DAKIN



Daikin University
Training Course Guide



COMMITTED TO YOUR SUCCESS

Welcome to Daikin University! Our mission is to offer our customers the best training in the industry, exhibited by a variety of quality training programs designed to provide the tools and resources needed for our customers to be successful.

We embrace and stand by this commitment through the development of our state-of-the-art training centers, highly trained and experienced instructional staff and professionally developed curricula.

Curriculum

Our courses are designed by training professionals around specific objectives based on industry needs and job task analysis. We offer a choice of instructional settings based on the program goals and our students' needs including: online/on-demand web-based training, instructor led webinars, onsite training, and instructor led classroom training at one of our Daikin Authorized training facilities.

Daikin University offers classroom training at distributors and dealer facilities and at our Daikin Authorized training facilities in Carrolton, TX, Irvine, CA and Long Island City, NY. Our training facilities have a complete range of fully functional residential and commercial products, including Daikin Altherma and VRV for invaluable hands-on, practical experience.









Web Based Training (WBT):

Our highly-acclaimed Web-Based Training (WBT) is available for you to login when you are ready. The course(s) selected can be retrieved with a few small strokes on your keyboard 24-hours a day, seven days a week.

Online On-Demand (OLOD):

We will offer a selection of Daikin developed OLOD courses. This selection will include some recorded versions of some our instructor-led webinars. Contact training@daikinac.com for more information.

Online Instructor-Led Training (OLIL):

We can offer 1 to 2 hour training sessions via webinars per request. Each session is hosted by an experienced Daikin staff member. You can visit our website www.daikinac.com or go directly to www.daikinuniversity.com to register for one or all of the classes.

Price

- Prices vary if individually purchased
- Online course are included in the General Access Plus individual curriculum or a company subscription



Daikin Introduction

Course Objectives

- Daikin introduction and history
- Daikin as the global leader recognized for energy efficiency, innovation, and high quality products and services
- Daikin and the environment

Target Audience
Recommended for anyone

Duration 0.5 Hours

The Daikin Difference (Technology)

Course Objectives

- How Daikin's product innovation, inverter technology and compressors make Daikin the product of choice
- Understand how to best position Daikin's product line with regard to energy efficiency, individualized comfort, and quality
- Review 12 of Daikin's technological advantages

Target Audience
Recommended for anyone

Duration 1 Hour

Daikin Resources

Course Objectives

- Review of the Dealer Handbook or Distributor Handbook
- Understanding Daikin's Technical Resource Library (TRL) and how to use it
- Review of Dr. Daikin
- Review our Spare Parts Bank product and services offered
- Review Daikin University resources

Target Audience
Recommended for distributors or dealers

Duration 0.5 Hours

Piping & R-410A Refrigerant

Course Objectives

- Refrigerant recovery & the atmosphere
- Properties of R-410A
- POE vs. PVE oil
- Identify line set components
- Daikin dedicated tools
- Flared connections & brazing
- Standard pressure test & leak testing
- Triple evacuation process
- Pipe insulation
- Importance of liquid charging

Target Audience
Recommended for anyone

Duration
1 Hour - 2 Parts



Daikin Residential Product Line

Course Objectives

- Review single-split outdoor & indoor product line-up
- Review multi-split outdoor & indoor product line-up
- Review general and technical specs of all components
- Understand Daikin model # nomenclature
- Understand general applications

Target Audience

Recommended for distributors, contractors, residential sales personnel.

Duration

0.5 Hours

Daikin Commercial Product Line

Course Objectives

- Review VRV outdoor & indoor product line-up
- Review general and technical specs of all components
- Understand Daikin model # nomenclature
- Understand general applications
- Frequently asked questions

Target Audience
Recommended for anyone

Duration 0.5 Hours

VRV Product & Technology

Course Objectives

- Daikin VRV concepts & characteristics
- VRV systems & product line-up
- General overview of VRV technology
- Describe inverter operation & benefits
- VRV Heat Pump & Heat Recovery
- VRV basic refrigeration piping specs
- VRV controls & communication wiring
- VRV controls product line-up

Target Audience
Recommended for anyone

Duration

2 Hours - 7 Parts

iTM Sales Overview

Course Objectives

- iTM Overview
- Functions
- Monitor & Operation
- Automatic Controls Part
- Menu List

