

SINEXCEL Cabinet Guide



Exceptional Power Quality, Shaping a Smart Future
Precision Current Monitoring, Ensuring Power Stability

CATALOGUE



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COMPANY INTRODUCTION

01

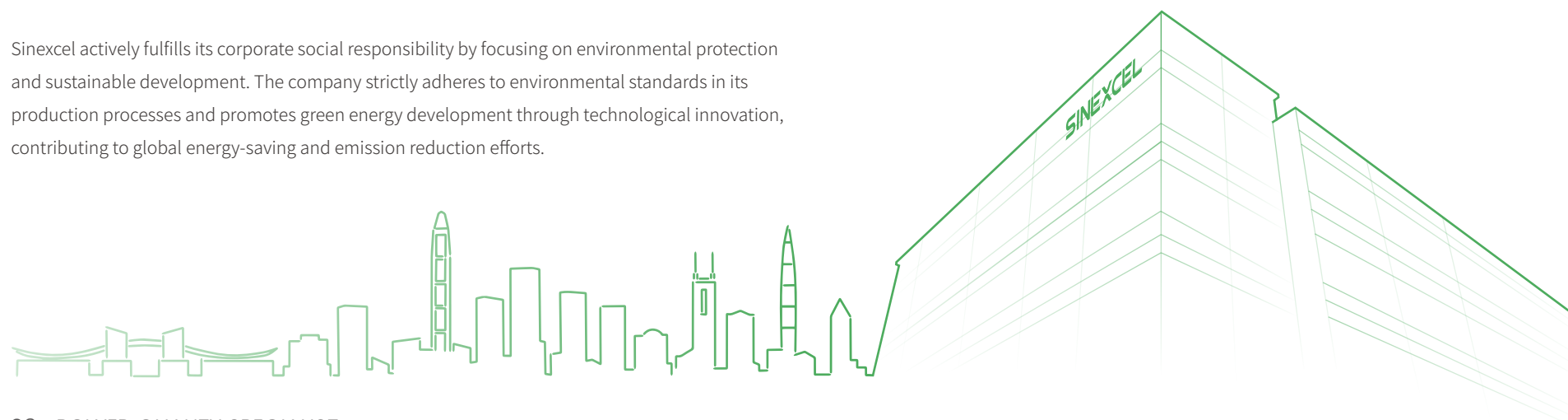
Shenzhen Sinexcel Electric Co., Ltd. (Sinexcel) was founded in 2007 and successfully listed in 2017, stock code: 300693. The company is dedicated to optimizing power quality and intelligently managing power for various power supply scenarios and industrial production environments, aiming to improve the efficiency of electrical energy use.

Headquartered in Shenzhen, China, Sinexcel leverages strong R&D capabilities and continuous technological innovation to quickly become a leader in the power electronics industry.

As a technology-driven company, Sinexcel holds numerous independent intellectual property rights and core technologies. In the field of power quality management, the company has developed products such as active harmonic filters and static var generator, which effectively address issues like harmonics, reactive power, and three phase unbalanced in the grid, ensuring high-quality power transmission and usage.

Adhering to the philosophy of "Technological Innovation, Green Future," Sinexcel aims to become a global leader in power quality solutions. The company continuously expands its international market, with its products and services covering multiple countries and regions, earning widespread acclaim and trust from customers.

Sinexcel actively fulfills its corporate social responsibility by focusing on environmental protection and sustainable development. The company strictly adheres to environmental standards in its production processes and promotes green energy development through technological innovation, contributing to global energy-saving and emission reduction efforts.



