



#### Web Based Training:

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 Instructor-Led Training (OLIL):**

We offer quarterly 1 to 2 hour training sessions via webinars. Each session is hosted by an experienced Daikin AC staff member. You can visit our website <u>www.daikinac.com</u> to register for one or all of the classes.

#### **Online On-Demand (OLOD):**

We will offer a selection of Daikin AC developed OLOD courses (Fall 2012). Look for this laptop symbol and email <u>training@daikinac.com</u> for more information.

#### Prerecorded Webinars:

We are pleased to start offering recorded versions of some of our instructor-led webinars. Look for the play symbol and email <u>training@daikinac.com</u> for more information.









#### Daikin Introduction\*

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ΔΑΙΚΙΝ ΛΟ

absolute comfort

**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 .5 Hours

\*Fall 2012

Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System -Fall 2012.

#### 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



Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System -Fall 2012.

\*Fall 2012

#### Daikin Resources\*

#### **Course Objectives**

- Review of the Dealer 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 AC University resources

Target Audience Recommended for distributors

Duration .5 Hours

\*Fall 2012

#### 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



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

OLOD courses are included with subscription pricing for Learning Management System - Fall 2012.

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Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System -Fall 2012.



DAIKIN AC

absolute comfort

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 2 Hours

\*Fall 2012

#### 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 2 Hours

\*Fall 2012



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Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System -Fall 2012.

Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System -Fall 2012.





#### 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

\*OLOD Version – Fall 2012



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

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#### **New Product Overview\***

**Course Objectives** 

- Daikin AC product evolution
- New RA & RA-Multi systems
- New SkyAir product
- Daikin Altherma introduction
- VRV product additions

Target Audience Recommended for anyone

Duration 1 Hour

\*OLOD Version – Fall 2012



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

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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

\*OLOD Version – Fall 2012



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

#### VRF Testing and Rating Standard AHRI 1230\*

**Course Objectives** 

- Review purpose and scope of AHRI Standard 1230 and why it is important to engineers, installers, contractors, and users
- Learn how AHRI 1230 will allow VRF manufacturers to test and certify full load (EER, COP) and part load (IEER)
- Learn how efficiency values are based on the total system performance
- Learn what are the minimum data requirements that all manufacturers must publish in the AHRI Directory

Target Audience Recommended for anyone



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

\*OLOD Version – Fall 2012

Duration 1 Hour



#### LEED for New Construction Commercial Buildings\*



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

#### certification Energy and Atmosphere credits

**Course Objectives** 

Indoor Environment Quality credits

Learn how Daikin equipment and systems can

assist in earning LEED credits toward LEED

• Innovation in Design credits

Target Audience Recommended for anyone

Duration 2 Hours

\*OLOD Version – Fall 2012

#### 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



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.



#### Engineer Days – Session 1\*

**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

\*Fall 2012



Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

#### Engineer Days – Session 2\*

**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

\*Fall 2012



Class Prerequisites None. This is an introductory level course.

Class Size N/A

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.



#### 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



Class Prerequisites None. This is an introductory level course.

Class Size Limited to 25 students

Materials Provided N/A

Price No training fees for prerecorded or instructor-led webinars.

#### Mind Leaders\*

**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

\*OLOD Version – Fall 2012



**Class Prerequisites** None. This is an introductory courses.

Class Size N/A

Materials Provided N/A

Price OLOD courses are included with subscription pricing for Learning Management System - Fall 2012.

Introducing 250 More Courses in Fall 2012 with the Launch of Daikin AC University's Learning Management System!!



# 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.

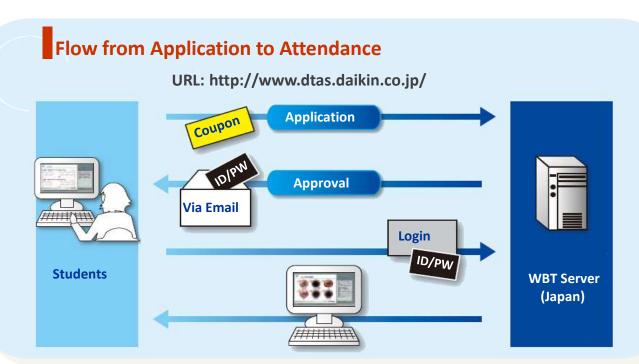
#### Easy-to-understand multimedia training materials.

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 AC University training facilities. For more details, please visit our website: <u>www.daikinac.com</u> or contact training@daikinac.com.



