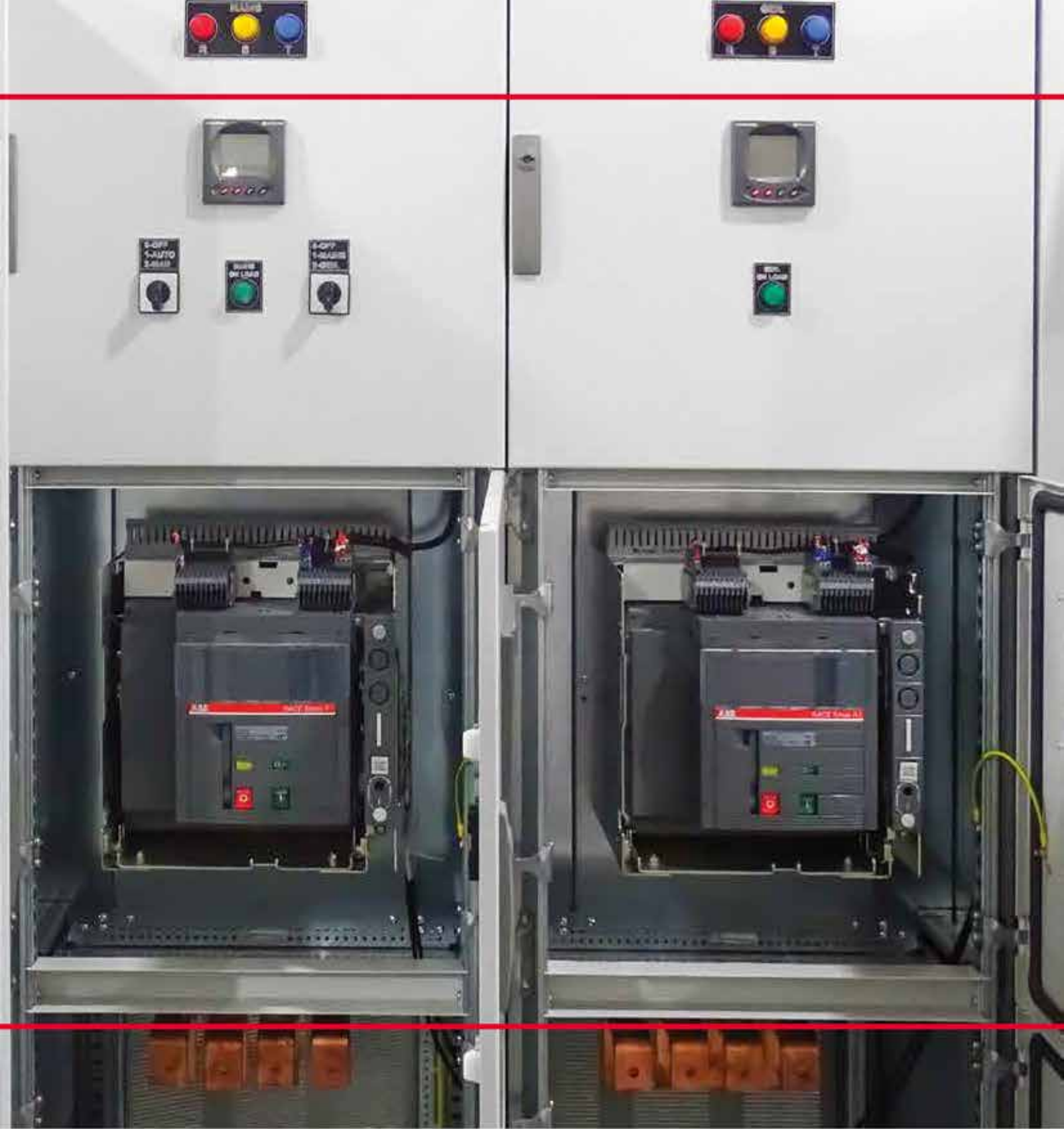


REFERENCES





LOW VOLTAGE SWITCHGEAR

LEBANON

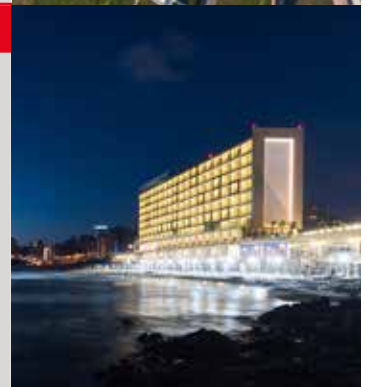
Project	Lancaster Plaza
Contractor/End-User	Office of Engineer Mohamad Wissam Ali Ashour
Description:	Totalizing Panel rated at 4000A busbar system, with BMS interface on Modbus Network, Main Distribution Boards rated at 1600A & 2000A busbar system with BMS interface on Modbus Network, Automatic Transfer Switch rated at 1600A & 2000A busbar system with BMS interface on Modbus Network, Motor Control Center comprising DOL, Softstarters interfaced with BMS, Sub Mains Distribution Boards, Final Distribution Boards



Project	Sour Waste Water Treatment
Consultant	Cabinet Merlin
Contractor/End-User	Veolia Water Technologies
Description:	Main LV Switchboard Type Tested Assembly IEC 61439 Form 4b rated at 2500A 50KA busbar system, Power Factor Corrector rated at 760KVAR with Detuned reactors, Motor Control Centers Type Tested Assembly IEC 61439 Form 4b incorporating withdrawable compartments comprising DOL, star-delta, softstarters & Variable speed drives, Low Harmonic Variable speed drives cabinet-built 110KW



Project	Lancaster Eden Bay
Contractor/End-User	Office of Engineer Mohamad Wissam Ali Ashour
Description:	Main LV Switchboard rated at 1600A busbar system, Main Distribution Board rated at 1600A & 630A comprising ATS 1600A & 630A respectively



Project	Falamanki Restaurant
Consultant	Wassim Tawil & Associates
Contractor/End-User	Falamanki Restaurant
Description:	Main LV Switchboard Type Tested Assembly IEC 61439 Form 2b rated at 2000 A busbar system, Sub Mains Distribution Boards, Final Distribution Boards



LEBANON

Project	Serum and Solutions
Consultant	Kamal J. Sioufi & Associates
Contractor/End-User	Serum and Solutions
Description: Totalizing Panel rated at 1600A busbar system, Main Distribution Boards, Automatic Transfer Switches	



Project	Al Mayadeen TV Station
Consultant	SNAP
Contractor/End-User	EME international
Description: Genset Control & Synchronization Panel rated at 2000A busbar system, Main Distribution Board rated at 1600A busbar system, Distribution Panel Boards	



Project	Kidzmondo
Consultant	CODE-EM
Contractor/End-User	International Design Engineering & Architecture
Description: Main LV Switchboard L-Shape rated at 1600A busbar system, Distribution Panel Boards	