Target Audience

Recommended for anyone

Duration

1.5 Hours - 5 Parts



NEC - National Electric Code

Course Objectives

- Understand NEC that is applicable to Daikin systems and field wiring examples
- Understand wire sizing
- Understand circuit protection
- Understand cable types for plenums

Target Audience
Recommended for anyone

Duration
1 Hour

Ventilation Xpress System Layout

Course Objectives

Understanding of Ventilation Xpress

Target Audience
Recommended for manufacturing reps

Duration
1 Hours

Refrigerant Safety Considerations for VRF

Course Objectives

- Understand occupancy classifications (ASHRAE 15, Section 4)
- Understand refrigerant system classification (ASHRAE 15, Section 5)
- Understand refrigerant safety classification (ASHRAE 34, Section 6)
- Understand refrigerant concentration limits (ASHRAE 34, Tables 1 & 2)
- Understand installation restrictions (ASHRAE 15, Section 8)

Target Audience
Recommended for anyone

Duration
1 Hour

VRV Xpress System Layout

Course Objectives

- Understanding of VRV Xpress
- Selecting VRV equipment
- Producing submittal data for installers & design engineers
- Basic design layout
- Frequently asked questions

Target Audience
Recommended for manufacturing reps

Duration 2 Hours



Engineer Days – Session 1 – VRV Concept & Technology

Course Objectives

- VRV vs. VRF
- VRV technology overview
- VRF energy legislation
- Optimizing designs for cost & efficiency

Target Audience

Recommended for engineers & architects

Duration

1 Hour

Engineer Days – Session 2 – The Daikin Difference

Course Objectives

- The Daikin Difference
- VRV vs. VRF class leading efficiency
- Class leading technology
- Control systems DNet, BacNet, LonWorks
- Tools to cut design time in half

Target Audience

Recommended for engineers & architects

Duration

1 Hour

Daikin VRV BMS Integration - VRV Integration with BACnet and Lonworks Protocols

Course Objectives

- BACnet interface specification
 - BACnet objects/points
- Control Strategies
 - Navigation Remote Controller
 - iTouch Controller
 - BACnet Interface
 - Notes to program
- Lon Interface
 - Network variables

Target Audience

Recommended for anyone

Duration

.5 Hours

Daikin VRV BMS Integration - Understanding VRV Indoor unit and Controls Logic

Course Objectives

- VRV system overview for BMS integrator
 - VRV system
 - Individual zone control
 - Control logic
 - Changeover Master
 - Addressing
 - Indoor unit grouping
 - · Temperature sensing
 - Indoor unit operation

Target Audience

Recommended for anyone

Duration

.5 Hours



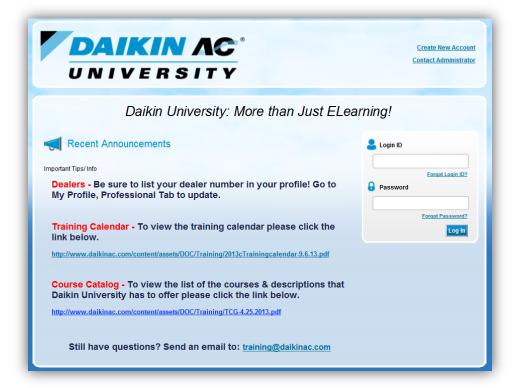
Mindleaders

Course Objectives

- Customer service skills
- Selling skills
- HR topics
- Soft skills (ex: time management)
- Management skills
- Leadership skills
- And More!

Target Audience
Recommended for anyone

Duration Various





Web Based Training

Anyone Anytime Anywhere...

Features

- Convenience.
 - You can study anywhere and anytime as long as you have a PC and Internet access. Because there is no need to go to a training facility, it is just right for those who are busy or who live in remote areas. You can also save travel and accommodation expenses. Refer to page two for current course list in English-USA.
- Easy-to-understand multimedia training materials.

 Easy-to-understand training materials facilitate understanding incorporating narration, photographs and illustrations.
- Learn at your own pace.

You are free to study at your own pace, going through easy parts quickly and taking enough time for difficult parts. You can also review the sections you have already studied. Say goodbye to any problems keeping up with a lecture!!

WBT provides basic study courses. If you are seeking more advanced courses, please attend classroom training available at our Daikin University training facilities.
For more details, please visit our website: www.daikinac.com or contact training@daikinac.com.

We offer the \$299 General Access Plus subscription which includes all of our proprietary WBT courses, our Daikin developed OLOD courses and 250 Mindleaders management, leadership, and soft skills courses!



