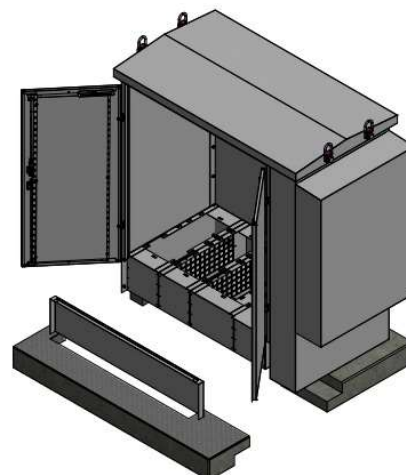


GRITEC

Stainless Steel Enclosure designed for Siemens 8DJH 12/24 kV Switchgear



1. Introduction

HV Power and GRITEC have designed a new stainless steel outdoor enclosure for New Zealand and Australian customers. It is manufactured in Germany and type-tested with Siemens 8DJH 12/24 kV switchgear for safe arc-fault performance.

2. Experience

Founded in 1963, GRITEC has been a pioneering force in infrastructure and technical building manufacturing for over 63 years. They specialise in serving sectors such as electricity, gas, water, renewable energies, rail, e-mobility and industry.

GRITEC excels in the development, production and distribution of technical buildings, spanning from compact, enclosed switchgear/transformer substations to expansive, accessible structures assembled from multiple modular units.

Their workforce comprises roughly 1100 employees stationed across multiple sites in Germany and other locations.

3. The enclosure

To ensure longevity, the outdoor enclosure is crafted from stainless steel, then coated in network equipment green (RAL6020) to reduce glare. The doors boast a double-point locking system for added durability, and standard padlocks can be attached for security. Smaller enclosures feature double doors for convenient access to the Siemens switchgear, while larger enclosures feature three doors.

4. The concrete base

Pre-cast concrete bases feature four lifting eyes, enabling seamless transportation and installation of the entire unit in a single lift.

5. Cable penetrations

The concrete base enables cables to emerge beneath the switchgear with gland plates at the enclosure's base to reduce the ingress of foreign objects or vermin and to uphold the IEC-tested safety venting.

6. Standards and testing

IEC 62271-202 delineates the operational conditions, rated specifications, general structural prerequisites, and testing procedure for cable-connected prefabricated substations (including walk-in and non-walk-in variants) intended for outdoor installation in locations accessible to the public, necessitating personnel protection.

The HV Power is type tested with Siemens 8DJH 12/24kV to this standard with the classification of IAC-AB 20kA/1s.

The AB classification ensures the protection of individuals in the event of an internal arc as:

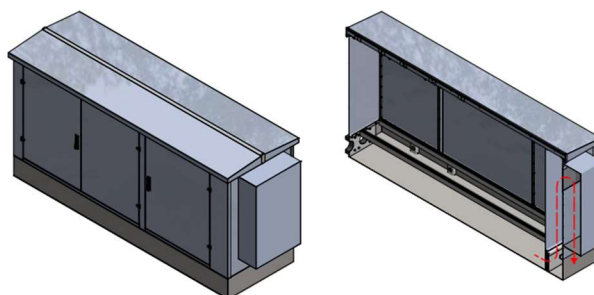
- Type A = Safety precautions for the operator
- Type B = Safety measures for the public

The IAC B specification is vital for all publicly accessible network switching assets, particularly in scenarios involving remote or autonomous switching operations.

This compliance is ensured by integrated baffles within the enclosure, eliminating the necessity for designated below-ground voids or chambers to meet compliance standards. This feature makes it particularly suitable for sites prone to groundwater fluctuations, as it eliminates concerns of the venting space being compromised by water.

