# **Introduction:**

Union Electric Group is amongst the biggest establishments of its kind, originally found to meet the rising demand for energy in the local and regional markets.

It is considered as a leading establishment in the electrical industry and represents an extremely important role in the reconstruction process that Syria is currently undergoing.

Union Electric Group is built on an area of 155.000 m2 located in the industrial city of ADRA, and has the capability of producing:

- 1500 tons of copper & aluminum per month,
- 1000 tons PVC per month.
- 500 units of transformers monthly.
- 1200 tons of 8mm copper rod.

The factories are supplied with the latest developed machinery and use the latest technology to deliver high quality products.

Union Electric Group has five main manufacturers that are specialized mainly in power cables (LV, MV, HV and XHV), control cables, overhead lines, special cables, bare copper, copper rod, winding wires, meters, PVC materials and transformers from 25 KVA to 5,000 KVA.

Our products outstand for their quality and safety due to the international standards followed throughout the production process.

Union Electric Group adopted a policy that assures maximum effectiveness and efficiency throughout processes and systems ensuring that customer needs are met without wasting efforts and cost.

We are heading towards being national and international, expert in our domain, with a high professional team and experts working to be first choice worldwide.



# **Copper Rods**

#### **Product Range**

Generally, we manufacture rods in the diameter 8mm only (size acceptable worldwide for cable & winding wire industry)

#### **Coil Gross Weight**

From 3.0 MT to 4.0 MT on wooden pallets or returnable steel pallets.

#### **Manufacturing Standards**

ASTM - B49 and EN 1977



# Overhead Conductors Bare Soft and Hard Drawn Stranded

#### **Copper Conductors**

Soft drawn copper conductors for grounding electrical systems, where high conductivity and flexibility are required.

Hard drawn copper conductors for overhead electrical distribution networks.



All aluminium bare conductors for aerial distribution lines having relatively short spans, aerial feeders and bus bars of substations.

#### **All Aluminium Alloy Conductor (A.A.A.C.)**

A.A.A.C For overhead lines, in transmission and distribution electrical networks, having relatively long spans. they are also used as a messenger to support overhead electrical cables.

#### **Steel Reinforced Aluminium Conductor (A.C.S.R)**

A.C.S.R. for electrical power transmission over long distances, ideal for long overhead line spans. Also used as a messenger for supporting overhead electrical cables.









# **Service Drop Cables**

# Aluminium (or Copper) Conductors & XLPE (or HDPE) Insulated

For secondary overhead lines ( in circuits not exceeding 1000 V phase to phase ) on poles or as feeders to residential premises.





# **Low Voltage Cables**

#### NYA-m, NYA-e & H05V-R (450/750 V & 300/500 V)

Single core cable with Soft annealed solid ( or stranded ) copper conductors insulated with PVC compound rated 70°c ( or 85°c ).

#### NYA-f & H05V-K (450/750 V & 300/500 V)

Single Core cable with soft annealed copper fine wires, bunched together in subunits or stranded bunched groups into main units, which forms the flexible conductors. insulated with PVC compounds  $70^{\circ}\text{c}$  ( or  $85^{\circ}\text{c}$ ).

#### NYLHY & NYMHY (300/300 V & 300/500 V)

Multicore cables, with flexible copper conductors PVC insulated and PVC sheathed for indoor movable installation in dry location connecting to source power portable electrical appliances operating under uncomfortable conditions, such as portable lamps, fans, refrigerators, washing machines, vacuum cleaners, TV house hold heating and ventilating apparatus.

#### NYM (300 /500 V)

Multicore cables, with stranded ( or solid ) copper conductors PVC insulated and PVC sheathed. For fixed wiring in dry and damp premises, in conduits, or under plaster, switching an distribution panels.

#### NYFLY (450 / 750 V)

Multicore cables with flexible flat copper conductors PVC insulated and PVC sheath.

For lift and submersible pumps.

For flexible connection PVC insulated flat cables are used as trailing cables for crane installation shelf control units.

