

# 102038-ELE-12PTyz-E-2010

## Senior Freelancer Protection Engineer

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 10 years experience working in protection, testing and commissioning.

### PERSONAL DATA

Nationality : Egyptian  
Birth Date : 06/04/1988  
Gender : Male  
Marital Status : Married  
Residence : Giza, Cairo

### EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Helwan University, 2010  
: Master preparation in Cairo University (2011-2012)

### LANGUAGES

Arabic : Native Language  
English : Very Good

### COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet  
: MATLAB, C++  
: C#, HTML

### TRAINING COURSES AND CERTIFICATIONS

: Matlab and Simulation, Helwan University, Faculty of Engineering.  
: Programming with C, Helwan University, Faculty of Engineering.  
: AutoCAD Program.  
: Lifts Control Course, ITC Institute.  
: PLC Step7 Course, ITC Institute.  
: Power Distribution Course: Two level, Shrooq Center, Helwan University, Faculty Engineering.  
: Automatic Control Course, Shrooq Center, Helwan University, Faculty of Engineering.  
: Summer trainings at:

- South Cairo Distribution Company, Mokatam Training Institute (2009).
- Egyptian Electricity Transmission Company, National Energy Control

- Center (2009).
- EGEMAC Company by Siemens and Areva Company (2009).
- Shoubra El-Kheima Power Plant (2008).

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Jan. 2021 till now  
**Job title** : Senior Freelancer Protection Engineer  
**Job Description** : Working with a lot of companies:
 

- HYUNDAI.
- XD EGEMAC.
- MADKOUR.
- ELSWEDY.
- SHEMAK.
- TOP.
- GLOPAL.
- Advanced Power Company.

**Dates** : From Jun. 2019 till Jan. 2021  
**Employer** : Advanced Power Company  
**Job title** : Team Leader Testing & Commissioning

**Dates** : From Apr. 2013 till Apr. 2019  
**Employer** : ALFANAR Saudi Arabia  
**Job title** : Senior Testing & Commissioning Engineer (Protection Engineer)

**Dates** : From Apr. 2012 till Apr. 2013  
**Employer** : EGYRAP Co.  
**Job title** : Maintenance Engineer  
**Job Description** :
 

- Production Line Maintenance.
- Motors Control and Drives.
- 22KV switch gears.
- Trouble shooting.

**Employer** : SAUDI ARAMCO, SAMSUNG  
**Job title** : Rent Senior Protection Engineer

### **Projects in Saudi Arabia:**

- QURRAYAH IPP 380/230KV.
- RAS ALKHAIR POWER PLANT.
- RAS ALKHAIR BSP 380KV.
- MAADEN 380KV (ENERGIZED).
- AL OMRAN BSP 380/115/13.8KV.
- AL NADA S/S 115/13.8KV.
- KING FAHD S/S 115/13.8KV.
- SECOND DIE S/S 115/13.8KV.

- ASH SHAYYIT S/S 115/13.8KV.
- AL QARRIAH ALOLIA 115/13.8KV (ENERGIZED).
- 8830 132/13.8KV (ENERGIZED).
- 8839 132/13.8KV.
- 8833 132/13.8KV.
- 9029 BSP 380/132/13.8KV (ENERGIZED).
- ALMUBARAKIAH 115/13.8KV.
- AL UQAIR 380KV/115KV.
- ABQIQ 230/69KV S/S (ENERGIZED).
- JABAL ALQARAH 115/13.8KV.
- AL MOHERSE 115/13.8KV.
- AL NARIYAH-3 115/13.8KV.
- DAMMAME HOUSING#2 115KV.
- DAMMAME NORTH BSP380/115/13.8KV BSP.
- HAFR 8 115/13.8KV.
- HAFR 6 115/13.8KV.
- AL NARIYAH NORTH BSP 380/115/33KV.
- QAISUMAH POWER PLANT 115/13.8KV (ENERGIZED).
- QAISUMAH 380/115/13.8KV BSP (ENERGIZED).
- HAFR-3 115/13.8KV (ENERGIZED).
- HALF MOON 380/115/13.8KV BSP (ENERGIZED).
- DHAHRAN OWNERSHIP 380/115/13.8KV BSP (ENERGIZED).
- ALAZYZYAH 115/13.8KV.
- DAMMAME HOUSING#1 115/13.8KV.
- DAMMAME SOUTH 115/13.8KV.
- KARMAH 115/13.8KV.
- ALODAYILIAH GAS PROJECT.
- AL HAWIAH GAS PROJECT.
- SHAIBAH PROJECT (NGL. GOSP 1, 2, 3, 4).
- ALFADLI GAS PROGRAME PROJECT (SS-400&SS-431&SS432&SS-433&SS-434).
- ALFADLI FIELD 115/13.8KV.
- KEMYA PROJECT (34.5/4.16/0.38KV).
- WASSIT GAS PROGECT (230/13.8KV).