2 R&D CENTERS

in Shenzhen and Xi'an, China

3 manufacturing bases

in Shenzhen China, Huizhou China,
and Suzhou China

4 overseas Sinexcel offices

in Silicon Valley USA, Dusseldorf Germany,
Seoul South Korea, and Pune India

13 years

of R&D and manufacturing experience

100+ cities

Sinexcel products are applied worldwide

2000+ employees

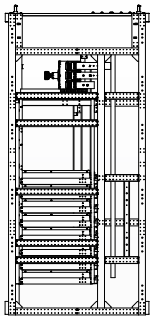
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PRODUCT OVERVIEW

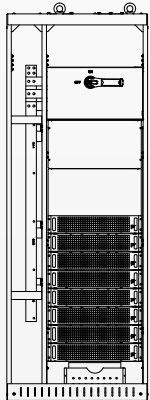
Sinexcel has always excelled in modular design, leveraging its expertise and extensive experience to provide customers with efficient and reliable solutions. To better address power quality issues, Sinexcel has introduced a new cabinet solution. This solution not only retains the flexibility and scalability of modular design but also enhances overall system performance and stability. By integrating advanced technology and innovative design concepts, Sinexcel's cabinet solution offers customers a comprehensive power quality optimization solution, meeting the needs of various application scenarios.

Sinexcel Flexible Cabinet

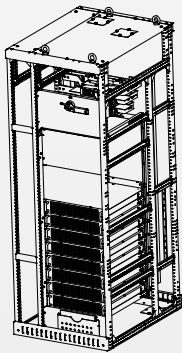
Sinexcel Flexible Cabinet Solution, characterized by modular design and integrated technology, offering flexibility, ease of maintenance, and high capacity. Ideal for industrial, commercial, and data center applications, it enhances power quality optimization and operational efficiency



Rear View



Front View



Overview

Cabinet Basic Information

Parameter	Description			
Product Model	Sinexcel Flexible Cabinet			
Size (W*D*H)	600*1000*2200mm	800*800*2200mm	800*1000*2200mm	1000*1000*2200mm
Prodcut Code	SE FL1	SE FL2	SE FL3	SE FL4
Input Voltage	220/380/480VAC			
Capacity	Maximum as 6pcs		Maximum as 8pcs	
Module Type	Sinexcel Ultra AHF/SVG/ASVG			
System Wiring	3P3W/3P4W			
Frequency	50Hz/60Hz			
Diaplay	A7-inch HMI / X2-PRO			
Display Language	Chinese/English/Korean/German/Spanish/Polish, etc.			
Cable Entry	Top/Bottom			
Installation location	Independent /Left/Right/Middle			
Busbar	Copper/Aluminum			
Color	Standard: RAL 7035 (Custom colors available)			
Installation Method	Rack-mounted module			
Interface Type	RS485, Ethernet, Modbus			
Protection Level	Standard IP20/IP21/IP30/IP31 optional)			
Airflow	Front and rear			
Airflow Distance	800mm Rear			
Material	Cabinet: cold-rolled steel plate, hot-dip galvanized plate Internal structural parts: aluminum-zinc coated plate, hot-dip galvanized plate			
Cooling System	Ventilation holes			
Operating Temperature Range	-10°C to~40°C / Rh95%			
Storage temperature	-40°C~+70°C			
MTBF	100,000 Hours			
Relative Humidity	5% to 95% non-condensing			
Pollution level	Indoor, IIIa			
Altitude	Below 2000m			
Application Fields	Industrial, commercial, data centers			
Other Features	Modular design, easy expansion and maintenance			
Optional parts	Dry Contact Board, Advanced Filter			

Table 2 Cabinet Sizing Information

Rated Current	200A	250A	300A	400A	500A	550A	600A	750A	900A	1050A	1200A
Phase L1/L2/L3 mm2	95	120	70*2	95*2	120*2	150*2	185*2	240*2	185*3	240*3	300*3
Phase N mm2	150	185	95*2	120*2	150*2	185*2	240*2	185*3	240*3	500*3	500*3
PE cable mm2	50	70	70	95	120	150	185	240	95*3	185*2	240*2
Power terminal screw	M10	M10	M10	M10	M10	M12	M12	M16	M16	M16	M16
Power cable tightening torque	108~132(kgf.cm)										
PE terminal screw	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8
Rated current of Breaker	250A	315A	400A	500A	630A	700A	800A	1000A	1250A	1600A	1600A
CT cable	Below 15m: RVVSP 2*2.5 mm2; 15m-30m: RVVSP 2*4 mm2; above 30m: contact Sinexcel										
Range of CT ratio	50/5~30000/5										

