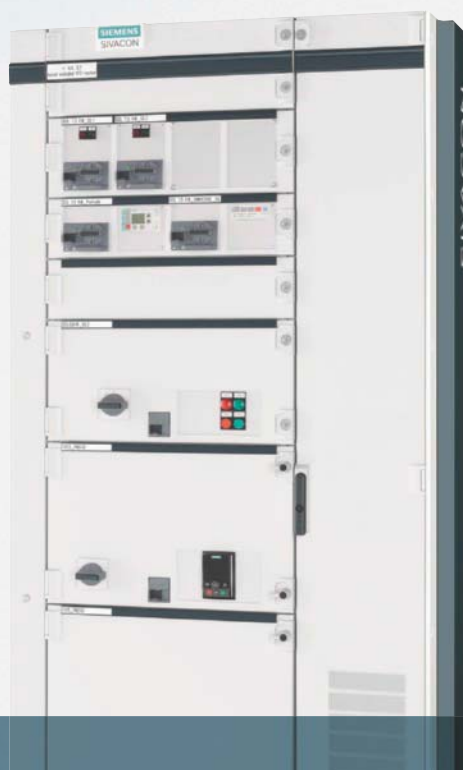


SIEMENS



SIVACON

Universal installation design Section with forced ventilation

Flexible planning with intelligent SIVACON technology

Expanded mounting options

The SIVACON S8 low-voltage power distribution board sets new standards for flexibility. Constructed according to our universal installation design, these sections with forced ventilation enable the installation of withdrawable units with extremely high power loss, such as frequency converters up to 45 kW. Each withdrawable unit is fitted with two integrated temperature-controlled fans. The heated air is discharged via a separate 100 mm-wide ventilation duct. The overall panel width of 1000 mm or 1200 mm remains the same. The fans are sized so that heat removal of the withdrawable unit is ensured even if one of the fans fails. Fan control is implemented ex works with the option of fault message output if required.

Flexible combinations

Thanks to the Siemens universal installation design, these new sections with forced ventilation offer maximum flexibility by allowing the combination of a range of different installation systems. The universal installation design supports the combination of fixed-mounted, withdrawable or plug-in tap-off units for the 3NJ6 in-line design. Proven technical features, such as operating error protection or withdrawable unit coding, have also been retained.

Highlights

- Integration of withdrawable devices with high power loss
- Reliable heat removal, even in the event of fan failure
- Flexibility through the combination of different installation systems

Answers for industry.

