DAIKIN
AIR INTELLIGENCE™

TECHNICAL TRAINING

CATALOG

PUBLISHED BY DAIKIN TECHNICAL SERVICES

(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this catalog without notice and without incurring any obligation.)

Welcome to Daikin North America Training

Daikin delivers design, applications, and product specific training for the entire line of residential, light commercial and commercial equipment we manufacture.

Daikin University

Daikin University offers industry-leading training programs for heating, ventilating and air conditioning (HVAC) professionals, owner/operators, contractors, service technicians, building and systems engineers, designers, distributors, sales reps and internal employees. Daikin technical training will help to minimize improper installations, costly service call backs and misdiagnosing system problems. Additionally, it delivers hands-on skills training your employees can put to use immediately and will educate your organization on new technologies and solutions that will be beneficial to your company. Training increases employees' morale, sense of value and presents them with opportunities to network and collaborate with others.

Indicated courses are NATE approved for continuing education credits.

Indicated courses are approved for Professional Development Hours (PDH).

Indicated courses are AIA approved for Learning Units (LU).

CERTIFIED CLASSROOM TRAINING

Daikin Corporate Training Facilities:

Daikin University DTTP ..... Waller, TX
Daikin University TX ..... Carrollton, TX
Daikin University CA ..... Irvine, CA
Daikin University NY ..... Long Island City, NY
Daikin University MA ..... Woburn, MA
Daikin University CAN ..... Markham, Ontario, Canada

For your safety, please wear closed toe shoes and long pants when attending classes and working around operating equipment

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Commercial Products Training

VRV Service & Troubleshooting Level 1

Course Code: VRVST2

Description: Course covers how to properly service and troubleshoot the Daikin *VRV* system using the proper instruments and procedures.

Target Audience: *VRV* Service Technicians

Duration: 16 Hours

Prerequisites: Attend the *VRV* Installation and *VRV* Commissioning courses

Registration: www.daikincity.com/#trainingcenter

VRV IV-S Key Points of Installation

Course Code: VRVKPI04

Description: Course covers how to properly install and start up the Daikin *VRV* IV-S system.

Target Audience: *VRV* Service Technicians

Duration: 8 Hours

Prerequisites: Attend the *VRV* IV Install course

Registration: www.daikincity.com/#trainingcenter

Light Commercial Systems Install & Commissioning

Course Code: LCIC08

Description: This course covers the proper installation and commissioning of the Daikin Light Commercial Packaged and Split product lines including the DDC controller and additional accessories.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Light Commercial Systems Service & Troubleshooting

Course Code: LCST08

Description: This course covers the proper methods for servicing and troubleshooting Daikin Light Commercial Packaged and Split product lines including the DDC controller and additional accessories.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV IV Installation

Course Code: VRVIVL1

Description: This course covers the proper Installation practices for the Daikin *VRV* IV indoor and outdoor heat pumps and heat recovery systems and accessories.

Target Audience: Design Build Mechanical Contractors, Installation Contractors

Duration: 8 Hour

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV IV Commissioning

Course Code: VIV008

Description: This course covers the proper practices for the Daikin *VRV* IV equipment product line to include the pre-commissioning and System Commissioning Steps, set up of Selected Remote Controller and Outdoor Unit Field Settings, Outdoor Unit with Ducted Discharge Air & Indoor Units.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 16 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV Service & Troubleshooting Level 2

Course Code: VST016

Description: Will elevate technician's understanding and comprehension of *VRV* systems through enhanced troubleshooting and data analysis.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 16 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Residential Products Training

90+ Gas Furnace Install & Commissioning

Course Code: GFIC904

Description: This course covers the install, start-up, and commissioning procedures for the Daikin DM96VE and DM96VC 90 Plus gas furnaces. Topics covered are applications, suspension and leveling, condensate drain trap, venting, gas and electrical connections, and controls. Temperature rise, blower speed adjustments, and duct static measurement are also covered in the class.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 4 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

90+ Gas Furnace Service & Troubleshooting

Course Code: GFST904

Description: This course covers service and troubleshooting techniques for the Daikin DM96VE and DM96VC 90 Plus gas furnaces. Topics covered are the sequence of operation, troubleshooting safety circuits, integrated control board, fault status codes, and the components and motors utilized in these furnace models.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 4 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Introduction to HVAC

