




Reliable solutions
Proven quality



SAS Power Industries
(A Galfar Group Company)

A photograph of a server room with rows of server racks on both sides, illuminated with blue light. A large white triangle is overlaid on the left side of the image, pointing towards the center.

Power up your world with excellent-quality, custom-made products, services and solutions with SAS Power FZE.

As the region's leading full-service power company, we focus on developing, innovating, and creating efficient power automation systems, power distribution equipment and products.

We provide comprehensive solutions for all power challenges along with field-related services.

SAS Power works with leading Original Equipment Manufacturers (OEM) hailing from Europe, Japan, and North America for medium voltage switchgear, protection systems, and power automation systems.

Index

1. Introduction
 - Mission, Vision & Values
 - Message from the Director
 - Business Model
 - Growth Data
 - Organization Data
2. Strategic Alliances
3. Products & Services
4. Quality Management System
5. Factory
 - Facilities
 - Production Capacity
 - Workflow
6. Machines & Equipment
7. Quality System
 - Quality Policy
 - HSE Policy
 - Inspection & Test Plan
8. Licenses, Certificates & Warranties
9. Projects
 - Completed Projects
 - Current Projects
10. Our Esteemed Clients
11. Contact Information





Introduction



SAS Power Industries

As a subsidiary of the illustrious GALFAR Al Misnad company, SAS Power Industries, also known to the world as SAS Galfar, came into existence in 2005. It is our perseverance, hard-work and passion that has helped us in creating a stellar portfolio of large-scale, avant-garde assets along with auxiliary services built on the foundations of outstanding technical and business expertise.

SAS provides bespoke, competitively-priced power distribution and automation systems with related service support to clients, with agility, and perfection.

We do this all, and more, by outperforming all competitors in the zone.

Following all safety and quality protocols, we, the SAS Power team, are fulfilling all our clients' and clients' needs with a sharp focus and never-ending passion that compels us to do more, be more at all times.



Vision & Values

To provide **unrivalled technical quality**

Our keen focus on technical quality and dedication to exemplary customer service is our strength. Making it available for clients in a commercially viable and sustainable manner is what we aim for with every project.

To invest in **excellence**

Our vision must align with on-ground work. By investing in world-class facilities in our factory and our people, in research, design, technology and tools, and collaborating with the technology partners and experts is what makes our goal achievable.

Message from Management

Since our inception, we have been clear about our goal - to be the globally preferred power and automation engineering, manufacturing plus field service partner to all leading names across the globe in the energy and water domain. To accomplish what we had set then, we are consistently working to develop and integrate the best practices in engineering, production, and research from our peers and our parent company.

So far, the journey has been nothing but insightful, eventful, and inspiring, thanks to our clients, our team, and clients for pushing us to achieve the impossible. Hopefully, we can continue working and delivering along the path and get to where we rightfully belong - The No. 1 spot.



Origin of SAS: Where it all began

SAS is proud to be associated with GALFAR group; a prestigious name set up back in 1972, known for its consistent quality and excellent work upheld across several businesses and subsidiaries.

What began as a subsidiary company under Oman based Galfar Engineering and Contracting LLC in 1995, Galfar Al Misnad has now become an undefeated force to be reckoned across industry scapes - from oil and gas to E & I, infrastructure, building and MEP plus facility management, each of the five operating divisions along with the respective specialized support units come together to make sustainable growth and wide-scale development a reality for Qatar and beyond.

Carrying the values of its parent company deep in its foundations, Galfar Al Misnad, when it became independent post-2007, began expanding its reach in the GCC with the acquisition of Galfar Kuwait in 2010, followed by Galfar SAS in 2011.

Thus began the story of SAS Power.



The Leadership: Galfar Al Misnad

Under the leadership of our senior management team, the wide-scale industrial evolution of the Gulf region in the areas of operation has turned into reality within a short period of time.

Looking deeper into the veins of Galfar Group, the operating division heads are well-supported by the supporting division heads. The latter ensures that all project backend operational requirements are handled and completed on schedule.

They work together to plan and carry out the company's projects and activities across all divisions and subsidiaries in the most sustainable, efficient, and innovative manner possible.



Why choose SAS Power?

1 - Customer satisfaction

With SAS Power, all clients are offered an extensive portfolio with a range of products, globally recognised for their strength, durability and power.

From procurement, logistics to customer service, everything is taken care of by SAS to ensure all work is completed without clients having to worry.

In the end, our clients experience the brilliance of our comprehensive product range, consistent and responsive service, and the care of a knowledgeable team that is dedicated to delivering practical and timely solutions across all stages of the work involved.

2 - Start-till-finish solutions by SAS specialists

The SAS product development process starts with design followed by manufacturing, then installation succeeded by complete support service to ensure top-notch maintenance at all times. SAS Power provides you complete power services and solutions to fulfil all your power automation and distribution needs across Energy and Water sectors.

Our highly skilled team of technicians, advisors and engineers have successfully managed numerous automation and electrical projects in the region, earning recommendations and laurels from seasoned specialists across the industry.

3 - Product excellence

- Assured quality, 100% cost-effective, safety and reliability of all products.
- Each SAS Power FZE product comes with complete compliance guarantee to all legal requirements, international standards and local statutory requirements.
- Verified design of all electrical installations with components that meet international design and safety codes.
- Rigorous design testing and material analysis of products before installation.
- Scrutiny performed at all stages of construction and installation.
- All essential approval checks and commissioning checks are completed at the installation stage.
- In-depth analysis of location that helps in the detection of conditions that could potentially lead to power failures and short circuits.

Consistent focus on innovation has resulted in the creation of a versatile list of products and services that provide the highest usability levels, open protocols, reliability, and optimized control. One can spot SAS Power Products in action across commercial infrastructures, manufacturing, generation and water treatment plants, among many other sectors.

A photograph of a server room with rows of server racks. The racks are filled with server units, each with numerous indicator lights and small displays. The room is dimly lit, with a strong blue glow emanating from the server units, creating a futuristic and high-tech atmosphere. The perspective is from a low angle, looking down a long aisle between the racks.

SAS Products & System Portfolio

Low Voltage Switchgear

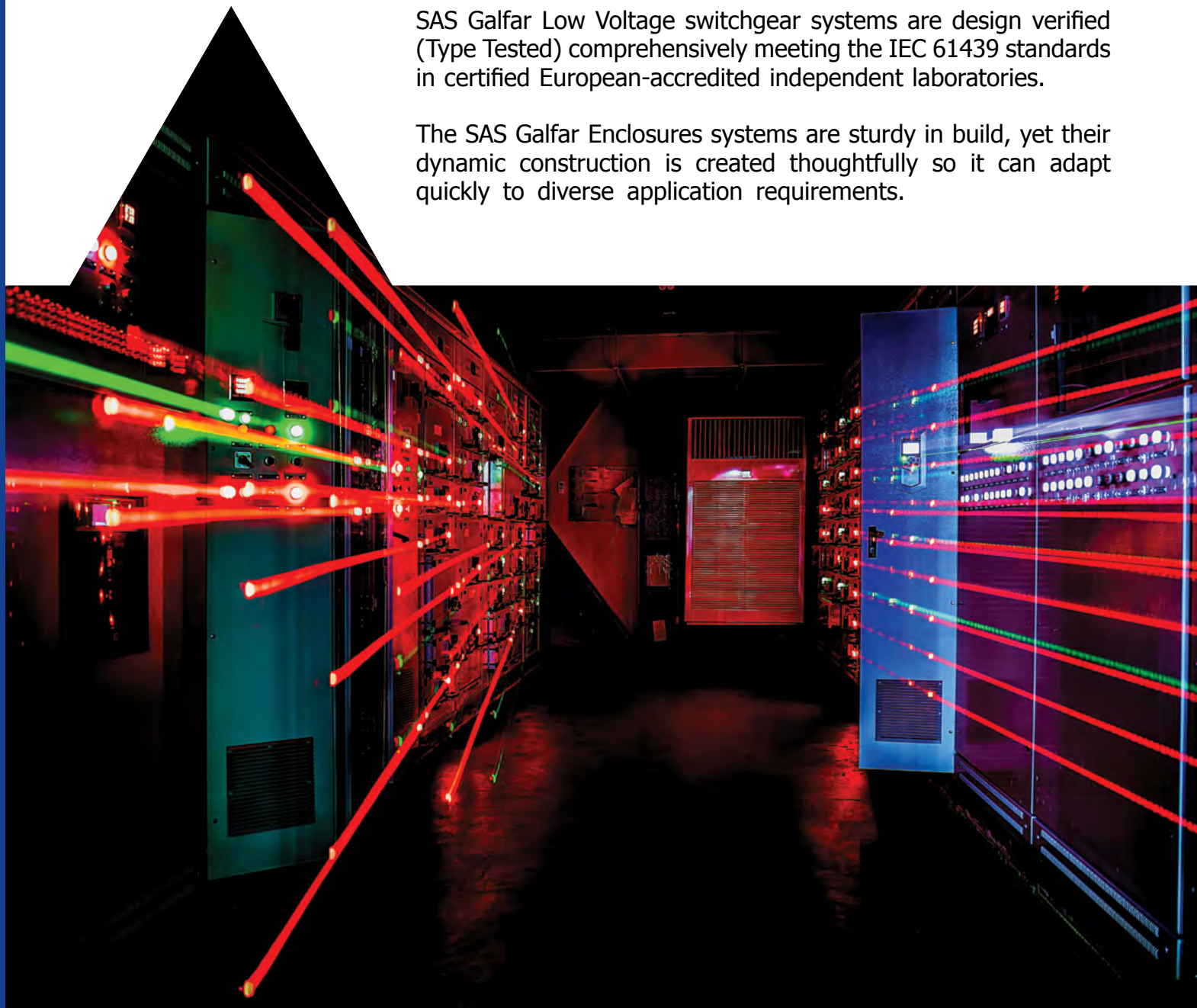
(Assemblies rated up to, and including 1000 V AC and 1500 V DC)

