



# Arctic Chiller Group Training Program

## Maintenance Training & Certification for Service Providers

### Course Description

This 3-day course is for service contractors who will maintain, service and troubleshoot Arctic Chiller Group chiller systems outside of the warranty period.

The course covers the latest in Danfoss Turbocor® compressor technology, monitoring software, controllers, and Arctic chiller systems.

### Duration

21 hours over 3 days (9 a.m. to 4 p.m.)

### Course Outline

#### Day 1

- Company Overview/Technology History
- Facility Tour
- Turbocor® DTC Compressor
  - Compressor overview and key features
  - Discussion on centrifugal compressors
  - Compressor in-depth
  - Compressor operation
  - DTC Service Monitoring Tool (SMT) installation

#### Day 2

- Controller review
  - Controller set up
  - Controller trouble shooting
  - Software installation
  - Chiller component review
  - Field server setup and operation

#### Day 3

- DTC SMT overview
- Compressor troubleshooting



- Chiller troubleshooting
- Technical literature familiarization
- ArcticCool chiller forms and procedures

## Competencies Achieved

- Turbocor® compressors
  - TT300-TT500 components setup and troubleshooting
- Turbocor® monitoring software
  - Competency ...
- Arctic Chiller Controls
  - Setup and adjustments
- Sporlan Expansion Valves
  - Setup and adjustments

## Two-Year Certification

Certification is valid for 2 years upon successful completion of the training course. A refresher course may be necessary to gain knowledge on new innovative designs and technology.

**Important:** This course does not certify technicians to act as certified trainers for the ArcticCool chiller systems or Danfoss Turbocor® systems.

Arctic Chiller Group reserves the right to:

1. require additional courses or refresher training for certification to remain valid
2. reject applicants or refuse certification at its sole discretion if the prerequisites are not met to the satisfaction of training administrators.

## Prerequisites

- Previous HVAC accreditation or minimum field experience
  - Documented Education (1 of the following)
    - Engineering Degree
    - Associates Degree
    - Certificate
    - Trade Certificate
  - Minimum 5 years of experience with centrifugal chillers
- Adequate Computer Skills
  - Familiar with Microsoft Windows
  - Familiar with Microsoft Office
  - Ability to copy/paste files/folders



- Ability to open, create, and save files
- Ability to capture screen shots
- Ability to download and install software
  
- Familiar With Basic Multi-Meter Functions
  - Measuring resistance ( $\Omega$ )
  - Measuring voltage (V)
  - Measuring amperage (A)
  - Measuring milli-amperage (mA)
  - Measuring continuity (...)
  - Measuring diodes
  - Measuring capacities
  
- Laptop Computer
  - Windows XP/Vista 32 bit Operating System or Higher
  - Adobe Reader
  - Microsoft Word
  - Microsoft Excel
  - Portable wireless internet access
  - NO ADMINISTRATIVE RESTRICTIONS
  
- English language proficiency
  - Spoken
  - Written

### Preferences

- Ability to read P&ID documents
- Previous electrical training
- Previous centrifugal chiller experience
- Previous VFD experience
- Previous controls experience

### Cost\*

\$2,500 per person

- Price includes:
  - Danfoss Turbocor<sup>®</sup> software
  - Controller software
  - Current manuals (electronic format)
  - Hotel stay – 3 nights paid, breakfast included (Room and Tax only)
  - Lunch 3 days
  - Dinner 2 nights
- HST is extra where applicable.
- Airline tickets and taxi/car rental costs will be at the expense of the participant and should not be pre-booked until authorization is granted for participating in the training course.

\* Cost is based on a maximum-sized class of 14 participants only. Payment must be made in full at least 1 week prior to the class start date.



## Location

Arctic Cool Chillers Limited  
2100 Steeles Avenue East  
Brampton, ON  
L6T 1A7  
Canada

Phone: 905-789-9988

Fax: 905-789-9945

- Please book flights to and from: Toronto Pearson International Airport (Code YYZ) as this is the closest airport to our facility.

## Transportation

Arctic Coll does not provide any transportation so, make sure you provide your own transportation such as rental car.

## Application Form

The application form is provided at the end of this document.

Please complete and submit this form via e-mail or fax to:

- Justin Weightman [justinw@arcticchillergroup.com](mailto:justinw@arcticchillergroup.com) **or**
- Ali Khadiv [akhadiv@arcticchillergroup.com](mailto:akhadiv@arcticchillergroup.com) **or**
- Service [service@arcticchillergroup.com](mailto:service@arcticchillergroup.com)
- Fax the attention of Ali Khadiv at 905-789-9988, ext. 223.

## Training Class Schedule

The following dates are tentatively scheduled for the technical training classes. Dates are subject to change.

Date	Location	Availability
January 30- February 1	Arctic Cool Chillers Limited 2100 Steeles Avenue East Brampton, ON L6T 1A7  Phone: 905-789-9988 Fax: 905-789-9945	14 spaces
February 27- March 1		14 spaces
March 27-29		14 spaces
April 24-26		14 spaces
May 29-31		14 spaces
September 25-27		14 spaces
October 23-25		14 spaces
November 20-22		14 spaces



## **Cancellation Policy**

**Important:** All confirmed participants will be notified **2 weeks prior** to the **course start date**. Await your official enrollment confirmation e-mail before booking flight reservations.

Arctic Chiller Group reserves the right to cancel a scheduled training course and/or reschedule a training course if enrollment is insufficient a minimum of 2 weeks prior to the scheduled course date.



### Service Provider Maintenance Training & Certification Enrollment Form

<b>Contractor</b>	
Company Name	
Contact Name	
Contact Email Address	
Address	
City	
Province/State	
Postal Code/Zip Code	
Office Phone Number	
Office Fax Number	

<b>Applicant</b>	
Name	
Title	
Cell Number	
e-mail	

<b>Course Prerequisites per Applicant</b>	
Education (List degree, certification)	
Years of experience with centrifugal chillers (5 years' minimum required)	
Adequate computer skills?	Yes                      No
Familiar with basic multi-meter functions?	Yes                      No
Laptop computer prerequisites met?	Yes                      No
Proficient in spoken/written English?	

<b>Session Booking</b>	
Training dates preference	1.                      2.                      3.
Purchase Order Number	
Method of Payment	



<b>Office Use Only</b>	
Training Date Session	
Prerequisites confirmed	
Confirmed to client via:	
Payment received	