Project	Beirut North Souks - S&T Blocks
Consultant	G. Tambourgi and Partners / R&K Architects and Consulting Engineers
Contractor/End-User	Akkary Group
Description: Main LV Switchboard Type Tested Assembly IEC 61439 Form 4a rated at 3200A & 2000A 85KA busbar system, Automatic Transfer Switch Type Tested Assembly IEC 61439 Form 2b rated at 1250A busbar system, Motor Control Panels comprising DOL, Star Delta & Variable speed drives starters, Sub Main Distribution Boards	



LEBANON

Project	Centro Mall
Consultant	M.J. AZZI & Partners s.a.l
Contractor/End-User	EME international
Description: Totalizing Panel Type Tested Assembly IEC 61439 Form 3b rated at 6300A 100KA busbar system, Main Distribution Boards Type Tested Assembly IEC 61439 Form 3b 85KA rated at 2500A busbar system, Sub Main Distribution Boards, Motor Control Center comprising DOL, Two speed starters & Variable speed drives, Final distribution Boards	



Project	ABC Verdun
Consultant	Khatib & Alami
Contractor/End-User	EMTECH
Description: Main LV Switchboards Type Tested Assembly IEC 61439 Form 2b rated at 2500A 85KA busbar system, Sub Main Distribution Boards Type Tested Assembly IEC61439 Form 2b rated up to 800A pan assembly busbar system, Motor Control Centers Comprising DOL, Softstarters & Variable speed drives, Final Distribution Panel Boards	



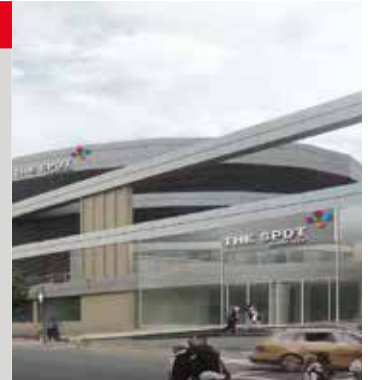
Project	ABC Store Verdun
Consultant	Khatib & Alami
Contractor/End-User	EMTECH
Description: Main LV Switchboards L-Shape Type Tested Assembly IEC 61439 Form 2b rated at 2500A 85KA busbar system, Sub Main Distribution Boards Type Tested Assembly IEC61439 Form 2b, Motor Control Centers comprising DOL, Softstarters & Variable speed drives, Final Distribution Panel Baords	



Project	The Spot Saida
Consultant	SNAP
Contractor/End-User	EME International
Description: Totalizing Panel rated at 2500A busbar system, Main Distribution Board rated at 1600A, 1250A & 800A busbar system comprising ATS 1600A, 1250A, & 800A respectively, Final Distribution Panel Boards	

LEBANON

Project	The Spot Nabatieh
Consultant	Engineering Services & Consultancy
Contractor/End-User	TTC (Technical Trading & Contracting)
Description: Totalizing Panel Type Tested Assembly IEC 61439 Form 2b rated at 2500A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 2b rated at 1600A busbar system, Final Distribution Panel Boards	



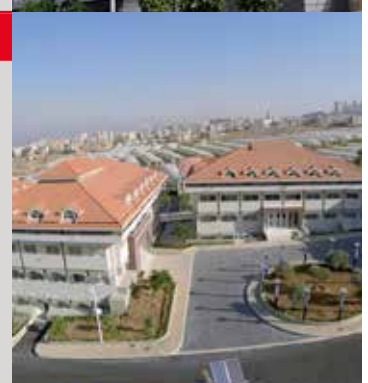
Project	Karout Mall
Consultant	Engineering Services & Consultancy
Contractor/End-User	Karout Mall
Description: Genset Control & Synchronization Panel Type Tested Assembly IEC61439 Form 2b rated at 4000A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 2b rated at 2000A busbar system	



Project	UCA Headquarters
Consultant	Wassim Tawil & Associates
Contractor/End-User	ARCODE
Description: Genset Control & Synchronization Panel Tested Assembly IEC61439 Form 2b rated at 1000A busbar system comprising PLC for load management, Main Distribution Boards Type Tested Assembly IEC61439 Form 2b, Final Distribution Boards	



Project	Islamic University of Lebanon
Consultant	Zou Al-Fikar Othman Office
Contractor/End-User	Islamic University of Lebanon
Description: Genset Control & Synchronization Panel rated at 2000A busbar system, Automatic Transfer Switch Panels	



LEBANON

Project	Fenicia Bank
Consultant	Adnan Olayan Consulting Office
Contractor/End-User	Climate technology
Description: Totalizing Panel Type Tested Assembly IEC61439 Form 4b rated at 2500A 50KA busbar system, Automatic Transfer Switch Type Tested Assembly IEC61439 Form 4b rated at 1000A busbar system, Motor control panel comprising DOL Starters	



Project	Ministry of Public Health
Consultant	Khatib & Alami
Contractor/End-User	Magma Engineering & Contracting
Description: Totalizing Panel Type Tested Assembly IEC61439 Form 2 rated at 3200A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 2b rated at 1600A & 1000A busbar system comprising ATS 1600A & 1000A respectively Sub Main Distribution Board, Final Distribution Boards	



Project	Beit Beirut
Consultant	Wissam Tawil & Associates
Contractor/End-User	Rockland Co. Electromechanical Trading & Contracting
Description: Totalizing Panel Type Tested Assembly IEC61439 Form 2b rated at 1000A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 2b rated at 400A & 600A busbar system, Final Distribution Boards, Motor control panels comprising DOL Starters.	



Project	Lebanese Parliament
Consultant	SDT International
Contractor/End-User	International Design Engineering & Architecture
Description: Totalizing Panel Type Tested Assembly IEC61439 Form 2b rated at 1600A busbar system with BMS interface on Modbus Network, Main Distribution Board Type Tested IEC61439 Form 2b rated at 2000A busbar system with BMS interface on Modbus Network, Automatic Transfer Switch rated at 400A busbar system, Motor control panels comprising DOL Starters	



LEBANON

Project	Waterfront City M8
Consultant	ERGA Group
Contractor/End-User	EMTECH
Description:	Totalising Panel Type Tested Assembly IEC61439 Form 2b rated at 2000A 50kA busbar with BMS interface on Modbus Network, Main Distribution Board rated at 630A & 400A busbar system with BMS interface on Modbus Network, Motor Control Center comprising DOL, Variable speed drive, Automatic Transfer Switch Panels, Final Distribution Boards



Project	Plus Tower II
Consultant	ERGA Group
Contractor/End-User	Rockland Co. Electromechanical Trading & Contracting
Description:	Totalizing Panel Type Tested Assembly IEC61439 Form 2b rated at 2000A 50kA with BMS interface on Modbus Network, Main Distribution Board rated at 630A & 400A busbar system with BMS interface on Modbus Network, Motor Control Center comprising DOL starters, Variable speed drive, Automatic Transfer Switch, Final Distribution Boards



