

A Practical Course for Engineers Working on Board Ships



《轮机英语》

Marine Engineering English



南通航运职业技术学院 轮机工程系

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Module 3

Marine Electrical and Automation

船舶电气和
自动化



Lesson 29

Alternating Current Generator 交流发电机





Module 3 Marine Electrical | New words and expressions

- | | |
|---------------------|------------|
| 1. coil | 盘管, 线圈 |
| 2. magnetic field | 磁场 |
| 3. current | 电流, 水流, 气流 |
| 4. Slip-ring | 滑环 |
| 5. insulate | 隔绝, 隔离 |
| 6. carbon brush | 碳刷 |
| 7. external circuit | 外部电路 |
| 8. alternating | 交互变化的 |
| 9. additional | 额外的, 附加的 |



Module 3 Marine Electrical | New words and expressions

- | | |
|-------------------------|-----------|
| 1. pole | 磁极 |
| 2. electromagnet | 电磁铁 |
| 3. adjacent | 临近的 |
| 4. opposite polarity | 相反的极性 |
| 5. field coils | 磁场线圈，励磁线圈 |
| 6. in series | 串联 |
| 7. conductor | 导体 |
| 8. phase | 相 |
| 9. three phase system | 三相系统 |
| 10. single phase supply | 单相供应 |
| 11. star formation | 星型格式 |



Module 3 Marine Electrical | New words and expressions

- | | |
|-----------------------------|--------|
| 1. alternator | 交流发电机 |
| 2. neutral line | 中性线 |
| 3. delta arrangement | 三角形装置 |
| 4. armature | 电枢 |
| 5. reverse | 逆反的 |
| 6. direct current generator | 直流发电机 |
| 7. exciter | 励磁机 |
| 8. brushless | 无刷的 |
| 9. counter | 抵抗, 中和 |
| 10. power factor | 功率因数 |
| 11. phase difference | 相位差 |



Module 3 Marine Electrical | New words and expressions

1. voltage 电压
2. cosine 余弦
3. phase angle 相位角
4. purely resistance 纯电阻
5. in phase 同相
6. Inductive 电感性
7. capacitive 电容性
8. lagging 滞后的
9. leading power factor 超前的功率因数
10. alternating current 交流电
11. voltage drop 电压降



Module 3 Marine Electrical | New words and expressions

- | | |
|--------------------------------------|----------|
| 1. exciter | 励磁器 |
| 2. prime mover | 原动机 |
| 3. automatic voltage regulator (AVR) | 自动电压调节器 |
| 4. amplifier | 放大器 |
| 5. hunting | 波动 |
| 6. overcorrecting. | 过调, 调节过度 |
| 7. squirrel cage motor | 鼠笼式电机 |
| 8. transformer | 变压器 |
| 9. rectifier | 整流器 |



Module 3 Marine Electrical | New words and expressions

- | | |
|---------------------|-------|
| 1. series and shunt | 串励和并励 |
| 2. compounded | 复励 |
| 3. compensation | 补偿 |
| 4. commutator | 换向器 |
| 5. hollow shaft | 中空的轴 |



Lesson 29

Alternating Current Generator 交流发电机





Module 3 Marine Electrical | New words and expressions

1. coil 盘管, 线圈

2. magnetic field 磁场

field coil
coil spring

electromagnet
exciter





Module 3 Marine Electrical | New words and expressions

1. current 电流, 水流, 气流
 2. external circuit 外部电路
 3. alternating 交互变化的
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A.C.

D.C.

Circuit breaker

alter



Module 3 Marine Electrical | New words and expressions

1. Slip-ring 滑环
2. insulate 隔绝, 隔离
3. carbon brush 碳刷

slipper
cross head

insulator
isolate

brushless





Module 3 Marine Electrical | New words and expressions

1. pole 磁极
 2. adjacent 临近的
 3. opposite polarity 相反的极性
-

adjust
adjustment



1. conductor 导体
 2. phase 相
 3. three phase system 三相系统
-

semi-

liquid phase



1. star formation 星型格式
 2. neutral line 中性线
 3. delta arrangement 三角形装置
-

from
form

neutralize

arrange



Module 3 Marine Electrical | New words and expressions

1. armature 电枢

2. direct current generator 直流发电机

3. exciter 励磁机

winding

alternator
F.W.G.

exciter



Module 3 Marine Electrical | New words and expressions

1. power factor 功率因数
 2. phase difference 相位差
 3. voltage 电压
 4. cosine 余弦
 5. phase angle 相位角
-

p.f.



Module 3 Marine Electrical | New words and expressions

1. purely resistance 纯电阻
 2. in phase 同相
 3. Inductive 电感性
 4. capacitive 电容性
-

leading
lagging



Module 3 Marine Electrical | New words and expressions

1. lagging 滞后的

2. leading power factor

超前的功率因数



Module 3 Marine Electrical | New words and expressions

1. exciter 励磁器
2. prime mover 原动机
3. automatic voltage regulator (AVR)
自动电压调节器

D.C. exciter

governor

field coil current



Module 3 Marine Electrical | New words and expressions

1. amplifier 放大器

2. hunting 波动

3. overcorrecting.

过调，调节过度

overheating

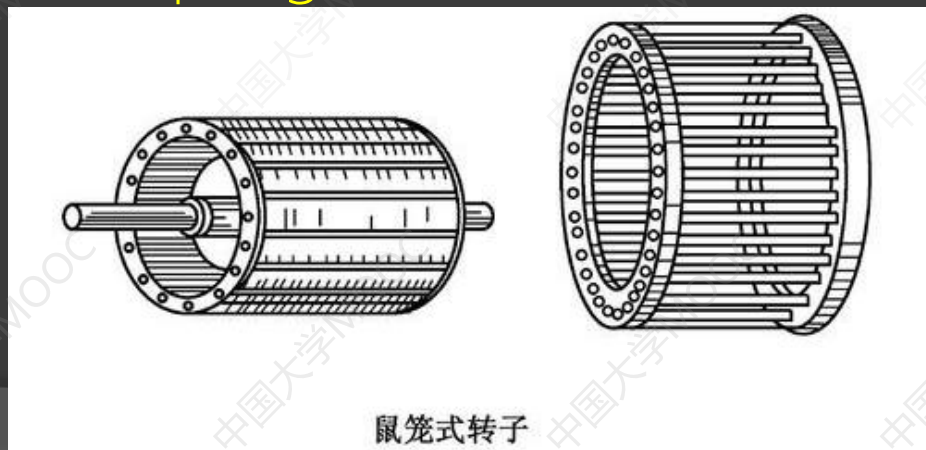


Module 3 Marine Electrical | New words and expressions

1. squirrel cage motor 鼠笼式电机
2. transformer 变压器
3. rectifier 整流器

field coil
coil spring

check valve





Module 3 Marine Electrical | New words and expressions

1. series and shunt 串励和并励
 2. compounded 复励
 3. compensation 补偿
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Module 3 Marine Electrical

New words and expressions

1. commutator 换向器
2. hollow shaft 中空的轴

armature

shaft