

ELSEWEDY
ELECTRIC

RENEWABLE
ENERGY
SEGMENT

ELSEWEDYELECTRIC.COM

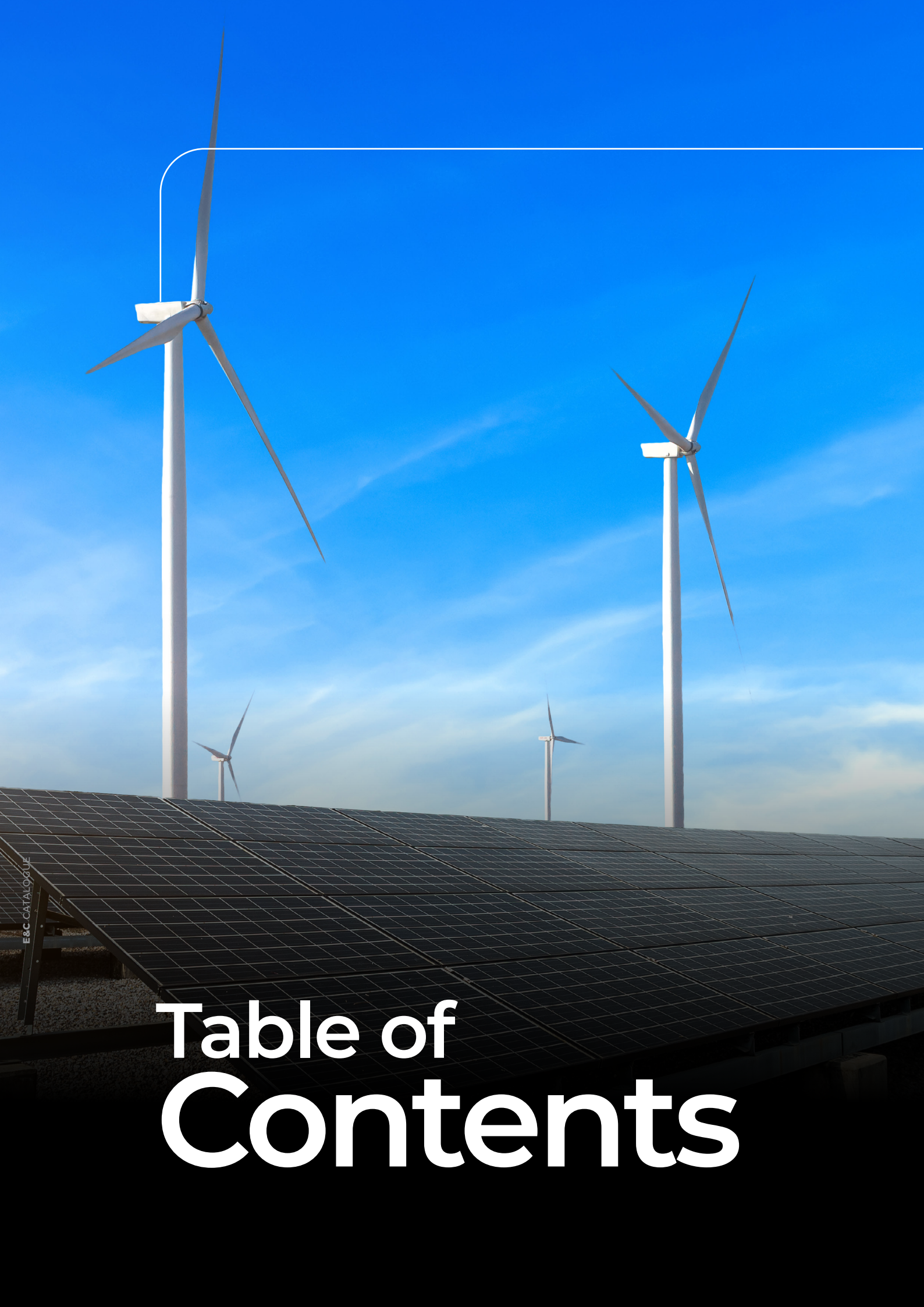


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ABOUT ELSEWEDY ELECTRIC

A global leader that has evolved from a local manufacturer of electrical products into an integrated infrastructure solutions provider; with over 19,000 employees and with recorded revenues of more than USD 5.13 billion in 2024. We Operate in five key business sectors: Wire, Cable & Accessories, Electrical Products, Engineering & Construction, Digital Solutions, and Infrastructure Investments. With a strong presence in 19 different countries, 34 production facilities spread across African and Asian countries including Egypt, Algeria, KSA, Qatar, Indonesia, Pakistan, and Tanzania. We export a wide range of high-end products to over 110 countries worldwide. At the heart of our approach is an all-in-one integrated Engineering, Procurement & Construction (EPC) service, enabling us to deliver the most complex turnkey projects on time and with the highest efficiency.

