



Profile



Saxon is an ASTA Certified Low Voltage Switchgear Manufacturer, certified as per the latest IEC standards (IEC-61439-1&2). We also have the prestigious accreditations and certifications of ISO 9001:2008 and approvals by FEWA, DEWA, SEWA, RTA and the Federal Ministry. We have a strong relationship with ABB, SCHNEIDER, SIEMENS, LG, HAGER, LEGRAND, and LT. Saxon is a multinational organization committed to the development, design & manufacture of electrical products, leveraging technologies and providing competent services to meet global standards. We manufacture and assemble power and control panels in our facility located in Hamriya Free Zone (HFZA). We specialize in all types of control panels (PLC and SCADA) up to 6000A Form IV. A team of qualified and experienced engineers lead different divisions including automation. Our engineers are experts and capable of design of switchgears and control gears up to Form 4 configurations, evaluation of fault level calculations, computer aided design (CAD) for drawings and design of controls & instrumentation panels. We are equipped with an advanced component testing facility for MCCB, MCB, ELCB etc. We play a vital role in the new era of growing technology and emerge as a globally recognized organization in the infrastructure industry and specifically in the field of power. We have sound expertise in the manufacturing, assembling, delivery, installation and servicing of electrical panels. We partner up with Developers, Consultants, MEP Contractors and Manufacturing Industries in providing electrical engineering solutions to our clients in the Construction, Manufacturing and Oil & Gas Industries in the UAE, the other GCC nations and the African countries.

Quality Policy



Saxon Switchgear established quality policy and it is communicated across the organization. We are committed to continually improve the effectiveness of the documented and established Quality Management System and the objectives of an organization are documented as Quality Objectives of the organization. The documented and established quality policy is corresponded across all levels of the organization by conducting meetings, displaying at appropriate places, imparting training to all staff to ensure that staff understands and adhere to the quality policy. Management reviews (subjected to revision when ever needed) the quality policy and quality objectives for ensuring the continuing suitability & effectiveness of the established Quality Management System and the changing needs of market. Top management has defined a quality policy for the organization, which is considered as a benchmark to provide quality service to the customers. Management ensures' that all the employees whose work affects the quality of the service understands the “Quality Policy” of the organization and are committed towards it. Quality policy is periodically reviewed to ensure its continuing suitability with the organizational needs and the changing environment. Saxon is committed to design, assemble and supply quality products full filling customer and applicable statutory and regulatory requirement with international and local standards enhancing our customer satisfaction with continual improvement through effective implementation of quality management system. We actively involve our employees in effectively managing the quality system by setting high standards on all business parameters. Our constant endeavor is to continually improve customer satisfaction with focused attention on skill and competency development, improving quality and upgrading process capability with the objective of achieving market leadership in all Saxon brands of products. At our factory, separate provision has been made for the testing of the components and switchboards. Saxon is fully equipped with the necessary test kits and equipments. To carry out the requirements of the standard tests as per IEC 60439 / BS 5486.

Products



- **Low Voltage Panels up to 6000A**
- **Main Distribution Boards**
- **Sub Main Distribution Boards**
- **Final Distribution Boards**
- **Motor Control Center**
- **Pump Control Panels**
- **Automatic Transfer Switch Panels**
- **Generator Synchronizing Panels**
- **Capacitor Panel**
- **Metering Cabinet**
- **Isolator Panels**
- **Manual Change over Panels**
- **Street Lighting Feeder Pillars**
- **Control Desk**
- **RTU Panels**

Technical Information



Calculation of the Capacitor Size

The reactor power which is necessary to achieve a desired power factor is calculated by the following formula:

$$Q_c = P (\tan\varphi_1 - \tan\varphi_2)$$

- P Active power of the load to be corrected
- Q_c Reactive power of the required correcting capacitor
- $\cos\varphi_1$ Original power factor before correction
- $\cos\varphi_2$ new power factor

The factor $(\tan\varphi_1 - \tan\varphi_2)$ can be determined by means of the chart below