From design, engineering, assembly to testing and installation, each part of the LV Switchgear is crafted and put together at the SAS facility.

The SAS LV switchboard designs are developed in-house by experienced professionals and technicians. They ensure that all statutory and mandatory processes are followed, which meet the International standards and the regulations set in place by local and regional authorities.

SAS Galfar Low Voltage switchgear systems are design verified (Type Tested) comprehensively meeting the IEC 61439 standards in certified European-accredited independent laboratories.

The SAS Galfar Enclosures systems are sturdy in build, yet their dynamic construction is created thoughtfully so it can adapt quickly to diverse application requirements.



One look, and it's obvious - SAS Galfar Enclosure Systems are elegant, and aesthetically pleasing. SAS Galfar uses its own branded enclosure systems for building the switchgear and control gear systems. If client requests, OEM enclosure systems are also created, which showcases our ability to fulfill client's needs and requirements at all costs.

Our capacity to construct complex panels with withdrawable motor control units and power switchgear that can carry large currents down to simple distribution boards that handle small loads at the consumer level; makes us a one-stop destination for all clients.

The surface treatment and the painting used on each of the panels make it highly corrosion-resistant. The non-metallic parts used in the assembly for insulation and support are tolerant of high temperatures.

Product Technical Specifications

LV Switchgear / Motor Control Centers/ Distribution Boards meeting IEC 61439 Standards.

Description	LVAC Switchgear
Bus bar Material	Electrolytic Grade Copper for Main and Distribution bus bars
Enclosure	2.5mm Sheet Steel, Free standing, Floor Mountable type.
Construction	Form 4B Construction ,IP 43/ 54
Shade /Thickness	RAL7032 for external, RAL9003 for internal, 70 micron (min) / 90 micron (average)
Cable Entry	Both TOP/ Bottom alternatives: Possible
Terminal Blocks	Disconnecting type for CT and VT secondary Circuits, Non Disconnecting types for AC/ DC and Control Circuits, Knife edge terminals for Alarm and SCADA circuits
CT/VT/Control Wiring	PVC Insulated , Stranded Copper Conductors , Tri Rated , 600/1000 V Grade, Flame retardant low smoke type meeting BS 6231, CT & VT secondary Circuits – 2.5 sq mm R,Y,B & Black, DC Circuits – 1.5 sq mm Grey, AC Circuits – 1.5 sq mm Black, Heater & illumination – 2.5 sq mm Black, Protective Earth – 2.5 sq mm Y/G, Other Colors on Request
Control wire markers (ferrules)	White PVC tubes with indelible marking as per client practice.
Labels	PVC/Traffolyte engraved Labels with Black lettering on White Background of different sizes
Mimic	Mimic shall be PVC, sticker type with good adhesive properties



Products Features

- 1000 V AC & 1500 V DC
- Designed as per IEC 62208 standards with galvanized iron sheet metal of 2.00mm thickness or more if specified
- Resistance to corrosion - IEC 60068-2-30 (test Db) at (40+/-3 deg C) and RM 95%.
- Design verification tests were done at DEKRA (KEMA quality) the Netherlands.

Electrical tests as per IEC 61439

- 1.LV Panels tested as per IK10 impact test according to IEC 62262 - designed according to the IEC 62208
- 2.Severity Class A for indoor and Severity Class B for outdoor - all design verified
- 3.Available in draw-out and non-draw out versions
- 4.Available in Form 4b and Form 2b construction with up to IP54 ingress protection

Medium Voltage Switchgear

(For voltages exceeding 1000 volts up to, and including 33 000 volts)

More complex than their lower voltage counterparts in both construction and operation, the SAS MV Power Switchgear falls in line with the requirements of the latest IEC and IEEE standards. The SAS design and technicians team possess the talent and skills to introduce the right fit for increased asset life, thus protecting the operations personnel by limiting any chances of injuries or accidents.

The design + technicians team carefully selects the right components in terms of functionality, accuracy, appropriate ranges, current and voltage transformer sizing, protection relay settings, all based on the system data while addressing operation philosophy, sequence of switching, interlocks, and maintenance work.



For essential quality checks, the SAS team performs the documented scheme verification and other routine tests (as defined by the Inspection Test Plan) before the equipment is put into use. Such tests (both in the factory and field) ensure a superior level of performance over time.

SAS Galfar uses Type Tested Power Switchgear from Original Equipment Manufacturers (OEM's) and performs the complementary but key activities involved: design, LV Compartment assembly, integration, testing, supervision of installation, and site acceptance tests, commissioning, warranty, and maintenance checks.

In the end, aligning the product to satisfy the requirements laid out by the local regulations is conducted to ensure supreme performance at all times.

Product Technical Specifications

General Technical Data – Compliant to IEC 62271-1; 62271-200; 62271-100

Note: In each of the versions mentioned below, a manually operated Earth switch with fault making capacity interlocked with the VCB for safe operation in accordance with IEC 62271-102 is included.

Rated Voltage - kV	3.6/ 7.2 /12/ 17.5
Service Voltage - kV	3.3/ 6.6/11/13.8
Service Frequency - HZ	50/60
Power Frequency withstand Voltage - kV	10/20/38/38
Rated Impulse Withstand Voltage - kV	40/60/75/95
Short Time withstand - kA/ 3 seconds	20/25/31.5/40/50
Internal Arc Withstand - kA/1Second	20/25/31.5/40
Peak Withstand Current - kA	50/63/80/125/150
Electrical Endurance	274 (Class E2)
Mechanical Endurance	20,000
Vacuum Circuit Breaker	35-70
Closing Time - ms	25-40
Opening Time - ms	40-55
Breaking Time - ms	
Degree of Protection - IEC 60529	IP4X

Rated Voltage - kV	24
Service Voltage - kV	22
Service Frequency - HZ	50/60
Power Frequency withstand Voltage - kV	50/65
Rated Impulse Withstand Voltage - kV	125
Short Time withstand - kA/ 3 seconds	20/25/31.5/40
Internal Arc Withstand - kA/1Second	20/25/31.5/40
Peak Withstand Current - kA	50/63/80/100
Electrical Endurance	274 (Class E2)
Mechanical Endurance	20,000
Vacuum Circuit Breaker Closing Time - ms Opening Time - ms Breaking Time - ms	35-70 25-40 40-55
Degree of Protection - IEC 60529	IP4X

Rated Voltage - kV	36
Service Voltage - kV	33
Service Frequency - HZ	50/60
Power Frequency withstand Voltage - kV	95
Rated Impulse Withstand Voltage - kV	185
Short Time withstand - kA/ 3 seconds	25/31.5
Internal Arc Withstand - kA/1Second	25/31.5
Peak Withstand Current - kA	63/80
Electrical Endurance	274 (Class E2)
Mechanical Endurance	20,000
Vacuum Circuit Breaker Closing Time - ms Opening Time - ms Breaking Time - ms	55-80 25-40 <=60
Degree of Protection - IEC 60529	IP4X



Products Features

A. Type-tested switchgear ranges available from 3.3 kV to 33 kV acquired from OEM's. However, all key activities like design, LV compartment assembly, integration, testing, supervision of installation & site acceptance tests, commissioning, warranty & maintenance checks are done in-house.

