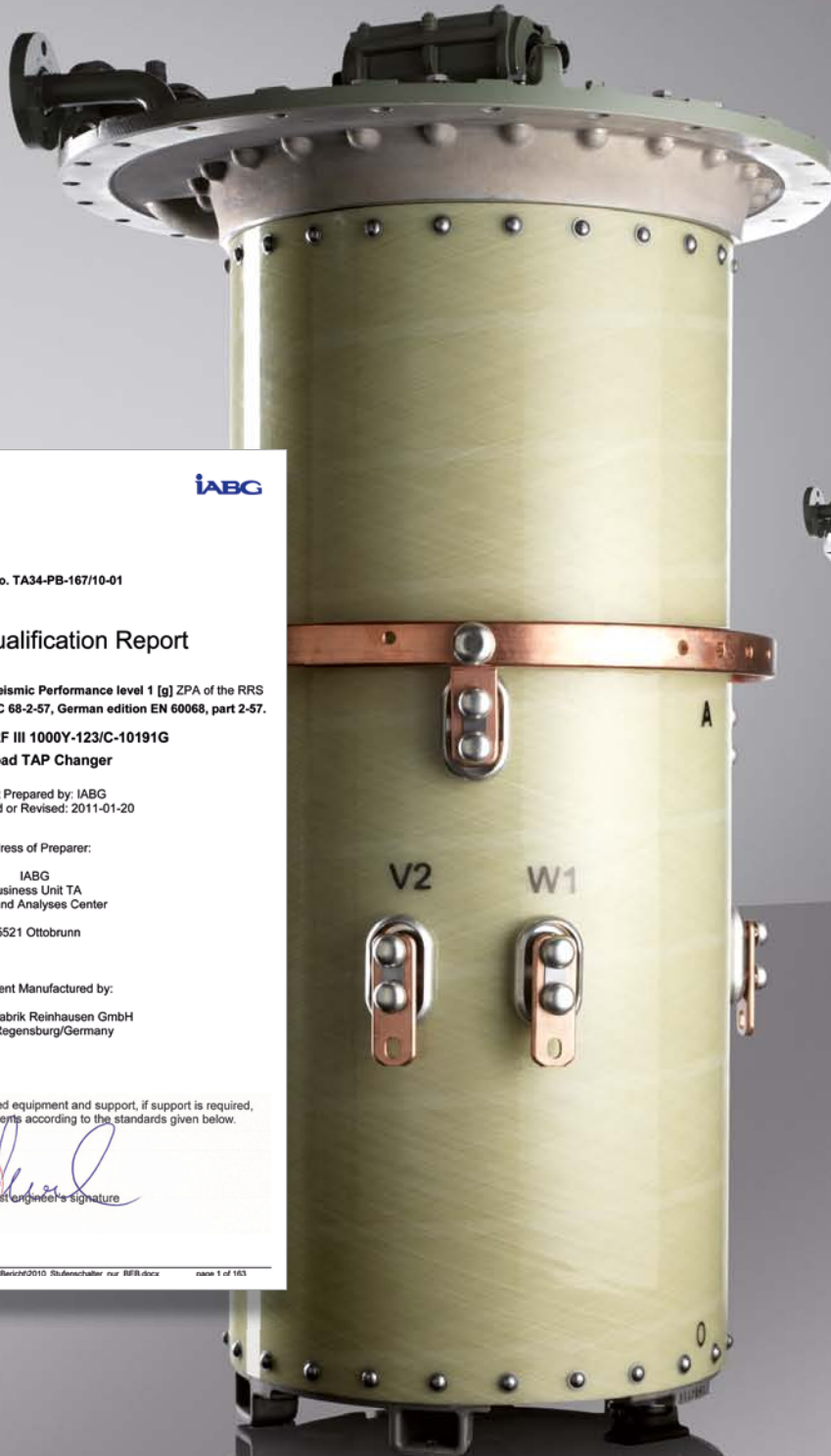


VACUTAP® VR® –

地震対応型の真空式負荷時タップ切換器



iABG

Report No. TA34-PB-167/10-01

Seismic Qualification Report

Qualified to IEEE 693-2005 High Seismic Performance level 1 [g] ZPA of the RRS and generic spectra according to IEC 68-2-57, German edition EN 60068, part 2-57.