original power factor	multiplication factor $(\tan\varphi_1 - \tan\varphi_2)$ for a target power factor											
	$\cos\varphi_1$	$\tan\varphi_1$	0.70	0.75	0.80	0.85	0.90	0.92	0.94	0.96	0.98	1.00
0.20	4.899	3.879	4.017	4.149	4.279	4.415	4.473	4.536	4.607	4.696	4.899	
0.25	3.873	2.853	2.991	3.123	3.253	3.389	3.447	3.510	3.581	3.670	3.873	
0.30	3.180	2.160	2.298	2.430	2.560	2.695	2.754	2.817	2.888	2.977	3.180	
0.35	2.676	1.656	1.795	1.926	2.057	2.192	2.250	2.313	2.385	2.473	2.676	
0.40	2.291	1.271	1.409	1.541	1.672	1.807	1.865	1.928	2.000	2.088	2.291	
0.45	1.985	0.964	1.103	1.235	1.365	1.500	1.559	1.622	1.693	1.781	1.985	
0.50	1.732	0.712	0.850	0.982	1.112	1.248	1.306	1.369	1.440	1.529	1.732	
0.55	1.518	0.498	0.637	0.768	0.899	1.034	1.092	1.156	1.227	1.315	1.518	
0.60	1.333	0.313	0.451	0.583	0.714	0.849	0.907	0.970	1.042	1.130	1.333	
0.65	1.169	0.149	0.287	0.419	0.549	0.685	0.743	0.806	0.877	0.966	1.169	
0.70	1.020		0.138	0.270	0.400	0.536	0.594	0.657	0.729	0.817	1.020	
0.75	0.882			0.132	0.262	0.398	0.456	0.519	0.590	0.679	0.882	
0.80	0.750				0.130	0.266	0.324	0.387	0.458	0.547	0.750	
0.85	0.620					0.135	0.194	0.257	0.328	0.417	0.620	
0.90	0.484						0.058	0.121	0.193	0.281	0.484	
0.95	0.329								0.037	0.126	0.329	

Current carrying capacities of Busbars

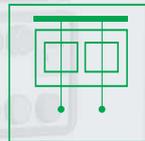
Copper busbars according to DIN 43761/12.75 (extract), material E-CuF30/F25

Width X Thickness	CONTINUOUS CURRENT							
	Ambient temperature : 35°C				Ambient temperature : 50°C			
	Temperature rise : 30°C		Temperature rise : 32°C		Temperature rise : 30°C		Temperature rise : 32°C	
	Painted Number of bars		Bare Number of bars		Painted Number of bars		Bare Number of bars	
mm	I	II	I	II	I	II	I	II
	A	A	A	A	A	A	A	A
20X5	319	560	274	500	319	—	274	—
30X5	447	760	379	672	447	—	379	—
40X5	573	952	482	836	573	—	482	—
50X5	697	1140	583	994	697	—	583	—
20X10	497	924	427	825	497	924	427	825
30X10	676	1200	573	1060	676	1200	573	1060
40X10	850	1470	715	1290	850	1470	715	1290
50X10	1020	1720	852	1510	1020	1720	852	1510
60X10	1180	1960	985	1720	1180	1960	985	1720
80X10	1500	2410	1240	2110	1500	2410	1240	2110
100X10	1810	2850	1490	2480	1810	2850	1490	2480

Forms of Separation / Type of Construction

Form 1

No Internal Separation



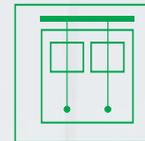
Terminals NOT separated from busbars

TYPE 1:

Busbar separation by insulated coverings e.g. sleeving, wrapping or coatings

Form 2

Separation of busbars from the functional units



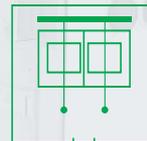
Terminals separated from busbars

TYPE 2:

Busbar separation by metallic or non-metallic rigid barriers or partitions

Form 3a

Separation of busbars from the functional units, Functional units from one another, Terminals from functional units but not from each other



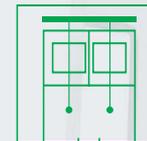
Terminals NOT separated from busbars

TYPE 1:

Busbar separation by insulated coverings e.g. sleeving, wrapping or coatings

Form 3b

Separation of busbars from the functional units, Functional units from one another, Terminals from functional units but not from each other



Terminals separated from busbars

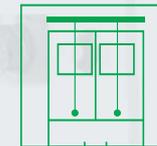
TYPE 2:

Busbar separation by metallic or non-metallic rigid barriers or partitions

Form 4

Separation of busbars from the functional units, Functional units from one another, Terminals of functional units

Terminals in same compartment as functional unit



TYPE 1:

Busbar separation by insulated coverings e.g. sleeving, wrapping or coatings. Cables glanded elsewhere.

TYPE 2:

Busbar separation by metallic or non-metallic rigid barriers or partitions. Cables glanded elsewhere.

TYPE 3:

All separation by metallic or non-metallic rigid barriers or partitions.

The terminals for each functional unit have their own integral glanding facility.

TYPE 4:

Busbar separation by insulated covering e.g. sleeving, wrapping or coatings. Cables glanded elsewhere.