Project	DAMAC Versace Residential Tower
Consultant	ERGA Group
Contractor/End-User	EMTECH
Description:	Totalizing Panel Type tested Assembly IEC61439 Form 2b rated at 2500A busbar system with BMS interface on Modbus Network comprising PLC for load management & load shedding, Main Distribution Board rated at 1000A & 1250A busbar system with BMS interface on Modbus Network, Automatic Transfer Switch, Final Distribution Boards, Motor Control Panels comprising DOL starters, two speed starters, & variable speed drives



Project	Platinum Tower
Contractor/End-User	Arabian Construction Company (ACC)
Description:	Motor control center Type Tested Assembly IEC61439 Form4b comprising DOL starters, Variable Speed Drives, Final Distribution Boards



LEBANON

Project	V-Verdun Residential Building
Consultant	Snap Engineering Services
Contractor/End-User	EME International
Description:	Totalizing Panel rated at 2000A busbar system, Automatic Transfer Switches rated at 2000A busbar system, Final Distribution Board
Project	Sodeco Square Building
Contractor/End-User	Sodeco Square
Description:	Genset Control & Synchronization Panel rated at 2500A busbar system
Project	Cocod-Khaldi Highway
Consultant	Dar Al Handasah
Contractor/End-User	MEAS
Description:	Softstarters Panels rated at 75KW & PLC control panel for alternation, Distribution Panel Boards
Project	Star Building
Contractor/End-User	Trust and Safety
Description:	Genset Control & Synchronization Panel rated at 1600A busbar system, Automatic Transfer Switches, Motor Control Panels



LEBANON

Project	Dream Building
Contractor/End-User	Trust and Safety
Description: Genset Control & Synchronization Panel rated at 1600A busbar system, Automatic Transfer Switches, Motor Control Panels	



Project	Sand Building
Contractor/End-User	Trust and Safety
Description: Genset Control & Synchronization Panel rated at 1600A busbar system, Manual Transfer Switches rated at 400A & 800A busbar system, Automatic Transfer Switches, Final Distribution Boards, Motor Control Panels	



Project	Waves Building
Contractor/End-User	Trust and Safety
Description: Genset Control & Synchronization Panel rated at 1600A busbar system, Manual Transfer Switches rated at 400A & 800A busbar system, Automatic Transfer Switches, Final Distribution Boards, Motor Control Panels	



Project	La Citadelle
Contractor/End-User	Jamil Ibrahim Est.
Description: Genset Control & Synchronization Panel rated at 2500A busbar system, Automatic transfer switches rated at 1600A & 2000A busbar system, Motor Control Panels comprising DOL Starters	



LEBANON

Project	Carlton Residences
Contractor/End-User	Jamil Ibrahim Est.
Description:	Genset Control & Synchronization Panel rated at 4000A busbar system, Automatic transfer switches rated at 1600A & 2000A busbar system, Motor Control panels comprising DOL



Project	Ouzai Highway Lighting- East Side
Consultant	Dar Al Handash
Contractor/End-User	MEAS
Description:	Main Distribution Board rated at 1600A busbar system comprising DOL starters, Automatic Transfer Switches rated at 1250A & 800A busbar System, Motor Control panels including DOL starters, Main Distribution Board Type Tested Assembly IEC61439 Form 2b rated at 2000A busbar system, Final Distribution Panel Boards



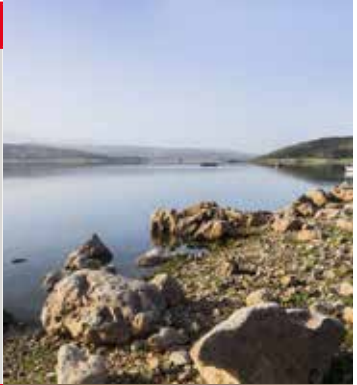

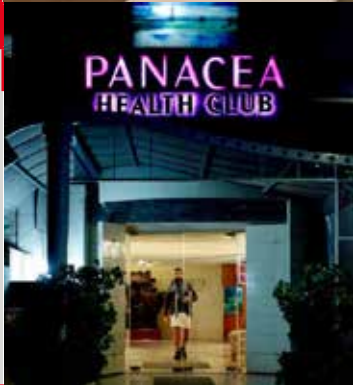

Project	Dream Building
Contractor/End-User	Jamil Ibrahim Est.
Description:	Genset Control & Synchronization Panel rated at 2500A busbar system, Main Distribution Boards rated at 1250A busbar system, Automatic Transfer Switches



Project	Abed Tahan Showroom
Contractor/End-User	Abed Tahan Showroom
Description:	Automatic Transfer Switch rated at 400A busbar system




LEBANON

<p>Project Hydro Agricultural Development of South Lebanon Irrigation</p> <p>Consultant Lahmeyer Int. Gauff Ingen. & Dar Al-Handasah</p> <p>Contractor/End-User Setcco</p> <p>Description: Automatic transfer Switch rated at 630A busbar system, Sub Main Distribution Boards, Motor Control Panels comprising DOL starters, Final Distribution Boards</p>	
<p>Project MEA Cedar Lounge</p> <p>Contractor/End-User Middle East Airlines</p> <p>Description: Final Distribution Boards</p>	
<p>Project Panacea Health Club</p> <p>Contractor/End-User Panacea Health Club</p> <p>Description: Main Automatic Transfer Switches, Sub-Main Distribution Panel Boards</p>	
<p>Project Warwick Pangea Beach Resort & Spa</p> <p>Contractor/End-User Warwick Pangea Beach Resort & Spa</p> <p>Description: Totalizing Panel rated at 1600A busbar system, Main Distribution Board comprising ATS rated at 1600A busbar system; Genset Control Panels, Control Panels comprising DOL starters, Sub Main Distribution Board</p>	

LEBANON

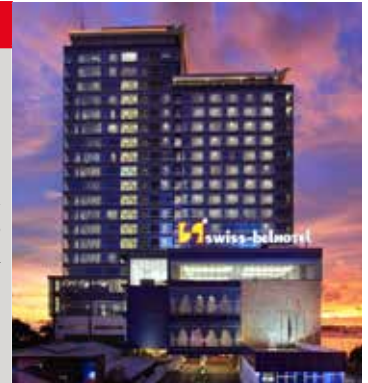
Project	Golf Club of Lebanon	
Contractor/End-User	Golf Club of Lebanon	
Description: Genset Control & Synchronization Panel rated at 600A busbar system		
Project	Sheraton Coral Beach Resort Hotel	
Contractor/End-User	Sheraton Coral Beach Resort Hotel	
Description: Genset Control & Synchronization Panel rated at 3200A busbar system, Main Distribution Boards comprising ATS rated at 3200A busbar system		
Project	Palladium	
Contractor/End-User	Palladium	
Description: Totalizing Panel rated at 4000A busbar system comprising PLC for load management and load shedding system		
Project	Palacio Verdun Residence	
Contractor/End-User	Dolmen Contracting	
Description: Main Distribution Board rated at 400A busbar system comprising Automatic transfer switches, Lighting Panel Boards, Motor Control Panels.		