- Air-insulated switchgear designed as per IEC 62271 standards. Complies with all the requirements of the latest IEC/IEEE standards.
- Completed all factory acceptance tests
- Complete field installation supervision
- Full testing and commissioning
- Warranty and annual maintenance plus service available

Control, Protection and Substation Automation

Switchgear protection is necessary for any system providing power to electrical loads. Protection can be built into a switching device, an external relay that swiftly identifies abnormalities in a power system and initiates tripping of the associated switching device.

Then, it must detect and isolate the faulty part of the network with minimum or no damage while ensuring that bad disconnections are avoided, thus requiring them to be accurate, fast-acting, and selective.

Control and protective equipment are needed everywhere in the power system setup. It is predominantly used in switchgears exceeding 1000 volts and goes up to ultra-high voltage.



The SAS Substation Automation System accomplishes switching operations, manages interlocks, and interfaces with its protection equipment. The SAS team is adept at providing Substation Control and Protection solutions – whatever the requirement from the end-user be; for all power systems to facilitate generation, transmission, distribution and efficient utilization of electric energy.

It has references in delivering protection systems, including up to 400 kilovolts.

Product Technical Specifications

Description	Relay & Control Panels
Form of Construction	Free Standing , Floor Mounting Door handle – swing type Three point mechanism with Padlock facility with lifting hooks on TOP plate
IEC Standard for the enclosure	IEC 62208
Degree of Ingress Protection in accordance with IEC 60529	IP54
Access	Front and rear for Relay Panels Rear for Control Panels
Shade	RAL 7032 – Exterior RAL 9003- Internal Base Frame & Sub Rack – RAL 9005(Black) Mounting Plates – RAL 9003
Paint Thickness	Average 90 microns
Cubicle Dimensions	Approx. 2300X800X800 mm (HXWXD)
Gland Plate thickness	2.5 mm or better
Bus bar Material	Electrolytic grade Tinned copper 99.98 % purity for earth Bus

Description	Relay & Control Panels
Protective Earth – Cross section Area	200 sq mm.
Cable Entry	Bottom
Mimic	Plastic, good adhesion sticker type 132 kV – RAL 5005 for Control Panels
Terminal Blocks	Disconnecting type for CT and VT secondary Circuits Non-disconnecting types for AC/ DC and control circuits Knife edge terminals for Alarm and SCADA circuits
CT/VT/Control Wiring	PVC Insulated , stranded copper conductors , Tri Rated , 600/1000 V Grade , Flame retardant low smoke type meeting BS 6231 CT secondary Circuits – 2.5 sq mm- R,Y,B & Black VT secondary Circuits – 2.5 sq mm- R,Y,B & Black DC Circuits – 1.5 sq mm Grey AC Circuits – 1.5 sq mm Black Protective Earth – 2.5 sq mm Y/G
Labels	PVC/ Traffolyte engraved Labels with Black lettering on white Background of different sizes

Products Features

- High-performance solutions for reliable control, protection, operation, and monitoring of electrical substations
- Designed and tested in Europe
- Expertise ranging from 11 kV to 400 kV system levels
- In-house design team who possess expertise and proficiency in utilization of different types and makes of protection systems curated and perfected to suit customer requirements
- Full compliance with modern numerical protections, configurations, and applications
- Expertise in designing conventional control or substation control & monitoring systems
- Panels entail dead front or modular rack arrangements with protective glass doors.
- Come equipped with control equipment and protection relays
- Enclosures tested to IP 54
- OHL/ cable, transformer, reactor, Busbar protection systems

Local Control Centers (LCC) for Gas Insulated Switchgear

LCC performs a significant role in substations with all the critical functions required to operate and maintain the GIS.

Gas Insulated Switchgear (GIS) are employed in indoor transmission substations. They constitute switching devices and instrument transformers placed inside airtight chambers filled with inert gas to achieve the desired dielectric strength compactly. The controls of such devices are provided in panels positioned as close as possible to the GIS.

The LCC works in a decentralized strategy - each bay is provided with a dedicated panel. These panels consist of the conventional control, measuring and monitoring components with interlocks between the switching devices and the bay control unit (part of the substation control & monitoring system - SCMS), thus allowing the backup to ensure efficient power flow.



Uninterrupted availability of the transmission voltages is vital for powering a large part of a city or a community. Hence, the switchgear layout, the operational possibilities, system interlocks and energy management are complex and pose challenges for the power system engineer.

Having manufactured several LCC's, the SAS team has devised and created conventional and programmable simulators to replicate the GIS for performing tests and checks.

We carry a unique distinction of being an independent approved LCC manufacturer by utilities in the region.

Product Technical Specifications

Description	Local Control Cubicle
Form of Construction	Free Standing , Floor Mounting Door handle – swing type Three point mechanism with Padlock facility with lifting hooks on TOP plate
IEC Standard for the enclosure	IEC 62208
Degree of Ingress Protection in accordance with IEC 60529	IP54
Shade	Exterior - RAL 7032 (texture finish) Interior - RAL9003 (semi glossy)
Paint Thickness	Average 90 microns
Cubicle Dimensions	Approx. (HXWXD) =2400X1200X800 mm/ 2400x1600x800mm/2400X1050X900 mm
Enclosure Sheet Thickness	2.5 mm

Description	Local Control Cubicle
Gland Plate thickness	2.5 mm or better
Bus bar Material	Electrolytic grade Tinned copper 99.98 % purity for earth Bus
Protective Earth – Cross section Area	200 sq mm.
Cable Entry	Bottom
Mimic	Plastic, good adhesion sticker type
Terminal Blocks	Disconnecting type for CT and VT secondary Circuits, Non Disconnecting types for AC/ DC and Control Circuits, Knife edge terminals for Alarm and SCADA circuits
CT/VT/Control Wiring	CT secondary Circuits – 2.5 sq mm- R,Y,B & Black VT secondary Circuits – 2.5 sq mm- R,Y,B & Black DC Circuits – 1.5 sq mm Grey AC Circuits – 2.5 sq mm Black Protective Earth – 2.5 sq mm Y/G
Labels	PVC engraved Labels with Black lettering on White Background of different sizes

Products Features

- Custom-made panels suited for dynamic operations, and provide complex operational safety interlocks, control and monitor GIS
- Panels with IP 54 ingress protection
- Optimized solutions for multi-vendor GIS, approved by several utilities
- Design capability for developing logics, scheme diagrams
- Expert-designed PLC-based simulator which replicates as GIS
- Programs for system interlocks developed for different feeder types, and various utilities for manufacturers

Automation Project

Water: switching, control & instrumentation to facilitate optimal use of Water through recirculation, desalination, irrigation, district cooling and treatment that are all process-based applications related to efficient use of water.

Oil and Gas: control and operation of higher power motors are put into practice utilizing medium voltage starters and soft starters or variable frequency drives. The control, protection, monitoring and measurements work like it is in the lower voltage range.

Across oil and gas industries as well as water and energy, the SAS switching control and instrumentation system help put together all process-based applications into effect.

Process control, instrumentation, measurement, and monitoring of the electrical system associated with the above applications need versatile products, avant-garde resources, and experience.



To develop the right techniques and achieve seamless integration of field instruments that measure physical parameters and convert them to electrical equivalents, the right automation equipment, switching devices, and the program algorithm must be created to achieve the desired operation.