7. Ordering

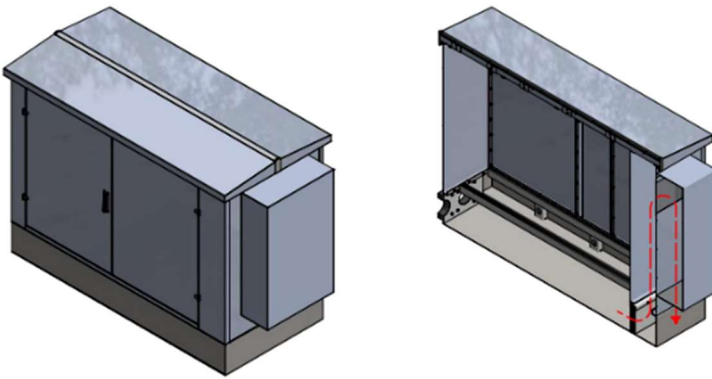
HV Power provides enclosure designs for most typical Siemens 8DJH 11/22kV switchgear combinations. Contact HV Power for personalised assistance with your application.



Technical Data

8. Designs already requested

Manufacturer:	GRITEC
Electrical Data:	24 kV
Type of switchgear:	SIEMENS 8DJH, 24kV RMU
Switchgear height:	max. 1400 mm
Degree of protection:	IP34D
Standard:	IEC 62271-202
IAC-Classification:	IAC-AB 20 kA-1s
Material:	Enclosure: Stainless steel: DIN 1.4301 Interior covers / Partition walls: Steel sheet, zinc-plated
Coating:	Powder Coating
Colour:	RAL 6020 Chrome Green
Doors:	Swing-handles for DIN profile half cylinder with self-locking door stoppers Door opening angle: 95 deg.



9. Types

MCS1019-20F New Zealand Size-1

1950 mm height (not including concrete pad)
1918 mm width
1100 mm door width
1000 mm depth
Configuration – RRL-006511
RRT-006501 -1400 mm high
Max. RMU width possible: 1050 mm
Pad: SSP2170B
Halo: 5 Basement

MCS1028-20F New Zealand Size-2

1950 mm height (not including concrete pad)
2780 mm* width
1910 mm* door width
1000 mm depth
Example configuration – LRRRL-006511
RRTL-006511
LRRRL-006511 -1400 mm high

Max. RMU width possible: 1910 mm

Pad: SSP2800B

Halo: 7 Basement

MCS1032-20F New Zealand Size-3

1950 mm Height (not including concrete pad)
3210 mm* width
2350 mm* door width
1000 mm depth
Example configuration – LRRRRL-006511
RRLLL-006511 -1400 mm high

Max. RMU width possible: 2340 mm

Pad: SSP3570B

Halo: 9 Basement

MCS1041-20F New Zealand **Size-4**

1950 mm height (not including concrete pad)
4070 *mm width
3200 *mm door width
1000 mm depth
Example configuration – RRTTTTTT-006511 – 1400 mm high
Max. RMU width possible: 3200 mm
Pad: SSP4270B
Halo: 11 Basement

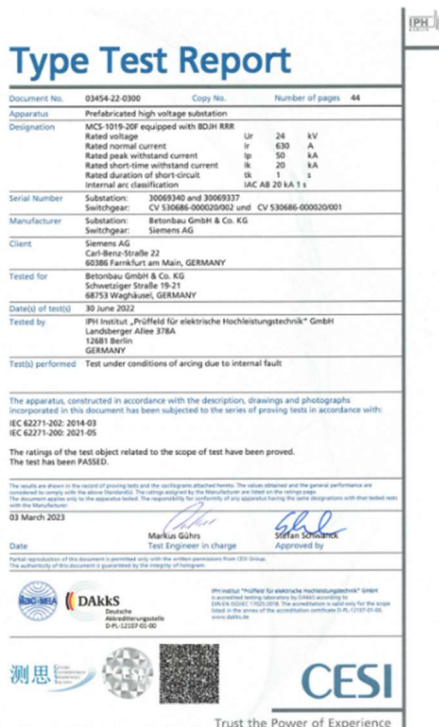
MCS1045-20F* New Zealand Size-5

1950 mm height (not including concrete pad)
4500 mm* width
3630 mm* door width
1000 mm depth
Example configuration – LV pull-out draw with
LRTTLL-M66711 -1400 mm high

Max. RMU width possible: 3630 mm

Pad: SSP 4700B
Halo: 13 Basement

Values marked * are dependent on final configuration, to be confirmed at time of order.



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