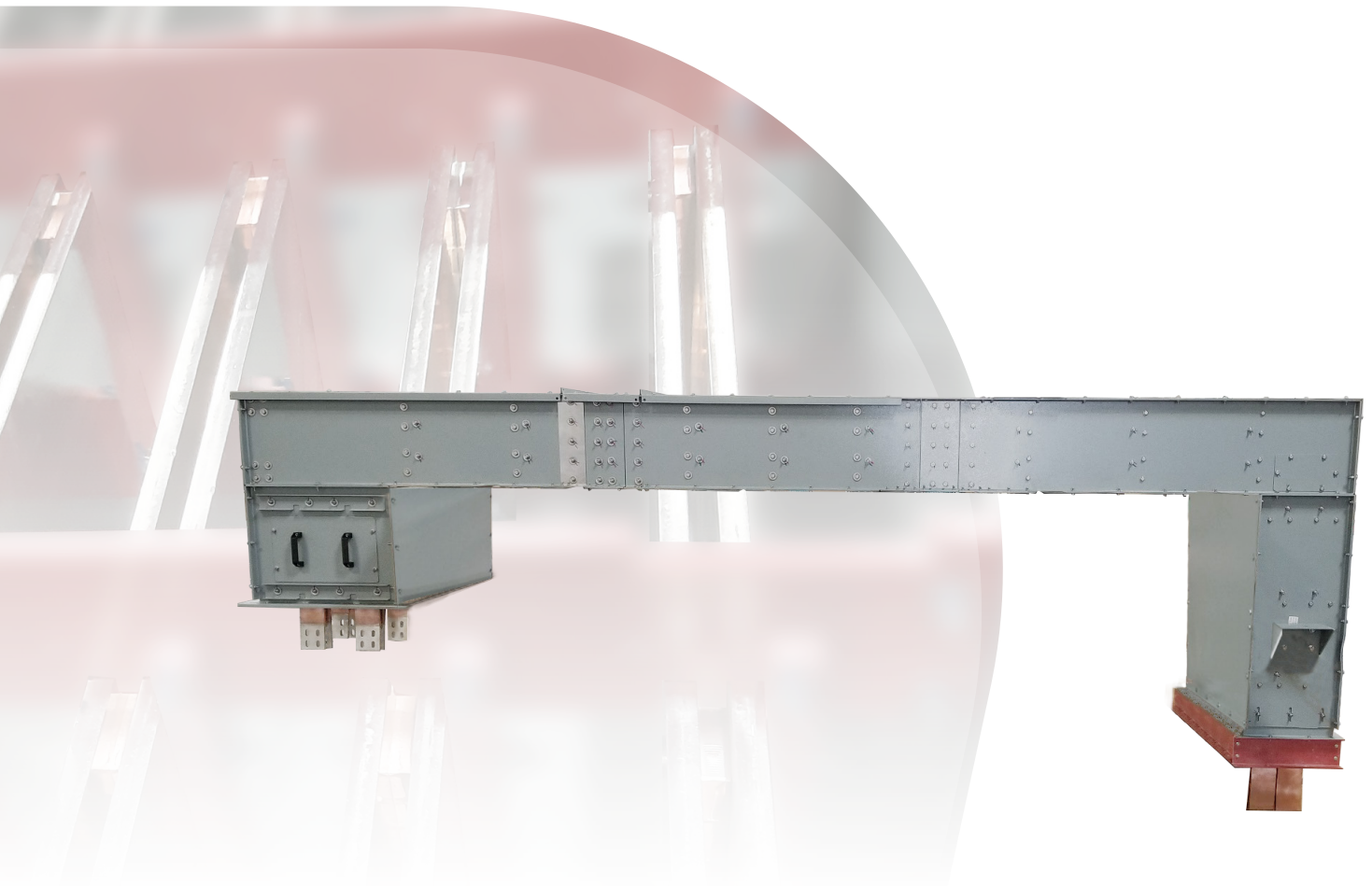


# AC/DC BUS DUCTS

## EFFICIENT-**B**DUCT



# EFFICIENT

## POWER CONVERSION



Using experience accumulated over more than 50 years working in the field of traction power substations, Sécheron has designed the EFFICIENT product category from the ground up to cover all the customer needs for DC supplies.

All EFFICIENT products are built specifically to comply with the most stringent requirements of usability, maintainability and durability in traction power application environments, maximizing the return of investment for our customers. These reliable and field-proven building blocks are also the basis for custom applications upon specific requests.

## MAIN CHARACTERISTICS

AC and DC bus ducts are made of aluminium or steel housing and copper bus conductor.

	Unit	AC bus duct	DC bus duct
<b>Standard product range</b>			
Rated voltage	[V]	Up to 1 058	Up to 1 200
Rated current	[A]	Up to 3 000	Up to 15 000
Rated frequency	[Hz]	50 - 60	N/A
Rated short-time withstand current	[kA]/[s]	30/1	69/0.25
Rated short-circuit withstand current	[kA]	70	121
Test voltage at power frequency (1min.)	[kVrms]	4.8	4.8
Width	[mm]	915	420
Depth	[mm]	According to the requirements	According to the requirements
Height	[mm]	400	400

Other ratings and dimensions upon request.

## MAIN BENEFITS

- ✓ Custom engineered to suit the requirement of each installation
- ✓ Indoor or outdoor rated enclosures
- ✓ Available in any length made of modules up to 2 meters long
- ✓ Easy to install with its permissible busbar/enclosure adjustment at each junction
- ✓ Bus joints bolted together with splice plates
- ✓ Removable covers for easy access when making joints and during inspections
- ✓ Safe and reliable

# DESCRIPTION

Our AC and DC bus ducts are designed for interconnecting groups of metal-enclosed or metal-clad switchgear, power converters and transformers. By manufacturing the bus duct as well as the switchgear, we contribute to efficient site integration between components.

## Non-segregated phase bus / AC bus

The AC bus duct is available for voltages ranging up to 1 058 V<sub>AC</sub> with current ratings up to 3 000 A.

The AC bus duct has all phase conductors in a common enclosure with an air space between phases. There are no metallic barriers between phase conductors of adjacent phases. Conductors are mounted on custom molded fiberglass reinforced polyester blocks.


The AC bus duct is developed for connection of transformer to 12-pulse or 6-pulse converter.

## DC bus

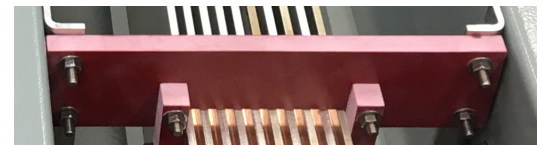
The DC bus duct is available for voltages ranging up to 1 200 V<sub>DC</sub> with current ratings up to 15 000 A.

The DC bus can be supplied to meet the needs of most direct current applications. Each pole contained in a separate enclosure.

The DC bus duct is developed for connection of converters to DC switchgear assemblies, positive and negative.

 Refer to **Brochure REV** • SG847024BEN

 Refer to **Brochure MBS-HD** • SG839111BEN



## Non-ventilated enclosure

The enclosure is constructed in order to provide no intentional circulation of external air through it. Ventilated enclosures can be provided for indoor applications.

# STANDARDS

Type tested according to the following standard:

- **IEEE C37.23-2015** | IEEE Standard for Metal-Enclosed Bus



## PROJECT APPLICATION

- ✓ Indoor DC bus connection between rectifier and DC switchgear (8 000 A and 15 000 A)
- ✓ Outdoor AC bus connection (3 000 A)



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