The most critical ingredient here is the acquired experience that is needed to craft the perfect integration of all these to build an efficient system that must be flexible to allow expansion and modification without major constraints.

SAS Galfar incorporates the above tenets effectively in delivering and installing systems for the process-based automation systems in all the projects across our operating sectors.

Products Features

- Complete switching, control & instrumentation
- Instrumentation from reputed companies like E&H
- Optimal use of water, recirculation, desalination, irrigation, district cooling & treatment. All process-based applications related to efficient use of water.
- Complete automation solutions available for district cooling plants, pumping stations, and sewage treatment plants compliant with devices and softwares of major OEMs: ABB, SE, Rockwell Automation etc.
- Seamless integration and functioning with multi-vendor products and systems
- Full service available - from document preparation, providing clarifications to programming and verification by simulation methods
- Design, architecture, system description, process flow, I/O list, Boolean diagram, Ladder Logic available
- Complete factory acceptance tests - from hook-up with instruments to VFD and metering equipment
- Site acceptance tests to demonstrate functional aspects and performance tests along with redundancy checks



SAS Services

SAS Services

Site measurements plus power studies, related analysis, and subsequent maintenance are essential to maintain a smooth and clean power supply. It may start from simple methods of proficient load management or filtering, passive or active; the solutions needed to fulfill the aforementioned goal are numerous. SAS Power takes pride in providing expert services to solve all power-related challenges, which sets the ground for power to function optimally.

Engineering Services

- Power quality - harmonic calculation and recommendation of filter sizing
- Technical studies - use of conventional calculations and time-proven software to determine the appropriate values used in the configurations and settings to be adopted
- Retrofit, annual & preventive maintenance - perform up-gradation, repair, replacement and maintenance works on planned shutdowns on extremely short durations to keep the plant interruptions to the minimum



Technical Studies

- Short circuit analysis
- Protection discrimination & coordination
- Power factor correction
- Heat load Calculation
- Arc Flash analysis
- Lightning protection
- CT/ VT calculations and sizing
- Battery sizing
- Relay setting calculations

Retrofit, Annual & Preventive Maintenance

- Teams available on call 24x7, for all service and maintenance requirements
- Protection modifications - replacement of old or obsolete protections
- Modifications - remote end old main1 and main 2 line protections replacement with new relays
- Replacement of LV capacitor banks
- LV Circuit breakers replacements for enhanced capacity

Miscellaneous Services

- Designing, assembly, testing, and commissioning of fault monitoring systems
- Designing, assembly, and testing of automatic voltage regulator for transformers
- Create remote telemetry unit panels for power and water applications
- Create control panels for motor controls employing soft starters, variable frequency drives
- Create SCMS/SCADA panels
- All-inclusive training (classroom and on-field) on usage, compliance, operations related to our entire range of products and activities



Factory

SAS Factory

Located in the Jazeera Al Hamra suburb, a modern developing part of Ras Al Khaimah, UAE, SAS Power boasts of state-of-the-art tools, and all modern facilities in its office, and production-cum-manufacturing space that are conveniently located under one roof. SAS Galfar premises is spread over 8000 Sq. meters with the current facility built consuming half the available space and the other half ready for future expansion. Equipped with state-of-the-art pneumatic tools, SAS Power team is composed of over 100+ trained professionals and technicians from the RAK Economic Zone in the UAE.

Key Strengths

- Office headquarters with manufacturing and production space located nearby for efficient operations and management.
- Dedicated areas that facilitate full-scale production, design, research and development, and complex assembly. The assembly division allows simultaneous construction of over 300 cubicles at any given time.
- Versatile testing facilities, avant-garde pneumatic tools, and other dynamic equipment available at the factory.
- A trained and proficient workforce, hand-picked from different parts of the world.





Office - Factory Built-up
Area **8,000** sq.mt.

The assembly division
allows simultaneous
construction of over
300 cubicles at any
given time



SAS Team

Every SAS member, fueled with hard work and motivation, is routinely working to ensure brilliant product quality and excellent services are served at all times to every client.

From managing operations to working towards sustainable solutions, and consistently working to develop cutting-edge innovation, our team's efforts have led to SAS Power growing steadily through the years.





SAS Departments

Sales and Marketing

Every sales and marketing team member is trained to ensure customer's needs and requirements are taken care of at all stages. From the beginning, each prospective client is requested to state their expectations, along with mandatory questions about the budget and timelines. The marketing personnel then introduces SAS products and services curated and compiled specifically to match the client requirements and solve their pain points.

After the client is briefed about the process from the beginning till the end, a carefully thought out commercial offer is prepared as per the specific requirements mentioned, maintaining all standard and legal regulations as necessary. This sets in motion the rest of the process to follow.



Finance, Administration and HR

From budget allocation to maintaining work details across all stages of project work and development alongside file maintenance (record, review, update, withdraw or edit details whenever necessary), the primary goal of the SAS finance, administration and HR department is to ensure well-organized documentation, optimum financial management and smooth team flow across all sectors of the company.

Engineering Project Management, Procurement, and Logistics

With years of practical experience and knowledge, the SAS design and engineering team is well-trained to fulfill the client's requirements in total compliance with local regulations, IEC and other national and international standards along with legal regulations.

Our clique of perfectionist engineers are constantly in sync, working hands-on with the design team, assisting them in using customized programs based on their technical expertise and knowledge; and ensuring the final product or service checks all set standards and regulations.

To support the design and engineering team, the SAS procurement and logistics team operates like a well-oiled machine, managing all work through a computerized network, resulting in better material management of the stock inventory, further enhancing the efficiency levels and overall output.



Production

The production team comprises a production-in-charge, a supervisor, and team leads working in tandem with trained technicians, who collectively put together their intelligence and hard work to develop the switchgear, switchgear panels, among other SAS products.

The production-cum-manufacturing facility is well-equipped with high-end machines, pneumatic tools, and other miscellaneous equipment, thoroughly checked to maintain consistency in the production and manufacturing work at regular intervals.

Quality & Testing

As protocol is set, each product undergoes multiple quality checks and inspection rounds at the end of the production process, following an established quality and testing program. Tests are conducted in a defined area of the facility in compliance with set regulations by qualified testing personnel to test the quality of the materials and workmanship involved. Routine tests are carried out during the process of assembly to detect faults and swiftly solve them to ensure that the final output upholds SAS integrity and excellence.



A high-angle photograph of several business professionals sitting in a circle on a grey carpeted floor. Their hands are stacked in the center of the circle, symbolizing teamwork and collaboration. The individuals are wearing light-colored, professional attire such as blouses and suits. The background is slightly blurred, focusing attention on the hands and the central gesture.

Strategic Technology Partners

LV Switchgear - ABB

- SAS Power has been ABB's authorized channel since 2006.
- SAS is the authorized channel for ABB to assemble ArTu-K Low voltage switchgear and products in UAE.
- SAS Power's type tested panels from 250A up to 3200A are well accepted in all utilities in the region, and type tested with ABB Europe-made components.
- SAS Power's type tested panels have been supplied to more than 75 Substations of DEW

Principals & Technology Partners

Low Voltage Switchgear



Medium Voltage Switchgear



Control, Protection and Substation Automation



Local Control Centers (LCC)



Automation





QHSE & Safety Policy

QHSE & Safety Policy

SAS POWER INDUSTRIES FZE is committed to sustainable development by balancing social, environmental and economic considerations while managing its businesses.

SAS strives to follow all protocols associated with maintaining optimum Quality Health Safety and Environment (QHSE) standards.

It promises to follow the best system standards of ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018 in all its operations, thus contributing to the overall betterment of employees, communities, and other stakeholders.

SAS is actively working on creating an accident-free workplace, and implementing all safety practices.



Additionally, it promises -

- To provide quality products and services to all clients. At the same time maintain all safety standards at the facility.
- To adhere and comply with all applicable legal and statutory requirements and fulfill its compliance obligations without fail.
- To continually improve working conditions for all employees and processes based on reasonable business practices and customer feedback, thus enhancing QHSE performance.
- To fulfill all obligations associated with protecting the environment, including prevention of pollution, hazard risk identification, and other protocols relevant to the organization.

It supports strategic direction and actions targeted to address the risk and opportunities.

