

TRIP UNIT RETROFIT COURSE

URC
UTILITYRELAY.COM

THE COURSE

The Utility Relay Company Retrofitting Course combines classroom and hands-on experience to provide new and veteran technicians with an education in the theory behind low voltage trip systems and a solid understanding of the retrofit process.

What you will learn:

THEORY

of protective devices used on low voltage power breakers

INSTALLATION

of a Retrofit Kit

HANDS-ON

installation of a retrofit kit with no more than 2 students per breaker

BREAKER TESTING

of the completed retrofit using primary & secondary injection along with our InfoPro-AC software (Bring your own laptop)

*compatible ONLY with Windows based computers



3.5 DAYS

combined classroom and hands-on instruction.

28 NETA CREDITS

NETA Continuing Technical Development credits awarded to members of NETA accredited companies.

LOCATION

Utility Relay Company
Chagrin Falls, Ohio

Marriot Suites
Beautiful Northeast Ohio

Cost: \$2,185

Credit card required to reserve a seat.

Registration Includes:

- Hands-On and Classroom Learning
- Hotel accommodation (4 nights)
- Full Breakfast each morning
- Lunch - Tues Wed Thurs
- Group Dinner on Wed

THE EXPERTS

The course is instructed by our degreed electrical and mechanical engineers. Together they have decades of experience designing electronic trip devices and retrofit components for hundreds of low voltage AC & DC power circuit breakers.

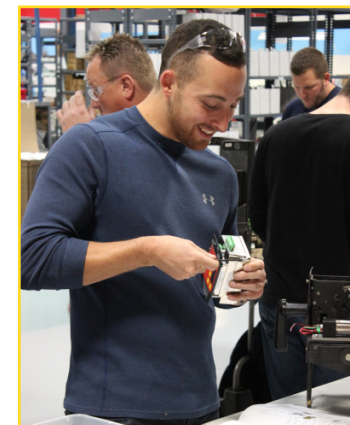


"A great class. I would recommend it to all electrical testing companies."

SCOTT SMITH - PACE TECHNOLOGIES

"Great experience, all instructors were extremely knowledgeable"

MIKE GUERRA - FERGUSON ELECTRIC



ABOUT US & WHY WE STARTED THE RETROFIT COURSE

Since URC started in 1995, our total energy has been focused on one thing, low voltage protection. More specifically, to develop and manufacture retrofit protection products for the low voltage breaker retrofit market. Our company philosophy is simple; produce high quality, easy-to-use products and follow it up with the greatest customer service possible.

Over the years our customers have repeatedly asked:

"Where can we find qualified breaker technicians to retrofit circuit breakers?"

This industry request for help has gone unanswered until now. URC is proud to announce and offer our Trip Unit Retrofit Class to our partners. This class will be held throughout the year at our facility in Chagrin Falls, Ohio.

The Low Voltage Circuit Breaker Retrofit Class can be a starting point for a new technician, or sharpen the skills of the experienced team leader. This class is being offered to both independent and OEM service technicians that retrofit power circuit breakers.

UPCOMING SESSIONS

Register by July 16, 2021

Fall 2021
SEP 28 - OCT 01

To Register or For More Information:

Call: 440-708-1000 ext-139

Email: ANelli@UtilityRelay.com

CLASS SCHEDULE

(Subject to change from session to session based on student's experience)

DAY 1

CLASSROOM DAY

8:30 AM to 4:00 PM

- Basic components of low voltage power circuit breakers
- Short history of series overloads
 - o Dashpots, sucker disks, etc.
 - o Issues with series overloads
- Short history of electronic trip units
 - o Analog trip units
 - o Digital trip units
 - o Communications
- Components of an electronic trip system
 - o Sensors
 - o Actuator
 - o Trip Unit
- Tour of URC facility
- Lunch at URC
- Basic iron core sensor theory
 - o Dual & single core sensors
 - o Advantages and issues
 - o Polarity
- Rogowski coil sensor theory
 - o Advantages and issues
 - o Polarity

DAY 2

CLASSROOM & HANDS-ON

8:30 AM to 4:00 PM

- Trip Units
 - o Protection functions
 - i. What is LSIG
 - ii. Issues with GF
 - iii. Double Ended Subs
- Break
- Trip Units (continued)
 - o Entering Settings
 - o Testing
 - i. Secondary Injection
 - ii. Primary Injection
- Lunch at URC
- TCCs
- Prepare for tomorrow's hands-on retrofit
 - o Review of retrofit kit installation manual
 - o Review of actuator adjustments
 - o Review of trip unit settings
 - o Review of breaker test sheet
 - o Review of pre-retrofit breaker checks
 - o Review of post-retrofit breaker tests

Evening

- Team Dinner

DAY 3

HANDS-ON & CLASSROOM

8:30 AM to 4:00 PM

- Pre-retrofit inspection of breaker
- Install retrofit kit
- Lunch at URC
- Install retrofit kit (continued)
- Grade quality of retrofit
- Test retrofit using secondary injection (break as needed)

DAY 4

HANDS-ON 1/2 DAY

8:30 AM to 11:30 AM

- Test retrofitted breaker
 - o Primary injection
 - o Dielectric
 - o Low-resistance ohm meter
- Review test reports
- Adjourn

**EXCEPTIONAL PRODUCTS
EXCEPTIONAL SERVICE**

Utility Relay Company
10100 Queens Way
Chagrin Falls, Ohio 44023
440-708-1000



UTILITYRELAY.COM