VACUTAP VRF III 1000Y-123/C-10191G
ON-Load TAP Changer

Report Prepared by: IABG
Date Signed or Revised: 2011-01-20

Address of Preparer:

IABG
Business Unit TA
Test- and Analyses Center
85521 Ottofurt

Equipment Manufactured by:

Maschinenfabrik Reinhausen GmbH
93059 Regensburg/Germany

This is to certify that the above-named equipment and support, if support is required, meets or exceeds all of the requirements according to the standards given below.

Signed:

A blue ink signature over a red circular seal. The seal contains the text 'IABG' and 'IABG test engineers signature'.

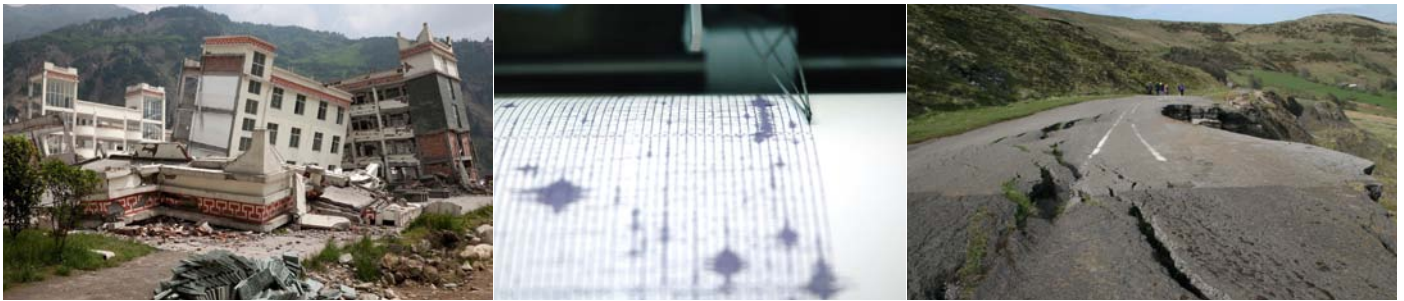


VACUTAP® VR® – 最高の安全性を最高の品質と共にお届けします

80年来、弊社はお客様に最高の品質と精度をお約束しております。苛酷な状況下でのご使用であってもこれは変わりません。弊社のVACUTAP®VR®は大きな地震にも耐えられる製品です。この耐震性能はドイツにあるIABG社の試験・分析センターでの厳しい試験により証明されております。



ミュンヘン市近郊のオットーブルン(Ottobrunn)にあるIABG社試験設備内のVACUTAP® VR®。



真空式負荷時タップ切換器のVACUTAP® VR®は複雑な試験プログラムにより実施された様々な地震試験を問題なくクリアしました。試験は下記の規格に基づいて実施されました。

IEC 68-3-3, German edition EN 60068, part 3-3, environmental testing; seismic test methods for equipments; guidance

IEC 68-2-6, German edition EN 60068, part 2-6, environmental testing; test Fc and guidance: vibration sinusoidal

IEC 68-2-59, German edition EN 60068, part 2-59, environmental testing; test Fe and guidance: vibration sine-beat method

IEC 68-2-57, German edition EN 60068, part 2-57, environmental testing; test Ff and guidance: vibration time-history method

IEEE 344, Recommended practice for seismic qualification of class 1E equipment

IEEE 693, Recommended practice for seismic design of substations

IEC 60980, Recommended practices for seismic qualification of electrical equipment of the safety system for nuclear generating stations

UBC, Uniform Building Code, chapter 16, division IV

IBC, International Building Code

Eurocode 8, Auslegung von Bauwerken gegen Erdbeben

RCC-E Section B, Seismic qualification and approval

Transelec, ETG-A.0.20; Consideraciones Antisismicas

IEC 1166, Guide for seismic qualification of high-voltage alternating circuit-breakers

KTA 2201.4, Auslegung von Kernkraftwerken gegen seismische Einwirkungen

JIS S 1018, Japanese Industrial Standard, test methods of vibration and earthquake

MR WORLDWIDE**AUSTRALIA**

REINHAUSEN AUSTRALIA PTY. LTD.
17/20-22 St Albans Road, Kingsgrove, NSW, 2208
Phone: +61 2 9502 2202
Fax: +61 2 9502 2224
Email: sales@au.reinhausen.com