A vital part of our mission is ensuring that the communities where we operate develop and flourish. We work to facilitate the global transition toward a sustainable energy future, whereby we established green energy projects and smart cities across Africa, the Middle East, and Eastern Europe. In alignment with our 2030 sustainability strategy, we aim to extend and enhance our positive impact, provide energyservicestoagrowingcustomerbase,anddrivedecarbonization, digitalization, and sustainable transition in Egypt and beyond.



34

Production Facilities



48

International Offices



19K

Employees



20%

Engineers



70%

Age Below 40



110

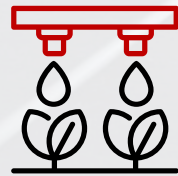
Export Countries



HOSPITALITY



HEALTHCARE



IRRIGATION



**INDUSTRIAL &
MINING**



**RENEWABLE
ENERGY**



REAL ESTATE



**WATER &
WASTEWATER**



TRANSPORTATION



40+ GW

Power
Generation



350K

Wires & Cables
Capacity



25K+ KM

Power
Networks



30K

Annual Transformer
Capacity



ABOUT THE RENEWABLE ENERGY SEGMENT

ELSEWEDY ELECTRIC delivers its full portfolio of integrated energy and infrastructure solutions to the renewable energy sector, addressing the unique needs of solar, wind, and hybrid power developments. We offer end-to-end solutions that ensure reliable, efficient, and sustainable operations throughout every stage of a renewable project's lifecycle.

Our expertise empowers developers and energy providers to build future-ready installations with intelligent infrastructure, enhanced energy efficiency, and a strong commitment to environmental stewardship.

Backed by decades of experience and a global footprint, ELSEWEDY ELECTRIC is a trusted partner in transforming renewable energy projects into resilient, connected, and energy-optimized ecosystems.

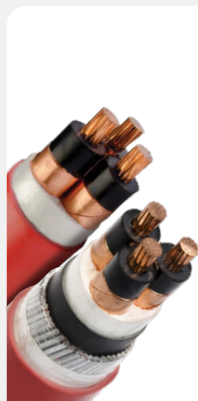
» CABLES, WIRES & ACCESSORIES

HIGH VOLTAGE & EXTRA HIGH VOLTAGE CABLES (CU/XLPE/CWS/LEAD/HDPE)



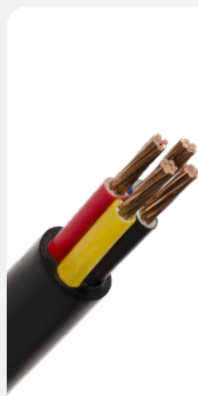
Voltage Rating: 66 kV to 500 kV
Conductor: Segmented or Milliken Copper
Insulation: XLPE
Metallic Screen: Copper wires/tape (CWS)
Water Blocking: Semi-conducting and non-conducting tapes
Armoring: Lead Sheath (optional), for water ingress and shielding
Sheath: HDPE (optionally graphite-coated)
Current Range: Up to 2584 A for 2500 mm² conductor
Size Range: 240 mm² to 3000 mm²
Applications: Utility-scale transmission from renewable plants
Standards: IEC 62067, IEC 60840

MEDIUM VOLTAGE POWER CABLES (CU/XLPE/AWA/SWA/PVC OR HDPE)



Voltage Rating: 6/10 kV up to 18/30 (36) kV
Conductor: Stranded Copper or Aluminum
Conductor Screen: Thermoset semi-conducting layer
Insulation: XLPE (Cross-linked polyethylene)
Insulation Screen: Semi-conducting compound
Armoring: AWA or SWA based on application and number of cores
Sheath: PVC or HDPE
Current Range: ~150 A to 700+ A depending on installation
Size Range: 25 mm² to 630 mm²
Applications: Connection between substations and renewable equipment
Standards: IEC 60502-2, BS 6622

LOW VOLTAGE CABLES (CU/XLPE/PVC OR CU/XLPE/SWA/PVC)

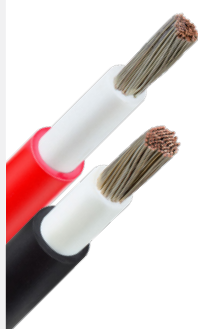


Voltage Rating: 0.6/1 kV (Um = 1.2 kV)
Conductor: Copper or Aluminum (solid or stranded)
Insulation: XLPE or PVC
Sheath: PVC or PE
Armoring:
• Steel Wire Armour (SWA) for multi-core
• Aluminum Wire Armour (AWA) for single-core
Current Range: ~80 A to 742 A depending on size and installation
Size Range: 16 mm² to 500 mm² (larger sizes available on request)
Applications: Internal power distribution, inverters, switchboards
Standards: IEC 60502-1, BS 5467



SOLAR CABLE

(H1Z2Z2-K TCU/LSHF/LSHF)



Application: Interconnection within photovoltaic systems.