- To safely handle hazardous chemicals & create a pollution-free work environment for all employees working for the organization.
- To ensure prevention of pollution, injury, and ill health at the facility.

Eliminate any hazards that may endanger employees' lives and any other factors that are harming the surroundings & environment, thus improving IMS management and performance.

- To generate awareness of QHSE by training, communication, consultation, and active participation of all employees.
- To ensure QHSE policy is relevant and provides a flexible framework for setting any new IMS objectives. To make sure all such protocols are understood within the organization and communicated to the appropriate interested parties.

A close-up photograph of a person's hand operating a red stapler on a document. The stapler is positioned vertically, and the hand is shown from the side, gripping the handle. The document is partially visible at the bottom, showing some text and a white margin. The background is dark and out of focus. A red rectangular box is overlaid on the bottom right of the image, containing white text.

Certifications & Approvals

Certifications & Approvals

SAS Power FZE is accredited by Veritas Assurance International, a globally recognized certification authority that issues internationally recognised accredited certifications to enterprises that commit to and comply with the applicable Standard standards.

SAS Power is ISO 9001, ISO 14001, and ISO 45001 accredited for Quality Management System, Environmental Management System, and Occupational Health and Safety Management System respectively, that is applicable to:

- Sales
- Design
- Manufacture
- Assembly,
- Supply, Testing & Commissioning of Low Voltage & Medium Voltage Switchgear
- Power Factor Compensation and Detuned Filter Equipment
- Control Panels,
- Relay Panels
- Protection Panels
- Voltage Regulator Panels
- Automation Panels & System Integration of Electricals
- Automation for Industries and Utilities
- After Sales services including retrofit of all above products,
- Harmonic Measurement Services
- Power Quality
- Short Circuit Studies
- Annual and Preventive Maintenance Works

ISO Certifications



CERTIFICATE OF REGISTRATION

This is to certify that the management system of

SAS POWER INDUSTRIES FZE (SAS GALFAR)
P.O.Box: 54505, Plot-8, Al Hamra Industrial Zone, RAKEZ, Ras Al Khaimah, United Arab Emirates.

has been assessed and registered by Veritas Assurance International as conforming to the requirements of

ISO 9001:2015

Quality Management System

The Quality Management System is applicable to:

Sales, Design, Manufacturer, Assembly, Supply, Testing and Commissioning of Low Voltage and Medium Voltage Switchgear, Power Factor Compensation and De-Tuned Filter Equipment, Control Panels, Relays Panels, Voltage Regulator Panels, Automation Panels, Automation with System Integration

After Sales Services including Retrofit of All above Products, Harmonic Measurement Services, Power Quality, Short Circuit Studies, Annual and Preventive Maintenance Works.

Certificate No : 321181501

Certificate issue date : 20-12-2021 | Certificate expiry date : 19-12-2023
1st Surveillance due before : 19-12-2021 | 2nd Surveillance due before : 19-12-2022



Authorized Signatory
Veritas Assurance International
Accredited by UAF (United Arab Emirates Accreditation Authority)
Full Member of IAF (International Accreditation Forum)

Registration Accreditation Office:
400 North Center Dr., STE 202, Norfolk, VA 23502
United States of America (USA)



VERITAS ASSURANCE INTERNATIONAL



CERTIFICATE OF REGISTRATION

This is to certify that the management system of

SAS POWER INDUSTRIES FZE (SAS GALFAR)
P.O.Box: 54505, Plot-8, Al Hamra Industrial Zone, RAKEZ, Ras Al Khaimah, United Arab Emirates.

has been assessed and registered by Veritas Assurance International as conforming to the requirements of

ISO 14001:2015

Environmental Management System

The Environmental Management System is applicable to:

Sales, Design, Manufacturer, Assembly, Supply, Testing and Commissioning of Low Voltage and Medium Voltage Switchgear, Power Factor Compensation and De-Tuned Filter Equipment, Control Panels, Relays Panels, Voltage Regulator Panels, Automation Panels, Automation with System Integration

After Sales Services including Retrofit of All above Products, Harmonic Measurement Services, Power Quality, Short Circuit Studies, Annual and Preventive Maintenance Works.

Certificate No : 321181502

Certificate issue date : 20-12-2021 | Certificate expiry date : 19-12-2023
1st Surveillance due before : 19-12-2021 | 2nd Surveillance due before : 19-12-2022



Authorized Signatory
Veritas Assurance International
Accredited by UAF (United Arab Emirates Accreditation Authority)
Full Member of IAF (International Accreditation Forum)

Registration Accreditation Office:
400 North Center Dr., STE 202, Norfolk, VA 23502
United States of America (USA)



VERITAS ASSURANCE INTERNATIONAL



CERTIFICATE OF REGISTRATION

This is to certify that the management system of

SAS POWER INDUSTRIES FZE (SAS GALFAR)
P.O.Box: 54505, Plot-8, Al Hamra Industrial Zone, RAKEZ, Ras Al Khaimah, United Arab Emirates.

has been assessed and registered by Veritas Assurance International as conforming to the requirements of

ISO 45001:2018

Occupational Health & Safety Management System

The Occupational Health & Safety Management System is applicable to:

Sales, Design, Manufacturer, Assembly, Supply, Testing and Commissioning of Low Voltage and Medium Voltage Switchgear, Power Factor Compensation and De-Tuned Filter Equipment, Control Panels, Relays Panels, Voltage Regulator Panels, Automation Panels, Automation with System Integration

After Sales Services including Retrofit of All above Products, Harmonic Measurement Services, Power Quality, Short Circuit Studies, Annual and Preventive Maintenance Works.

Certificate No : 321181503

Certificate issue date : 20-12-2020 | Certificate expiry date : 19-12-2023
1st Surveillance due before : 19-12-2021 | 2nd Surveillance due before : 19-12-2022



Authorized Signatory
Veritas Assurance International
Accredited by UAF (United Arab Emirates Accreditation Authority)
Full Member of IAF (International Accreditation Forum)

Registration Accreditation Office:
400 North Center Dr., STE 202, Norfolk, VA 23502
United States of America (USA)



VERITAS ASSURANCE INTERNATIONAL


ePlan Certified Design Engineers

SAS design engineers are ePLAN certified professionals who come with considerable experience in developing complex electrical distribution systems across products.



ICV Certified Switchgear Supplier

SAS Galfar switchgears are known for their indispensable quality and value, making them the preferred choice for clients and clients across the region.



IN-COUNTRY VALUE CERTIFICATE

Certificate ID: 100790
Issue Date: 23.06.2020
Valid Until: 22.08.2021


SAS Power Industries FZE

44.86%

Company General Information
License No.: 8000030
Company Type:
Financial Year And Month: 0
Company Based In: Undefined
Company Business: **GOOD MANUFACTURER**

For Cases of Re-Certification
Re-certification (*) No.:

Reason For This Recertification:



Signed By
On Behalf Of Supplier

Name:

Designation:

Verified As Per ICV Agreed Upon Procedures (AUP)
On Behalf Of Certification Body

Name:
Mubin Javed

Designation:
Senior Consultant

Company:
Baker Tilly WAM Chartered Accountants

Certificate issued based on GuideLine Version: 1.0

Test Certification

DEKRA



DEKRA

DEKRA

DEKRA

DEKRA

DEKRA

TEST CERTIFICATE

Issued to: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

For the product: Low-voltage switchgear and controlgear assembly

Trade name: SAS-GALFAR

Type/Model: 400 A Switchboard

Ratings: I_{nB} 400 A, U_o 415 V, U_{imp} 8 kV, IP54,
 I_{cw} 43,3 kA - 1 s and 25 kA - 3 s (main busbar), I_{cc} 36 kA at 415 V (incoming unit),
 I_{cc} 25 kA and 36 kA at 415 V (outgoing units)
For more details see annex

Manufactured by: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject: Design verification

Requirements: IEC 61439-2:2011
Clauses 10.2.2, 10.2.3, 10.2.7, 10.3 - 10.9, 10.10.2.3.5 and 10.11 - 10.13

Remarks: -


This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2163707.02-INC. dated 16 December 2013.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 16 December 2013

Number: 2163707.101

DEKRA Certification B.V.