LEBANON

Project	FreeGoZone,	
Consultant	Engineering Services & Consultancy	
Contractor/End-User	FreeGoZone	
Description: Main Distribution Board comprising ATS rated at 2000A busbar system, Sub Main Distribution Boards		

WORLDWIDE

Project	Swiss BelHotel, Iraq
Consultant	Maqyas Arch. Ayad Y. Naoom
Contractor/End-User	EMTECH
Description: Main Distribution Board Type Tested Assembly IEC61439 Form 4b rated at 2500A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 4b rated at 2500A busbar system comprising ATS 2500A respectively, Sub Main Distribution Boards, Motor Control Centers comprising DOL starters, Final Distribution Boards	



Project	Al Rayan Dairies Factory, Iraq
Contractor/End-User	Dar Beirut s.a.l
Description: Totalizing Panel L-shape rated at 4000A busbar system comprising ATS 4000A respectively, Main Distribution Board rated at 800A busbar System comprising ATS 800A respectively, Sub Main Distribution Board, Final Distribution Board	



Project	Vivacell Offices, Sudan
Contractor/End-User	Vivacell
Description: Main Distribution Board rated at 400A busbar System, Distribution Panel Boards	

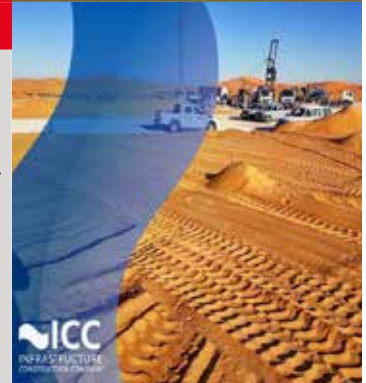


Project	UN Star Camp, Chad
Contractor/End-User	PACE
Description: Totalizing Panel rated at 3200 busbar system comprising Automatic Transfer Switches & Main Distribution Boards	



WORLDWIDE

Project	Usine De Cigarette, Algeria
Consultant	BGConsultant Engineer
Contractor/End-User	Electro Mechanical Enterprises
Description:	Main Automatic Transfer Switches, Sub-Main Distribution Panel Boards
Project	Réalisation de la Connection Electrique 60 KV, Algeria
Consultant	Groupeement Sonatrach –AGIP
Contractor/End-User	Infrastructure Construction Company
Description:	Genset Control & Synchronization Panel between generators and mains supply rated at 1250A busbar system with BMS interface on Modbus network & Power Factor Corrector rated at 250KVAR
Project	Four Point Hotel, Nigeria
Contractor/End-User	ITB NIGERIA LIMITED
Description:	Main Distribution Boards rated at 2500A busbar system, Sub-Main Distribution Panel Boards, Lighting Panel Boards, Motor Control Centers
Project	Henkel Factory, Nigeria
Contractor/End-User	KELM ENG LTD
Description:	Genset Control & Synchronization Panel rated at 3200A busbar system, Main Distribution Board rated at 3200A & 1600A busbar system comprising ATS 3200A &1600A respectively



WORLDWIDE

Project	Delta Mall, Nigeria
Consultant	AURECON TSHWANE
Contractor/End-User	KELM ENG LTD
Description:	Main Distribution Boards rated at 2500A & 800A & 400A busbar system with Kamstrup energy meters



Project	Port Terminal OIPL at Onne Port, Nigeria
Consultant	Khatib & Alami
Contractor/End-User	Lubrik Construction Company LTD
Description:	Genset Control & Synchronization Panel Type Tested Assembly IEC61439 Form 4 rated at 5000A busbar system comprising manual Synchronization with BMS interface on Modbus Network comprising PLC for load management, LV Transformer panel Type Tested Assembly IEC61439 Form 4 rated at 5000A busbar system, Sub Main Distribution Boards, Feeder Pillars Panels, Final Distribution Boards



Project	Madina Tower, Nigeria
Contractor/End-User	KELM ENG LTD
Description:	Genset Control & Synchronization Panel Type Tested Assembly IEC 61439 Form 2 rated at 1250A busbar system, LV Transformer Distribution Panel rated at 800A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 4 rated at 1200A busbar system with energy meters comprising ATSS, Insulation Monitoring System







Project	My Joy Food Factory, Nigeria
Consultant	Engineering Services & Consultancy
Contractor/End-User	Myjoy Food Industries Limited
Description:	Totalizing Panel rated at 7000A busbar system, Main Distribution Board rated at 3200A & 1600A busbar system comprising ATS 3200A & 1600A respectively, Sub Main Distribution Boards



WORLDWIDE

Project Fas Agro Factory, Nigeria Contractor/End-User Fas Agro Industrial Limited Description: Main Distribution Boards comprising ATS rated at 4000A & 3200A & 1600A & 1000A, Sub Main Distribution Boards, Final Distribution Boards	
Project SCN Color, Nigeria Contractor/End-User SCN Color Description: Genset Control & Synchronization Panel rated at 2500A busbar system, Main distribution Board rated at 2000A busbar System comprising ATS 2000A respectively, Final Distribution Board	
Project Medland Hospital, Zambia Consultant Lab Square Contractor/End-User Medland Health Services Limited (Z) Description: Genset Control & Synchronization Panel type Tested Assembly IEC61439 Form 2b rated at 2000A busbar system with BMS interface on Modbus Network, Main Distribution Board type Tested Assembly IEC61439 Form 2b rated at 1600A & 1000A busbar system with BMS interface on Modbus Network, Automatic Transfer Switch With Manual Bypass rated at 1000A & 1600A busbar system with BMS interface on Modbus Network	
Project Fairy Bottling Factory, Zambia Contractor/End-User Fairy Bottling Factory Description: LV transformer panel rated at 3200A busbar system, Totalizing Panel L-shape rated at 4000A busbar system, Main Distribution Board rated at 3200A busbar system comprising ATS 3200A respectively, Sub Main Distribution Boards, Final Distribution Boards	

WORLDWIDE

<p>Project Gardenia Juice Factory, Angola</p> <p>Contractor/End-User International Business Corporation</p> <p>Description: Totalizing Panel rated at 3200A busbar system, comprising Manual Transfer Switches rated at 2500A, 1600A & 630A.</p>	
<p>Project Gold Refinery Factory, Ghana</p> <p>Contractor/End-User Euroget Gold Refinery LTD</p> <p>Description: Main Distribution Boards rated at 1600A busbar system Power Factor Capacitor Bank rated at 240KVAR, Final Distribution Board</p>	
<p>Project DODO Cosmetic Factory, Togo</p> <p>Contractor/End-User DODO Cosmetic Factory</p> <p>Description: Genset Control & Synchronization Panel rated at 3200A busbar system, LV Transformer Panel rated at 3200A busbar system, Main distribution Boards, Final Distribution board</p>	
<p>Project Dodo Style Factory, Togo</p> <p>Contractor/End-User Dodo Style Factory</p> <p>Description: Genset Control & Synchronization Panel rated at 2500A Busbar System, Transformer Panel Rated at 2500A Busbar System, Automatic Transfer Switches, Main Distribution Boards rated at 2500A Busbar System.</p>	