Daikin International Web-based Training Courses		
Category	Course Name	
Basic Air Conditioning	Introduction to Air Conditioning	
	Classification of Air Conditioning Systems	
	Principles of Refrigeration	
	4 Components of Refrigeration Cycle & How it Works	
	4 Components of Refrigeration Cycle & 4-way Valves	
	Basic Knowledge of Heat and Pressure	
	Standard Operation State	
	Impact of Various Changes on Operation State	
	Simple Heat Load Calculation	
	Model Selection of Air Conditioners	
	The Basic Knowledge of Analog Relays	
	Refrigerant Types and Nomenclature	
	Air-Cooled and Water-Cooled Air Conditioners	
	Primary Electrical Components of Air Conditioners	
	Primary Electronic Components of Air Conditioners	
	The Primary Components of the Refrigeration Cycle Other than the Four Principle Components	
	The Primary Safety Devices of the Refrigerant Cycle	
	The Basics of Ventilation: Ventilation Methods and Required Ventilation Volume	
	How to Select Air Conditioning Units - VRVIII	
Psychrometric Chart	How to Read Psychrometric Chart	
	Utilization: Mixture of Air	
	Utilization: Heating, Humidifying, Cooling, & Dehumidifying	
P-h Chart	Introduction to P-h Chart	
	P-h Chart and Coefficient of Performance	
Basic Work	How to Use Testers and Clamp Meters	
	How to Use Megger Testers and Thermometers	
	How to Use Gauge Manifolds	
	Flaring Procedures	
	Procedures for Refrigerant Pipe Bending	
	Setting of Acetylene Welders	
	Flare Connection and Handling of the Service Ports & Stop Valves	



	URL: http://www.dtas.daikin.co.jp/
Category	Course Name
Basic Work (cont.)	Vacuum Drying
	Procedures for Additional Refrigerant Charge (Sky Air)
	Pump Down Procedures
	Procedures for Refrigerant Recovery
	Air Tightness Test
	Basics of Brazing Work
Test Run	Inspections Prior to Test Run
	How to Run Test Run Data – Sky Air Edition
	How to Run Test Run Data – VRV Edition
Troubleshooting	Wired Remote Controller: How to Use "Inspection" Mode
	Wireless Remote Controller: How to Use "Inspection" Mode
	Wired Remote Controller: How to Use the Service Mode
	Wired Remote Controller: Malfunction Codes
	Methods of Diagnosing Malfunction Codes: A3 and AF
	Methods of Diagnosing Malfunction Codes: Malfunction Code: A0 (with related functions)
	Methods of Diagnosing Malfunction Codes: E3 and JA
	Methods of Diagnosing Malfunction Codes: E4 and JC
	Methods of Diagnosing Malfunction Codes: E6 and J2
	Methods of Diagnosing Malfunction Codes: C4
	Methods of Diagnosing Malfunction Codes: A9 and E9
	Methods of Diagnosing Malfunction Codes: U5 and U8
	Methods of Diagnosing Malfunction Codes: U4 and U9
	Methods of Diagnosing Malfunction Codes: L5, L8 and L9
	Malfunction Diagnosis using Outdoor PCB
Installation	Pre-Installation Checks
	Installation Flow and Precautions
	Examples of VRV Installation Problems (Indoor Units)
	Key Points of VRV Refrigerant Piping Installation
	Key Points of Drain Piping Installation (VRV and Sky Air)
	Remote Control Wiring
	Overview of VRV Control Wiring and Wiring Precautions



	URL: http://www.dtas.daikin.co.jp/	
Category	Course Name	
	Indoor Unit Installation Points	
	Key Points for VRV Outdoor Unit Installation	
	Local Setting with Remote Controller	
	Field Setting with Outdoor Unit PCB	
	Operating Instructions and Delivery – Sky Air Ceiling Mounted Cassette Type	
Product Knowledge	Principles of Reluctance DC Motors	
	Principles of Inverter Control	
	Why are Inverter ACs Energy Efficient?	
	VRV System Features	
	Refrigerant Pip Selection for the VRVIII Heat Pump System (for USA)	
	Duct Design Procedures for the Ceiling Mo0unted Built-in Type	
	The Basics of Sound	
	Soundproofing Plans for AC Equipment	
New Refrigerants	Flourocarbons and the Earth's Environment	
	Properties of New Refrigerant & Key Points for Use	
Customer Satisfaction	Customer Satisfaction for Service Engineer	



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CLASSROOM TRAINING

We offer regularly scheduled classes at our Daikin Authorized Training Facilities



Class is available for onsite training.