Switchboards

SIVACON S8 Power Distribution Boards and Motor Control Centers

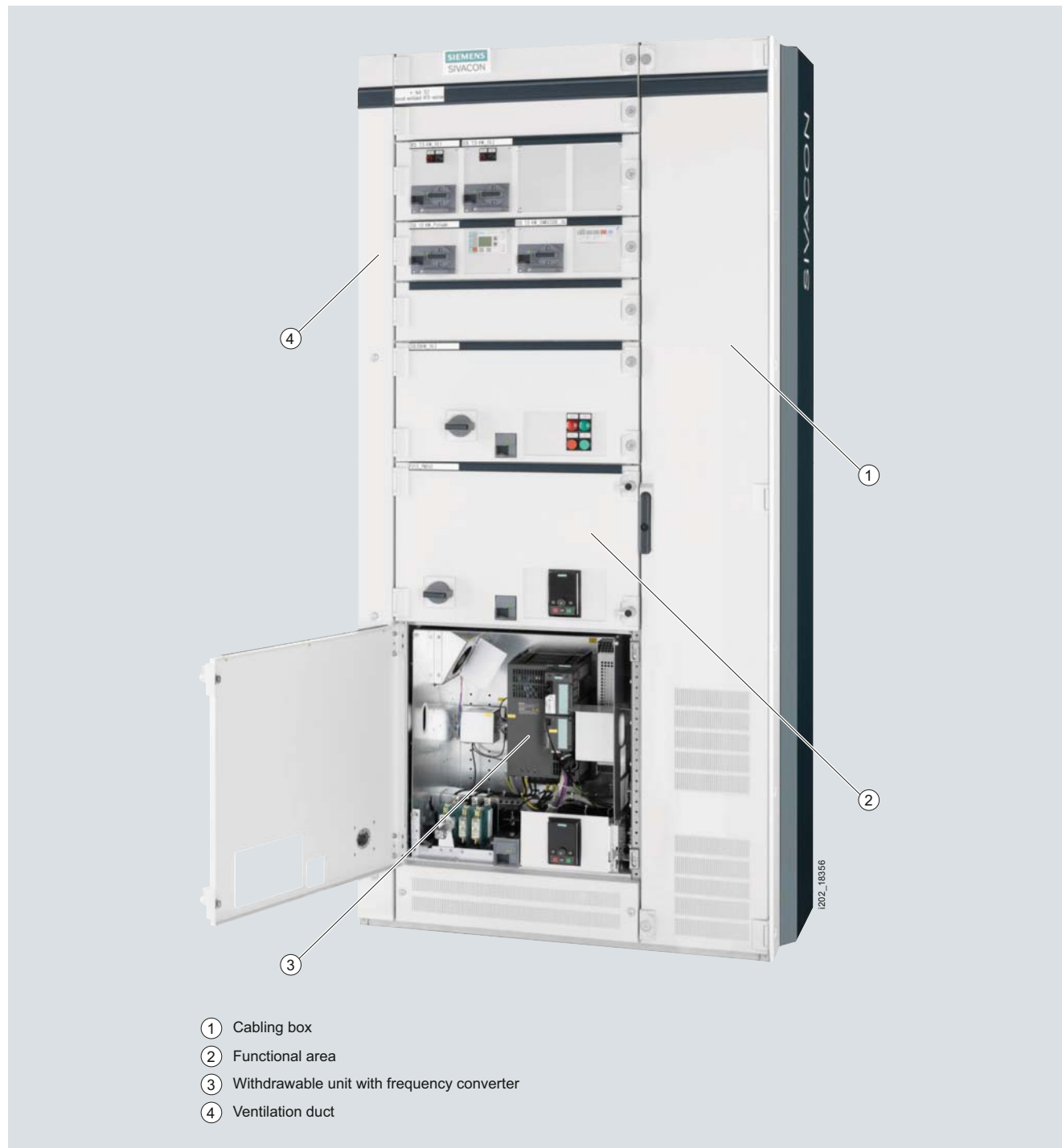
Universal installation design Section with forced ventilation

Overview

Sections with forced ventilation offer flexible solutions for the proven withdrawable version of SIVACON S8 power distribution boards and motor control centers to meet all requirements in industrial plants.

Features

- Separate ventilation duct, 100 mm, located on left
- Section width, 1000 or 1200 mm (front connection)
- Cable connection: located at the front right (section width 1000/1200 mm)
- Cabling box, 300/500 mm
- Cable entry, optional top or bottom connection
- Device installation space can be fully utilized up to a height of 1800 mm (section height, 2200 mm)



Installation of withdrawable frequency converter unit in SIVACON S8

SIVACON S8 Power Distribution Boards and Motor Control Centers

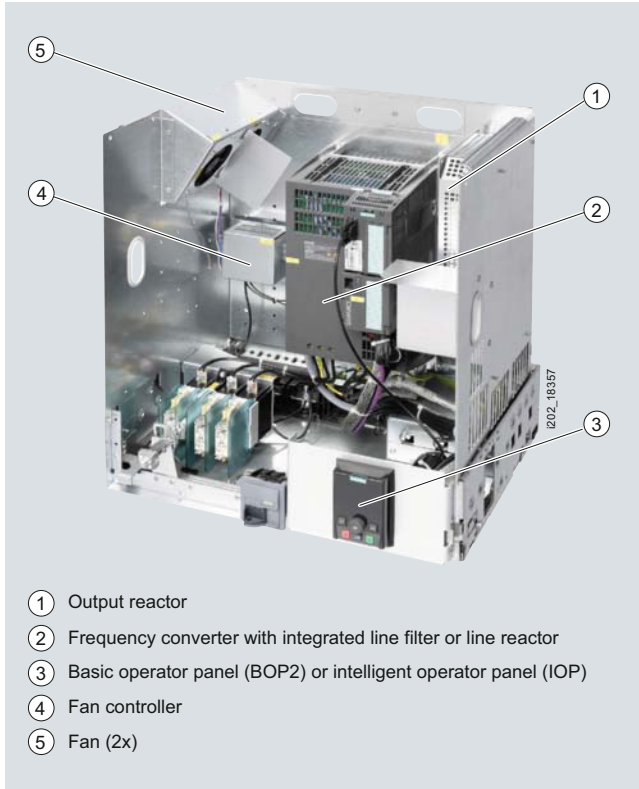
Universal installation design
Section with forced ventilation

Design of withdrawable unit with frequency converter

Withdrawable units with SINAMICS G120 frequency converter for motor ratings up to 45 kW / 400 V:

Components

- CU230 Control Unit
- Power Module (PM)
- Basic operator panel (BOP2) or intelligent operator panel (IOP)
- Line filters
- Line reactors



Design of frequency converter (detailed view)

Application**Application areas for SIVACON S8 withdrawable technology**

SIVACON S8 low-voltage switchboards are used as withdrawable motor control centers for reliable and universal power distribution in industrial plants.