H.L. Schendstok
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Company registration 09085398

Test Certification



DEKRA
TEST REPORT

2184038.03-INC

Page 1 of 9

Applicant : SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Application Date : 13 October 2015

Order Number : 2184038.00-INC

Product : Low-voltage switchgear and controlgear assembly

Trade name : SAS-GALFAR

Type/Model : Representative IK Test Enclosure for SAS Galfar Switchgear Systems

Arnhem, 26 April 2017

Manufacturer/ Production sites: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject : Mechanical impact test

Requirements : IEC 61439-2:2011
Clause 10.2.6

Conclusion : The product complies with the specified requirements

Tested by : R. Verhagen

Checked by : F.S. Strikwerda

RVer

17-0245

© DEKRA Certification B.V. All rights reserved

Products may only be provided with a quality mark or put on the market as approved if DEKRA Certification B.V. has explicitly granted the right to carry a quality mark.

DEKRA Certification B.V. and/or its subsidiaries are not liable for any direct or indirect, incidental or consequential loss originating through or because of the use of the information or data from this document or due to the impossibility of using that information or data.

The contents of this report may not be made available to a third party other than as an entity provided with the aforementioned designations with respect to copyrights and liability.

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Company registration 09085396

Test Certification

DEKRA

TEST CERTIFICATE

Issued to: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

For the product: Low-voltage switchgear and controlgear assembly

Trade name: SAS-GALFAR

Type/Model: DEFT PLUS 1600

Ratings: I_{na} 1600 A, U_n 415 V, U_i max. 1000 V, U_{imp} max. 12 kV, IP54
 I_{cw} 50 kA - 1 s, I_{cc} 50 kA at 415 V
For more details see annex (3 pages)

Manufactured by: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject: Design verification

Requirements: IEC 61439-2:2011
Clauses 10.2.2, 10.2.3, 10.2.5, 10.2.7, 10.3 – 10.9, 10.10.2.3.5,
10.11 – 10.13, and 8.101

Remarks: Date of performance of tests: 2013 and 2015
(see general notes on tests in the report)

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2184038.01-INC, dated 2 November 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 2 November 2015 Number: 2184038.100

DEKRA Certification B.V.



H.L. Schendstok
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Company registration 09085395

Test Certification



TEST CERTIFICATE

Issued to: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

For the product: Low-voltage switchgear and controlgear assembly

Trade name: SAS-GALFAR

Type/Model: 3200A DEFTPLUS IP43 Switchboard

Ratings: I_{nA} 3200 A, U_e 415 V, U_i max. 1000 V, U_{imp} max. 12 kV, IP43
 I_{cw} 50 kA - 3 s and 65 kA - 1 s (main busbar).
 I_{cc} 50 kA at 415 V (incoming unit and outgoing units)
For more details see annex

Manufactured by: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject: Design verification

Requirements: IEC 61439-2:2011
Clauses 10.2.2, 10.2.3, 10.2.5, 10.2.7, 10.3 – 10.9, 10.10.2.3.5,
10.11 – 10.13, and 8.101

Remarks: Date of performance of tests: 2013, 2016 and 2017
(see general notes on tests in the report)

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2195261.02-INC, dated 6 June 2017.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 6 June 2017

Number: 2195261.101

DEKRA Certification B.V.

F.S. Strikwerda
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

Test Certification



TEST CERTIFICATE

Issued to: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

For the product: Low-voltage switchgear and controlgear assembly

Trade name: SAS-GALFAR

Type/Model: 2500A DEFTPLUS IP54 Switchboard

Ratings: I_{na} 2500 A, U_e 415 V, U_i max. 1000 V, U_{imp} max. 12 kV, IP54
I_{cw} 50 kA - 3 s and 65 kA - 1 s (main busbar).
I_{cc} 50 kA at 415 V (incoming unit and outgoing units)
For more details see annex

Manufactured by: SAS Power Industries FZE
(Subsidiary of Galfar Al Misnad Engg. & Contg., WLL)
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject: Design verification

Requirements: IEC 61439-2:2011
Clauses 10.2.2, 10.2.3, 10.2.5, 10.2.7, 10.3 – 10.9, 10.10.2.3.5,
10.11 – 10.13, and 8.101

Remarks: Date of performance of tests: 2013, 2015 and completed in September 2016
(see general notes on tests in the report)

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2195261.03-INC, dated 6 June 2017.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 6 June 2017

Number: 2195261.102

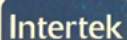
DEKRA Certification B.V.



F.S. Strikwerda
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

Test Certification


Test Report No. 2638

ASTA TEST REPORT

Laboratory Ref. No: B25-17-AE-01E
APPARATUS: 440V (U_g), 50Hz, extendable Power Switchgear and Controlgear Assembly incorporating a three-phase and neutral horizontal and vertical tinned copper busbar system.

DESIGNATION: SAS Galfar Low Voltage Switchgear Assembly

MANUFACTURER: SAS Power Industries FZE
 (Subsidiary company of Galfar Al Misnad Engineering & Contracting WLL Qatar)
 P.O. Box 54505, Technology Park, RAKFTZ , Ras Al Khaimah. UAE

TESTED BY: TECNALIA Research & Innovation, Parque Científico y Tecnológico de Bizkaia
 Laida Bidea. Edificio 413, 48170 Zamudio, Spain

DATES OF TESTS: 9th February 2017

The apparatus, constructed in accordance with the description, drawings and photographs attached hereto has been examined in accordance with Client's instructions test procedures and requirement generally in accordance with:

IEC/TR 61641 Edition 3.0 2014-09, Clauses 8 applying Criteria 1 to 5

Tests of the busbars compartment under the conditions of arcing due to an internal fault with a short-circuit current of 50kA (I_{p_arc}) and 65kA (I_{p_arc}) initiated in the middle of the main horizontal busbars and the incoming busbars respectively, at a rated operational voltage of 440V and arc duration of 100ms (t_{arc}), applying criteria for an assembly providing personnel protection under arcing conditions.

This is not a certificate of rating. A certificate of rating could not be issued as the arc fault tests to IEC/TR 61641 Edition 3.0 do not establish a rating and only selected tests were performed.

The documents forming this Test Report are:

- (1) Record of proving tests: Pages 1 to 14
- (2) Diagram no.: B25-17-AE-01E / D01
- (3) Oscillogram nos.: B25-17-AE 003, 005, 007, 008 and 009
- (4) Photograph nos.: B25-17-AE-01E/P01 to P09 c)
- (5) Drawing nos.: SAS-ATT-001 - 4 sheets

The Record of Proving Tests applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designation with that tested rests with the Manufacturer.



010

C Diack-Evans C Diack-Evans
 ASTA Observer

P Galfar Certification
 Manager

14th August 2017Date

Reproduction of the complete Test Report only is permitted without written permission from Intertek Testing and Certification Ltd, Centre Court, Meridian Business Park, Leicester LE19 1WD, United Kingdom. Contact: asta@intertek.com Tel: +44 (0)116 263 0330, www.intertek.com

Test Certification

00-IC-F0468 Issue #: 13.0

UL TYPE EXAMINATION CERTIFICATE

Certificate No.	UL TEC-01048
Page	1/1
Date of Issue	2021-05-30
Issued to	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturer	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturing site/location	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Product Sample Description	800A Low Voltage Power Switchgear and Controlgear assembly, extendable comprising of one incomer MCCB, seven outgoing MCCB, one outgoing star delta starter and one outgoing DOL starter with three-phase and neutral busbar system and a protective busbar. The Assembly is suitable for indoor use with metallic enclosure
Designation	800A DEFT PLUS SWITCH BOARD MDB/SMDB/MCC
Ratings	Rated operational voltage (Ue): 415V Rated insulation voltage (Ui) : 1000V for 1Q1, 2Q1, 2Q3, 3Q1, 3Q2 & 3Q6 : 800V for 3Q3 & 3Q5 : 690V for 2Q2 & 3Q4 Rated impulse withstand voltage (Uimp): 8kV for all component except 2Q2 & 3Q4 : 6kV for 2Q2 & 3Q4 Rated current of the ASSEMBLY (InA): 800A Rated frequency (fn): 50Hz, Ambient Temperature: 50°C IP rating: IP 54 (Form 4b), Rated diversity factor (RDF): 1 Mechanical impact: IK10 Rated short time withstand current (Icw): 36kA for 3sec & 50kA for 1sec Refer Type Examination summary for other details (4789863221.1.1-A-S)
Product Sample Tested and found in compliance with Standard(s)	IEC 61439-2:2020, IEC 61439-1:2020
Test Report Nos.	4789863221.1.1-A issued on 2021-05-02
Additional information	N/A