Course is approved for NATE Continuing Education Credits.

PDH/CEU*

Course is approved for Professional Development Hours and in most states towards Continuing Education Credit for engineers.



CLASSROOM TRAINING

Daikin Authorized Training Facilities listed below:

CA Irvine: Daikin CA

NY Long Island City: Daikin NYTX Carrollton: Daikin TX (Dallas)

FL Davie: Daikin-McQuay FL (Miami)GA Marietta: Daikin-McQuay (Atlanta)



CT New Haven: Star SupplyFL Pensacola: Nova Tech

FL Tampa: Carroll Air Systems

ID Boise: Innovative Air

MI New Hudson: Behler-Young (Detroit)

MI Grand Rapids: Behler-Young

• MA Woburn: F.W. Webb (Boston)

MN Minneapolis: S.V.L.

NC Greensboro: Hoffman & Hoffman

• NJ Caldwell: The Wallwork Group

• NJ Ronkonkoma: The Wallork Group

NY Long Island City: The Wallwork Group

• PA Philadelphia: United Refrigeration Inc

PA Pittsburgh: Allegheny Engineering

• TN Memphis: Ewing Kessler

TX Houston: DXS

SC Columbia: Hoffman & Hoffman

VA Chesapeake: Hoffman & Hoffman

• VT Rutland: F.W. Webb

Canada, Montreal: EMCO

• Canada, Toronto: HTS

More Locations Coming Soon!

Continental breakfast & lunch is provided in Daikin Authorized training facilities. Hotel information with Daikin rate discounts will be emailed with the class confirmation.

❖ 8 HR classes will be completed in one day

16 HR classes will be completed in two days

Daikin University is an approved NATE testing organization!

Contact training@daikinac.com for schedule & location information.



CONTINUING EDUCATION GUIDELINES

Daikin University provides a certificate of completion that includes the number of PDH (Professional Development Hours) for all attendees of qualified training courses.

Florida

In the state of Florida, Daikin University has been approved as a *provider* of continuing education for engineers; *specific courses* have been approved for continuing education.

Louisiana

In the state of Louisiana, Daikin University has been approved as a **provider** of continuing education for engineers.

North Carolina

In the state of North Carolina, Daikin University has been approved as a **provider** of continuing education for Professional Engineers and Surveyors.

New York (PIE , Practicing Institute of Engineering)

In the state of New York, *specific courses* have been approved for continuing education for engineers.

Remaining States

States not listed above currently do not have a Continuing Education requirement for the State Board of Engineers. As with all training courses, Daikin University requires prior notification of any event that a Certificate of Completion is requested. All Daikin University certificates will indicate the Professional Development Hours (PDH) of the course completed.

Professional Development Hours (PDH):

For every hour of (training) time, 1 (one) Professional Development Hour will be given. Every 10 PDH = 1 CEU (continuing education unit).



ONSITE TRAINING

Onsite training available upon request

A Daikin authorized trainer provides training at a customer office or training site (not an install job-site) for sales or technical training. Not all classes can be trained onsite. Please contact training@daikinac.com for requests or more details.

Customized classes are available and must be approved by the Training Manager.

Price of the onsite will be determined by the base price plus materials and expediting if necessary.

Portable RA trainers available for rent or for sale – These trainers make dealer points easier to reach and RA Service training done on site!

Current Approved Onsite Classes:

- VRV Install & Commissioning
- VRV Product & Applications
- RLC Install & Commissioning
- RLC Service & Troubleshooting
- RLC Product & Applications
- Key Sales Points for Dealers
- 8- Zone Multi-Split Key Points of Installation

- Daikin Altherma Install & Commissioning
- Daikin Altherma Product & Applications
- Controls Product & Applications
- Controls Integrator Training
- iTM Commissioning
- Single & Multi Splits Key Points of Install

Training Location	Base Price	Each Additional Day
Contiguous United States	\$1950	\$750
Hawaii & Alaska	Call for Pricing	Call for Pricing
US Territories	Call for Pricing	Call for Pricing
Canadian Provinces	Call for Pricing	Call for Pricing







VRV TRAINING

From lightweight, yet powerful outdoor units to quiet, elegant indoor units, Daikin® systems offer innovative and advanced product features that deliver the optimum in air conditioned comfort and control. Our systems are energy efficient, easy to install, and are designed to fit virtually any environment.