Course Code: HVAC08

Description: The purpose of this course is to provide information and instruction on the basics of Heating, Ventilation, and Air Conditioning. (HVAC)

Target Audience: Anyone desiring to learn some HVAC fundamentals

Duration: 2 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Residential A/C & Heat Pump Install & Commissioning

Course Code: RHPIC8

Description: This course covers the install, start-up, and commissioning procedures for the Daikin 1 & 2 Stage AC and HP packaged and split systems. Topics covered are clearances, existing refrigerant lines, evacuation, high and low voltage, start up, and charging.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Residential A/C & Heat Pump Service & Troubleshooting

Course Code: RHPST8

Description: This course covers service and troubleshooting techniques for the Daikin 1 & 2 Stage AC and HP packaged and split systems. Topics covered are Comfortalert, Coresense, contractors, and the two-stage board relays. Also covered are troubleshooting techniques for the high and low pressure controls, fan motors, compressor and unloaders, capacitors, and Bias Data Voltage.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Single/Multi-Zone Install & Start Up

Course Code: RIS008

Description: Students will be able to properly install and start up Daikin Ductless systems using preferred servicing equipment and procedures.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Single/Multi-Zone Service & Troubleshooting

Course Code: RST008

Description: Course covers how to properly service and troubleshoot the Daikin Ductless System.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Residential Inverter Install & Commissioning

Course Code: RIC008

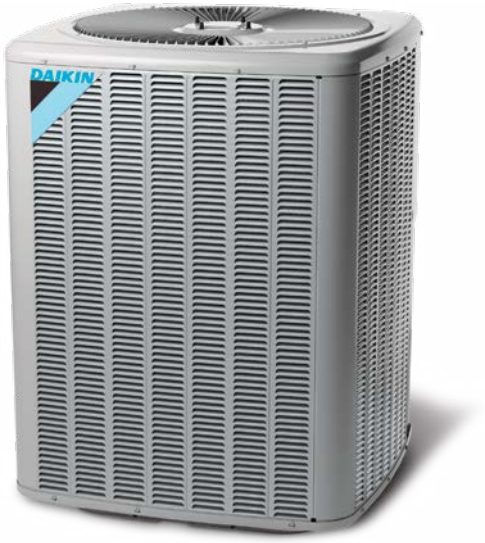
Description: This course covers the pre-installation and installation procedures for the Daikin DZ20VC and DZ18VC heat pumps. The installation, charging, start-up, system test, and commissioning procedures are covered.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter



Residential Inverter Service & Troubleshooting

Course Code: RIT008

Description: This course covers the service and troubleshooting instructions for the new Daikin DZ20VC and DZ18VC heat pumps. The troubleshooting instructions for the compressor, fan, capacitor, sensors, EEV, reversing valve, and fault codes are covered. Also included are procedures for system pump down, defrost, and replacing the inverter board.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV LIFE™ Install & Commissioning

Course Code: VRVLIFE

Description: Course covers how to properly install and start up the Daikin *VRV LIFE™* system.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV LIFE™
Service & Troubleshooting

Course Code: VRVLST1

Description: Course covers how to properly troubleshoot the components of a *VRV LIFE™* Out Door Unit and Gas Furnace. plus other *VRV* Air Handlers that are installed with the *VRV LIFE™* System.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Daikin Fit™
Install & Commissioning

Course Code: DFITMIC

Description: This course covers the install, start-up, and commissioning procedures for the Daikin *Fit™* systems.

Target Audience: Mechanical Contractors, Installation Contractors, Technicians, Mechanics

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Course Code: DFITMST

Description: This course covers the service and troubleshooting procedures for the Daikin *Fit™* systems.

Target Audience: Contractors, Installers, Service Technicians, Distributors

Duration: 8 Hour

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Controls Training

Controls
Install and Commissioning

Course Code: CIC016

Description: Course covers Daikin's *VRV* System Overview & Control Logic as well as the operation, proper installation and commissioning of Daikin's Local Remote Controllers, Multi-Zone Controllers, Open Protocol Interfaces and Adapters.

Target Audience: Controls Commissioning Technicians

Duration: 16 Hours

Prerequisites: Before being able to attend this course, the student must complete the two day course "*VRV* Installation".

Registration: www.daikincity.com/#trainingcenter

Intelligent Touch Manager (iTM) Commissioning

Course Code: ITM008

Description: Course covers proper programming and commissioning of Daikin's iTM Controller.