TYPE 1:

Busbar separation by metallic or non-metallic rigid barriers or partitions. Terminals separated by insulated coverings. Cables glanded in common cabling chamber.

TYPE 1:

All separation by metallic or non-metallic rigid barriers or partitions. Cables glanded in common cabling chamber.

TYPE 1:

All separation by metallic or non-metallic rigid barriers or partitions. The terminals for each functional unit have their own integral glanding facility.

Typical Variants

Sales & Marketing



This Department is strategically built – up to cover the complete UAE market geographically divided between the sales engineers under the ultimate co-ordination of the Sales Manager. A team of people with good educational background and sound experience makes up the mandatory condition to furnish proficiently these duties with customer satisfaction as motive. The customers/clients are efficiently guided to communicate his practical expectations. While confidence in our products built – up from the primitive stages of discussions, the sales engineers are associated with the customers right from the sourcing of enquiry to after sales service. The techno-commercial clear offer comes out as per the explicit requirement of client/consultant while meeting the local regulations complying to international standards (IEC & BSEN) Customized solutions from our range of Products will be provided to the customer within the guidelines of the principals.

Estimation & Tendering



Estimation is the process of explaining in detail at every key stage of the project, from early cost studies, through the preparation of the estimate, to the creation of budgets for successful tenders. Each step is illustrated with examples and notes, and appropriate technical documentation. With our wide experience in the field We are more into the new techniques of Estimation & tendering and with the significant developments in construction management, notably new procurement methods, we are giving greater emphasis on innovation and partnering, a greater reliance on cost planning as a methodology, and new developments in both industry and governmental reports and guidance.

Our estimate should include the:

- **Overall Price**
- **Breakdown listing the components of the price**
- **Schedule detailing when work will be done or products delivered**
- **Terms and conditions**
- **Time period the estimate is valid for**

Design & Engineering



The in –house design office structured with an engineering team of design Engineers Assisted by designers, capable to design the market requirements strictly according to Local regulations, I.E.C and other International Standards. It is equipped with all records Of technical documents provided by our principals and by other suppliers, catalogues, Manuals, product qualification & conformity certificates and complete latest International standards for ready reference. Also requirements of customer's Justifications towards design aspects can be fulfilled with our principal's guidelines or Through worked out calculations.

The marketing / sales, design office , materials control and production sections are all Equipped with the latest available technology computers and networked at all levels to Faciliate communication. This is to reduce time and speeding up of the work done. Moreover, This is an attempt towards a paperless office automation.

Production



The production team comprise a supervisor and a group of team Leaders under Whom a batch of trained and well experienced technicians put their combined efforts To bring out the best in quality products of various L.V.switchgear panels and control Panels etc.. In all above three levels their work – in – progress is documented through Auto – control sheets. The factory is completely equipped with manual bending machines, hydraulic bending Machines for bus bar shaping, punching machines for drilling, shearing and bending Machines for fabrication, besides miscellaneous equipments, such as drilling machines, Saw cutters, heat gun for basic operations. This machinery and equipments are carefully Controlled on periodical basis so as to ensure a consistency in the performed operations (corrective and preventive actions are recorded). As a part of the every day schedule, production, material, co-ordination and design People meets to discuss the progress of jobs and planning for new ones. In addition to the above the shop floor is upgraded to contemporary equipments & tools From time to time to meet the rapid growing technology.

Quality Control



Quality Control (QC) is a system of routine technical activities, to measure and control the quality of the inventory as it is being developed. Our QAQC Team Provides routine and consistent checks to ensure data integrity, correctness, and completeness, Identify and address errors and omissions. We Document and archive inventory material and record all QC activities. Our Quality Assurance (QA) activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process. We consider after-sales service as the e almost as important thing for as the initial purchase. Our after-sales service might include additional training or helpdesk availability. Also we are giving equal importance is the customer's perception of the degree of willingness with which a supplier deals with a question or complaint, speed of response, and action taken.

Safety Policy



Saxon is totally committed to a policy of prevention, reduction and elimination of all undesired events that could or do result in loss. To protect the interest of Saxon and its client at all times and to eliminate using materials that have undesirable environmental side effects, Saxon has embarked on a safety and environmental program which will encompass all sections and areas of Saxon operations. It is vital that all employees commit themselves to the attainment of these objectives by ensuring that every task is done safely and in accordance with Saxon standards and managerial instructions.

