

ASTA CERTIFICATION SERVICES

(A Company Limited by Guarantee, Registered at London, Number 347056)

Registered office: Prudential Chambers, 23/24 Market Place, Rugby CV21 3DU England
Telephone: 0788-78435 Telex: 311794 CHACOM G Fax: 0788-80001x 73605

Director: ~~F. R. P. R. G. B. E. X. E. M. G. M. K. B. E.~~ M. J. Swan Dip. E. E., C. Eng.,
F. I. E. E. F. I. Q. A.

GEC Installation Equipment Ltd.,
East Lancashire Road,
Liverpool. L10 5HD

Attention Of: Mr T. Wells

File Ref. AST/68/3/75

Authorisation Ref. A3055 A

Date 9th January 1989

Dear Sirs,

AUTHORISATION TO USE THE ASTA CERT ENDORSEMENT

Authority is hereby given for the fuse-link types and ratings identified below to be endorsed ASTA [®] CERT or ASTA [®] CERTIFIED.

Details of Reference Fuse-Links

British Standard No. 38: Part 2, sections 2.1 and 2.2: 1988 (IEC 269-2: 1986 and IEC 269-2-1, section II: 1987)	
Manufacturers Type Designation & BS Ref / Size / Types	TIS BS Ref A3
Voltage Rating	660 Vac
Breaking Capacity	80 kA
Current Ratings	63M80 & 63M100
ASTA Certificate No(s).	9894 & S10845

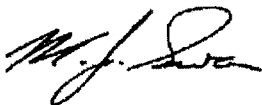
Approved Variants

Details of any approved variants are shown on attachments to this letter.

This letter of authorisation is not valid until a signed acknowledgement of receipt has been received by ASTA. The signing of this letter by a manufacturer means *ipso facto* that the manufacturer agrees to recognise and to observe the requirements of the current issue of ASTA Publication No. 20.

Yours Faithfully,
for ASTA

Note: This authorisation extends that of the same reference issued 21st November 1984.

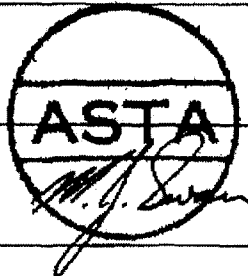


Acknowledgement of receipt is hereby given

T. Wells Signed
for *GEC Installation Equipment Ltd.* Company
17 January 1989 Date

AUTHORISATION TO USE ASTA CERT ENDORSEMENT
Details of Approved Variants.

File Ref.	Fuse Type Designation	Variation Details	Approved	
AST/68/3/75/1	TIS63M80 and TIS63M100	Alternatives end tag arrangement (closed fixing holes)	9.9.87	
AST/68/3/75/2	TC80 and TC100	Alternative end tag arrangement and outer end cap fixing.BS ref. B1	5.2.91	B
AST/68/3/75/3	TCP80 and TCP100	Alternative end tag arrangement BS reference A4	5.2.91	B
AST/68/3/75/4	TC80 and TC100	Alternative form of tag foot and blade BS reference B1	22.9.94	C
AST/68/3/75/5	TCP80 and TCP100	Alternative end tag arrangement (open end fixing slots)BS Ref.A4	22.9.94	C



ASTA

The Association of Short-Circuit Testing Authorities

(Incorporated in the year 1938)

23/24 Market Place, Rugby CV21 3DU, England.

Laboratory Ref. No. 28WC

CERTIFICATE OF Short Circuit Rating

APPARATUS: Motor circuit non indicating tag type fuse links (B.S.Ref.A3)

DESIGNATION: Types TIS63M100 and TIS63M80 *

MANUFACTURER: GEC Installation Equipment Limited, Liverpool

TESTED BY: SWITCHGEAR TESTING COMPANY LIMITED

DATE(S) OF TESTS: 10-6-83, 28-6-83, 29-6-83, 30-6-83

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this Certificate has been subjected to the series of proving tests in accordance with B.S. 88 : Parts 1 and 2 : 1975. The tests also comply with the requirements of IEC Publications 269-1 : 1968 and 269-2A : 1975, and Australian Standard 2005 : Parts 1 and 2 : 1977.

The results are shown in the Record of Proving Tests and the oscillograms attached hereto. The values obtained and the general performance are considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated below

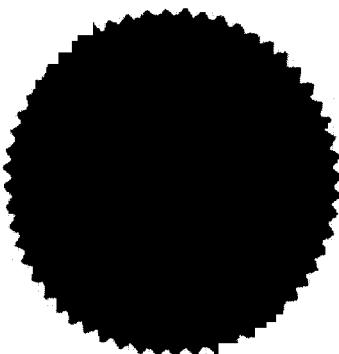
Symmetrical breaking current of 80kA rms for a voltage rating of 660 volts a.c.

* The above fuse links represent the maximum and minimum ratings of a homogeneous series. No intermediate ratings of fuse links were submitted.

The responsibility for conformity of any apparatus having the same designation with that tested lies with the manufacturer.

This Certificate comprises 8 pages, 1 diagrams, 26 oscillograms, 7 photographs, 1 drawings and - other sheets as detailed on page -

Only integral reproduction of this Certificate, or reproductions of this page accompanied by any page(s) on which are stated the assigned rated characteristics of the apparatus tested, are permitted without written permission from ASTA, 23/24 Market Place, Rugby CV21 3DU England. (see ASTA Publication No. 7).



Red Ree
..... ASTA Observer
P. D. ...
..... Secretary
28th September 1984
..... Date

ASTA CERTIFICATION SERVICES

(Incorporated in the year 1938)

23/24 Market Place, Rugby, CV21 3DU, England

Laboratory Ref. No. 28MH

SUPPLEMENT TO CERTIFICATE OF SHORT-CIRCUIT RATING

No. 9894 ISSUED 28th September 1984 (28WC)

APPARATUS: Motor circuit non-indicating tag type fuse-links B.S. ref. A3 of 63M100A and 63M80A normal current rating. No intermediate ratings of fuse-links were submitted

DESIGNATION: TIS

MANUFACTURER: GEC Installation Equipment Limited, Liverpool

CERTIFICATION STANDARD: B.S. 88 : Parts 1 and 2 : 1975, IEC 269-1 : 1968,
IEC 269-2A : 1975

CERTIFIED RATINGS: 80kA at 660V, 50Hz

This supplement to the above mentioned certificate is issued to extend its applicability to cover compliance with clause B.5 of B.S. 88 : Parts 1 and 2, Sections 2.1 and 2.2 : 1988 (IEC 269-1, IEC 269-2 : 1986 and IEC 269-2-1, Section II : 1987) for the same short-circuit rating.

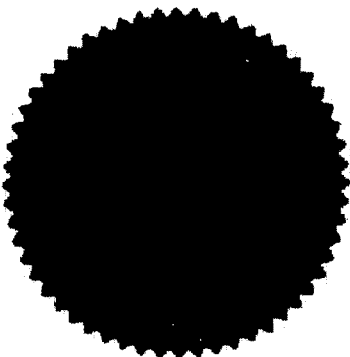
Breaking Range and Utilization Category - gM

No additional tests were made

The record of Proving Tests applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designations with that tested rests with the Manufacturer.

This Certificate comprises this page

Only integral reproduction of this Certificate, or reproductions of this page accompanied by any page(s) on which are stated the assigned rated characteristics of the apparatus tested, are permitted without written permission from ASTA, 23/24 Market Place, Rugby CV21 3DU England. (see ASTA Publication No.7).



By [Signature] ASTA Observer/Inspector
[Signature] DIRECTOR
 Secretary
10th November 1988 Date