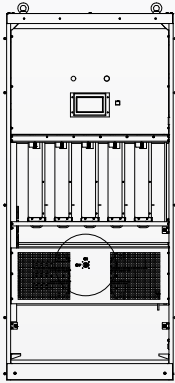
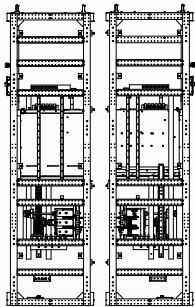


Sinexcel Top-Vent Cabinet

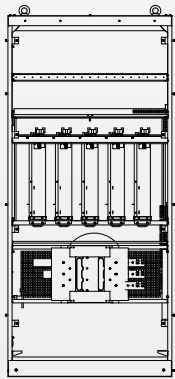
Sinexcel Top-vent series cabinet solution, designed to offer flexible installation options for industrial, commercial, and data center applications, it significantly optimizes power quality.

Cabinet Basic Information			
Parameter	Description		
Product Model	Sinexcel Top-Vent Cabinet		
Size (W*D*H)	800*600*2200mm	1000*600*2200mm	1200*600*2200mm
Prodcut Code	SE TV1	SE TV2	SE TV3
Capacity	Maximum as 4pcs	Maximum as 5pcs	Maximum as 6pcs
Input Voltage	220/380/480VAC		
Module Type	Sinexcel Ultra AHF/SVG/ASVG		
System Wiring	3P3W/3P4W		
Frequency	50Hz/60Hz		
Diaplay	A7-inch HMI / X2-PRO		
Display Language	Chinese/English/Korean/German/Spanish/Polish, etc.		
Cable Entry	Bottom		
Installation location	Independent /Left/Right/Middle		
Busbar	Copper/Aluminum		
Color	Standard: RAL 7035 (Custom colors available)		
Installation Method	Rack-mounted module		
Interface Type	RS485, Ethernet, Modbus		
Protection Level	Standard IP20(IP21/IP30/IP31 optional)		
Airflow	Front to Top		
Airflow Distance	Against wall 500mm from top		
Material	Cabinet: cold-rolled steel plate, hot-dip galvanized plate Internal structural parts: aluminum-zinc coated plate, hot-dip galvanized plate		
Cooling System	Ventilation holes		
Operating Temperature Range	-10°C to~40°C / Rh95%		
Storage temperature	-40°C~+70°C		
MTBF	100,000 Hours		
Relative Humidity	5% to 95% non-condensing		
Pollution level	Indoor, IIIa		
Altitude	Below 2000m		
Application Fields	Industrial, commercial, data centers		
Other Features	Modular design, easy expansion and maintenance		
Optional parts	Dry Contact Board, Advanced Filtter		

Table 2 Cabinet Sizing Information									
Rated Current	200A	250A	300A	400A	500A	550A	600A	750A	900A
Phase L1/L2/L3 mm2	95	120	70*2	95*2	120*2	150*2	185*2	240*2	185*3
Phase N mm2	150	185	95*2	120*2	150*2	185*2	240*2	185*3	240*3
PE cable mm2	50	70	70	95	120	150	185	240	95*3
Power terminal screw	M10	M10	M10	M10	M10	M12	M12	M16	M16
Power cable tightening torque	108~132(kgf.cm)								
Rated current of Breaker	250A	315A	400A	500A	630A	700A	800A	1000A	1250A
CT cable	Below 15m: RVVSP 2*2.5 mm2; 15m-30m: RVVSP 2*4 mm2; above 30m: contact Sinexcel								
Range of CT ratio	50/5~30000/5								