Voltage Rating: AC: 1000 V / DC: 1500 V (max 1800 V)

Conductor: Class 5 flexible tinned copper

Insulation: Cross-linked Low-Smoke Halogen-Free (LSHF)

Sheath: Cross-linked LSHF flame retardant

Armoring: None

Temperature Rating: -40°C to +90°C (short circuit: 250°C)

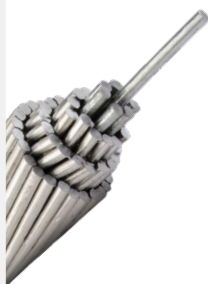
Current Carrying Capacity: Ranges from 176 A (25 mm²) to 775 A (240 mm²)

Standards: BS EN 50618, TUV 2PFG1169

Size Range: 4 mm² to 240 mm²

HTLS OVERHEAD CONDUCTORS

(E.G., ACCC, ACSS, STACIR/AW)



Application: Long-distance high-capacity transmission lines (solar/wind farms)

Conductor: Aluminum composite, Al-Zr alloys, or Invar steel cores

Insulation: None (bare conductors)

Armoring: None (reinforced internally)

Sheath: None (bare)

Temperature: Operating up to 210–250°C

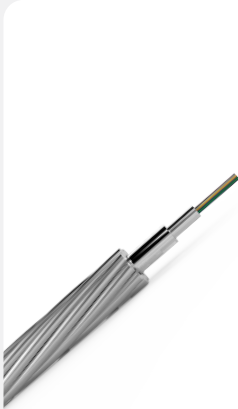
Current Range: 765 A to 2032 A

Size Range: 151 mm² to 691 mm² and above

Features: Low sag, high strength, lightweight

Standards: ASTM B857, IEC 62004

OPGW – OPTICAL GROUND WIRE



Application: Dual-purpose grounding and data transmission in high-voltage renewable energy lines (solar/wind farms)

Conductor: Galvanized steel, Aluminum-clad steel

Insulation: Stainless Steel Tube (SST), Aluminum-Coated Stainless Steel Tube (ACST), or Aluminum Tube (AT)

Armoring: Integrated via stranding; no separate armor needed

Sheath: Bare or metallic tube (no polymeric sheath)

Temperature: Withstands extreme weather and electrical faults

Current Range: Carries earth fault current (not rated in amperes like power cables)

Size Range: Varies by fiber count and stranding type (up to 48+ fibers)

Features: Provides lightning protection, earth fault path, and optical communication in one cable Standards: IEC 60794, ASTM B857, IEEE 1138

Voltage: 450/750 V

CONTROL CABLES

CU/PVC/PVC



Voltage: 300/500 - 0.6/1 kV

Standard: IEC 60502-1

Sizes: 1.5 mm², 2.5 mm², 4 mm².

Conductor: Plain annealed stranded copper

Insulation: PVC, or alternatives (XLPE, LSOH)

Assembly: Cores twisted together in round shape with fillers when necessary

Sheath: PVC, or alternative (LSOH)

INSTRUMENTATION & CONTROL CABLES

INSTRUMENTATION CABLES



Control Shielded Cable (SWA)

Voltage: 300V, 500V

Standard: BS EN 50288-7

Type: Multi Core, Multi Pair, Multi Triple

Conductor: Plain annealed stranded copper

Insulation: PVC, or alternatives (XLPE, LSOH, PE)

Wrapping: at least one layer of plastic tape

Sheath: PVC, or alternatives (LSOH)

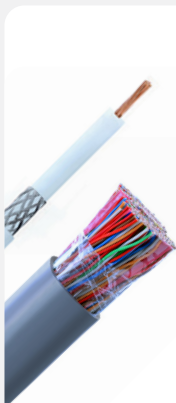
ACCESSORIES



- Premolded Cable Joints
- Cable Termination
- Porcelain Outdoor Sealing End
- Dead Break Separable Connectors
- Link Box
- Heat Shrink Products
- Metal Accessories
- Tools

TELECOMM CABLING SOLUTIONS

COPPER CABLING SOLUTIONS



Coaxial Cables

(RG-58/RG-59/RG-6/RG-8/RG-11/RG-213/C-80/CF-160)

Technical Specifications:

Solid Copper Wire:

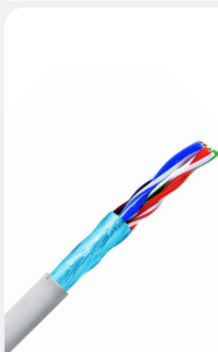
RG-58(0.9mm)/RG-59(0.59mm)/RG-6 & C-80&CF-160(1mm)/RG-11(1.63mm)/
RG-213(2.25mm)