Target Audience: Controls Commissioning Technicians

Duration: 8 Hours

Prerequisites: Before being able to attend this course, the student must complete the pre-requisite courses "*VRV* Installation" and "*VRV* Commissioning"

Registration: www.daikincity.com/#trainingcenter

iTM BACnet Commissioning

Course Code: IBC016

Description: This is an expert level course that covers all aspects of interfacing and commissioning the iTM controller within the BACnet protocol environment.

Target Audience: Controls Commissioning Technicians

Duration: 16 Hours

Prerequisites: Before being able to attend this course, the student must complete the following courses "iTM install and commissioning" and "Controls Install and commissioning"

Registration: www.daikincity.com/#trainingcenter

iTM WAGO Application and Design

Course Code: ITMAD4

Description: This is a half day (4 hour) advanced level instructor led course which covers how the iTM can control and monitor third party equipment by using the BACnet/IP Client Option and WAGO I/O.

Target Audience: Sales Engineers, Inside Sales, Application Engineers, Design Engineers, Contractors

Duration: 4 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Controls Integrator

Course Code: VRVC108

Description: Course covers the understanding and successful application and the proper methods for integrating the Daikin *VRV* control system.

Target Audience: Commissioning Technicians, BMS Integrators

Duration: 8 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

Applications Training

VRV Advanced Applications

Course Code: VRVAFND

Description: This course covers the following; Codes and Standards that Daikin must meet to manufacture and sell equipment in North America. How to optimize the selection and design of *VRV* Heat Recovery and Heat Pump applications. How to correctly apply the proper design criteria for a Daikin *VRV* system coupled with fresh air ventilation using the applicable software while meeting all applicable codes and standards. Selection and application of the proper criteria for utilizing Daikin and third party controls to integrate, interface and interact with *VRV* and Daikin Applied systems to any specific building's needs. Comparing and contrasting the various commercial energy modeling software programs for *VRV* systems energy simulation usage and cost analysis for the four vertical markets – Retail, Office, Hotel and School in the seven climate zones as defined by ASHRAE Standard 90.1. *VRV* IV water cooled unit specifications, model lineup, water side and electrical systems requirements as well as proper system layouts and configurations.

Target Audience: Engineers, Commercial Sales Manages, Architects

Duration: 16 Hours

Prerequisites: Complete the *VRV* Applications Foundations instructor led course.

Registration: www.daikincity.com/#trainingcenter

VRV Foundational Applications

Course Code: VRVFND

Description: This 2 day course provides a comprehensive introduction to the *VRV* concept and an insight into the optimized design and application of *VRV* Systems including an overview of the features and benefits of the *VRV* system and its main components, Key factors that ensure optimized equipment design & selection, how to use the *VRV* WEBXpress selection tool, and 'Hands on' project design and equipment selection .

Target Audience: CSMs, Engineers, Architects, Design Build Mechanical Contractors, Installation Contractors

Duration: 16 Hours

Prerequisites: None

Registration: www.daikincity.com/#trainingcenter

VRV Local Design Workshops Available

Course Code: VRVFND

Description: This 1 day course provides a comprehensive introduction to the *VRV* concept and an insight into the optimized design and application of *VRV* Systems including an overview of the features and benefits of the *VRV* system and its main components, Key factors that ensure optimized equipment design & selection, how to use the *VRV* WEBXpress selection tool, and 'Hands on' project design and equipment selection .