	URL: http://www.dtas.daikin.co.jp/				
Available Courses	No.	Course Name			
Basic Air Conditioning	1.	Introduction to Air Conditioning			
	2.	Classification of Air Conditioning Systems			
	3.	Principles of Refrigeration			
	4.	4 Components of Refrigeration Cycle & How it Works			
	5.	4 Components of Refrigeration Cycle & 4-way Valves			
	6.	Basic Knowledge of Heat and Pressure			
	7.	Standard Operation State			
	8.	Impact of Various Changes on Operation State			
	9.	Simple Heat Load Calculation			
	10.	Model Selection of Air Conditioners			
	11.	The Basic Knowledge of Analog Relays			
	12.	Refrigerant Types and Nomenclature			
	13.	Air-Cooled and Water-Cooled Air Conditioners			
	14.	Primary Electrical Components of Air Conditioners			
	15.	Primary Electronic Components of Air Conditioners			
	16.	The Primary Components of the Refrigeration Cycle Other than the Four Principle Components			
	17.	The Primary Safety Devices of the Refrigerant Cycle			
NEW	18.	The Basics of Ventilation: Ventilation Methods and Required Ventilation Volume			
Psychrometric Chart	19.	How to read Psychrometric Chart			
	20.	Utilization: Mixture of Air			
	21.	Utilization: Heating, Humidifying, Cooling, & Dehumidifying			
P-h Chart	22.	Introduction to P-h Chart			
	23.	P-h Chart and Coefficient of Performance			
Basic Work	24.	How to Use Testers and Clamp Meters			
	25.	How to Use Megger Testers and Thermometers			
	26.	How to Use Gauge Manifolds			
	27.	Flaring Procedures			
	28.	Procedures for Refrigerant Pipe Bending			
	29.	Setting of Acetylene Welders			
	30.	Flare Connection and Handling of the Service Ports & Stop Valves			
	31.	Vacuum Drying			

		URL: http://www.dtas.daikin.co.jp/
Available Courses	No.	Course Name
Basic Work (cont.)	32.	Procedures for Additional Refrigerant Charge (Sky Air)
	33.	Pump Down Procedures
	34.	Procedures for Refrigerant Recovery
	35.	Air Tightness Test
Test Run	36.	Inspections Prior to Test Run
	37.	How to Run Test Run Data – Sky Air Edition
	38.	How to Run Test Run Data – VRV Edition
Troubleshooting	39.	Wired Remote Controller: How to Use "Inspection" Mode
	40.	Wireless Remote Controller: How to Use "Inspection" Mode
	41.	Wired Remote Controller: How to Use the Service Mode
	42.	Wired Remote Controller: Malfunction Codes
	43.	Methods of Diagnosing Malfunction Codes: A3 and AF
	44.	Methods of Diagnosing Malfunction Codes: Malfunction Code: A0 (with related functions)
	45.	Methods of Diagnosing Malfunction Codes: E3 and JA
	46.	Methods of Diagnosing Malfunction Codes: E4 and JC
NEW	47.	Methods of Diagnosing Malfunction Codes: E6 and J2
NEW	48.	Methods of Diagnosing Malfunction Codes: C4
UPDATED	49.	Malfunction Diagnosis using Outdoor PCB
Installation	50.	Pre-Installation Checks
	51.	Installation Flow and Precautions
	52.	Examples of VRV Installation Problems (Indoor Units)
	53.	Key Points of VRV Refrigerant Piping Installation
	54.	Key Points of Drain Piping Installation (VRV and Sky Air)
	55.	Remote Control Wiring
	56.	Overview of VRV Control Wiring and Wiring Precautions
	57.	Indoor Unit Installation Points
UPDATED	58.	Key Points for VRV Outdoor Unit Installation
Product Knowledge	59.	Principles of Reluctance DC Motors
	60.	Principles of Inverter Control
	61.	Why are Inverter ACs Energy Efficient?
	62.	VRV System Features

		URL: http://www.dtas.daikin.co.jp/
Available Courses	No.	Course Name
Product Knowledge (cont.)	63.	Duct Design Procedures for the Ceiling Mounted Built-in Type
	64.	The Basics of Sound
	65.	Soundproofing Plans for AC Equipment
New Refrigerants	66.	Flourocarbons and the Earth's Environment
	67.	Properties of New Refrigerant & Key Points for Use
Customer Satisfaction	68.	Customer Satisfaction for Service Engineer

## Take One, Two, or **Take Them All!**

Contact training@daikinac.com for instructions.

Note: Be sure to select "English-USA" for the language option.

WBT On-Line/On-Demand Course Fees:

- ♦ \$20 / Course
- \$399 / Full Subscription
- \$2299/ Bundle of 10 Full Subscriptions A 50% Savings!!

**Introducing 250 More Courses in Fall 2012** with the Launch of Daikin AC University's Learning Management System (LMS)!!

WBT & OLOD courses will be included with subscription pricing for the LMS.

Daikin AC reserves the right to make changes at their discretion. The content in this leaflet is current as of June 2012 and is subject to change without notice.

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