Stranded Copper Wire:

RG-8 (2.22mm)

Telephone Cables

IEC-189 & TC-113



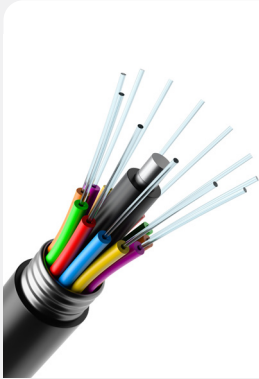
LAN Cables

(CAT5E-CAT6-CAT6E-CAT6A-CAT7)

Technical Specifications:

- 4 Pairs of Color-coded Twisted Pairs
- Solid Conductor Sizes Vary from 23:24 AWG
- Solid or Foamed PE Insulation
- Shielded or Unshielded Configuration
- PE, PVC, LSHF Sheathed

FIBER CABLING SOLUTIONS



- **Fiber Optic Cables**
- **Outdoor Cables**
- **Porcelain Outdoor Sealing End**
- **Direct Buried Cables**
- **Duct Cables**
- **Air Blown Fiber (ABF) Cables**
- **Pre-loaded Duct Cables**
- **All Dielectric Self Supporting (ADSS) Cables**
- **Figure 8 Cables**

FIBER CONNECTIVITY



- **Fiber Patch Panel** (Available in both single and multimode optical fiber)
- **Fiber Patch Cord and Pigtails** (Available in both single and multimode optical fiber)
- **Fiber Optic Splitter** (Low insertion loss and high uniformity)
- **Fiber Termination Box and Outlet** (For both indoor and outdoor applications)
- **Fiber Optic Closures** (Dome and inline types are available)
- **Customized Solutions** (Custom pre-terminated cables)

CABINETS



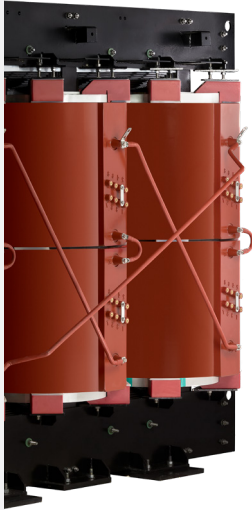
➤ **Outdoor Cabinets**

- Wall / Pole mounted
- Free Standing
- Telecom Street Cabinets



ELECTRICAL PRODUCTS

DRY TRANSFORMERS



Types:

- » CRT: Cast Resin Dry Transformer
- » VPIT: Vacuum Pressure Impregnated Transformer

Material:

- » AL or Cu for HV/LV cores based on customer request

Rating:

- » Up to 15MVA, 36 kV

Performance:

- » Up to 15MVA – 36KV
- » Short Circuit withstand up to 3 sec
- » C2-E2-F1 classified
- » Insulation Class F (155) & H (180 degree)
- » Low Partial Discharge
 - Standard (≤ 10 Pc) as per IEC
 - < 5 Pc upon request
- » AN or AF cooling
- » Standard: IEC60076 & BS50541-1& IEE, EN 50588

OIL IMMERSED DISTRIBUTION TRANSFORMERS



Application:

Step-up/step-down transformers in renewable generation stations and substations

Transformer Type:

Oil-immersed, hermetically sealed or conservator type

Power Rating:

- » Small Distribution: 50 kVA – 250 kVA
- » Large Distribution: 250 kVA – 5,000 kVA
- » Medium Power & Special: Up to 15,000 kVA

Voltage Range:

- » Up to 36 kV

Cooling Method:

ONAN / ONAF

Insulation Fluid:

Mineral Oil / Ester Fluid

Mounting Types:

Pad-mounted, pole-mounted, or compact substations

Features:

- » Customizable bushings and tap changers
- » Available with dual windings and multiple cooling radiators
- » Suitable for remote/off-grid and grid-connected renewable systems

Standards:

IEC 60076, IEEE/ANSI, BS, NEMA



POWER TRANSFORMERS



➤ **Application:**

» Main step-up transformers at renewable generation stations or substations

➤ **Transformer Type:**

» Core-type oil-immersed

➤ **Power Rating:**

» 5 MVA – 250 MVA

➤ **Voltage Range:**

» 3.3 kV up to 220 kV

➤ **Cooling Method:**

» ONAN / ONAF / OFAF / OFWF / ODAF

➤ **Oil Preservation:**

» Conservator / Nitrogen / Air sealed systems

➤ **Tap Changers:**

» Off-load and on-load (motorized)

➤ **Special Features:**

» Designed with short-circuit withstand and seismic durability

» High-efficiency cores and advanced insulation structures

» Available with remote control RTCC panels and SCADA integration

➤ **Standards:**

» IEC, ANSI/IEEE, NEMA, BS







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