WORLDWIDE

Project DODO Plast Factory, Togo

Contractor/End-User DODO Plast Factory

Description:

Genset Control & Synchronization Panel rated at 3200A busbar system, LV Transformer Panel rated at 3200A busbar system, Main distribution Boards, Final Distribution board



Project SIVOP, Togo

Contractor/End-User SIVOP

Description:

Main Distribution Board rated at 2500A busbar system, Final Distribution Board



Project Sotoraf Factory , Togo

Contractor/End-User Sotoraf Factory

Description:

Automatic Transfer Switch rated at 1600A busbar system comprising main distribution board, Sub Main Distribution Board, Final Distribution Board



Project Nouvelle Parfumerie Ghandour, Ivory Coast

Contractor/End-User Nouvelle Parfumerie Ghandour

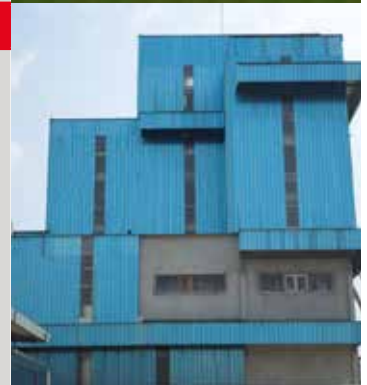
Description:

Totalizing Panel rated at 5000A busbar system comprising Automatic Transfer Switch 5000A respectively with insulation monitoring system & interface with DCS on Modbus network, Motor Control Center comprising DOL Starters, Forward Reverse Starters, Softstarters & Variable Frequency Drives with DCS interface on Modbus & profibus network, Sub Main Distribution Board



WORLDWIDE

Project	DMD Showroom, Ivory Coast
Contractor/End-User	The Canadian Company for Investment & Construction
Description:	Main Distribution Board rated at 300A busbar system comprising ATS 300A respectively
Project	Usine de Societe African De Raffinage, Ivory Coast
Contractor/End-User	Societe African De Raffinage
Description:	Main Distribution board rated at 1250A busbar system, Motor Control Panels comprising softstarters, Capacitor Bank rated at 420KVAR
Project	Pointe Noire, Republic of the Congo
Contractor/End-User	Atlantic Palace
Description:	Genset Control & Synchronization Panel rated at 3200A busbar system, LV Transformer Panel rated at 5000A busbar system, Main Distribution Board rated at 5000A busbar system comprising ATS 5000A respectively, Sub Main Distribution Boards
Project	Rafraichissants Glaces Eau du Congo, Republic of the Congo
Contractor/End-User	Rafraichissants Glaces Eau du Congo
Description:	Genset Control & Synchronization Panel rated at 3200A busbar system, LV Transformer Panel rated at 5000A busbar system, Main Distribution Board rated at 5000A busbar system comprising ATS 5000A respectively, Sub Main Distribution Boards



WORLDWIDE

<p>Project Pain Victoire, Democratic Republic of the Congo</p> <p>Consultant Engineering Services & Consultancy</p> <p>Contractor/End-User SOCIETE GENERALE DES PAINS SGP</p> <p>Description: Genset Control & Synchronization Panel Type Tested Assembly IEC61439 Form 2b rated at 4000A busbar system, Main Distribution Board Type Tested Assembly IEC61439 Form 2 rated at 2500A & 2000A busbar system comprising ATS 2500A & 2000A respectively, Main Distribution Board Type Tested Assembly IEC61439 Form 2 rated 2500A busbar System, Manual Changeover Switches rated at 1600A busbar system</p>	
<p>Project Biscuit Prince Factory, Democratic Republic of the Congo</p> <p>Contractor/End-User Achour Group</p> <p>Description: Main Distribution Boards rated at 3200A & 2000A busbar system</p>	
<p>Project American Eagle, Democratic Democratic Republic of the Congo</p> <p>Contractor/End-User Ste.SOMEB S.A.R.L</p> <p>Description: Genset Control & Synchronization Panel rated at 3200A busbar system, Main distribution Board rated at 2500A busbar System comprising ATS 2500A respectively, Final Distribution Boards</p>	
<p>Project Le Premier Shopping Mall, Democratic Republic of the Congo</p> <p>Contractor/End-User International Business Corporation</p> <p>Description: Totalizing Panel rated at 1000A busbar system, LV Transformer Panel rated at 1600A, Automatic Transfer Switch Panel rated at 1000A busbar system</p>	

WORLDWIDE

Project Station Electrique Du Complexe Agroalimentaire, Guinea

Contractor/End-User Grand Moulin de Conakry

Description:

Totalizing panel rated at 4000A busbar system, Main Distribution Board rated at 4000A busbar System comprising ATS 4000A respectively, Final Distribution Board



Project Grand Moulin De Conakry, Guinea

Contractor/End-User Grand Moulin De Conakry

Description:

Totalizing Panel comprising main distribution breakers rated at 4000A busbar system, Manual Changeover Switch 2000A



Project PARCEL Project, Guinea

Contractor/End-User Socoba S.A.R.L

Description:

Genset Control & Synchronization Panel rated at 2500A busbar system, Main Distribution Boards rated at 800A busbar system, LV Transformer Panel rated at 1600A busbar system, Automatic Transfer Switches



Project SONIT PÊCHE, Guinea

Contractor/End-User SICOM GROUP

Description:

Automatic Transfer Switch rated at 3200A busbar system



WORLDWIDE

Project	Agricool, Guinea
Contractor/ End-User	AFRILIB-PECUARIA E AGRO INDUSTRIA, LDA
Description:	Genset Control & Synchronization Panel rated at 3200A busbar system, Sub Main Distribution Boards, Softstarter Panel 200KW



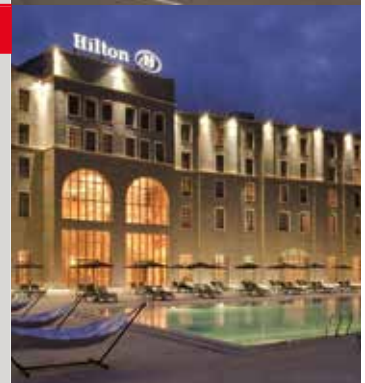
Project	Tourismo, Equatorial Guinea
Contractor/End-User	Horizon Construction
Description:	Main Distribution Board rated at 800A Busbar System, Automatic Transfer Switch rated at 800A Busbar System, Sub Main Distribution Boards, Final Distribution Boards.