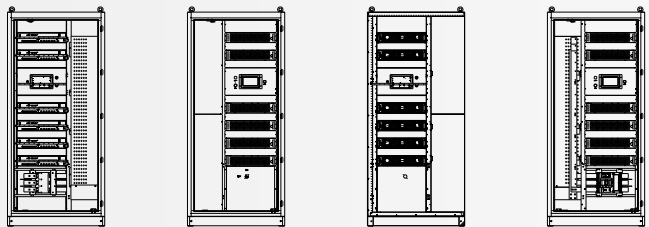


Front View



Rear View

Sinexcel IP54 Cabinet



Rear View

Front view

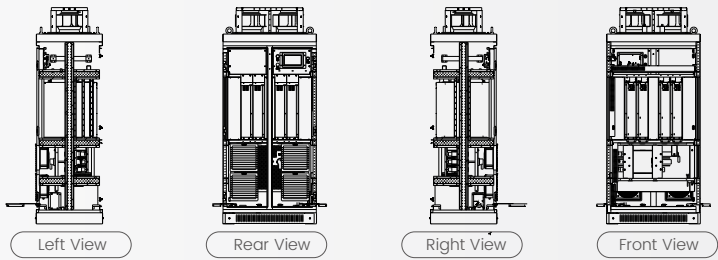


Cabinet Basic Information		
Parameter	Description	
Product Model	Sinexcel Flexible Cabinet	
Size (W*D*H)	700*900*1800mm	1000*1000*2200nm IP54 Cabinet
Prodcut Code	SE IP54 T1	SE IP54 T2
Input Voltage	220/380/480VAC	
Capacity	Maximum as 3pcs	Maximum as 6pcs
Module Type	Sinexcel Ultra AHF/SVG/ASVG	
System Wiring	3P3W/3P4W	
Frequency	50Hz/60Hz	
Diaplay	A7-inch HMI / X2-PRO	
Display Language	Chinese/English/Korean/German/Spanish/Polish, etc.	
Cable Entry	Bottom	
Installation location	Independent /Left/Right/Middle	
Busbar	Copper/Aluminum	
Color	Standard: RAL 7035 (Custom colors available)	
Installation Method	Rack-mounted module	
Interface Type	RS485, Ethernet, Modbus	
Protection Level	IP54	
Airflow	Front and rear	
Airflow Distance	800mm Rear	
Material	Cabinet: cold-rolled steel plate, hot-dip galvanized plate Internal structural parts: aluminum-zinc coated plate, hot-dip galvanized plate	
Cooling System	Ventilation holes	
Operating Temperature Range	-10°C to~40°C / Rh95%	
Storage temperature	-40°C~+70°C	
MTBF	100,000 Hours	
Relative Humidity	5% to 95% non-condensing	
Pollution level	Indoor, IIIa	
Altitude	Below 2000m	
Application Fields	Industrial, commercial, data centers	
Other Features	Modular design, easy expansion and maintenance	
Optional parts	Dry Contact Board, Advanced Filter	

Table 2 Cabinet Sizing Information									
Rated Current	200A	250A	300A	400A	500A	550A	600A	750A	900A
Phase L1/L2/L3 mm2	95	120	70*2	95*2	120*2	150*2	185*2	240*2	185*3
Phase N mm2	150	185	95*2	120*2	150*2	185*2	240*2	185*3	240*3
PE cable mm2	50	70	70	95	120	150	185	240	95*3
Power terminal screw	M10	M10	M10	M10	M10	M12	M12	M16	M16
Power cable tightening torque	108~132(kgf.cm)								
PE terminal screw	M8	M8	M8	M8	M8	M8	M8	M8	M8
Rated current of Breaker	250A	315A	400A	500A	630A	700A	800A	1000A	1250A
CT cable	Below 15m: RVVSP 2*2.5 mm2; 15m-30m: RVVSP 2*4 mm2; above 30m: contact Sinexcel								
Range of CT ratio	50/5~30000/5								