#### **Projects in EGYPT:**

- ISMAILYA EAST 500/220/22KV SS (Team Leader).
- ALMOSTAKBAL CITY 220/22KV SS.
- ZAHRAA ELMOQATAM 220/22KV.
- CAIRO WEST POWER PLANT EXTENTION (Team Leader).
- BENBAN 3 500/220KV SS.
- TOSKA-2 500/220KV.
- EL KOM EL AHMER 220/66KV.
- EL NARGAS 220/66/22KV.
- EL BADARI 66/11KV.
- BADR 500/220KV.
- NEW CAPITAL S2 220/22KV.
- HURGHADA POWER PLANT.
- GERZA 220/66/22KV.

- BORG EL ARAB POWER PLANT.  
Some of the Substations are GIS (Gas Insulation Switch Gear or System) and others are Switch Yard Outdoor Substations.

- Field of experience :**
- Commissioning Activities:
    - Scheme Checking:
      - ❖ Power Transformer Protection & Transformer Back Feed Test.
      - ❖ Under Ground Cable Protection.
      - ❖ Over Head Line Protection.
      - ❖ Bus bar Protection (Low Impedance, High Impedance).
      - ❖ Pole Discrepancy.
      - ❖ Circuit Breaker Failure Protection.
      - ❖ TEE Protection Scheme.
      - ❖ 500, 380, 230, 132 and 110KV GIS & OUT DOOR Function Test (HYUNDAI, HAYOSUNG, ABB, GE, ALSTOM, IEMENSE).
      - ❖ 33, 13.8, 4.16KV Switchgear & 4.16KV, 480V MCC Function Test (ALFANAR, ABB, HYUNDAI, SIEMINSE, ALSTOM, D SQUAR).
      - ❖ Automatic Voltage Regulator (Remote Tap Changer Control and Parallel Operation).
      - ❖ Load Shedding Systems.
      - ❖ Capacitor Bank Protection.
      - ❖ Circuit Breaker Auto Reclosure System (500KV & 380KV & 115KV).
      - ❖ ABTS, ACSE, ACCS System.
      - ❖ Synch Scheme.
      - ❖ Common Alarm Panels.
      - ❖ ACDB, DCDB PANEL.
      - ❖ End To End Test.
      - ❖ Final Trip Test.
      - ❖ Energy Meters, PF, DSM, DFR Panels.
      - ❖ Trip Circuit Supervision Panels.
      - ❖ Siemens Generator Interface Panels, Generator Dummy Synchronization.
      - ❖ Islanding Test at 230KV system connected to Power Plant.
      - ❖ 500, 380, 230, 115KV Line Protection Upgrade with New Version Relays and Scheme.
      - ❖ 115KV Bulk Oil CB Replacement with Siemens out Door Dead Tank CB for Old SS.
      - ❖ 500KV SHUNT REACTORS Commissioning.
    - Power Service:
      - ❖ High, Medium and Low Voltage CB, BB Testing. (500, 380, 230, 220, 115, 13.8KV).
      - ❖ Power Transformer Stability Test (500, 380, 115, 33, 13.8KV).
      - ❖ Shunt Reactors Stability Test (500, 380/115KV).
      - ❖ VT, CVT Test.
      - ❖ CT LOOP.
      - ❖ VT LOOP.
      - ❖ Primary Test.
      - ❖ BB (LOW & HIGH Impedance) Stability Test.
      - ❖ 13.8KV High Voltage.

- ❖ Ability to Work with All Test Equipment.
- Automation System:
  - SAS interface panels.
  - Common Alarm Panels.
  - Relays Alarm, Measurements, Control with SAS, PSA (SCNEIDER, SEL, ABB).
  - Open and Closed Loop Test.
  - All Relays Configuration.
  - Working at ABB SAS Programs as Operation Engineer.
  - Working with SEL Team at PMS system For Isolated Network.
- Power System Operation:
  - RAS ALKHAIR 380KV S/S Operation.
  - RAS ALKHAIR PP Operation.
- S/S Energization:
  - RAS ALKHAIR 380KV S/S.
  - ASH SHAYYIT 115KV S/S.
  - 9029 380KV S/S.
  - SHAYBAH NGL 7 Generator Synchronization.
  - CAIRO WEST POWER PLANT.
  - BENBAN 500KV.
  - TOSHKA 500KV.
  - EL KOM EL AHMER 220KV.
  - EL NARGAS 220KV.
- Coordination Skills:
  - Preparation of Test Format, test reports.
  - Coordination with consultants, vendors, equipment manufacturer.
  - Rental Engineer With ARAMCO, SAMSUNG, SEPCOIII, Siemens.
  - Preparation for Master Plan, 3 Week Schedule.