Project	Mercado Centro Artesanal Bata, Equatorial Guinea
Contractor/End-User	Horizon Construction
Description:	Genset Control & Synchronization Panel rated at 2500A busbar system






Project	Hilton Malabo, Equatorial Guinea
Contractor/End-User	Hilton Malabo
Description:	Main Distribution Boards, Type Tested Assembly IEC61439 Form 3b, Automatic Transfer Switches Type Tested Assembly IEC61439 Form 3b, Motor Control Center Type Tested Assembly IEC61439 Form 3b comprising withdrawable starters, Sub-Main distribution Panels, Lighting Panel Boards



WORLDWIDE

<p>Project EGTC Maritno, Equatorial Guinea</p> <p>Contractor/End-User Horizon Construction</p> <p>Description: Main Distribution Board rated at 850A Busbar System, Dual Automatic Transfer Switch rated at 850A Busbar System, Final Distribution Boards.</p>	
<p>Project Aconibe, Equatorial Guinea</p> <p>Contractor/End-User Horizon Construction</p> <p>Description: Main Distribution Board rated at 1000A Busbar System, Dual Automatic Transfer Switch rated at 1000A Busbar System, Final Distribution Boards.</p>	
<p>Project Twin Tower, Equatorial Guinea</p> <p>Contractor/End-User Horizon Construction</p> <p>Description: Genset Control & Synchronization Panel Rated at 4000A Busbar System, Main Distribution Boards rated at 3500A & 1500A Busbar System, Automatic Transfer Switches, Sub Main Distribution Boards, Final Distribution Boards.</p>	
<p>Project Prison, Equatorial Guinea</p> <p>Contractor/End-User Horizon Construction</p> <p>Description: Main Distribution Board rated at 1250A Busbar System, Dual Automatic Transfer Switch Panel Board rated at 1700A Busbar System, Sub Main Distribution Boards, Final Distribution Boards.</p>	

WORLDWIDE

Project	Malabo Fountains Equatorial Guinea
Contractor/End-User	Horizon Construction
Description:	
Motor Control Panels comprising softstarters, direct on-line starters, PLC for pumps alternation	
Project	Comandashina Building, Equatorial Guinea
Contractor/End-User	Horizon Construction
Description:	
Automatic Transfer Switch rated at 1250A busbar system comprising Main Distribution Board, Distribution Panel Boards	
Project	Palacio De Justicia Bata, Equatorial Guinea
Contractor/End-User	Horizon Construction
Description:	
Main Distrubution Board rated at 1250A Busbar System, Dual Automatic Transfer Switch Panel Board rated at 1700A Busbar System, Sub Main Distribution Boards, Final Distribution Boards.	



MEDIUM VOLTAGE

Project	Beirut-Rafic Hariri International Airport - Main Power Station, Lebanon
Consultant	Dar Al-Handasah
Contractor/ End-User	Beirut-Rafic Hariri International Airport
Description:	<p>ABB 12 kV SWITCHGEAR TYPE UNIGEAR ZS1 LSC2B AFLR, 1600A rated BusBar 25KA: QTY 1</p> <ul style="list-style-type: none"> • Utility Incoming feeder SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 3) • Generator Incoming feeder SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 5) • Bus Coupler SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 2) • Bus Riser 12kV; 25kA/1s, 1600A (Quantity 2) • Outgoing feeder SF6 Circuit Breaker 12kV; 25kA/1s, 630 B (Quantity 12) <p>ABB 12 kV SWITCHGEAR TYPE UNIGEAR ZS1 LSC2B AFLR, 1250A rated BusBar 25KA:</p> <ul style="list-style-type: none"> • Incoming feeder SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 2) • Metering Panel with CTs & VTs (Quantity 2) • Bus Coupler SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 2) • Bus Riser 12kV; 25kA/1s, 1250A (Quantity 2) • Motor Outgoing feeder SF6 Circuit Breaker 12kV; 25kA/1s, 630 (Quantity 4)
Project	Beirut-Rafic Hariri International Airport - Aviation Lebanon
Consultant	Dar Al-Handasah
Contractor/ End-User	Beirut-Rafic Hariri International Airport
Description:	<p>ABB UNISEC SWG MV Switchboard 24 kV, 630A, 16 kA, 1sec: QTY 2</p> <ul style="list-style-type: none"> • Incoming Panel 24 kV, 630A, 16kA type SDC; LSC2A with standard mechanism and on-load switch (Quantity 2) • Outgoing Panels 24 kV, 630A, 16 kA type SBC; LSC2A with motorized Vacuum circuit breaker VD4/R-Sec (Quantity 2)



Project	Beirut-Rafic Hariri International Airport - Cargo Building, Lebanon
Contractor/ End-User	Beirut-Rafic Hariri International Airport
Description:	<p>Sarel MV Switchboard SYStem-6 17.5 kV, 630 A, 16 kA: QTY 2</p> <ul style="list-style-type: none"> Incoming feeder 17.5 kV, 630A, 16 kA type I-KS with standard mechanism and on load switch (Quantity 2) Transformer outgoing feeder 17.5 kV, 630A, 16 kA type ITI-WL VCB, 50 Hz, Dyn 11, IP00 (Quantity 2) <p>Tesar Cast resin transformer 1600 kVA 15/0.41 kV - 6% 50 Hz, Dyn 11, IP00 QTY 2</p>
Project	Centro Mall, Lebanon
Consultant	Mario Azzi
Contractor/ End-User	Electro Mechanical Enterprises International
Description:	<p>ABB UNISEC SWG with SF6 circuit breaker 24kV, 630A, 20KA: QTY 1</p> <ul style="list-style-type: none"> Incoming feeder WBC 24kV 630A 20kA (Quantity 2) Transformer outgoing feeder 24kV 630A 20kA (Quantity 2) <p>Tesar MV Dry type transformer 1600 kVA; 20-11/0.41 kV 6% Al/Al IP00 QTY 6</p>
Project	Grands Moulin de Conakry, Guinea
Contractor/ End-User	Grands Moulin de Conakry
Description:	<p>Sarel MV Switchboard SYStem-6 ; 24 kV; 630A; 16 kA: QTY 2</p> <ul style="list-style-type: none"> Incomer panel 24 kV, 16 kA, 630A type I-KS (Quantity 1) Metering panel type MA with CTs & VTs (Quantity 1) Protection panel with Vacuum circuit breaker, CTs (Quantity 1) <p>Elprom Oil Type Transformer 4000KVA;ONAF 20/0.41KV; 50Hz; Cu Windings QTY 2</p>



Project Station Electriques du Complexe Agroalimentaire, Guinea

**Contractor/
End-User** Station Electriques du Complexe Agroalimentaire

Description:

Sarel MV Switchboard SYStem-6 ; 24 kV; 630A; 16 kA: QTY 2

- Incomer panel 24 kV, 16 kA, 630A type I-KS (**Quantity 2**)
- Metering panel type MA with CTs & VTs (**Quantity 1**)
- Protection panel with Vacuum circuit breaker, CTs (**Quantity 4**)

Elprom Oil Type Transformer 2500KVA; ONAF 20/0.41KV; 50Hz; Cu Windings QTY 4

Project Fairy Bottling, Zambia

**Contractor/
End-User** Fairy Bottling

Description:

Sarel MV Switchboard SYStem-6 ; 12 kV; 630A; 16 kA QTY 1

- Incomer panel 12 kV, 16 kA, 630A type I-KS (**Quantity 2**)
- Metering panel type MA with CTs & VTs (**Quantity 1**)
- Protection Panel 12 kV 630A type "TM-KP" including MV Current limiting fuses (**Quantity 3**)

Elprom Oil Type Transformer 2000KVA; ONAN 11/0.4KV; 50Hz; Cu Windings QTY 3

Project Henkel Factory, Nigeria

**Contractor/
End-User** Henkel Factory

Description:

Sarel MV Switchboard SYStem-6 ; 36 kV; 630A; 16 kA: QTY 2

- Incomer panel 36 kV, 16 kA, 630A type ITI with Vacuum Circuit Breaker (**Quantity 2**)
- Metering panel type MA with CTs & VTs (**Quantity 1**)
- Protection panel with Vacuum circuit breaker, CTs (**Quantity 1**)

Elprom Oil Type Transformer 2000KVA; ONAF 36/0.4KV; 50Hz; Cu Windings QTY 1





**UNINTERRUPTIBLE
POWER SUPPLY**

Country	Project	Application	Consultant	End-User Name / Contractor	Products	Power	Units
Lebanon	Centro Mall	Commercial	M.J.Azzi & Partners S.A.L	EME International	Power Wave-33	300KVA	3
	Alforno	Bakery		Califood Co. SARL	Power Wave-33	120KVA	3
					Power Scale	40KVA	1
	The Jordanian Embassy	Offices	Dar Al-Handasah (Shair & Partners)	ME Group	Power Wave-33-S3	60KVA	1
	Lebanon Pastery & Bakery	Bakery		Lebanon Pastery & Bakery	Power Wave-33-S3	120KVA	1
	Vegetable Market	Commercial	A. Chehab Architects & Engineers	ME Group	Power Wave-33-S3	80KVA	1
					Power Scale	15KVA	1
					Power Scale	25KVA	1
	Beirut Arab University	Education	Codeem	Climacond Middle East S.A.L	Power Wave-33	160KVA	2
	Graphis Pre-Press Factory	Industry		Graphis Pre-Press	Power Wave-33-S3	60KVA	1
	Cedar Lounge Beirut Rafic Hariri Airport	Hospitality		MEA Airlines	Power Scale	15KVA	1
	Propack Factory	Industry		Propack	Power Wave-33	200KVA	3
	Tyre Dentist Clinic	Healthcare		Tyre Dentist Clinic	Power Scale	10KVA	1
	Corniche Tower	Residential		Corniche Tower	Power Scale	30KVA	2
	Kazim Hospital	Healthcare		Emdad Committee	Power Wave-33-S3	120KVA	1
	Farah Bldg	Residential		ME Group	Power Scale	10KVA	1
	Yarze Terrace Building	Residential		Yarze Terrace	Power Scale	15KVA	1
	Vanrise Building	Offices		Vanrise Solution	Power Scale	40KVA	2
	Serum & Solutions	Industry	Kamal J Sioufi & Associates	Serum & Solutions	Power Scale	10KVA	1
	Mahfouz Stores	Commercial		Kassem Mahfouz & Sons	Power Wave-33	200KVA	1
Guinea	Grand Moulin de Conakry	Industry		Grand Moulin de Conakry	Power Wave-33	500KVA	8
	Station électrique du complexe agroalimentaire	Industry		Grand Moulin de Conakry	Power Wave-33	500KVA	6
	SICOM Building	Residential		SICOM Offshore SAL	Power Scale	15KVA	1
Iraq	Dar Beirut Factory	Industry		Dar Beirut Co.	Power Wave-33	500KVA	2



Country	Project	Application	Consultant	End-User Name / Contractor	Products	Power	Units
Congo (DRC)	Rafraichissants Glaces Eau du Congo	Industry		Rafraichissants Glaces Eau du Congo	Power Wave-33	200KVA	1
					Power Wave-33-S3	80KVA	1
	Kinshasa Building	Residential		Matrix Design I.A.T.O.	Power Scale	10KVA	5
					Power Scale	30KVA	1
	Matrix Tower	Residential		Matrix Design I.A.T.O.	Power Scale	10KVA	1
Ivory Coast	Nouvelle parfumerie Ghandou	Industry		Nouvelle parfumerie Ghandour	Power Scale	40KVA	4
	Societe African De Raffinage	Industry		Societe African De Raffinage	Power Scale	25KVA	1
Zambia	Medland Hospital	Healthcare	Lab Square	Medland Hospital	Power Wave-33-S3	60KVA	4
Nigeria	SMC Factory	Industry		Kobeissi Electrical & Mechanical Eng	Power Scale	10KVA	1
					Power Scale	20KVA	2
	Crispy Cream	Restaurant		Kobeissi Electrical & Mechanical Eng	Power Scale	25KVA	1
					Power Scale	30KVA	1
	A & K Project	Residential		Kobeissi Electrical & Mechanical Eng	Power Scale	40KVA	2
					Power Scale	50KVA	1
Angola	Purangol Factory	Industry		Purangol	Power Scale	40KVA	1
					Power Wave-33-S3	60KVA	2
					Power Wave-33-S3	80KVA	1
Liberia	Gasoline Station	Industry		Petro Trade	Power Wave-33	200KVA	1
					Power Scale	10KVA	10





RENEWABLE ENERGY

Project 25KWp Solar water pump station – Hawesh Tal Safieh, Lebanon

**Contractor/
End-User** The Council for Development and Reconstruction

Description:
Design, Supply, Installation, Testing & Commissioning of 25KWp Solar water pump station.



Project 174KWp Solar water pump station – Assayra 1, Lebanon

**Contractor/
End-User** The Council for Development and Reconstruction

Description:
Design, Supply, Installation, Testing & Commissioning of 174KWp Solar water pump station.



Project 174KWp Solar water pump station – Assayra 2, Lebanon

**Contractor/
End-User** The Council for Development and Reconstruction





Description:
Design, Supply, Installation, Testing & Commissioning of 174KWp Solar water pump station.