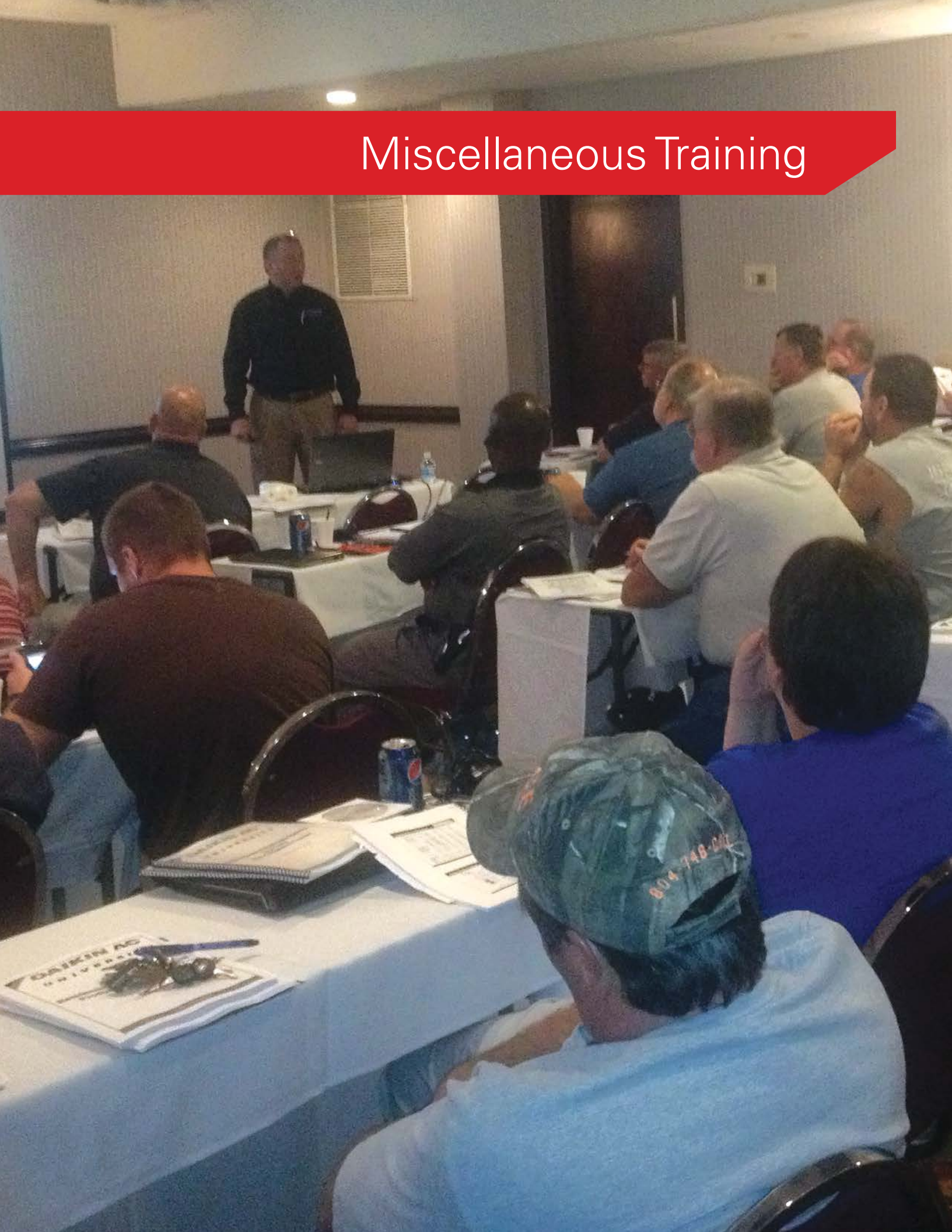
Target Audience: CSMs, Engineers, Architects, Design Build Mechanical Contractors, Installation Contractors

Duration: 8 Hours

Prerequisites: Complete the *VRV* Foundational Applications instructor led course.

Registration: www.daikincity.com/#trainingcenter

Miscellaneous Training



Daikin North America is an Authorized Provider of Professional Development Hours (PDH) for the American Council of Engineering Companies (ACEC). The following courses are approved for PDH credit. Contact Daikin University at training@daikincomfort.com

AC-1-PDH VRF Product & Technology
Module covers specific VRF Products and Technology to include System Types, Key Features, Indoor Unit Solutions, Controls, and Remote Monitoring & Diagnostics.

AC-2-PDH Application Considerations for Piping, Wiring and Condensate
Module will cover how to successfully demonstrate the ability to assess and apply the general piping principles for VRF applications, and specific VRF piping principles for various aspects of refrigerant piping. Course covers the requirements for properly wiring communications network between all VRF connected components and controllers.

AC-3-PDH Applying VRF Controls and Options
Module covers typical line of commercial controllers and all optional adapter boards and their proper application for VRF systems.

AC-4-PDH VRF Principles of Design and Selection
Learner will be able to successfully demonstrate the ability to assess and apply the criterion to evaluate and apply proper application of VRF Design and Selection.

AC-8-PDH Codes and Standards Considerations
Module covers the Codes and Standards that companies must meet to manufacture and sell equipment in North America.