**Protection Relay Testing:**

MANU-FACTURE	TYPE	PROTECTION	IEC 61850 CONF&BUFFER REPORT	SOFTWARE
ABB	RED670	87L,21L,67N,67,27,59,25,79,51,51N,50N,50, CBF	VERY GOOD	PCM
	RET670	87T,67N,67,27,51,51N,50,50N,59, REF, CBF		
	REB750	87BB, CBF (GOOD KNOWLEDGE)		
	REC670	BCU, BB HIGH IMP, ACCS, ACSE, ABTS, CAP PROT, LOAD SHEEDING		
	REF615	27,51,51N,50,50N,59,25		
	REL670	87L,21L,67N,67,27,59,25,79,51,51N,50N,50, CBF		
SEL	SEL411L	87L,21L,67N,67,27,59,25,79,51,51N,50N,50, CBF	VERY GOOD	ACSELERATOR QUIKSET
	SEL311L	87L,67N,67,27,59,25,79,51,51N,50N,50		
	SEL487E	87T,67N,67,27,51,51N,50,50N,59, REF, CBF		

	SEL451	ATS, CONTROL,51,50, CBF,25,59,27		AcSEL erator Archite ct		
	SEL487B	87B, CBF				
	SEL487V	CAPACITOR BANK PROTECTION				
	SEL751	27,51,51N,50,50N,59,25				
	SEL710	MOTOR PROTECTION				
	SEL2440	I/O MODULE				
MR	TAPCON	AUTOMATIC VOLTAGE REGULATOR	GOOD	MR SUIT		
ZIV	ZIV RTV	AUTOMATIC VOLTAGE REGULATOR	GOOD	ZIVERCOM ZIVER CID		
	ZIV 6RTV	51,51N,50N,50				
ALSTOM SCHNEIDER	C264	ACCS, ACSE, ABTS	NO	PACIS, SCE, CAT		
	P546	87L,21L,67N,67,27,59,25,79,51, 51N,50N,50, CBF	VERY GOOD	S1 AGILE S1 STUDIO EASERGY STUDIO		
	P443, P442	21L,67N,67,27,59,25,79,51,51N, 50N,50, CBF				
	P643, P645	87T,67N,67,27,51,51N,50,50N, 59, REF, CBF				
	P142, P143, P122, P127	27,51,51N,50,50N,59,25				
	P94V	SYNCKRONIZATION				
	P543	87L,21L,67N,67,27,59,25,79,51, 51N,50N,50, CBF				
	P841	AUTO RECLOSURE				
	P741, P743, P746	BB LOW IMPEDANCE				
	SEPAM	27,51,51N,50,50N,59,25				
	P437	21L,67N,67,27,59,25,79,51,51N, 50N,50, CBF				
	SIEMENS	7SS			BUSBAR LOW IMPEDANCE	CFC CONFIGU- RATION AND IEC61850 MAPPING
7SD		87L,21L,67N				
7SA		21L,67N,67,27,59,25,79,51,51N, 50N,50, CBF				
7VK		79(380KV,115KV), CBF,25				
7UT		87T,67N,67,27,51,51N,50,50N, 59, REF, CBF				
7RW		LOAD SHEEDING				
6MD		BCU,25				
7SJ		51,51N,50,50N				
GE	L90	87L,21L,51,51N,50N,50	VERY GOOD	UR ENTERVIST A		
	L30	87L,51,51N,50N,50				
	D60	21L,51,51N,50N,50				
	T60	87T,67N,67,27,51,51N,50,50N, 59, REF, CBF				
	750	51,51N,50N,50				

	C70	CAPACITOR BANK PROTECTION		
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- Testing All types of Auxiliaries, Contactors, Timers and Annunciators.
- Able to Test Any Other Relay.
- Very Good in Relay Configuration and CID files Mapping and IEC61850 Configuration.
- Testing and Configuring All types of Relays and Configuring it with SAS, PSA, SCADA.

Achievements:

- Building the First Emergency Diesel Generator Black Start Restoration Using Goose Message in Saudi ARAMCO in SHAYBAH NGL-MS1 SS.
- Getting Certificate of Appreciation from ARAMCO and SAMSUNG for EDG Black Start Restoration.