Certification Manager
Jan-Erik Storgaard

Certification Body

This is to certify that the sample(s) of the Product described herein has been investigated and found to have been in compliance with the Standard(s) indicated on this Certificate, in accordance with the UL Type Examination Certificate Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/ Manufacturer are solely and fully responsible for any declaration of ongoing conformity of all products to all applicable Standard(s), specifications or requirements. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**UL International Demko A/S, Borupvang 5A, 2750
Ballerup, Denmark, Tel. +45 44 85 65 65,
info.dk@ul.com
www.ul.com**



Test Certification

00-IC-F0468 Issue #: 13.0

UL TYPE EXAMINATION CERTIFICATE

Certificate No.	UL TEC-01049
Page	1/1
Date of Issue	2021-05-30
Issued to	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturer	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturing site/location	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Product Sample Description	1000A Low Voltage Power Switchgear and Controlgear assembly, extendable comprising of one incomer MCCB, seven outgoing MCCB, one outgoing star delta starter and one outgoing DOL starter with three-phase and neutral busbar system and a protective busbar. The Assembly is suitable for indoor use with metallic enclosure.
Designation	1000A DEFT PLUS SWITCH BOARD MDB/SMDB/MCC
Ratings	Rated operational voltage (Ue): 415V Rated insulation voltage (Ui) : 1000V for 1Q1, 2Q1, 2Q3, 3Q1, 3Q2 & 3Q6 : 800V for 3Q3 & 3Q5 : 690V for 2Q2 & 3Q4 Rated impulse withstand voltage (Uimp): 8kV for all component except 2Q2 & 3Q4 : 6kV for 2Q2 & 3Q4 Rated current of the ASSEMBLY (InA): 1000A Rated frequency (fn): 50Hz, Ambient Temperature: 50°C IP rating: IP 54 (Form 4b), Rated diversity factor (RDF): 1 Mechanical impact: IK10 Rated short time withstand current (Icw): 36kA for 3sec & 50kA for 1sec Refer Type Examination summary for other details (4789863221.1.1-B-S)
Product Sample Tested and found in compliance with Standard(s)	IEC 61439-2:2020, IEC 61439-1:2020
Test Report Nos.	4789863221.1.1-B issued on 2021-05-02
Additional information	N/A

Certification Manager
Jan-Erik Storgaard

Certification Body

This is to certify that the sample(s) of the Product described herein has been investigated and found to have been in compliance with the Standard(s) indicated on this Certificate, in accordance with the UL Type Examination Certificate Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/ Manufacturer are solely and fully responsible for any declaration of ongoing conformity of all products to all applicable Standard(s), specifications or requirements. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**UL International Demko A/S, Borupvang 5A, 2750
Ballerup, Denmark, Tel. +45 44 85 65 65,
info.dk@ul.com
www.ul.com**



Test Certification

00-IC-F0468 Issue #: 13.0

UL TYPE EXAMINATION CERTIFICATE

Certificate No.	UL TEC-01050
Page	1/1
Date of Issue	2021-05-30
Issued to	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturer	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Manufacturing site/location	SAS POWER INDUSTRIES FZE (GALFAR AL MISNAD ENGINEERING & CONTRACTING WLL) PLOT NO-8, RAK ECONOMIC ZONE PO BOX 54505 RAS AL KHAIMAH UNITED ARAB EMIRATES
Product Sample Description	1250A Low Voltage Power Switchgear and Controlgear assembly, extendable comprising of one incomer MCCB, seven outgoing MCCB, one outgoing star delta starter and one outgoing DOL starter with three-phase and neutral busbar system and a protective busbar. The Assembly is suitable for indoor use with metallic enclosure.
Designation	1250A DEFT PLUS SWITCH BOARD MDB/SMDB/MCC
Ratings	Rated operational voltage (U_b): 415V Rated insulation voltage (U) : 1000V for 1Q1, 2Q1, 2Q3, 3Q1, 3Q2 & 3Q6 : 800V for 3Q3 & 3Q5 : 690V for 2Q2 & 3Q4 Rated impulse withstand voltage (U_{imp}): 8kV for all component except 2Q2 & 3Q4 : 6kV for 2Q2 & 3Q4 Rated current of the ASSEMBLY (I_{thA}) : 1250A Rated frequency (f_n): 50Hz, Ambient Temperature: 50°C IP rating: IP 43 (Form 4b), Rated diversity factor (RDF): 1 Mechanical impact: IK10 Rated short time withstand current (I_{ctw}): 36kA for 3sec & 50kA for 1sec Refer Type Examination summary for other details (4789863221.1.1-C-S)
Product Sample Tested and found in compliance with Standard(s)	IEC 61439-2:2020, IEC 61439-1:2020
Test Report Nos.	4789863221.1.1-C issued on 2021-05-02
Additional information	N/A

Certification Manager
Jan-Erik Storgaard

Certification Body

This is to certify that the sample(s) of the Product described herein has been investigated and found to have been in compliance with the Standard(s) indicated on this Certificate, in accordance with the UL Type Examination Certificate Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/ Manufacturer are solely and fully responsible for any declaration of ongoing conformity of all products to all applicable Standard(s), specifications or requirements. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**UL International Demko A/S, Borupvang 5A, 2750
Ballerup, Denmark, Tel. +45 44 85 65 65,
info.dk@ul.com
www.ul.com**



Test Certification



TEST CERTIFICATE

Issued to: SAS Power Industries FZE
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

For the product: Control , Relay Protection Panel

Trade name: SAS-GALFAR

Type/Model: Control , Relay Protection Panel for HV, EHV, UHV applications

Ratings: IP54, 2000 Vac - 60 s, for more details see annex - Page 1 of 1

Manufactured by: SAS Power Industries FZE
P.O. Box 54505
RAS Al Khaimah
United Arab Emirates

Subject: Design verification

Requirements: IEC 61439-2:2011
Clauses 10.2.2, 10.2.3.2, 10.2.5, 10.2.7, 10.3, 10.5.2, 10.9.2, 10.13

Remarks: -

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2151980.01-INC, dated 16 October 2012.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 16 October 2012

Number: 2151980.100
DEKRA Certification B.V.


H.L. Schendstok
 Certification Manager

© Integral publication of this certificate and adjoining is allowed

All testing, inspection, auditing and certification activities performed by former KEMA Quality are an integral part of the DEKRA Certification Group.

DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem, The Netherlands
T +31 26 356 2000 F +31 26 352 5800 www.dekra-certification.com P.O. Box 5185, 6802 ED Arnhem, The Netherlands
Company registration 09085396