BRAZIL

MR DO BRASIL INDÚSTRIA MECÂNICA LTDA.
Av. Elias Yazbek, 465, CEP: 06803-000
Embu - São Paulo
Phone: +55 11 4785 2150
Fax: +55 11 4785 2185
Email: vendas@reinhausen.com.br

CANADA

REINHAUSEN CANADA INC.
3755, rue Java, Suite 180
Brossard, Quebec J4Y 0E4
Phone: +1 514 370 5377
Fax: +1 450 659 3092
Email: m.foata@ca.reinhausen.com

INDIA

EASUN-MR TAP CHANGERS (P) LTD.
612, CTH Road, Tiruninravur, Chennai 602 024
Phone: +91 44 26300883
Fax: +91 44 26390881
Email: easunmr@vsnl.com

INDONESIA

PT. REINHAUSEN INDONESIA
German Center, Suite 6310, Jl. Kapt. Subijanto Dj.
BSD City, Tangerang 15321
Phone: +62 21 2565 0045
Fax: +62 21 2565 0046
Email: c.haering@id.reinhausen.com

IRAN

IRAN TRANSFO AFTER SALES SERVICES CO.
Zanjan, Industrial Township No. 1 (Aliabad)
Corner of Morad Str., Postal Code 4533144551
Email: itass@iran-transfo.com

ITALY

REINHAUSEN ITALIA S.R.L.
Via Alserio, 16, 20159 Milano
Phone: +39 02 694 3471
Fax: +39 02 694 347 66
Email: sales@it.reinhausen.com

JAPAN

MR JAPAN CORPORATION
German Industry Park, 1-18-2 Hakusan
Midori-ku, Yokohama 226-0006
Phone: +81 45 929 5728
Fax: +81 45 929 5741

LUXEMBOURG

REINHAUSEN LUXEMBOURG S.A.
72, Rue de Prés, L-7333 Steinsel
Phone: +352 27 33 471
Fax: +352 27 33 4799
Email: sales@lu.reinhausen.com

MALAYSIA

REINHAUSEN ASIA-PACIFIC SDN. BHD.
Level 11 Chulan Tower, No. 3 Jalan Conlay
50450 Kuala Lumpur
Phone: +60 3 2142 6481
Fax: +60 3 2142 6422
Email: mr_rap@my.reinhausen.com

P.R.C. (CHINA)

MR CHINA LTD. (MRT)
开德贸易(上海)有限公司
中国上海 浦东新区 浦东南路360号
新上海国际大厦4楼E座, PC: 200120
电话: +86 21 6163 4588
传真: +86 21 6163 4582
邮箱: mr-sales@cn.reinhausen.com
mr-service@reinhausen.com
公司主页: www.mr-china.cn

RUSSIAN FEDERATION

000 MR
Naberezhnaya Akademika Tupoleva 15, Bld. 2
("Tupolev Plaza"), 105005 Moscow
Phone/Fax: +7 495 980 89 67
Email: mrr@reinhausen.ru

SOUTH AFRICA

REINHAUSEN SOUTH AFRICA (PTY.) LTD.
No. 15, Third Street, Booysens Reserve, Johannesburg
Phone: +27 11 835 2077
Fax: +27 11 835 3806
Email: support@za.reinhausen.com

SOUTH KOREA

REINHAUSEN KOREA LTD.
21st floor, Standard Chartered Bank Building,
47, Chongro, Chongro-gu, Seoul Korea 110-702
Phone: +82 2 767 4909
Fax: +82 2 736 0049
Email: you-mi.jang@kr.reinhausen.com

USA

REINHAUSEN MANUFACTURING INC.
2549 North 9th Avenue, Humboldt, TN 38343
Phone: +1 731 784 7681
Fax: +1 731 784 7682
Email: sales@reinhausen.com

UNITED ARAB EMIRATES

REINHAUSEN MIDDLE EAST FZE
Dubai Airport Freezone, Building Phase 6
3rd floor, Office No. 6EB, 341 Dubai
Phone: +971 4 2368 451
Fax: +971 4 2368 225
Email: service@ae.reinhausen.com

Please note: The data in our publications may differ from the data of the devices delivered. We reserve the right to make changes without notice.
IN2856788/00 JA - VACUTAP® VR® - F0295800 - 03/12 - uw - ©Maschinenfabrik Reinhausen GmbH 2012

