

## PadPlus+ transformers

### An economical and flexible solution

PadPlus+ transformers are equipped with distribution transformer protection that exceeds the capabilities of conventional expulsion fuses and switches. Significant advantages include a programmable, optimizable curve with higher continuous-curve and interrupting ratings to provide unequalled transformer and system protection possibilities. ABB now offers an economical and flexible solution for both pad-mounted and unit substation transformers.



#### PadPlus+ transformers

For many distribution transformer applications, particularly those in the range of 750 kVA to 3000 kVA, PadPlus+ transformers offer optimized protection that conventional fuses and switches can't match.

An ABB distribution transformer equipped with \*Elastimold® MVI Molded Vacuum Fault Interrupters provides the desired transformer protection and serves a wide range of system protection and switching requirements. The molded vacuum fault interrupters are easily programmed to optimize protection, are easily reset and can be operated remotely.

ABB provides PadPlus+ solutions for both pad-mounted and unit substation transformers to help reduce unplanned outages and increase operational efficiency. Contact your local ABB representative for your specific application considerations.

#### Features

- **Protection for large distribution transformers where conventional fuses are not adequate or economical**
  - Protection for applications with full load current greater than 120 amps
  - Can be used in conjunction with current limiting fuses
- **Multiple application possibilities**
  - Transformer protection
  - Loop protection
  - Remote switching via SCADA
  - Automatic source transfer
- **Potential to combine transformer and switchgear functions**
  - Significantly reduced equipment costs
  - Reduced installation costs
- **Selectable and programmable time-current characteristic curves and trip settings**
- **Greener design**
  - Reduced footprint and environmental impact
- **Dead front construction**
  - Radial or loop feed
- **Vacuum interruption technology**
- **Factory-installed and tested**

# Technical information

## ABB PadPlus+ solutions

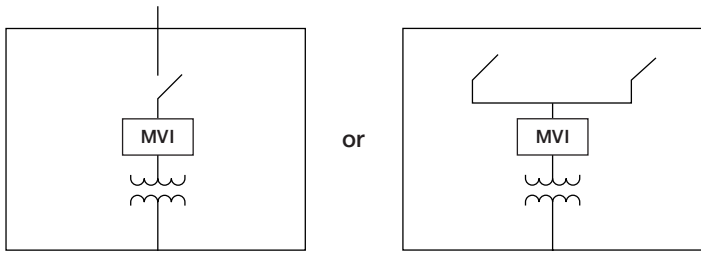
The ABB PadPlus+ transformer provides the ability to enhance service reliability, reduce costs and minimize environmental impact.

- Multiple protection options
  - Exceptional transformer protection
- Switching capabilities
  - Remote switching and service restoration
- Reduced footprint
  - Improved appearance and “greener” installation
- Reduced equipment costs
  - Combined transformer and switchgear applications

Following are a few possible ABB PadPlus+ Applications. Other configurations can be supported. Please consult your ABB representative to address your specific requirements.

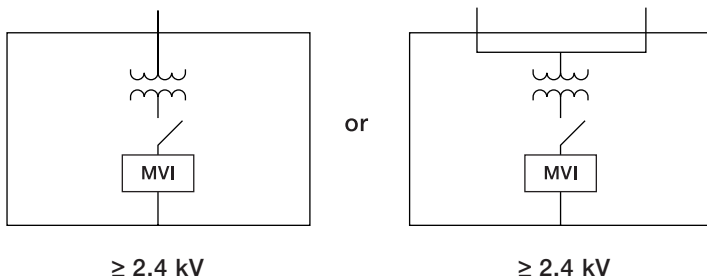
## Transformer protection

The PadPlus+ can be connected to protect the transformer and downstream equipment.



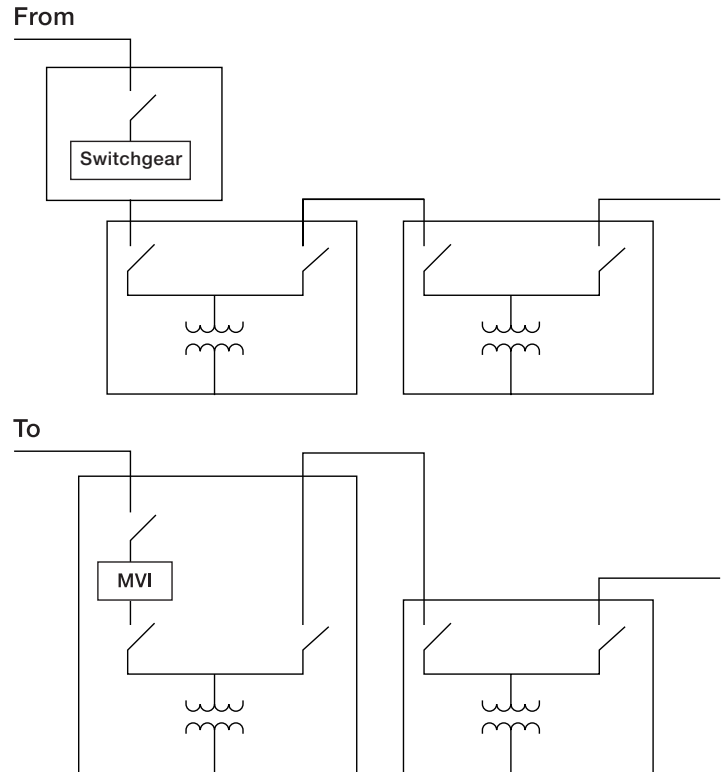
## Secondary protection

The PadPlus+ can be utilized for transformer secondary protection at greater than or equal to 2.4 kV.