Daikin University offers the following classroom training:

- VRV Install & Commissioning
- VRV Service & Troubleshooting
- VRV Product & Applications
- VRV Applications: Selection Tools
- VRV Design Workshop
- Engineer Day



VRV Install Only





PDH/CEU*

Course Objectives

Review Piping & R-401A refrigerant

VRV product and technology

Review installation procedures

Target Audience

Commercial Contractors, Installation Foremen & Crews, Professional Engineers, Sales, Service Personnel

Duration

6 HR course - Lecture only

Class Prerequisites

None, this is an introductory level course

Class Size

Limited to 20 students

Price

Onsite Pricing Applies

Available upon request.

VRV Commissioning Only





PDH/CEU*

Course Objectives

Review installation procedures

VRV Controls wiring & DIII Net communications

Review commissioning procedures

Target Audience

Commercial Contractors, Installation Foremen & Crews, Professional Engineers, Sales, Service Personnel

Duration

4 HR course - Lecture only

Class Prerequisites VRV Install Only

Class Size

Limited to 20 students

Price

Onsite Pricing Applies

Available upon request.



VRV Install & Commissioning





PDH/CEU*

Course Objectives

- Daikin Introduction & history
- Review Piping & R-401A refrigerant
- VRV product and technology
- Review installation procedures
- VRV Controls wiring & DIII Net communications
- Review commissioning procedures
- · Hands-on activities & practice

Target Audience

Commercial Contractors, Installation Foremen & Crews, Professional Engineers, Sales, Service Personnel

Duration

16 HR course includes hands-on activities 8 HR course – Lecture only

Class Prerequisites

None, this is an introductory level course

Class Size

Limited to 20 students

Price

8 HR course: \$179 16 HR course: \$229

VRV Service & Troubleshooting





PDH/CEU*

Course Objectives

- Understand basic operation principles at each stage of operation
- Wiring schematics, VRV components
- Demonstrate refrigerant flow software & how to use for diagnostics
- · How to trace refrigerant flow
- Learn advanced field settings
- Learn advanced troubleshooting using Daikin Service Checker
- Hands-on activities & practice

Target Audience

Contractors/Dealer & Rep/Distributor who have installed & commissioned Daikin VRV systems.

Duration

16 HR course includes Service Checker training

Class Prerequisites

VRV Install & Commissioning

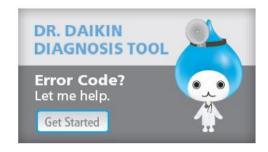
Class Size

Limited to 10 students

Price

16 HR course: \$229

The 16hr class is mandatory prior to purchasing a Daikin Service Checker.





VRV Product & Applications





PDH/CEU*

Course Objectives

Daikin introduction & history

• The Daikin Difference

 Commercial product line up & features, functions & benefits

Competitive comparisons & product positioning

• Intro to Daikin controls

Applications & case studies

 Software selection tools: Xpress, TRL, and EnergyCalc basics

Target Audience

VRV sales personnel, reps, engineers and architects

Duration
16 HR course
8 HR course – coming soon

Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 20 students

Price

16 HR course: \$299

This is not a service course. Attendee will not learn how to install or troubleshoot the unit.

VRV Applications: Selection Tools





PDH/CEU*

Course Objectives

 Review Technical Resource Library (TRL) and how to use

Review VRV Xpress and how to use

Review EnergyCalc and how to use

Hands-on activities & practice

Target Audience

Recommended for manufacturing reps

Duration

8 HR course with hands-on activities

Available upon request at TX training facility.

Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 20 students

Price

8 HR course: \$179

Must bring laptops with TRL & VRV Xpress software installed.



VRV Design Workshop



PDH/CEU*

Course Objectives

- Learn the best practices in designing a VRV system
- Learn the four key decision steps in designing a VRV system
- Understand the VRV design tools and resources available from Daikin
- Obtain hands-on practice in designing a VRV system that meets the needs of your customers

Target Audience
Engineers, Design & Build Contractors, and
Architects, Manufacturing Reps

Duration
16 HR course

Class Prerequisites

Daikin's Engineer Day or VRV Product & Applications class or the VRV Product & Technology online/on-demand module on www.daikinuniversity.com; knowledge of VRV Xpress and VRV Ventilation Xpress.

Class Size Limited to 20 students

Price

16 HR course: \$299

What Should You Bring to the Workshop?

