

ASTA CERTIFICATION SERVICES

(Incorporated in the year 1938)

ASTA House, Chestnut Field, Rugby, CV21 2TL, England

Laboratory Ref. No. 6909

CERTIFICATE OF SHORT CIRCUIT RATING

APPARATUS: Three Phase and Neutral Horizontal and Vertical Busbars, Incomer ACB Circuit and Twelve Outgoing Motor-starter Circuits in an Enclosed Four Panel Switchgear and Controlgear Assembly Suitable for Type TT and TN Systems.
Ratings:- Rated Voltages 415/750V (Ue/Ui): Rated Frequency 50Hz.

DESIGNATION: Modular Panel System (MPS).

MANUFACTURER: **Max Wright Ltd**, Woodlands Works, Thundridge, Ware, Herts, SG12 0SP.

TESTED BY: **Falcon Testing Laboratory Limited**, Loughborough, Leics., LE11 1HR.

DATE(S) OF TESTS: 8th December 1999 to 10th December 1999.

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

BS EN 60439-1:1999 and IEC 60439-1:1999 Clause number 8.2.3.

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.

For ratings assigned by the Manufacturer and proved by test see Page Number 1.

The Record of Proving Tests apply 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 24 pages, 1 diagram, 28 oscillograms, 24 photographs, 27 drawings and no other sheets as detailed on page 2

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, ASTA House, Chestnut Field, Rugby, CV21 2TL England. (see overleaf)



Registration Number
006

The use of the Accreditation Mark indicates accreditation in respect of those activities covered by the accreditation certificate number 006

D. G. Mee ASTA Observer
D G Mee

M. J. Sutton Director

5th July 2000 Date



ASTA

PUBLICATION NO. 7

This Publication gives a brief description of the Certificates and Reports issued by ASTA and provides guidance on the forms of advertised claims which may be made subsequent to certification. More information is given in ASTA Publications 5 and 28.

ASTA CERTIFICATES

Certificates are issued when samples of a particular product design have been tested satisfactorily against the requirements of a National or International Standard. Several forms of Certificate are available as follows:

Certificate of Complete Compliance - verifies compliance with all the requirements of a Standard e.g. dimensional, safety, performance, etc.

Certificate of Type Tests - is issued when a complete series of type tests prescribed in a Standard has been made successfully.

Certificate of Short-Circuit Rating - verifies the short-circuit performance of the design. the Certificate may include the results of other type tests, e.g. mechanical endurance tests.

Certificate of Making and Breaking Capacity - verifies the overload switching capability of equipment to which a short-circuit rating is not usually assigned, e.g. contactors. This Certificate may also include the results of other type tests.

Certificate of Supplementary Tests - extends the scope of an existing Certificate to cover changes in rating or in design which require additional proving tests to be made.

Certificate of Conformity - attesting that a sample of a product has been tested to conformity with a specified Standard.

TEST REPORT

An ASTA Test Report is issued when tests otherwise satisfactory cannot be included in a Certificate for one or more reasons, e.g. verification of non-standard ratings. Complete details are given in ASTA Publication No. 5.

PUBLICATION

A Holder may, without prior approval from ASTA, reproduce the entire contents of Certificates and Test Reports, or Certificate Front Sheets accompanied by any associated pages on which are stated the assigned rated characteristics provided no part is obscured and all essential details are legible. Permission for any other kind of reproduction of Certificates and Test Reports must be obtained from ASTA.

PRODUCT ENDORSEMENT



The use of the Diamond Mark is authorised by a licensing agreement between ASTA and the Manufacturer or responsible vendor. The granting of an ASTA Certificate does not give authority for the Diamond Mark to be used as registration of quality management systems and routine assessments of production samples apply. More detailed information is given in ASTA Publication No. 28.

Equipment may be endorsed with the words **ASTA CERT** or **ASTA CERTIFIED** only when a formal scheme has been established and a letter of authorisation issued by ASTA to the manufacturer and receipt of the same acknowledged by that manufacturer. Endorsed products shall show at least the ratings verified by ASTA and the Standard against which Certification has been made. **The ASTA CERT endorsement must not be used on equipment intended for household use.**

ADVERTISED CLAIMS

The holder of an ASTA Certificate may claim in Trade Journals, Catalogues, Technical Articles etc., and without the prior approval of ASTA that the product identified in a Certificate is **ASTA Certified**. To minimise the possibility of any mis-understanding such claims must clearly identify the product(s) certified, the ratings verified by ASTA and the Standard against which Certification has been made.

Ratings Assigned by the Manufacturer and Proved by Test.**1 Rated conditional short circuit current – sub-clause 8.2.3.2.3 a).**

Three phase : 50kArms at 415V, 0.25pf, 105kA peak.

1.1 Outgoing circuits

Motor-starter circuits : 4kW, 5.5kW, 9kW, 11kW, 15kW, 22kW, 25kW, 30kW,
: 45kW, 55kW, 80kW, 100kW.

2. Rated short time and peak withstand current – sub-clause 8.2.3.2.3 b & d).

Three phase : 50kArms for 1 second, 105kA peak.

Adjacent phase to neutral : 30kArms for 1 second, 63kA peak.

2.1 Horizontal busbars

Three phase and neutral : 40mm x 10mm hdhc copper bar per phase.

2.2 Vertical busbars Cubicle MCC1

Three phase and neutral : 50mm x 6.3mm hdhc copper bar per phase.

2.3 Vertical busbars Cubicle MCC3

Three Phase and neutral : 100mm x 6.3mm hdhc copper bar per phase.

2.4 Horizontal busbars

Three phase and neutral : 100mm x 10mm hdhc copper bar per phase.

2.5 Vertical busbars Cubicle MCC2

Three phase and neutral : 80mm x 6.3mm hdhc copper bar per phase.

2.6 Vertical busbars Cubicle ACB and ACB connections

Three Phase and neutral : 100mm x 10mm hdhc copper bar per phase.

Three phase : 50kArms for 3 seconds, 105kA peak.

Adjacent phase to neutral : 30kArms for 3 seconds, 63kA peak.

2.7 Horizontal busbars

Three phase and neutral : 100mm x 10mm hdhc copper bar per phase.

2.8 Vertical busbars Cubicle MCC3

Three phase and neutral : 100mm x 6.3mm hdhc copper bar per phase.

2.9 Vertical busbars Cubicle ACB and ACB connections

Three Phase and neutral : 100mm x 10mm hdhc copper bar per phase.

Three phase : 80kArms for 1 second, 176kA peak.

Adjacent phase to neutral : 48kArms for 1 second, 100.8kA peak.

2.10 Horizontal busbars With additional supports

Three phase and neutral : 100mm x 10mm hdhc copper bar per phase.

2.11 Vertical busbars Cubicle MCC3 With additional supports

Three phase and neutral : 100mm x 6.3mm hdhc copper bar per phase.



ASTA Observer

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