The specific objectives of this program are:

- Environmental consideration to be a part of the decision making process.**
- Pollution prevention and compliance with environmental regulations.**
- Prevention of accidents to persons.**
- Prompt accident notification, investigation and reporting.**
- The establishment and maintenance of a safe, healthy and productive working environment.**
- Protection of property, equipment and material from all downgrading incidents.**

Approvals



دولة الإمارات العربية المتحدة
الهيئة الاتحادية للكهرباء والماء
Federal Electricity & Water Authority



هيئة كهرباء ومياه الشارقة
Sharjah Electricity & Water Authority

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority



هيئة الطرق والمواصلات
ROADS & TRANSPORT AUTHORITY



Partners



Power and productivity
for a better world™



New Name of  LG Industrial Systems

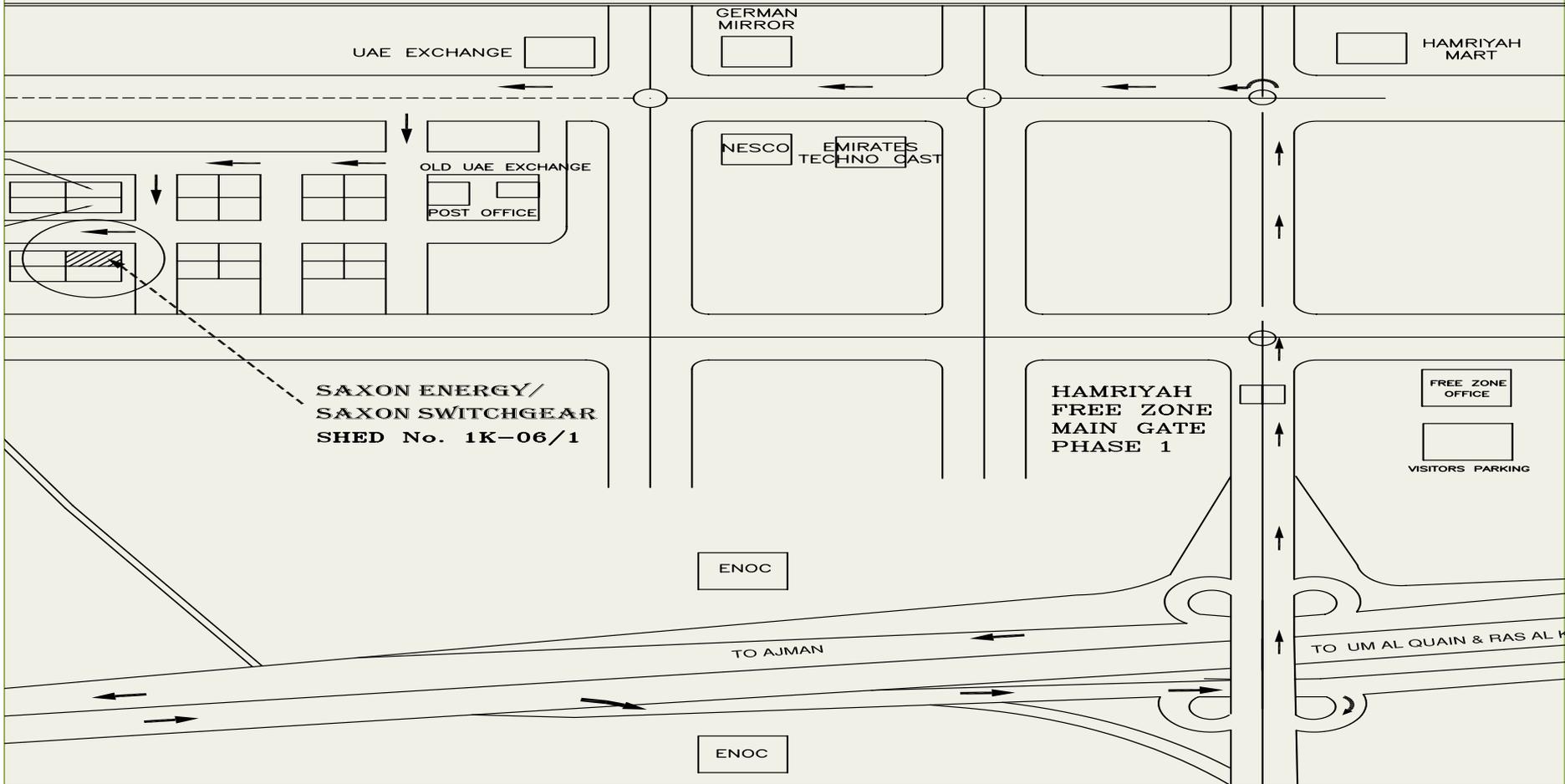


SIEMENS



LARSEN & TOUBRO LIMITED
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Location Map



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