#### 0.6/1 (1.2) KV

Single (or Multicore) cables with soft annealed stranded copper (or Aluminium) conductor insulated with PVC (or XLPE) compound rated 70°c (or 90°c) and sheathed with PVC compound layer.









For outdoor installation in damp and wet locations, where mechanical damages are expected to occur.



#### 0.6/1 (1.2) KV

For outdoor installation in damp and wet locations, where mechanical damages are expected to occur.



# **Medium Voltage Cables**

#### 3.6 / 6 (7.2) KV - 6/10 (12) KV - 8.7 / 15 ( 17.5 ) KV - 12 / 20 ( 24 ) KV - 18 / 30 ( 36 ) KV

Single or multicore copper (or Aluminium) conductors XLPE insulated and PVC sheathed.

For direct burial or for Installation on trays or ducts.



#### 3.6 / 6 (7.2) KV - 6/10 (12) KV - 8.7 / 15 (17.5) KV - 12 / 20 (24) KV - 18 / 30 (36) KV

Multicore copper (or Aluminium) conductors, XLPE insulated, steel tape armoured and PVC sheathed.

For direct burial or for installation on trays or ducts.



#### 3.6 / 6 (7.2) KV - 6/10 (12) KV - 8.7 / 15 ( 17.5 ) KV - 12 / 20 ( 24 ) KV - 18 / 30 ( 36 ) KV

Multicore copper (or Aluminium) conductors, XLPE insulated, steel wire armoured and PVC sheathed.



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### **High Voltage Cables**

#### 38/66 (72.5) KV

Single core copper conductors, XLPE Insulated, copper screened, laminited Aluminium tape (LAT) and HDPE sheathing.



Stranded circular compacted copper conductor, semiconducting layer as conductor screen, XLPE insulated, semiconducting layer as non metallic insulation screen, copper tape, wire or both as metallic screen to achive the required cross sectional area to withstand the earth fault current, longitudinal water blocking tapes to protect the screen area from any longitudinal water peneteration, copolymer aluminium tape (LAT) to protect the cable from any radial water peneteration and HDPE sheathed.

#### 38/66 (72.5) KV

Single core copper conductors, XLPE Insulated, copper wire and tape metallic screen and HDPE sheathing.



Stranded circular compacted copper conductor, semiconducting layer as conductor screen, XLPE insulated, semiconducting layer as non metallic insulation screen, semiconducting water blocking tape applied helically, copper wire and tape metallic screen with suitable thickness to withstand the earth fault current and HDPE sheathed.