AC-9-PDH – VRF Design: Optimization & Integration
Module covers how to optimize the selection and design of VRF Heat Recovery and Heat Pump applications

AC-10-PDH Methods to Address Ventilation with VRF Systems
Learner will be able to correctly apply the proper design criteria for a VRF system coupled with fresh air ventilation using the applicable software while meeting all applicable codes and standards.

AC-11 Meeting Building Needs with *VRV* Controls
Learner will be able to correctly explain, select and apply the proper criteria for utilizing Daikin and third party controls to integrate, interface and interact with *VRV* and Daikin Applied systems to any specific building's needs.

AC-12-PDH Energy Simulation and Analysis
Learner will be able to understand, compare and contrast the various commercial energy modeling software programs for VRF systems energy usage and cost analysis for the four vertical markets – Retail, Office, Hotel and School in the seven climate zones as defined by ASHRAE Standard 90.1

AC-20-PDH Water Cooled VRF Product & Application Overview
Learner will be able to define, explain and summarize the various VRF water cooled applications and all components required for each type of system as well as proper system layouts and configurations

CC-3-PDH - VRF Concept
Module will cover the history, features and application of VRF systems in compliance with formal ASHRAE, ANSI and other Standards applicable software while meeting all applicable codes and standards.

AC-11 Meeting Building Needs with *VRV* Controls
Learner will be able to correctly explain, select and apply the proper criteria for utilizing Daikin and third party controls to integrate, interface and interact with *VRV* and Daikin Applied systems to any specific building's needs.

AC-12-PDH Energy Simulation and Analysis
Learner will be able to understand, compare and contrast the various commercial energy modeling software programs for VRF systems energy usage and cost analysis for the four vertical markets – Retail, Office, Hotel and School in the seven climate zones as defined by ASHRAE Standard 90.1

AC-20-PDH Water Cooled VRF Product & Application Overview
Learner will be able to define, explain and summarize the various VRF water cooled applications and all components required for each type of system as well as proper system layouts and configurations

CC-3-PDH - VRF Concept
Module will cover the history, features and application of VRF systems in compliance with formal ASHRAE, ANSI and other Standards that are necessary.

CC-7-PDH - VRF Application
Module will cover the VRF concept and the application of VRF systems in commercial buildings, code requirements, design considerations and controls portfolios.

Daikin North America is an Authorized Provider of Learning Units (LU) for the American Institute of Architects. The following courses are approved for LU credit. Contact Daikin University at training@daikincomfort.com

CC-4-AIA - VRF Concept
Module will cover the history, features, functions and application of Variable Refrigerant Flow (VRF) systems.

AC-1-AIA - VRF Markets and Product Attributes
Module covers specific vertical market considerations for Variable Refrigerant Flow (VRF) as well as specific VRF attributes to include General Positioning, System Types, Key Features, Indoor Unit Solutions, Controls, Remote Monitoring & Diagnostics and VRF Support.

AC-2-AIA - VRF Considerations for Piping, Wiring and Condensate
Module will cover how to assess and apply the general piping principles for VRF applications, and specific VRF piping principles for various aspects of refrigerant piping. Course covers the requirements for properly wiring controls communications network between all VRF connected components and controllers.

AC-4-AIA - VRF Design and Selection
Module covers the process for properly preparing and constructing the required documentation for design and selection of *VRV* Systems.

PC-14.1-AIA - VRF Vertical Market Focus - Office Applications
Module covers various aspects, attributes, requirements, life cycle costs and trends of the Office vertical market as they apply to HVAC systems.

PC-14.2-AIA - VRF Vertical Market Focus - School Applications
Module covers various aspects, attributes, requirements, life cycle costs and trends of the Office vertical market as they apply to K-12 school systems.

