

Type Test Certificate of Verification of temperature-rise limits  
 Verification of the dielectric properties  
 Verification of the short-circuit withstand strength  
 Verification of the effectiveness of the protective circuit  
 Verification of the clearances and creepage distances  
 Verification of degree of protection

Apparatus Low-voltage switchgear and controlgear assembly, three-phase with neutral bar, multi-cubicle-type: MTLV 400

Designation

Rated voltage 415 V ; Rated normal current 1.450 A ; Rated frequency 50 Hz

Manufacturer MANTRA SWITCHGEAR CO. LTD. – SAMUTPRAKAN (THAILAND)

Tested for MANTRA SWITCHGEAR CO. LTD. – SAMUTPRAKAN (THAILAND)

Date(s) of tests From September 12, 2005 to September 15, 2005

Tested by CESI S.p.A. – Milano – ITALY

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in the reference documents, identified in this certificate, has been subjected to the series of proving tests in accordance with

**IEC 60439-1 (2004 - 04)**

Sub-clauses 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5 and 8.2.7

The results are shown in the record of Proving Tests and the oscillograms attached in the Test Reports. The values obtained and the general performance are considered to comply with the above Standards and to justify the ratings assigned by the Manufacturer as listed on page No.2 .

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

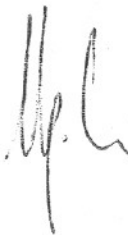
Only integral reproduction of this Certificate, or reproductions of this page accompanied by any pages on which are stated the endorsed ratings of the apparatus tested, are permitted without written permission from CESI.

No. of pages 4

Issue date October 25, 2005

Prepared PeC - U. Leva

Approved PeC - M. de Nigris



**CESI**  
 CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO  
 Business Unit  
 Prove e Componenti  
 Il Responsabile del Laboratorio