- Questions for our experts
- Laptop computer
- Knowledge and experience designing VRF style systems

Engineer Day



PDH/CEU*

Course Objectives

- Review VRV Concept & Technology
- Review the Daikin Difference

Target Audience
Engineers, Design & Build Contractors, and
Architects, Manufacturing Reps

Duration 2-4 hours

Class Prerequisites None.

Price No Cost

To schedule an engineer day please contact your local area sales rep or email training@daikinac.com for more information.





CONTROLS TRAINING

With Daikin®'s super-intelligent, user-friendly system controllers, you can create Absolute Comfort™ quickly and easily. Their advanced functionality and easy-to-read liquid crystal displays (LCDs) allow you to orchestrate and monitor temperature, time, airflow volume and more across your entire system at the touch of button.

Daikin University offers the following classroom training:

- Controls Product & Applications
- Controls Install & Commissioning
- Controls Integrator
- iTM Commissioning
- RLC Remote Controllers



Controls Product & Applications





PDH/CEU*

Course Objectives

- VRV system overview
- Controls product & technology
- Individual zone controllers / changeover master & remote control groups
- Remote controller sensors
- Daikin DIII-Net architecture
- Indoor unit sequence of operation & Integration strategies
- Applications & case studies
- Hands-on activities & practice

Target Audience

Counter or sales personnel, distributors, reps, those new to Daikin controller technology.

Duration

16 HR course available upon request 8 HR (Day 1 of Controls I & C Class)

Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 10 students

Price

8 HR course: \$229 16 HR course: \$299

Controls Install & Commissioning





PDH/CEU*

Course Objectives

- Product introduction
- Installation requirements
- Centralized Controller Startup & Commissioning Procedures
- Theory 100% Hands On

Target Audience

Contractors/Dealer & Rep/Distributor who will be installing or servicing Daikin Centralized Controls & Gateways.

Duration

16 HR course with second day hands-on using controls simulators— CA & TX only

Class Prerequisites

VRV Install & Commissioning Control Product & Applications

VRV Service & Troubleshooting (recommended)

Recommended to bring laptops to class

Class Size

Limited to 10 students

Price

16 HR course: \$229

Daikin training facility in Irvine, CA & TX only. Coming soon to NY facility.



Controls Integrator





PDH/CEU*

Course Objectives

- VRV system overview & Daikin DIII-Net architecture
- Individual zone controllers / changeover master & remote control groups
- Remote controller sensors
- Indoor unit sequence of operation
- Multi-zone controllers
- Integration with building management systems
 BACnet & Lonworks
- Integration strategies and program

Target Audience

Controls Integrators, distributors, and reps that are involved Daikin controls integration.

Duration

8 HR course available upon request

Class Prerequisites

None. This is an introductory level course. Basic integration knowledge recommended.

Class Size
Limited to 15 students

Price

8 HR course: \$229

itelligent Touch Manager Commissioning

(ITM)

Course Objectives

- Product introduction
- Installation requirements
- Centralized Controller Startup & Commissioning Procedures
- Hands-on with theory instruction

Target Audience

Contractors/Dealer & Rep/Distributor who will be installing or servicing Daikin Centralized Controls & Gateways.

Duration

8 HR course available upon request





PDH/CEU*

Class Prerequisites VRV Install & Commissioning

Recommended to bring laptops to onsite classes

Class Size
Limited to 10 students

Price

8 HR course: \$229



RLC Remote Controls





PDH/CEU*

Course Objectives

This class will review these controllers:

- Quaternity ARC447
- Wireless ARC452
- Wired BRC944B2
- Wireless BRC7E830/BRC4C82
- Daikin BRC1E72 Navigation Remote Controller Setup & Installation
- Daikin ENVi thermostat Setup & Installation
- Sensors, Adaptors, & Cables

Target Audience

Contractors, Distributor Inside/Outside Sales, Service Personnel

Duration

2 HR course – available on request only

Class Prerequisites

None. This is an introductory level course.

Class Size
Limited to 20 students

Price

2 HR course: \$59









RESIDENTIAL/LIGHT COMMERCIAL

From our compact, yet powerful outdoor units to our quiet concealed or wall-mounted units, Daikin® systems offer the kinds of innovative and unique product features that deliver the optimum in air conditioned comfort and control.

