

UDC

GB

National Standard of the People's Republic of China

中华人民共和国国家标准

P

GB/T 50062—2008

**Code for Design of Relaying Protection and
Automatic Device of Electric Power Installations**
电力装置的继电保护和自动装置设计规范

Issued on December 15, 2008

Implemented on June 1, 2009

Jointly issued by the Ministry of Housing and Urban-Rural Construction (MOHURC) and General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)

National Standard of the People's Republic of China

中华人民共和国国家标准

Code for Design of Relaying Protection and Automatic Device
of Electric Power Installations

电力装置的继电保护和自动装置设计规范

GB/T 50062—2008

Chief development department: China Electricity Council

Approval department: Ministry of Housing and Urban-Rural Construction of the People's
Republic of China

Implemented date: June 1, 2009

China Planning Publishing House

中国计划出版社

Beijing 2009

**Announcement of Ministry of Housing and Urban-Rural Construction of the
People's Republic of China**

No.196

**Notice on publishing the national standard of "Code for Design of
Relaying Protection and Automatic Device of Electric Power
Installations"**

"Code for Construction and Acceptance of Water and Sewerage Pipeline Works" has been approved as a national standard with a serial number of GB 50062-2008, and will be implemented on May 1, 2009. While the original "Code for Design of Relaying Protection and Automatic Device of Electric Power Installations" GB 50062-92 shall be abolished simultaneously.

Authorized by the Standard Rating Institute of the Ministry of Housing and Urban-Rural Construction, this Code is published and distributed by the China Planning Publishing House.

Ministry of Housing and Urban-Rural Construction of the People's Republic of China
December 15, 2008

Foreword

According to the requirements of Document Jian Biao [2004] No.67 issued by the Ministry of Construction-"Notice on Printing the Development and Revision Plan of National Engineering Construction Standard in 2004", this Code is formulated by Northeast Electric Power Design Institute of CPECC based on the revision of the original national standard "Code for Design of Relaying Protection and Automatic Device of Electric Power Installations".

This code is consisted of 15 chapters and 2 annexes, with primary coverage of: General provisions, general rules, generator protection, power transformer protection, 3~66kV power circuit protection, 110kV power circuit protection, bus-bar protection, power condenser or reactor protection, 3kV or above electric motor protection, auto-reclose circuit breaker, automatic throw-in equipment of standby power or standby equipment, automatic low-frequency low-voltage load shedding device, synchronous parallel, self-regulating excitation and automatic field suppressing, secondary loop and relevant equipments.

The primary revisory coverage includes:

1. Extend the application scope of this code: Change single-machine capacity of 25MW or below into 50MW or below;
2. Add resistance grounded transformer and grounding transformer protection;
3. Add parallel reactor protection;
4. Automatic low-frequency load-shedding equipment is changed into automatic low-frequency low-voltage load shedding devices;
5. Synchronous parallel and parallel off are changed into synchronous parallel, and parallel off content is cancelled;
6. Add self-regulating excitation and automatic field suppressing content;
7. Add relevant secondary loop equipment content

This code is under the administration of the Ministry of Housing and Urban-Rural Construction, and the Northeast Electric Power Design Institute of CPECC is in charge of the explanation of the specific technical contents. All relevant organizations are kindly requested to combine the engineering practice and to sum up experience earnestly during the implementation process of this code, the relevant opinions and suggestions on the modification or complementation parts, if any, may be posted or passed into Northeast Electric Power Design Institute of CPECC (address: No.4368, Renmin Street, Changchun City, Jilin Province, 130021, China) for further reference.

Chief development organization and major drafting staffs of this code:

Chief development organization: Northeast Electric Power Design Institute of CPECC

Major drafting staffs: LI Yanshan, WANG Ying, ZHANG Fusheng, LIU Gang, AN Liquan, FU Guang and WEI Xian'an

Contents

1. General provisions	1
2. General rules	2
3. Generator protection	3
4. Power transformer protection.....	7
5. 3~66kV power line protection.....	11
6. 110kV Protection of power circuit	14
7. Bus bar protection	15
8. Power condenser and reactor protection	16
8.1 Power condenser protection	16
8.2 Parallel reactor protection	17
9. 3kV or above electric motor protection.....	19
10. Auto-reclose circuit breaker.....	21
11. Automatic throw-in equipments of standby power and standby equipments	23
12. Automatic low-frequency load-shedding devices	24
13. Synchronous paralleling.....	25
14. Automatic Regulating Excitation and Automatic De-excitation	26
14.1 Automatic regulating excitation	26
14.2 Automatic de-excitation	27
15. Secondary loop and relative equipment	28
15.1 Secondary loop.....	28
15.2 Current transformer and potential transformer.....	29
15.3 DC power supply	30
15.4 Anti-jamming measures	30
Annex A Allowable Subtransient Current Times for Synchro Motor, Transformer in Self-synchronizing and Asynchronous Switching-on	32
Annex B Minimum Sensitivity Factor of Relay Protection	33

1. General provisions

1.0.1 This code is formulated with a view to implementing the related national technical-economic policies, to accomplishing state-of-the-art technology and economic feasibility in the design of relaying protection and automatic device of electric power installation.

1.0.2 This code is applicable to design of relaying protection and automatic device of electric power installations like 3~110kV power circuit or equipment, power generator with single-machine capacity of MW or below, 63MW·A or below power transformer.

1.0.3 For the design of relaying protection and automatic device of electric power installation, not only the requirements stipulated in this code but also those in the current relevant ones shall be complied with.

完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email: info@lancarver.com

<http://www.lancarver.com>

线下付款方式：

1. 对公账户：

单位名称：北京文心雕语翻译有限公司

开户行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

2. 支付宝账户：info@lancarver.com

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！



银联特约商户