

Alcomet Fuse Carrier

TESTED TO BS-HD 60269-2 (BS 88)



The safe solution to replace
the Artic Fuse Carrier

Alcomet Fuse Carrier

As an endorsement of quality and excellence, HM Queen Elizabeth II honoured Alcomet with a Queen's Awards for Enterprise: Innovation, expressly for the development and launch of the Guardian Security Range.

Alcomet has continued to work within the electrical market and responded to its needs by developing the Alcomet Fuse Carrier.

As the electrical industry strives towards minimising costs without compromising the quality and continuity of service provision, safety remains a key objective. The Alcomet Fuse Carrier tested to BSHD60269-2 (BS88-2) provides a safe solution for replacing asbestos laced Artic Fuses.

The Alcomet Fuse Carrier is approved by National Grid and type registered under EGI code LLPL01.

Alcomet Fuse Carrier - *Looking after your future.*





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Current Situation

On electrical networks, rewirable Artic Fuses, have commonly been installed in substations since the late nineteen fifties.

They are widely found in protection and control circuits fitted to relay panels but can often also be located on motorised isolator / circuit breaker mechanism cabinets. These are the main areas but they are also found on pieces of other equipment i.e. marshalling kiosks, battery chargers and transformer tap change control equipment etc.

The main problem with this product is that the Artic Fuse carrier contains asbestos flash guards.



We are all aware of the problems of working with asbestos and managing asbestos in the work place, but there is also the additional problem of fuse wire, as it degrades with age.



Problems with the Arctic Fuse

- Mitigating asbestos risk is costly requiring operators to be trained in handling and disposing of asbestos.
- The fuses (and asbestos) must be disturbed due to the decaying fuse wire.
- Should the fuse blow, asbestos particles will be released into the surrounding area.
- Fuses need to be removed to isolate parts of the substation control and protection circuits when undergoing works.
- Replacing the fuses for conventional 'red spot' fuses is costly and time consuming.
- Drilling into a relay panel could trip other relay panels.



How can Alcomet help?



Alcomet Fuse Carrier

The Alcomet Fuse Carrier has been constructed using the finest grades of material to enable it to meet the strict safety standards of BS88. It also had to be specifically designed to work with the existing Artic Fuse Holder, ensuring the best possible contact pressures time after time.

The main body of the Alcomet Fuse Carrier uses quality flame-retardant material also giving it excellent high dielectric properties required for protecting utility networks.

The contact system has been designed to cater for the British Standard HRC fuse as standard.



The Alcomet Fuse Carrier has been tested and approved to BS HD 60269-2 (BS88-2). Rated to take up to A1 type, 20 amp fuses or solid links, the Alcomet Fuse Carrier removes the presence of asbestos and eliminates the need for fuse wire.

Asbestos Free



Problem Solved

- Simply remove the existing Artic Carrier and replace it with the Alcomet Fuse Carrier.
- No need for network outages to isolate DC Bus Wiring to disconnect existing fuse bases.
- No need to re-wire and re-commission protection circuits as the existing Artic Fuse Holder remains in place.
- Eliminates the requirement to drill into the existing relay panels to fit new modern bases.
- Removing unreliable fuse wire and installing British Standard HRC fuses gives reliable protection operation.
- The Alcomet Fuse Carrier is simple and straight forward to install.
- The Alcomet Fuse Carrier is approved by National Grid and type registered under EGI code LLPL01.





Benefits

- Eliminates asbestos and fuse wire
- Fits into existing fuse holders
- Cost effective
- Easy to install
- Tested to BS HD 60269-2 (BS88-2)
- Approved by National Grid and type registered under EGI code LLPL01

A safe, easy and cost effective solution



Test Data

Test Object and Rating: 20A 500V Alcomet Fuse Carrier for the Artic Fuse System

Date of Test: 14th December 2015 to 25th January 2016

Test Completed by: ORE Catapult Development Services

Tests Performed : BS EN 60269-2: 2013

Referencing the following clauses from BS EN 60269-1: 2007 +A2: 2014

- 8.1.4 Dimensions
- 8.2 Insulating properties and suitability for isolation
- 8.3 Temperature rise
- 8.5 Peak withstand current
- 8.8 Degree of protection
- 8.9 Resistance to heat
- 8.10 Non deterioration of contacts
- 8.11.1 Mechanical Strength
(including supplementary Requirement 8.11.1.1 of BE EN 60269-2)
- 8.11.2.2 Resistance to abnormal heat and fire
- 8.11.2.3 Resistance to rusting

The samples tested fully complied with the requirements of the above tests to **BS EN 60269-2: 2013**

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Assembly Guide

Parts Included:

- 1 x Fuse Carrier (a)
- 2 x Fuse Carrier Contacts (b)
- 2 x Locating Contact Retaining Screws (c)

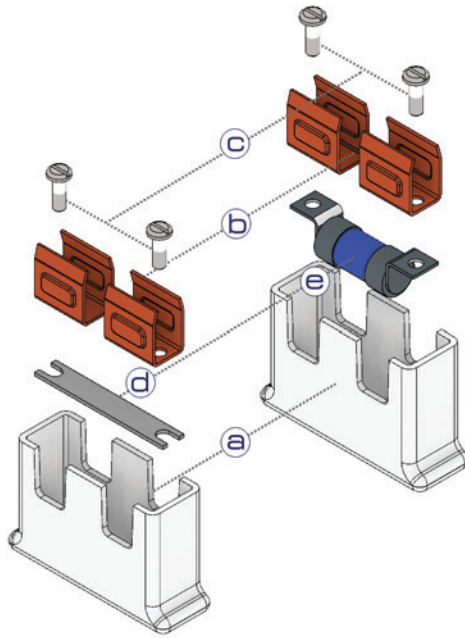
Also required:

- A1 Fuse Link or (d)
- Cartridge Fuse (e)

Assembly Instructions

1. Insert A1 type fuse link or cartridge fuse into fuse carrier ensuring the fuse body is inserted body first allowing the fuse tags to rest upon the contact ledges.
2. Insert contact retaining screws into each fuse holder contact.
3. Hold contact and lower it onto the fuse carrier locating the tips of the contact retaining screws into the fuse carrier M4 threaded holes (repeat with second contact).
4. Lightly tighten screws ensuring contacts are aligned in fuse carrier.
5. Finally tighten screws ensuring a sound contact connection with fuse link or cartridge fuse tags.





Parts List

Name / Description	Product Code
White Alcomet Fuse Carrier	ALCO20 - White
Black Alcomet Fuse Carrer	ALCO20 - Black
Green Alcomet Fuse Carrier	ALCO20 - Green
Cartridge Fuse 6 amp	ALCO06F
Cartridge Fuse 10 amp	ALCO10F
Cartridge Fuse 16 amp	ALCO16F
A1 Fuse Link	ALCO20F
Fuse Shroud	ALCO20FS



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