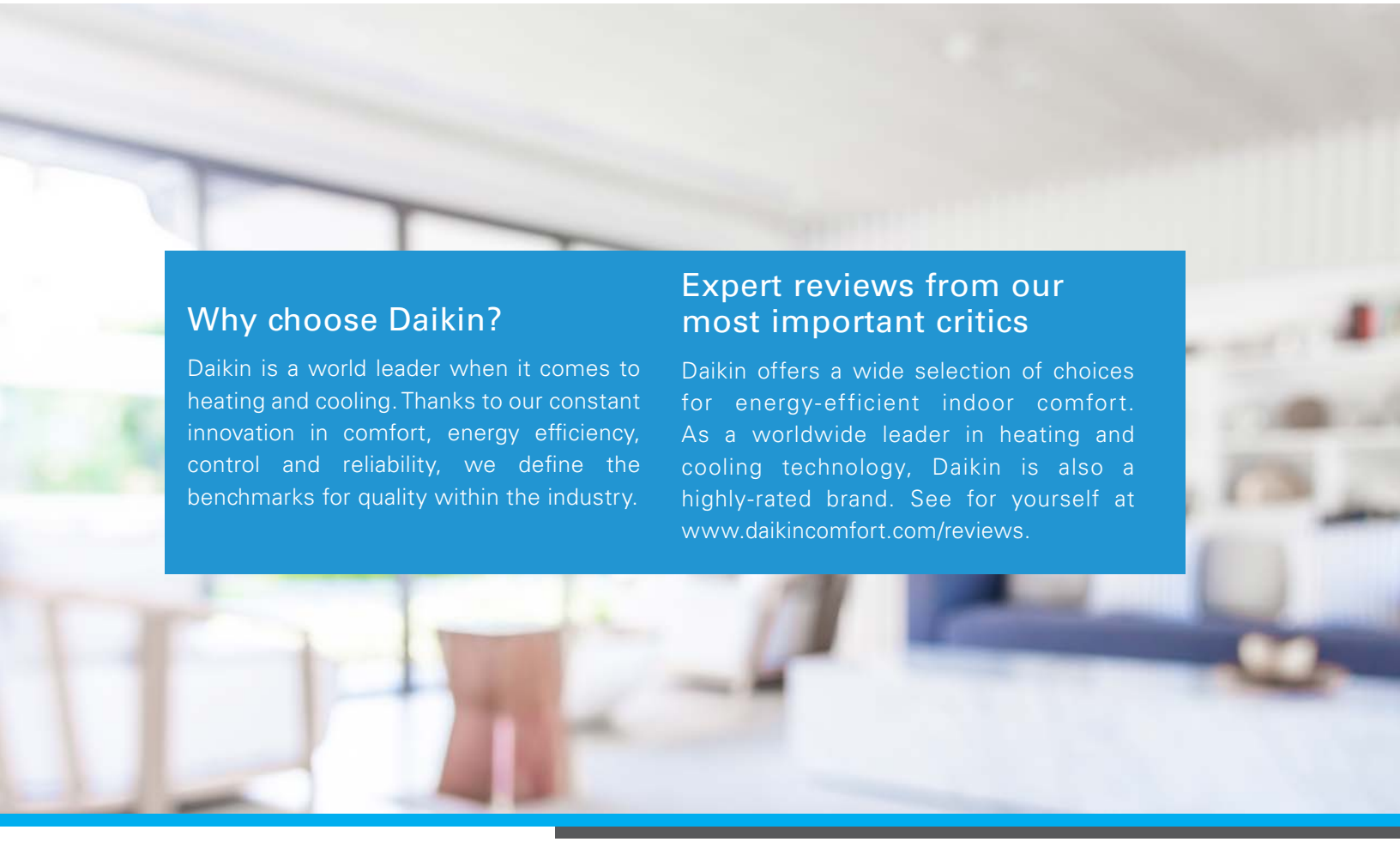
PC-14.3-AIA - VRF Vertical Market Focus - Hotel Applications
Module covers various aspects, attributes, requirements, life cycle costs and trends of the Hotel vertical market as they apply to HVAC systems.

PC-14.4-AIA - VRF Vertical Market Focus - Retail Applications
Module covers various aspects, attributes, requirements, life cycle costs and trends of the Retail vertical market as they apply to HVAC systems.

PC-14.5 - VRF Vertical Market Focus - Mulkti-Family Applications
Description to follow.

DAIKIN UNIVERSITY

For a complete course listing, training schedule and course details please scan the QR Code below or go to www.daikincity.com/#trainingcenter. For additional support contact Training Admin at training@daikincomfort.com.



Why choose Daikin?

Daikin is a world leader when it comes to heating and cooling. Thanks to our constant innovation in comfort, energy efficiency, control and reliability, we define the benchmarks for quality within the industry.

Expert reviews from our most important critics

Daikin offers a wide selection of choices for energy-efficient indoor comfort. As a worldwide leader in heating and cooling technology, Daikin is also a highly-rated brand. See for yourself at www.daikincomfort.com/reviews.

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