

A catastrophic failure in electrical systems is one which causes a dangerous product failure potentially exposing the homeowner to a safety risk.

Several examples might be the failure of a high energy consumption device in the home, such as an electric dryer, a motor short in the furnace or an electric water heater.

During a catastrophic failure, hot and conductive plasma gasses can be generated in the branch circuit breaker. Schneider Electric system testing helps to protect the homeowner from a wider failure of the whole load center due to the main and branch circuit breaker combination.

While rare, you cannot predict these "failures" and how Classified Circuit Breakers will function as the combination may never have been tested.

The Square D® series rated systems (circuit breaker and panel) exceed the minimum performance requirements established in the UL product safety standards as it is the Schneider Electric goal to give our customers the best products possible.

You Get What You Pay For With Square D®

With over 100 years of experience providing safe electrical equipment, Schneider Electric is devoted to manufacturing the best electrical products for your home or business. *We don't manufacture **classified** circuit breakers.*

At Schneider Electric we take the time to test and ensure that the products we sell to you work together safely. We're not trying to circumvent the excellent systems put in place by the groups involved in supporting the National Electrical Code (NEC). Why install a Classified Circuit Breaker in your own or your customer's load center that may not work in all circumstances? Why reduce the level of performance that you may need someday in an emergency?

Schneider Electric is concerned foremost with you and your customer's safety. We will not promote a generic circuit breaker program to contractors and consumers to profit at your expense.

Our company wholeheartedly supports the NEC and product listing requirements. The NEC and product safety standards establish a system to ensure a safe electrical installation. Why create a "second class product" category by shortchanging the system put in place for that very reason?

We support the electrical inspection system and the rejection of Classified Circuit Breakers. The red tag is an identification means that signals a non-compliance to the basic safety requirements in the NEC. The inspector community generally agrees that Classified Circuit Breakers are not an appropriate substitute for the circuit breakers marked on the Listed panel.

Inspectors are responsible for approving the electrical installation ensuring compliance with the basic safety requirements in the NEC. Why take the chance of receiving a red tag, incurring rework and call-back expense? Do you want a red-tag to send a signal to your customer that your work is not in compliance with the basic safety requirements of the NEC?

Don't be misled by conflicting information. Get all the facts before you decide. For more information on the questions regarding the Classified Circuit Breaker Program, contact us at 1-888-778-2733 or visit our web site at www.SquareD.com.

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Did You Get What You Paid For?

Weigh the Risks Before You Buy, Sell or Install A Classified Circuit Breaker

What is a catastrophic failure?



Classified Circuit Breakers Are Not Direct Factory Replacements.

Classified Circuit Breakers compromise electrical safety and many electrical inspectors agree and do not permit the use of Classified Breakers.

Don't "Red Tag" your customers causing hook-up or moving delays with a "look alike" product that is less expensive.

Learn **ALL** the facts before you make your decision!

The Classified Circuit Breaker Program Is Not Equivalent To The Panelboard Listed Program.

Classified Circuit Breakers are supposed to be supplied with a "compatibility list" that lists the "select" panelboards (load centers) where the breaker can allegedly be used. The list itself is a key indicator of the significant limitations. Only a fraction of the panels where the normally acceptable circuit breaker can be used are found on that list. In the case of Square D® products that accept a QO® circuit breaker, less than 10% of those products appear on any compatibility list.

The Classified Circuit Breaker Is Not Subject to the 22K/10K Series Rating System Test.

This oversight cannot be minimized by advertising. Square D circuit breakers and load centers are tested **AS A SYSTEM**. The series rating includes not only the circuit breaker but the equipment in which it is installed. The main circuit breaker is rated at 22,000 Ampere Interrupting Rating (AIR) while the branch circuit breakers are rated at 10,000 Ampere Interrupting Rating (AIR).

We test the load center and circuit breaker assembly to ensure that when the circuit breakers are called upon to protect your house from an electrical hazard they will provide that protection in a safe and reliable manner time-and-again without endangering the homeowner.