Daikin University offers the following classroom training:

- RLC Install & Start Up
- RLC Install & Commissioning
- RLC Service & Troubleshooting
- RLC Product & Applications
- Single & Multi Splits Key Points of Install
- Key Sales Points for Dealers
- 8 Zone Multi-Split Key Points of Installation
- Dealer Day

Coming Soon......

- Key Points of Install for SkyAir
- Key Points of Install for VRVIII-S.

^{*}Residential / Light Commercial is abbreviated "RLC" in course descriptions



RLC Install & Start Up (4 Wire Systems)

Course Objectives

- Daikin Introduction & history
- Piping & R-410A refrigerant
- 4-wire systems product & technology
- Review installation requirements
- Review start up procedures
- Review remote controllers
- Hands-on activities & practice

Target Audience

Contractors, Installers, Service Technicians, Distributors, Inside and Outside Sales

Duration

8 HR

16 HR course - this is the first day





PDH/CEU*

Class Prerequisites

None, this is an introductory level course

Class Size

Limited to 20 students

Price

8 HR course: \$179

RLC Install & Commissioning (DIII-Net Systems)

Course Objectives

- RLC Install & Start Up on the first day
- DIII Net systems product & technology
- Review installation requirements for SkyAir and VRVIII-S
- Review installation techniques
- Review commissioning procedures
- Hands-on activities & practice

Target Audience

Contractors, Installers, Service Technicians, Distributors, Inside and Outside Sales

Duration

16 HR course 8 HR DIII Net Systems only (second day) available upon request





PDH/CEU*

Class Prerequisites

None, this is an introductory level course

Class Size

Limited to 20 students

Price

8HR course: \$179 16 HR course: \$229



RLC Service & Troubleshooting (4 Wire Systems Only)



Course Objectives

- Review installation & start up basics
- How to use Service Tools (D-Checker, Inverter Analyzer, DC Motor Checker, & EEV Tool)
- Understanding error codes
- Servicing residential equipment
- How to maintain residential equipment
- Best practices for service & troubleshooting
- Hands-on activities

Target Audience Contractors, Installers, Service Technicians

Duration
8 HR course with hands-on activities

Class Prerequisites
RLC Installation & Start Up (4-wire)

Class Size Limited to 10 students

Price

8 HR course: \$179

Please bring meter to class so it can be used on equipment.

This class is for residential equipment only and does not include light commercial equipment.

RLC Product & Applications

Course Objectives

- Daikin introduction & history
- The Daikin Difference
- Product line up, including features, functions & benefits
- Competitive comparisons & product positioning
- Applications and case studies
- VRV Xpress overview
- 3D Dealer program overview

Target Audience
Inside and Outside Sales

Duration 8 HR course





PDH/CEU*

Class Prerequisites

None. This is an introductory level course.

Class Size
Limited to 20 students

Price

8 HR course: \$229

This is not a service course. Attendees will not leave with installation or servicing knowledge.



Single & Multi-Split Key Points of Installation

Course Objectives

- Proper Equipment Selection
- Equipment Location Considerations
- Refrigerant Piping
- R-410A & PVE Oil
- Refrigerant Charging
- Electrical Wiring
- Condensate Piping Requirements
- Controls
- Field Settings
- Start Up
- Basic Troubleshooting
- Accessories

Target Audience
Contractors, Installers, Service Technicians

Duration 2 HR course



Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 20 students

Price

\$59

Key Sales Points for Dealers Daikin Mini Split Systems

Course Objectives

- Daikin history
- Daikin compressor and motors
- Installation flexibility
- Product warranties
- · Residential examples

Target Audience
Distributors / Dealers that sell Daikin
residential products

Duration

1.5 HR course - Available Upon Request



PDH/CEU*

Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 10 students

Price

\$0

This is not a service course. Attendees will not leave with installation or servicing knowledge.



8-Zone Multi-Split Key Points of Installation

Course Objectives

- 8-ZoneMulti-Split systems product & technology
- · Review installation requirements
- · Review installation techniques
- Review start up procedures
- Hands-on activities & assessment

Target Audience

Contractors, Installers, Service Technicians, Distributors, Inside and Outside Sales

Duration

2 HR course



Class Prerequisites

None. This is an introductory level course.

Class Size

Limited to 20 students

Price

\$59

Dealer Day

Course Objectives

- Come learn from the #1 HVAC
 Manufacturer in the World about the fastest growing product segment in the industry, ductless split systems and VRV technology.
- Discover the Market opportunities and learn about the Worldwide leader in the industry
- Learn how to generate more leads and benefit from the fastest growing segment in the industry
- Review examples of success stories and application

Target Audience
Contractors, Installers, Service Technicians

Duration 2-4 HRs



Class Prerequisites

None. This is an introductory level course.

