

Introduction

When decouplers are installed on a pipeline for AC voltage mitigation and over-voltage protection, there may be occasions where disconnection of the decoupler is required. Reasons for disconnection of the decoupler include:

- Isolation of high frequency signals from locators and coating defect instrumentation
- Decoupler isolation from close interval survey (CIS) operations
- Decoupler testing
- Certain pipeline test procedures would otherwise be affected if the decoupler remained in the circuit

Safe disconnection can't always be easily accomplished by hand if notable AC induction is present. To serve this need, Dairyland offers a variety of isolation switches which allow safe disconnection and reconnection without causing exposed arcs.

Isolation Switch Models

SWX-100-PED

The SWX-100-PED features a pull-style switch housed in a NEMA 4x enclosure and is designed to be externally mounted to the cover of Dairyland pedestals. This design allows for convenient access to the switch and its deadfront terminals without opening the pedestal. The dead-front terminals provide convenient connection points to the pipeline and mitigation wire.

SWX-100-INT: The SWX-100-INT for internal pedestal-mounting, is a pull-style switch in a NEMA 4X enclosure, for field installation with a Dairyland Pedestal. The switch includes dead-front terminals that provide convenient connection points to the pipeline and mitigation wire.

SWX-100-INT48: The SWX-100-INT48 switch kit includes a pull-style isolation switch and components needed to connect with any Dairyland decoupler for field installation inside Dairyland's MTP-48 pedestal.

SWX-100-ENCL: SWX-100-ENCL models accommodate a pull style isolation switch and any Dairyland decoupler bundled in a NEMA 4x enclosure. When ordered in conjunction with a Dairyland SSD or PCR, full assembly is provided by Dairyland. Also available for purchase for field installation of a Dairyland SSD or PCR. Multiple enclosure sizes available.

An optional terminal extension bar (MTR-4), allowing up to 4 lead attachments to the switch, is also available. For all product features and accessories, see full product information at www.dairyland.com.

External Switch Ratings

	Vac	Vdc	Ampacity (Amps)	AC Fault 30 Cycles
SWX-100 (ALL)	240	125	100	15kA

Safety Considerations

After the Isolation Switch has been installed, disconnection of a decoupler when performing an AC mitigation function will cause the voltage on the pipeline to rise. NACE recommends that exposed pipelines be limited to 15V for personnel safety. Therefore, appropriate user-approved and industry safety precautions should be taken whenever one or more decouplers are disconnected on a pipeline subject to AC influence.

Dairyland provides suggested safety procedures for installing and operating the Isolation Switch. Refer to the appropriate installation instructions for complete information.

Note that the Isolation Switch is not certified for, and may not be used in, hazardous (classified) locations.



SWX-100-PED



SWX-100-ENCL1816



SWX-100-INT

Pull-Style Isolation Switches