

## Course description

# G585e - DCT880 Basics

## Internet Course (EN)

### Course Duration

0.5 hours, depending on personal knowledge.

### Course type

This course includes self-study material.  
The language of the course is English.

### Course Goal

The goal of this course is to understand the basics of a thyristor power controller in terms of requirements and load types of electric heating, control solutions and power optimization.

The training covers the following topics:

- General requirements of electric heating
- Power control solutions
- Hardware types of thyristor power controllers
- Control modes of thyristor power controllers
- Load types of electrical heating systems
- A special configuration called Multitap
- Power optimization of heating controllers

### Student Profile

Product engineers and engineering people who are planning, installing and servicing AC thyristor power controllers.

### Prerequisites and Recommendations

The student should have:

- Basic knowledge about electrical wiring
- Basic knowledge of drives or power controller engineering
- Physical understanding for electric heating application

### Preparation e-Learning courses

No prior courses to attending this course needed.

### Course Objectives

Upon completion of this course, students will be able to:

- Know the features of the thyristor power controller
- Enter application area for this thyristor power controller
- Know the requirements and load types of electric heating

### Main Topics

Types of industrial heating  
Principle of electric heating  
Typical solutions for electric heating  
Hardware types  
Control modes:

- Phase angle control
- Full wave control
- Half wave control

Three phase loads  
Single phase loads  
Low voltage and high current configurations  
Multitap configurations  
Power optimization

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