Use of withdrawable technology

When requirements are constantly changing, withdrawable technology offers you the flexibility that you need and ensures high operational safety and reliability.

Frequently changing requirements may include the following

- Changes to the motor rating and/or
- Connection of new loads.

Application areas for SINAMICS

Typical applications for SINAMICS drives and frequency converters can be found in industrial machinery and plant engineering. SINAMICS offers solutions for all drive tasks, such as

- Simple pump and ventilation applications in the process industry
- Sophisticated single drives in centrifuges, presses, extruders, lifts, conveying and material handling systems
- Drive assemblies in textile, foil and paper machines and rolling mills
- Highly dynamic servo drives for machine tools, packaging machines and printing presses

Switchboards

SIVACON S8 Power Distribution Boards and Motor Control Centers

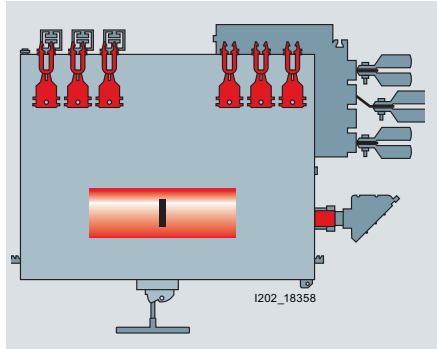
Universal installation design Section with forced ventilation

More information

Operating states of withdrawable units

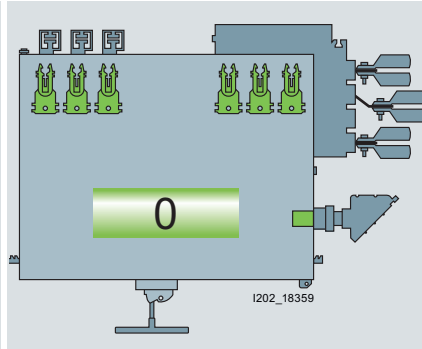
Uniform operation of all withdrawable units ensures maximum ease-of-use and flexibility without compromising safety.

Connected position



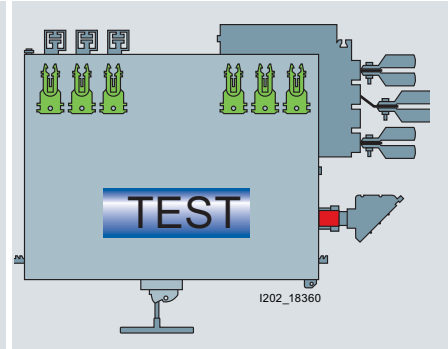
In the connected position, both power and control contacts are closed.

Disconnected position



If withdrawable unit is in the disconnected position, incoming, outgoing and control sides are isolated.

Test position



The test position enables the no-load testing of the withdrawable units.

Withdrawable unit sizes

Depending on the rating, withdrawable technology is available in the following withdrawable unit sizes.

- Small withdrawable units:
 - Size ¼ and ½ (¼ sub-section or ½ sub-section)
 - Height 150 mm and 200 mm
 - Up to 48 withdrawable units per section
- Standard withdrawable units:
 - Height 100 mm to 700 mm
 - Up to 18 withdrawable units per section
- Withdrawable units with frequency converter

General technical characteristics of section using universal installation design

Installation technology	Withdrawable technology, fixed-mounted with compartment doors, plug-in technology
Functions	Cable feeders, motor outgoing feeders (MCC)
Rated current I_n	A Up to 630
Rated power P_n	kW Up to 250
Connection type	Front and rear
Panel width	mm 600 × 1000 × 1200
Inner sub-distribution	Form 2b, 3b, 4a, 4b, 4 Type 7 (BS)
Busbar position	Top, rear top and/or rear bottom

More information

www.siemens.com/sivacon

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Subject to change without prior notice
Order No.: E86060-K8210-E300-A1-7600
MP.R3.LV.0000.01.2.13 / Dispo 18302
PI 0112 2. SB 4 En / valid until 09/12
Printed in Germany
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