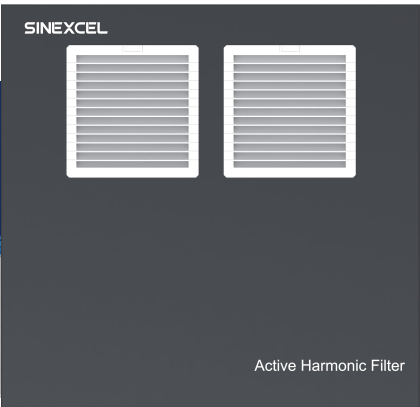


Sinexcel Top-Vent IP54 Cabinet



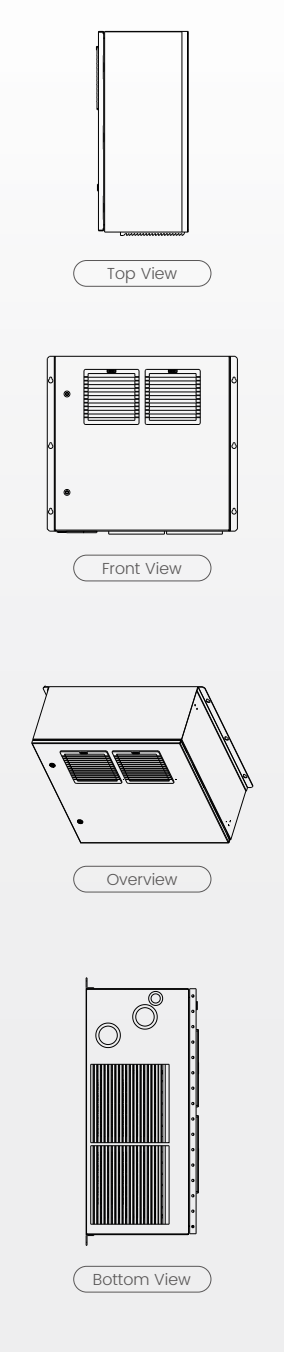
Sinexcel IP54 SPC Cabinet

Sinexcel SPC Cabinet Solution: Ideal for small-capacity, highly protective outdoor applications. Easy to install with compact dimensions, it ensures efficient and convenient deployment in diverse environments.



Cabinet Basic Information		
Parameter	Description	
Product Model	Sinexcel Top-Vent IP54 Cabinet	
Size (W*D*H)	850*600*2200mm	1000*600*2200mm
Prodcut Code	SE IP54 TV1	SE IP54 TV2
Capacity	Maximum as 3pcs	Maximum as 4pcs
Input Voltage	220/380/480VAC	
Module Type	Sinexcel Ultra AHF/SVG/ASVG	
System Wiring	3P3W/3P4W	
Frequency	50Hz/60Hz	
Diaplay	A7-inch HMI / X2-PRO	
Display Language	Chinese/English/Korean/German/Spanish/Polish, etc.	
Cable Entry	Bottom	
Installation location	Independent /Left/Right/Middle	
Busbar	Copper/Aluminum	
Color	Standard: RAL 7035 (Custom colors available)	
Installation Method	Rack-mounted module	
Interface Type	RS485, Ethernet, Modbus	
Protection Level	IP54	
Airflow	Front to Top	
Airflow Distance	Against wall 500mm from top	
Material	Cabinet: cold-rolled steel plate, hot-dip galvanized plate Internal structural parts: aluminum-zinc coated plate, hot-dip galvanized plate	
Cooling System	Filterfans	
Operating Temperature Range	-10°C to~40°C / Rh95%	
Storage temperature	-40°C~+70°C	
MTBF	100,000 Hours	
Relative Humidity	5% to 95% non-condensing	
Pollution level	Indoor, IIIa	
Altitude	Below 2000m	
Application Fields	Industrial, commercial, data centers	
Other Features	Modular design, easy expansion and maintenance	
Optional parts	Dry Contact Board, Advanced Filtter	

Table 2 Cabinet Sizing Information									
Rated Current	200A	250A	300A	400A	500A	550A	600A		
Phase L1/L2/L3 mm2	95	120	70*2	95*2	120*2	150*2	185*2		
Phase N mm2	150	185	95*2	120*2	150*2	185*2	240*2		
PE cable mm2	50	70	70	95	120	150	185		
Power terminal screw	M10	M10	M10	M10	M10	M12	M12		
Power cable tightening torque	108~132(kgf.cm)								
Rated current of Breaker	250A	315A	400A	500A	630A	700A	800A	1000A	1250A
CT cable	Below 15m: RVVSP 2*2.5 mm2; 15m-30m: RVVSP 2*4 mm2; above 30m: contact Sinexcel								
Range of CT ratio	50/5~30000/5								