Class Size

Depends on Location

Price

\$No Cost

Dealer Days are held at distributor locations across the country.





DAIKIN ALTHERMA TRAINING

Daikin Altherma, the home heating solution that connects to underfloor heating, low temperature radiators and fan coil units. Daikin has more than 50 years of experience in the production of air source heat pump systems, manufacturing over a million units a year for residential & commercial applications. Our product innovations provide you with high energy efficiency solutions minimizing the impact on the environment and running costs.

Daikin University offers the following classroom training:

- Daikin Altherma Product & Applications
- Daikin Altherma Install & Commissioning



Daikin Altherma Product & Applications





PDH/CEU*

Course Objectives

- Daikin introduction & history
- Introduce Daikin Altherma product including features, functions & benefits
- Applications & case studies
- Review installation requirements
- Daikin Altherma system operation & control features and options
- Daikin Altherma accessories overview
- How to select the correct size system using selection software

Target Audience

Contractors, Service and Maintenance Personnel who will be installing or servicing Daikin Altherma systems.

Duration 8 HR course

Class Prerequisites

None, this is an intermediate level course and will be introducing Daikin Altherma an air-to-water heat pump hydronic system. This is not a hydronic course, although basic hydronic considerations are covered.

Class Size Limited to 20 students

Price

8 HR course: \$229

Daikin Altherma Install & Commissioning





PDH/CEU*

Course Objectives

- Pre-Install planning
- Split installation (Hydro-box/Cond.)
- Mono-bloc installation
- Domestic water tank installation
- Solar option instal5lation
- Daikin fan coil installation
- Water piping planning and design
- Startup & commissioning procedures
- User interface programming
- Daikin Altherma service

Target Audience

Contractors, service and maintenance personnel who will be installing or servicing Daikin Altherma.

Duration

8 HR course

Class Prerequisites

Daikin Altherma Product & Applications (recommended)

Class Size Limited to 20 students

Price

8 HR course: \$179



Daikin Training Products

Daikin U has a variety of products for sale that can assist you with your training needs:

- RA Trainers
- Controls Simulator Boxes
- Daikin Flashlight Pens
- PCB Simulator CD
- Controls Simulator CD











Contact training@daikinac.com for pricing and availability



Daikin reserves the right to make changes at their discretion.

The content in this leaflet is current as of September 2013 and is subject to change without notice.



GENERAL INFORMATION

3D Dealers:

To receive points for the 3D dealer program you must list your dealer number in your profile. Go to My Profile, and the Professional Tab to update.

Confirmations:

Confirmations will be sent via email to the address provided in the profile and the manager selected. Please include an email address when registering for class if you would like to receive a confirmation.

Registrations:

We offer ONLINE registration for all of our classes. Please go to www.daikinac.com and click on the resources and training tab to get to our home page or go directly to www.daikinuniversity.com to create your profile and register for class.

Cancellations:

We reserve the right to cancel class for any reason. All classes are subject to cancellation if the minimum number of students is not met seven days prior to class. Daikin will not refund for travel expenses due to cancelled classes.





Thank you for your interest in Daikin University!

Please be sure to visit our website for all training dates, locations, travel arrangements, and other training information.

Our mission is to offer our customers the best training in the industry while branding Daikin as the premier HVAC manufacturer world-wide, leading the way in technology and high quality environmental products and services.







Our outstanding faculty is often asked to present and teach outside Daikin University at colleges and professional HVAC industry events.

Daikin North America, Inc.

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Tel: 1-866-4-DAIKIN
Tel: 1-972-245-1510
Web: www.daikinac.com

Web: www.daikinuniversity.com

We look forward to seeing you soon!

Daikin University Training Team

WARNINGS:

- Always use a licensed installer or contractor to install this product. Do not try to
 install the product yourself. Improper installation can result in water or refrigerant
 leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any inquiries, contact your local Daikin sales office.







Use of the AHRI Certified * mark indicates a manufacturer's participation in the certification program. For verification of certification for individual products, go to www.shricirectory.org

Daikin, Absolute Comfort, and its design, VRV, REFNET, Quaternity, Daikin Altherma are trademarks of Daikin Industries, LTD.

