test Method. It determines the Arc Protection Class Rating of the material or garment by using a constrained and directed Arc:
- EN 61482-1-2:2014 LIVE WORKING PROTECTIVE CLOTHING AGAINST THE THERMAL HAZARDS OF AN ELECTRIC ARC - PART 1-2: TEST METHODS
- METHOD 2: DETERMINATION OF ARC PROTECTION CLASS OF MATERIAL AND CLOTHING BY USING A CONSTRAINED AND DIRECTED ARC (BOX TEST) (IEC 61482-1-2:2014).
- NFPA 2112 Standard on flame resistant clothing for protection of industrial personnel against short duration thermal exposures from fire.
- NFPA 70E Standard for electrical safety clothing for employees.
- ASTM F1959, Standard Test Method for Determining the Arc Rating of Materials for Clothing.
- ASTM F2621-12, Standard Practice for Determining Response Characteristics and Design Integrity of Arc Rated Finished Products in an Electric Arc
- EN 11611:2015, Protective clothing for use in welding and allied processes.
- EN 11612:2015 Protective clothing -- Clothing to protect against heat and flame -- Minimum performance requirements.
- ASTM F2178-12 -Standard Test Method for Determining the Arc Rating and Standard Specification for Eye or Face Protective Products.

## **Packaging**

Jacket: DW-ARC100-J - are packed in a resealable polybag and

sold individually.

DW-ARC100-BP - are packed in a resealable polybag and Bib pants:

sold individually.

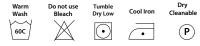
Switching hood:

DH-ARC100-SH - are packed in a resealable polybag and sold individually.

> DH-ARC100-SHV - are packed in a resealable polybag and sold individually.

## Cleaning & Maintenance

Wash care instructions need to be carefully followed to ensure garment level of protection. Dromex® A.P.T™ Garments can be cleaned by home or commercial laundry or by dry cleaning procedures without loss of their protective features. The following suggestions will help keep your garment safe and neat. Should home procedures not remove contaminants, commercial laundering or dry-cleaning is recommended.



- Launder garments of Dromex® A.P.T™ separate from personal non-flame resistant clothing to help avoid contamination by flammable materials.
- Pre-treat greasy stains and collar/cuff lines.
- · Wash garments in warm water with heavy duty detergent.
- Do not use detergents containing chlorine bleach as it may cause fading and reduce fabric strength.
- Tumble dry garments at a low setting.
- Remove and hang garments as soon as tumbler stops.
- Do not hang in direct sunlight as fading can occur.
- When using commercial laundry aids, be sure to carefully follow the manufacturer's instructions.

## Marking

### MAIN LABEL



## Position:

- Jacket Neck (Inside)
- Bib & Brace Back (Inside)
- · Hood Back (Inside)

## ARC HEAT TRANSFER PRINT



## Position:

- Jacket Right centre sleeve
- · Hood Left hand side at front

## ARC HEAT TRANSFER PRINT



## Position:

- Jacket Left hand side of chest
- Bib & Brace Back (Right botton)
- Hood Centre back

## DROMEX ARC BOOKLET



## Position:

Tag attached inside garment

#### **EMBROIDERY (WHITE THREAD)**



DROMEX A.P.T. WATERMARK

All over print (Inside fabric)

**ORIGIN & YOM LABEL** 

S10783 MADE IN

SOUTH AFRICA

Y. O. M. 2022

• Bib & Brace - Back

· Hood - Back (Inside)

Position:

SIZE LABEL

M

<--12mm -->

Position:

Jacket - Neck

• Bib & Brace - Back

Jacket - Neck

Oromex

Position:

- · Bib & Brace Back left side of bottom



- Jacket Side seam (Above hem)
- · Bib & Brace Left side seam below adjustable tab

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## Position:

- Jacket Left hand side of chest
- · Hood Left hand side at front

## TYVEK ATPV LOOP FOLD CARE LABEL



<----- 60mm

# Position:

- · Hood -Left seam (Inside)

# Disposal

All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Please consider recycling.

