

ASTA

CERTIFICATE OF TYPE TESTS

Certificate No. 17651

Laboratory Ref. No: 2009/STN-1/468

APPARATUS: 3200A/415V/1000V/8000V (Ie/Ue/Ui/Uimp), 50 Hz, Extendable Low Voltage Switchgear and Controlgear Assembly comprising, three phase & Neutral, Horizontal & Vertical busbars, one incoming ACB and a protective circuit.

DESIGNATION : KIK Modular Panel

MANUFACTURER: K.I.K. Lanka (Pvt.) Ltd.,
Spur Road 2, Phase 1,
Export Processing Zone,
Katunayake, Sri Lanka

TESTED BY: Central Power Research Institute, Switchgear Testing & Development Station,
Govindpura, Bhopal- 462 023, Madhya Pradesh, India.

DATE OF TESTS: 11th September to 19th September, 2009

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

IEC 60439-1, Edition 4.1:2004-04 & BS EN 60439-1:1999 with Amendment 1:2004 & Corrigendum 1&2: 2005, Clause 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6, 8.2.7 & 8.2.9

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 the tests see page 1

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 15 pages, 3 diagrams, 37 oscillograms, 7 photographs, 11 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 Intertek Testing & Certification Ltd., Hilton House, Corporation Street, Rugby. CV21 2DN, England.



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M.K. Wadhvani

M.K. Wadhvani
ASTA Observer

P. J. J. J.

Certification
Manager

24TH FEBRUARY 2010

Date

Ratings Assigned by the Manufacturer and Proved by Tests

1. Temperature rise limits (Clause 8.2.1) :

Rated current of the assembly : 3200A
(Main Horizontal Busbar size: 2 x 150 mm x 10 mm per phase, copper)
(Vertical Outgoing Busbar size : 2 x 150mm x 10mm per phase, copper)
3200A, 4P incoming ACB, Make – ABB SACE and connections : 3200A

2. Dielectric Properties (Clause 8.2.2) :

Rated impulse withstand voltage (Uimp) : 8kV

3. Short-circuit withstand strength (Clause 8.2.3)

Rated peak and short time withstand current (sub-Clause 8.2.3.2.3 b & d)

(Main horizontal busbar size: 2 x 150mmx 10mm per phase & neutral, copper)

Three phase : 75 kA for 1 second, 165 kA peak
Neutral and adjacent phase : 45 kA for 1 second, 94.5kA peak

Rated conditional short circuit current (sub-Clause 8.2.3.2.3 a)

3200A incoming ACB

Three phase : 75 kA at 415V, pf = 0.2
Neutral and adjacent phase : 45 kA at 240V, pf = 0.25

4. Effectiveness of the protective circuit (Clause 8.2.4)

Effective connection between the exposed conductive parts and the protective circuit (Clause 8.2.4.1) : **Verified.**

Rated conditional short-circuit current (Clause 8.2.4.2): **45 kArms for 1.0 sec., 94.5kA peak**
(Earth busbar size : 2 x 60mm x 10mm)

5. Clearance and creepage distances (Clause 8.2.5):

Material group III a, pollution degree 3 :

Verified

6. Mechanical operation (Clause 8.2.6) :

Incoming unit

Verified

7. Degree of protection (Clause 8.2.7) :

External Enclosure : IP 4X

Verified

**8. Resistance of the insulating materials to abnormal:
heat & fire (glow wire test) (Clause 8.2.9)**

Verified