Utility Approvals



شركة أبوظبي للتوزيع
Abu Dhabi Distribution Company

**Low Voltage Switchgear
Control & Protection**



هيئة كهرباء ومياه الشارقة
Sharjah Electricity & Water Authority

**Low Voltage Switchgear
Control & Protection
LCC for GIS**



شركة أبوظبي لخدمات الصرف الصحي
Abu Dhabi Sewerage Services Company

Low Voltage Switchgear



الهيئة الاتحادية للكهرباء و الماء
Federal Electricity & Water Authority

**Low Voltage Switchgear
Control & Protection
LCC for GIS**



ديوا
dewa

**Low Voltage Switchgear
Control & Protection
LCC for GIS**



ترانسكو
شركة أبوظبي لنقل والتوزيع
Abu Dhabi Transmission & Dispatch Company

**Low Voltage Switchgear
Control & Protection**



شركة العين للتوزيع
Al Ain Distribution Company

**Low Voltage Switchgear
Control & Protection**



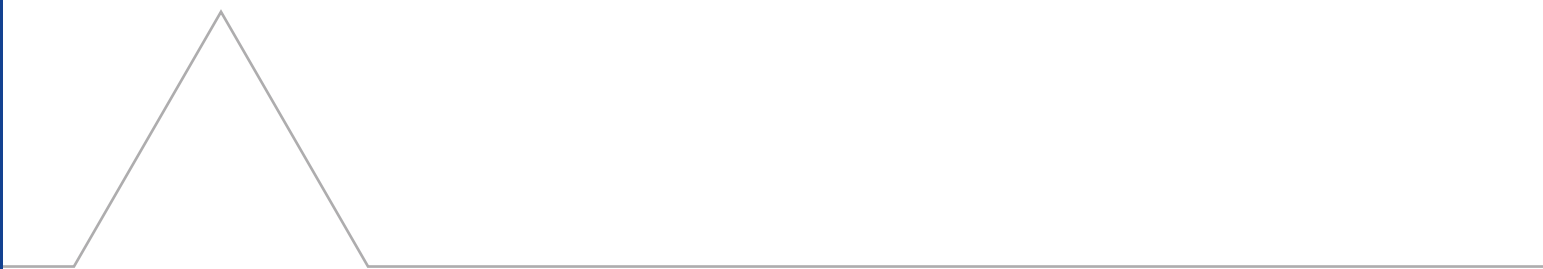
الإمارات العالمية للألمنيوم
EMIRATES GLOBAL ALUMINIUM

**Medium Voltage Switchgear
Low Voltage Switchgear**



EWA
هيئة الكهرباء والماء
Electricity & Water Authority
Kingdom of Bahrain

Low Voltage Switchgear





Projects

SAS Projects

SAS Galfar's installation references can be found across industry-scapes. Few prominent industry segments are:

- DATA Centers
- Transportation
- Commercial and residential buildings
- Substations
- Water Pumping Stations
- Oil & Gas
- Infrastructure like stadiums, hotels, parks, hospitals, shopping malls and district cooling plants.

Major Projects Executed

Be it UAE or any other region; our projects have garnered massive appreciation from clients for the attention to detail and agility we bring to the table.

All our projects are a salute to high-quality and impeccability, starting from planning, execution to maintenance, and its optimum service at any time of the week, month, or year.

Qatar Rail



New Doha International Airport



RTA (RTA Bus Depot in Al Ruwayah)



MIRAL- family hotel YAS Island, Abu Dhabi



ALDAR (Reem Central Park)



Emmar - Sunrise Bay



Emirates Airlines - Emirates Staff Housing project



EXPO 2020 - Emirates Pavilion



إكسبو 2020
دبي، الإمارات العربية المتحدة
DUBAI UNITED ARAB EMIRATES

EXPO 2020 - Luxemburg Pavilion



إكسبو 2020
دبي، الإمارات العربية المتحدة
DUBAI UNITED ARAB EMIRATES

Engineering Office (Last Exit Al Khawaneej)



ENGINEERING
— OFFICE —

Emirates Global Aluminum (Emirates Aluminium Smelter Complex)



EGA 
الإمارات العالمية للألمنيوم
EMIRATES GLOBAL ALUMINIUM

Emirates Airlines - Emirates Park Hotel




Emirates

Qatar Petroleum (QP Dukhan)



Abudhabi National Oil Gas Company (Bab Integrated Facilities Project)



Al Bayt Stadium, Qatar



Khalifa Stadium, Qatar



Intercontinental Hotel in RAK



Rove Hotel in Dubai Parks



Hilton Hampton Hotel, RAK



Aqua venture Water Park, Dubai



Sheikh Khalifa Central Hospital, Fujairah



MINISTRY OF PRESIDENTIAL AFFAIRS
 H.H. the President Initiatives
 Sheikh Khalifa Specialty Hospital (Sheikh Khalifa)



وزارة شؤون الرئاسة
 مبادرات صاحب السمو رئيس الدولة
 مستشفى الشيخ خليفة التخصصي (الشيخ خليفة)

LuLu Hypermarket@RAK, Lulu hyper market at Dibba, Fujairah, LuLu Qusais

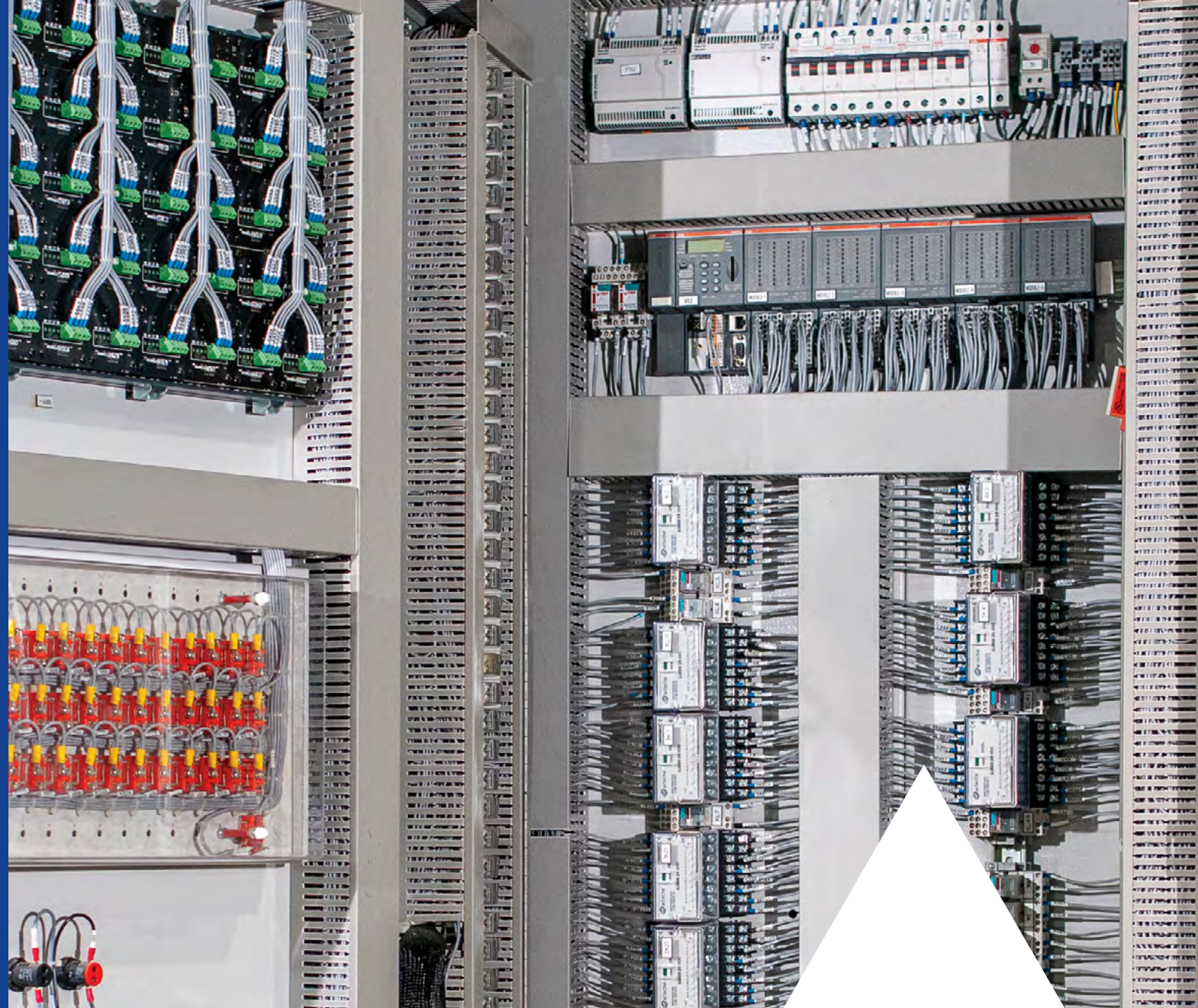


Al Hamra Real Estate (Al Hamra Village, Phase IV - District Cooling Plant)



EMPOWER (Tecom District Cooling Plant)





SAS Power Industries (A Galfar Group Company)

Plot 8, Technology Park, P.O. Box 54505,
RAK Economic Zone, Ras Al Khaimah, UAE
email: info@saspower.com
Ph: +971 7 2447278 Fax: +971 7 2447689

www.saspower.com