## DROMEX FRESH AIR FLASH HOOD VENTILATION SYSTEM DH-ARC100-SHV



DW-ARC100-SH

# Description

The Dromex® DH-ARC100-SHV, fresh air, arc flash ventilation system integrated within the Dromex ARC 100 cal flash hood, provides cooling comfort, whilst conducting electrical/Arc work tasks.

The ® DH-ARC100-SHV, features the following:

- · A battery-operated fan motor
- A flexible hose
- Dual ventilated bladders

Battery run time duration:

## **Specifications**

Style: Battery operated, Arc flash air ventilation

system intergrated with the Dromex®

Arc flash 100 cal hood assembly

Materials: Fan housing - ABS

> Hose – Poly Propylene Suspension - Polyester

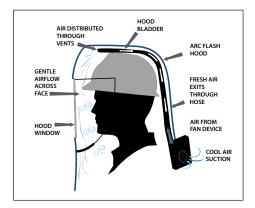
Zip - Nylon

Battery type (not included): Alkaline Manganese Battery 6LR61 9V.

850 minutes

 $226g \pm 2g$  when fitted with batteries

# Weight fan: Illustration



## **Fan Fitting & Air Flash Hood Ventilation System Instructions**



Insert batteries facing upwards



Press down until you hear a click



Twist fan device securely into hose compartment



Place helmet with visor on head



Ensure placement is matching battery (+ positive & - negative)



Insert hose cover



Close Hook & Loop closure on hose compartment



Securely align Hook & Loop closure from hood to visor & close



Insert securely into battery compartment & switch on to test power



Insert hose compartment into hood opening & close zip attaching hood & bladder



Place safely into fan device compartment & close Hook & Loop closure



Ensure Hook and Loop closure is placed flat & there is no misalignment



Close battery compartment by first pushing up at the top



Insert fan device into hose compartment



Close Hook & Loop closure on fan device compartment



Securely close Hook and Loop closure on sides

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**Arc Flash PPE Categories** 

Arc Flash PPE					
Hazard/Risk Category	Required minimum ATPV (Cal/cm²)	Workwear	Other PPE		
HRC 1		ARC ARC T-SHIRT SS BOXER SHORT	EARPLUGS  EARPLUGS		
HRC	4	DOLLATIONI  DOLLATIONI	ARC VISOR  ARC LEATHER *(must wear BSD ARC ARC ARC ARC GLOVES with Balaclava) ERGOS INTEC BALACLAVA BEANIE BLANKET		
HRC 2			ADS SMITS HAS		
HRC	8	ARC ARC SHIRTS & DENIM JEANS ARC ARC POSEIDON ARC ARC 2 PIECE ARC T-SHIRT LS DUST COAT BOILERSUIT X BIB CONTI-SUIT BOILERSUI	ARC SWITCHING DIPPED ARC ARC ANKLE MITT GLOVES ARC GLOVES SWITCHING ARC HARD HAT SAFETY BOOTS GLOVES  IT		
HRC 3			ARC ARC LEATHER ARC HARD HAT SAFETY BOOTS		
HRC	25	ARC SUIT	ARC SWITCHING ARC SWITCHING *(must wear BSD ARC ARC ARC		
HRC 4	2.5		MITT GLOVES GLOVES with Balaclava) ERGOS INTEC BALACLAVA BEANIEA  EARPLUGS		
4 HRC		ARC PADDED  ARC BIB & BRACE, JACKET  ARC BIB & BRACE, JACKET	ARC SWITCHING ARC SWITCHING ARC LEATHER ARC ARC ANKLE		
	40	ARC PADDED JACKET  ARC BIB & BRACE, JACKET AND HOOD WITH VISOR  ARC BIB & BRACE, JACKET AND HOOD WITH VISOR  ARC BIB & BRACE, JACKET AND HOOD WITH VISOR	MITT GLOVES GLOVES GLOVES BLANKET SAFETY BOOTS		
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