## Loop protection – integration of transformer and switchgear functions

The PadPlus+ can be dedicated to distribution system switching and protection. This integration of transformer and switchgear functions eliminates the need for separate switchgear installations and provides significant savings.



# Technical information

Ratings							
Voltage Class	15.5	15.5	15.5	27	35	35	
Maximum Design Voltage(kV)	17	17	15.5	29	38	38	
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
BIL Impulse Withstand (kV)	95	95	95	125	150	150	
One-Minute AC Withstand (kV)	35	35	35	60	70	70	
Five-Minute DC Withstand (kV)	53	53	53	78	103	103	
Continuous Current (Amp)	600	600	600	600	600	600	
Load Interrupting & Loop Switching (Amp)	600	600	600	600	600	600	
Transformer Magnetizing Interrupting (Amp)	21	21	21	21	21	21	
Capacitor or Cable Charging Interrupting (Amp)	40	40	40	40	40	40	
Symmetrical/Assymetrical Interrupting (kA)	12.5/20	16/25.6	20/32	12.5/20	12.5/20	25/40	
Current Sensor Ratio	1000:1	1000:1	1000:1	1000:1	1000:1	1000:1	

## Application information

Meets ANSI C37.60

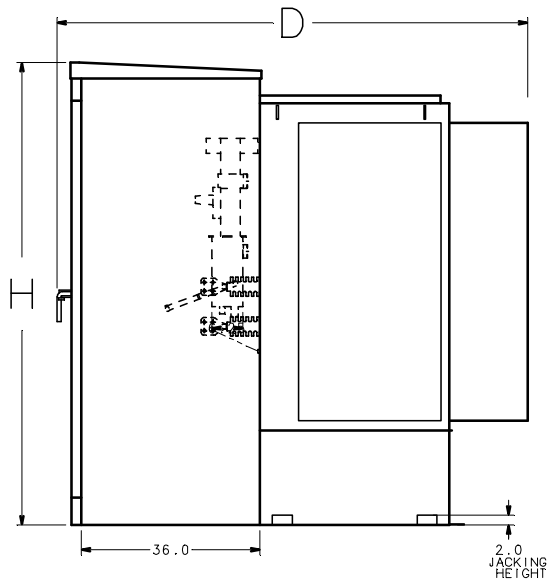
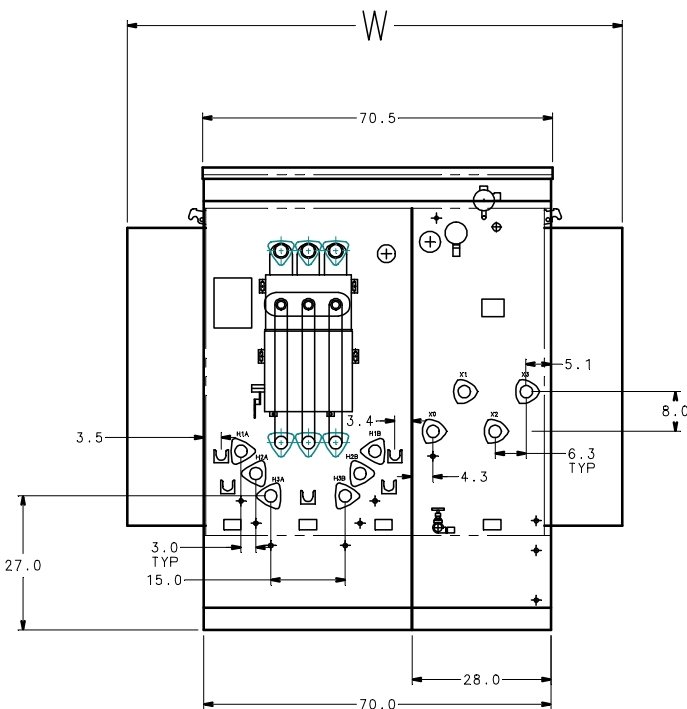
The complete product guide can be found at

[http://www-public.tnb.com/ps/util/index.cgi?a=pc\\_home](http://www-public.tnb.com/ps/util/index.cgi?a=pc_home).

## Loop feed application

## Estimated overall dimensions

kVA	Height	Width	Depth
750	93	89	78
1000	93	91	85
1500	93	95	91
2000	93	99	95
2500	93	102	95



For more information please contact:

**ABB Inc.**

500 West Highway 94  
Jefferson City, MO 65101  
USA

Phone: +1 573 634 2111

Fax: +1 573 635 6275

**[www.abb.com/transformers](http://www.abb.com/transformers)**

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