Cabinet Basic Information	
Parameter	Description
Product Model	Sinexcel IP54 SPC Cabinet
Size (W*D*H)	870*358*800mm
Prodcut Code	SE IP54 SPC
Input Voltage	220/380/480VAC
Capacity	Maximum as 1pcs
Module Type	Sinexcel Ultra AHF/SVG/ASVG
System Wiring	3P3W/3P4W
Frequency	50Hz/60Hz
Diaplay	4.3-inch HMI
Display Language	Chinese/English/Korean/German/Spanish/Polish, etc.
Cable Entry	Bottom
Installation location	Independent /Left/Right/Middle
Busbar	Copper/Aluminum
Color	Standard: RAL 7035 (Custom colors available)
Installation Method	Wall-mounted module
Interface Type	RS485, Ethernet, Modbus
Protection Level	IP54
Airflow	Bottom to front
Airflow Distance	800mm bottom
Material	Cabinet: cold-rolled steel plate, hot-dip galvanized plate Internal structural parts: aluminum-zinc coated plate, hot-dip galvanized plate
Cooling System	Ventilation holes
Operating Temperature Range	-10°C to~40°C / Rh95%
Storage temperature	-40°C~+70°C
MTBF	100,000 Hours
Relative Humidity	5% to 95% non-condensing
Pollution level	Indoor, IIIa
Altitude	Below 2000m
Application Fields	Industrial, commercial, data centers
Other Features	Modular design, easy expansion and maintenance
Optional parts	Dry Contact Board, Advanced Filtter

Table 2 Cabinet Sizing Information							
Rated Current	25A	35A	50A	60A	75A	100A	150A
Phase L1/L2/L3 mm2	25	25	25	25	25	35	50
Phase N mm2	25	25	25	25	25	35*3	50*3
PE cable mm2	16	16	16	16	16	25	25
Power terminal screw	M6/M8	M6/M8	M6/M8	M6/M8	M6/M8	M8	M8
Power cable tightening torque	108~132(kgf.cm)						
PE terminal screw	M8	M8	M8	M8	M8	M8	M8
Rated current of Breaker	32A	50A	63A	80A	100A	125A	200A
CT cable	Below 15m: RVVSP 2*2.5 mm2; 15m-30m: RVVSP 2*4 mm2; above 30m: contact Sinexcel						
Range of CT ratio	50/5~30000/5						

SINEXCEL CABINET INSTALLATION GUIDE

03

This manual is intended solely for Sinexcel standard cabinets. For any non-standard requirements, please contact the Sinexcel team.



Confirm Installation Location 01

Ensure the installation area is flat, stable, and provides ample space for operation and maintenance.

Check Accessories 02

Verify all accessories are present and in good condition, including CT, power cables, screws, and nuts, etc.

Installation Steps 03

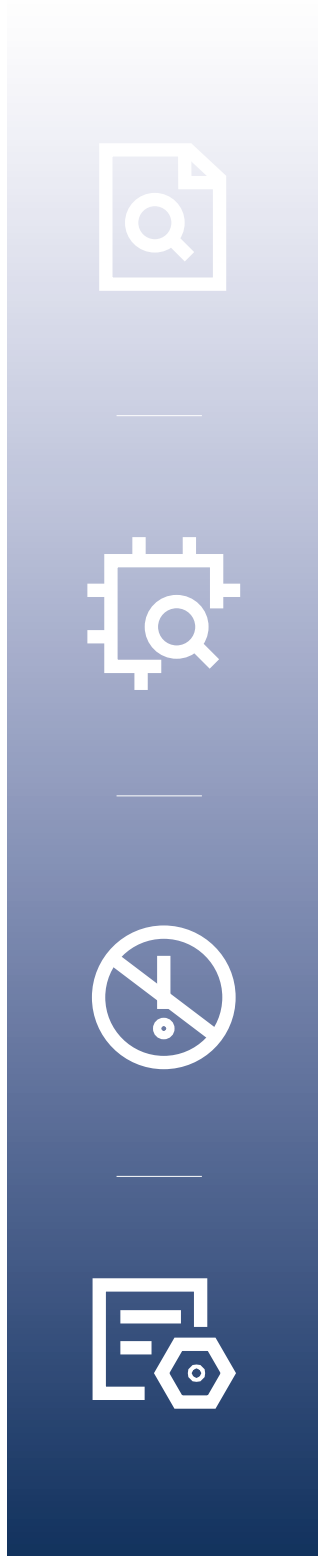
Position the electrical cabinet at the designated location, follow the electrical schematics to connect CTs and power cables, ensuring correct wiring and secure connections, connect the cabinet's grounding cables to the building's grounding system, ensuring proper grounding for safety. After connections are completed, perform electrical testing and commissioning to ensure all functions operate correctly.