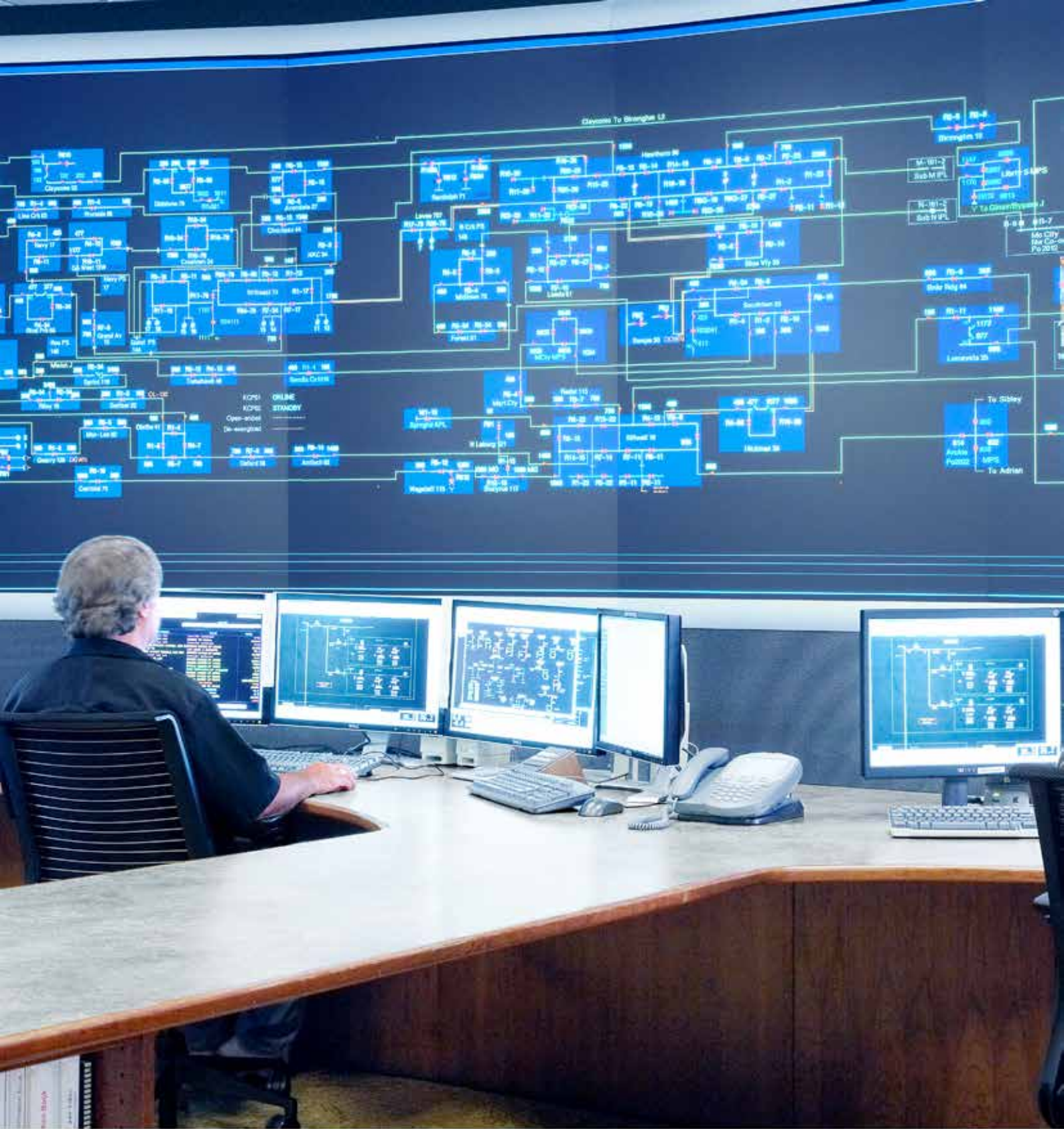
Project 123KWp Solar water pump station – Douris, Lebanon

**Contractor/
End-User** The Council for Development and Reconstruction

Description:
Design, Supply, Installation, Testing & Commissioning of 123KWp Solar water pump station.

<p>Project 225KWp Solar water pump station – Maslaha, Lebanon</p> <p>Contractor/ End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 225KWp Solar water pump station.</p>	
<p>Project 163KWp Solar water pump station – Maqneh1, Lebanon</p> <p>Contractor/ End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 163KWp Solar water pump station.</p>	
<p>Project 230KWp Solar water pump station – Maqneh 2, Lebanon</p> <p>Contractor/ End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 230KWp Solar water pump station.</p>	
<p>Project 143KWp Solar water pump station – Younine, Lebanon</p> <p>Contractor/ End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 143KWp Solar water pump station.</p>	

<p>Project 20KWp Solar water pump station – Majdaloun 1, Lebanon</p> <p>Contractor/End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 20KWp Solar water pump station.</p>	
<p>Project 20KWp Solar water pump station – Majdaloun 2, Lebanon</p> <p>Contractor/End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 20KWp Solar water pump station.</p>	
<p>Project 107.5KWp Solar water pump station – Maslakh, Lebanon</p> <p>Contractor/End-User The Council for Development and Reconstruction</p> <p>Description: Design, Supply, Installation, Testing & Commissioning of 107.5KWp Solar water pump station.</p>	
<p>Project 1MW Solar Station - Choukeen, Lebanon</p> <p>Contractor/End-User Ministry of Energy and Water</p> <p>Description: Supply and installation of 1 MWp On Grid solar Plant.</p>	



INDUSTRIAL & HOME AUTOMATION

DCS Projects:

Project Nouvelle Parfumerie Ghandour, Ivory Coast

**Contractor/
End-User** Nouvelle Parfumerie Ghandour

Description:

- ABB 800xA DCS to control and manage the processes using ABB AC 800M Controllers (3000 redundant tags & 6656 IO points).
- System 800xA Batch Management: a recipe management, batch and procedural control software package for configuring, scheduling, and managing batch operations to improve batch production profitability, consistency and traceability, while ensuring improved regulatory compliance, safety, and security.
- Implementation of Manufacturing Execution System MES: use ABB's cpmPlus Enterprise Connectivity System (ECS) for SAP R/3 integration in conjunction with ABB's System 800xA DCS (Generic OPC Integration, ECS SAP Integration, Web Services Integration, Database Integration, Production Management Module, ECS Downtime Management)

Project Islamic University - Garden Water Supply & Outdoor Lighting, Lebanon

**Contractor/
End-User** Islamic University

Description:

- Operation, indication and visualization of Garden Water Supply system using ABB AC500 Controllers.
- Remote Terminal Units RTUs connected to Main PLC via CS31 protocol
- ABB Compact HMI 800 / SCADA system for real time operation of irrigation pumps, outdoor lighting & monitoring of water level in Roof Tanks.

Home Automation Systems - KNX:

Private Villas & Homes, Lebanon

- Lighting control and regulation (Switching, dimming, central control, light scenes)
- Blind and Shutter Control
- Floor Heating, Ventilation and Air Conditioning (HVAC: fan speed and temperature set point control, Fan Coil Units interface)
- Security and Fault Monitoring (internal surveillance)
- Power Monitoring and Control
- Level Monitor (Water Tanks, Diesel Tanks)
- Communication Gateways to IP network
- Communication Gateway to telephone Landline number
- Operation, indication and visualization (Visualization via PC: Eisbaer Software)
- ABB Smart touch screen for lights, shutters, HVAC and scenes
- Communication Gateways to ONYX lighting control system
- Communication Gateways to DMX\POLI lighting system



**Bir Hassan, Near Golf Club, Elissar Bldg,
Ground Floor**

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