In some utility areas, a 22,000 AIR rating is **MANDATORY**. Schneider Electric tests circuit breaker combinations to meet these requirements. If a customer substitutes a Classified Circuit Breaker into our load center, the protection rating has just **DECREASED** to 10,000 Amps (AIR) potentially placing the entire electrical system within your home at risk.

Why Do Some Utilities Require 22K Fault Ratings on Load Centers and Circuit Breakers?

To protect the homeowner and the residence, utilities are placing larger transformers closer to homes to provide more current for demanding appliances and equipment, such as electric heat and air conditioning. Classified Circuit Breakers limit you to a 10,000 fault rating.

The utilities are depending on the main and branch circuit breaker **COMBINATION** to provide this increased protection. Ignoring this series system combination rating establishes the potential for a catastrophic failure for not only the circuit breakers and load center but also the entire electrical system and the connected electrical products.

Warranties Can Be Revoked By The Manufacturer If A Substitute Product Is Used and Causes Damage.

Classified Circuit Breaker manufacturers would like you to believe that the Magnusson-Moss Warranty Act states that the warranty will not be affected if a Classified Circuit Breaker is installed in another manufacturers load center.

This Act deals with the warranty of the assembly not being void when a component is used that does not affect the performance of the other components of the assembly, and is based on an evaluation of ordinary consumer products.

For example, a car manufacturer cannot void the warranty of the car if different spark plugs are used, or if the customer changes his own oil. But if an unauthorized mechanic replaces a piston of the wrong size and weight, the manufacturer IS NOT responsible for any resulting engine failure.

Circuit breakers and load centers are directly integrated and work **TOGETHER** to provide a safe electrical system. As such, the warranty can be impacted with the installation of a Classified Circuit Breaker.

Electrical Inspectors Are Clear In Their Position That Panelboard Markings Are The Only Ones To Be Followed.

Classified Circuit Breaker Manufacturers would have you believe that installation contrary to the marking on the panelboard (load center) is consistent with the National Electrical Code (NEC). In

fact, NEC 110.3(B) is clear in the requirement to follow the listing and label instructions. Labels added "in the field" as a part of the Classified Circuit Breaker Program can be contrary to the Listed panel markings and is in conflict with NEC 110.3(B).

The only method to ensure compliance with the NEC is to maintain the integrity of the Listed panelboard markings and install only the circuit breakers listed on the panelboard product markings as it left the factory.



Classified Circuit Breakers Do Not Take Into Account Manufacturer Design Revisions.

While Classified Circuit Breaker manufacturers provide you with a "compatibility list" this listing does not take into account original equipment design changes that occur over time.

The Classified Circuit Breaker Program only tests "currently available" load centers (panelboards) on the market.

What about load centers manufactured earlier?

Since the introduction of the QO circuit breaker and panelboard in the 1950s, numerous product revisions have taken place. Classified circuit breaker manufacturers have no method to evaluate classified circuit breakers in older panels. Only Schneider Electric has the engineering knowledge to understand the construction and performance of Square D panelboards past and present.

Even the Classified Circuit Breaker Program recognizes this limitation by establishing a compatibility list. In the case of Square D products that accept a QO circuit breaker, less than 10% of QO panel models appear on any compatibility list. In fact, when you consider the fact that none of those

panels on the compatibility list are even acceptable if applied above 10,000 amperes of short circuit current, the percentage is even smaller.

Circuit breakers and panelboards are unique in their construction and design among manufacturers. While a circuit breaker of one manufacturer may physically appear to "fit" in a panelboard of another manufacturer, the electrical connection, thermal characteristics, operational performance as a combination is unknown and questionable.

The owner of an existing home, when either shopping for a replacement breaker or when hiring a contractor to install a new one assumes that the products for sale fit the design.

Misleading advertising that does not take into account a product family's history of changes may lead to an increased safety risk for the homeowner without them even knowing!