Installation Steps

- ◆ During installation, take care to avoid damaging internal components and accessories.
Use appropriate personal protective equipment (PPE) such as gloves and safety glasses during installation.
- ◆ Seek assistance from qualified professionals if unsure about installation steps or for special requirements

04

SINEXCEL CABINET MAINTENANCE GUIDE



Regular Inspection

Regularly inspect the exterior and doors of the electrical cabinet for any damage, corrosion, or signs of water ingress.

Periodically clean the inside of the electrical cabinet to remove dust and debris, especially around heat sinks and fan components.

Hardware Inspection and Maintenance

Regularly check electrical connections for looseness or corrosion. Tighten and clean terminal connections as needed.

Periodically clean the inside of the electrical cabinet to remove dust and debris, especially around heat sinks and fan components.

Troubleshooting

Conduct periodic electrical testing to check voltages, currents, and insulation resistance of circuits. Address any issues promptly

Ensure the surrounding environment of the electrical cabinet is dry, clean, and free from water sources and chemicals to prevent corrosion and damage.

Scheduled Maintenance Plan

Establish a regular maintenance schedule, documenting maintenance dates and activities to ensure long-term reliability and performance of the electrical cabinet.

05 CASE

Country	APPLICATION	CAPACITY	UNIT
USA	LP SmartSide Trim & Siding	2400	A
Canada	HyLife Canada's leading pork producer	1400	A
Mexico	DEACERO Steel factory	900	A
Columbia	Vanguardia News Paper	250	kVAr
Chile	Cecinas Llanquihue food factory	500+	A
Spain	Vodafone mobile phone operator	500	A
German	Conrad Electronic	1200	A
British	GlaxoSmithKline Pharmaceutical factory	400	A
Sweden	Goteborg Landvetter Airport	270	kVAr
Switzerland	Model AG Paper manufacturer	1600+	A
Netherlands	Advanced Semiconductor Materials Lithography (ASML)	500+	A
Norway	Samsung heavy industry	100	A
Italy	Matic Plast Milano plastic manufacturing factory	675	A
Croatia	Petrokemija	400	kVAr
Hungary	Nestle	1100+	A
Turkey	Ministry of Health of Turkey	1025	A
Saudi Arabia	Riyadh steel factory	450	A
UAE	Dubai Port	7800+	A
Eritrea	National Radio Station	900	kVAr
Tunisia	Super Cables	450	A
South Africa	NGC Riverpumps	700	A
China	Beijing Winter Olympics	5200	A
HongKong China	Queen Mary Hospital	11685	A
Singapore	Marina Bay Financial Center Tower	5000+	A
Australia	Byerwen Coal mine Project	700	A
New Zealand	Central Plains Water	1340	A
Israel	Electre group Tel Aviv University	700	kVAr
Japan	NTT Global Data Centers	400	A
Korea	EAGON Window	4200	A
Thailand	Hilton Hotel	300	A
India	Tata Steel	1000	A
Malaysia	Prime Minister's Department	125	A
Indonesia	Singapore United Transworld (Jakarta)	1000	A
Vietnam	Textile factory	27000+	kVAr
Fiji	Coca Cola factory	350	kVAr
Pakistan	Suzuki factory	3100	kVAr