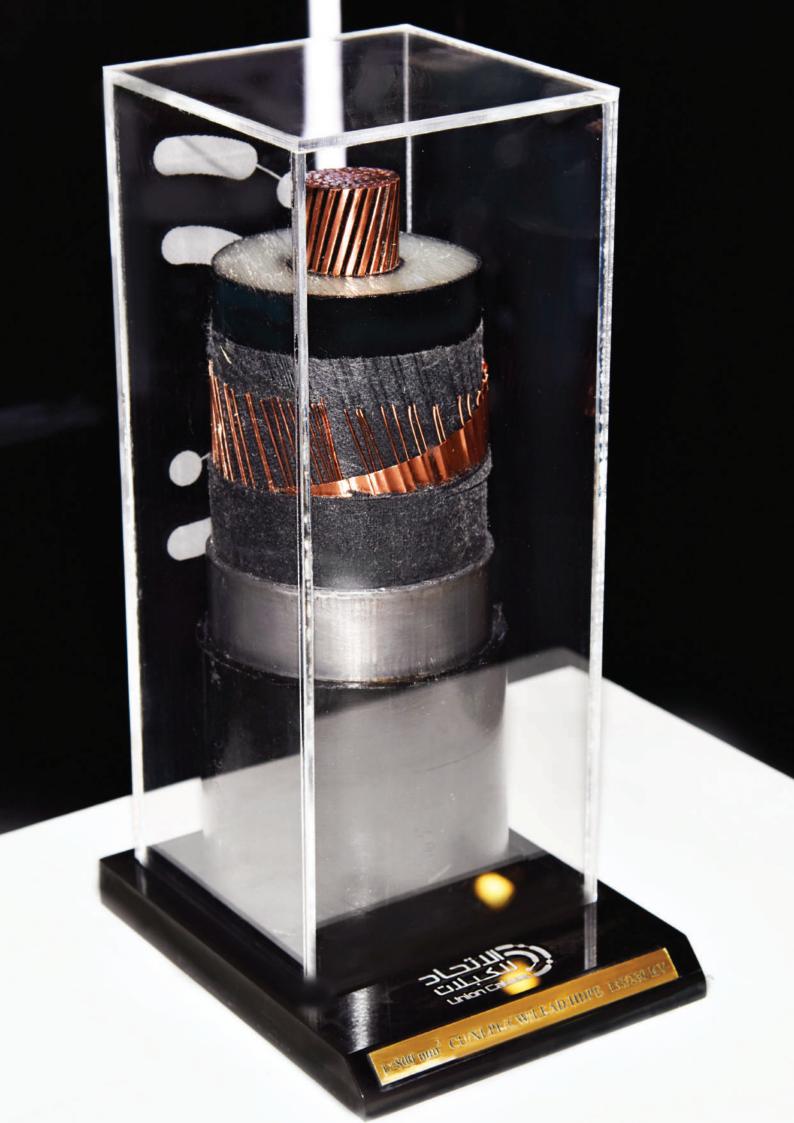
# **Extra High Voltage Cables**

#### 76/132 (145)KV - 133 / 230 (245) KV

Single core copper conductors, XLPE Insulated, copper wire and tape metallic screen, lead sheath and HDPE oversheath.



Stranded circular compacted copper conductor, semiconducting layer as conductor screen, XLPE insulated, semiconducting insulation screen, copper wire and tape metallic screen, semiconducting water blocking tape applied helically, lead sheath with suitable thickness to withstand the earth fault current and HDPE oversheath, very thin layer of graphite coating.



# **Control Cables**

#### 0.6/1 (1.2) KV

Control cable, with solid (or stranded) copper conductors, PVC (or XLPE) insulated and PVC sheathed.



For outdoor and indoor installation in damp and wet locations, connecting signaling and control units in industry, in railways, intraffic signals, inthermopower and hydropower stations. they are laid in air, in ducts, in trenches, in steel support brackets or directly in the ground, when well protected.

#### 0.6/1 (1.2) KV

Control cable, with solid ( or stranded ) copper conductors, PVC ( or XLPE ) insulated, copper tape screened and PVC sheathed.

For outdoor and indoor installation in damp and wet locations, connecting signaling and control units in industry, in railways, intraffic signals, in thermopower and hydropower stations. they are laid in air, in ducts, in trenches, in steel support brackets or directly in the ground, when well protected.

### 0.6/1 (1.2) KV

Control cable, with solid (or stranded) copper conductors, PVC (or XLPE) insulated, steel tape or steel wire armoured and PVC sheathed.

For outdoor and indoor installation in damp and wet locations, laid directly in the ground, where mechanical damages are expected to occur. They are normally used in connecting signaling and control units in industry, in railways, in traffic signals, in thermopower and hydropower stations.



# **Union Cables Company Products:**

We offer a wide range of equipments and materials manufactured or sourced to meet customers specific requirements. Union Cables Company can arrange factory visits prior to placing an order and Inspections of goods prior to dispatch. our products include:

- High grade copper rods.
- Overhead conductors, service drop cables and optical ground wires.
- Under ground power cables (low voltage cables, medium voltage cables, high voltage cables, extra high voltage cables).
- Control cables.

Products are manufacured by our preferred international suppliers.

All Products comply with International IEC, ANSI, NEMA, NF, DIN, or BS standard or similar.