

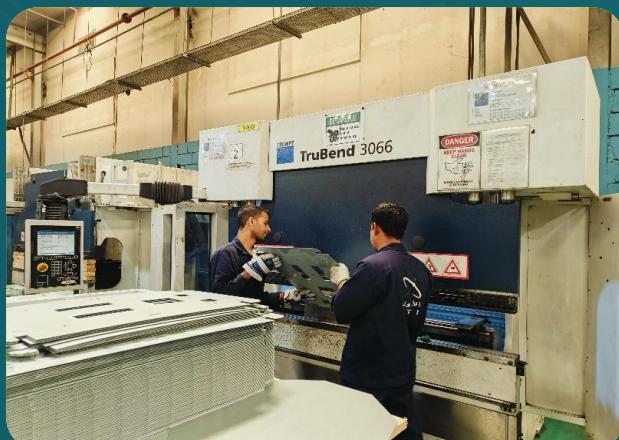


**Electrical Systems**



## Who We Are

**Awal Company is a leading provider of cutting-edge power solutions, specializing in high-performance electrical infrastructure for the modern world. We design, manufacture, and deliver smart, reliable, and future-ready systems that keep industries, utilities, and cities running efficiently.**



## Awal Company :

### Pioneering Localization for a Sustainable Future in Saudi Arabia

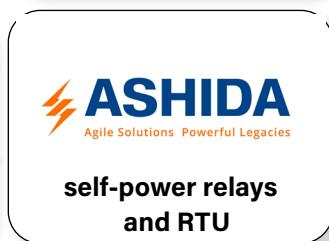
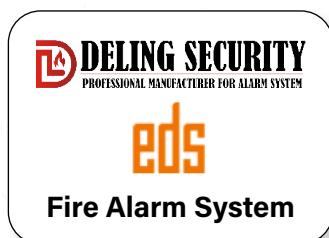
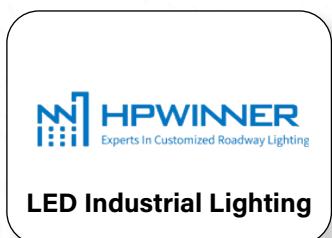
Awal Company is committed to driving localization as a core strategy to support Saudi Arabia's economic growth and Vision 2030 objectives. With a focus on integrating local talent, resources, and suppliers, FTI is not just aligning with national priorities, but also creating sustainable value for both the company and the Kingdom.

As part of its localization efforts, FTI prioritizes hiring Saudi nationals, contributing to the country's Saudization initiative. By nurturing a highly skilled local workforce, FTI is empowering the next generation of leaders and professionals. Moreover, FTI actively partners with local suppliers and global specialists that bring invaluable insights and expertise that help accelerate the localization process.

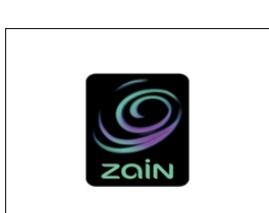
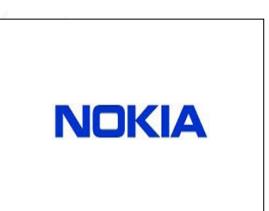
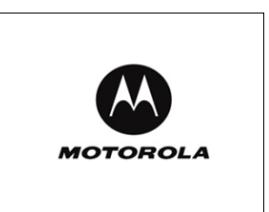
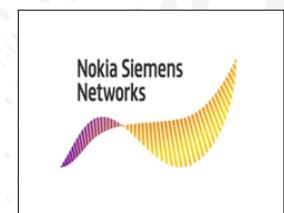
Localization at FTI extends beyond just employment. The company is committed to adapting its services and products to better meet the needs of the Saudi market, ensuring relevance and competitiveness in an ever-evolving landscape. By leveraging local expertise and strengthening regional supply chains, FTI is minimizing operational risks and ensuring long-term sustainability.

Through its dedication to localization, FTI not only supports national development but also secures a bright future for its business and the Kingdom of Saudi Arabia.

## Awal Technology Partners :



## Awal Customers



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# Power Distribution and Grid Solutions

Awal Company delivers an integrated suite of smart grid technologies designed to optimize power transmission, distribution, and protection across modern electrical networks. Our solutions combine advanced engineering, intelligent monitoring, and rugged reliability to meet the evolving demands of utilities, industries, and renewable energy integration

- **MV Smart Ring Main Unit (SRMU) - Up to 38 kV**
- **MV Non-Extensible Ring Main Unit (RMU) - 17.5 kV**
- **LV Distribution Boards**
- **Feeder Pillar with Steel Enclosure**
- **Dry-type, air-core reactors**
- **Circuit Breakers**
- **Self-Powered Relay**



## 1- MV Smart Ring Main Unit (SRMU) - Up to 38 kV

### Applications:

- Urban power grids
- Industrial plants
- Commercial centers
- Airports
- Highways
- SEC distribution network

### Key Features:

- Compact, maintenance-free design
- Flexible modular configurations
- High reliability and safety in extreme conditions
- Smart automation with remote monitoring and control capabilities
- Integrated RTU and communication devices
- Cybersecurity-compliant with advanced encryption and security protocols

### Technical Specifications:

- Operating Voltage: 13.8 kV and 34.5 kV
- Rated Current: As per SEC specifications
- Operating Temperature: -40°C to +75°C
- Protection Degree: IP54 (enclosure), IP67 (main tank)
- Weight & Size: Varies based on configuration

### Certifications & Standards:

- IEC Standards: IEC 62271100-, IEC 62271200-, IEC 60529, IEC 61869
- ISO Certifications: ISO 9001, ISO 14001, ISO 45001
- Cybersecurity Compliance: IEC 62351, advanced security protocols
- SEC approval is awaited



## 2- MV Non-Extensible Ring Main Unit (RMU) - 17.5 kV

### Applications:

- Urban power grids
- Industrial plants
- Commercial centers
- Airports
- Highways
- SEC distribution network

### Key Features:

- Compact, maintenance-free design
- Non-extensible, SF6 gas-insulated for long-term reliability
- High safety and durability in extreme environmental conditions
- Front-panel operation with clear visual indicators
- Integrated mechanical interlocks for enhanced safety
- Internal arc fault protection for operator and public safety
- IP54-rated enclosure, IP67 main tank

### Technical Specifications:

- Operating Voltage: 17.5 kV
- Rated Current: 400 A (LBS), 200 A (Circuit Breaker)
- Short Circuit Rating: 21 kA for 1 sec
- Operating Temperature: -40°C to +75°C
- Protection Degree: IP54 (enclosure), IP67 (main tank)

### Certifications & Standards:

- IEC Standards: IEC 62271100-, IEC 62271200-, IEC 62271103-, IEC 60529
- ISO Certifications: ISO 9001, ISO 14001, ISO 45001
- SEC approval is awaited



### 3- LV Distribution Boards

#### Applications:

- Residential buildings, commercial complexes.
- industrial facilities, and infrastructure projects.

#### Key Features:

- Compliance with IEC and SASO standards.
- Safe Power distribution.
- Robust and Durable construction.
- Versatile circuit protection.
- Efficient cable management.
- Easy Maintenance and Access.
- User Friendly interface.
- Modular design for easy expansion.

#### Technical Specifications:

- Frequency: 50/ 60Hz
- Frame Sizes: 100A, 250A, etc.
- Ways: 6-Way to 42-Way
- Enclosure: Light Gray (RAL7035 & RAL 9001)

#### Certifications:

- IEC 614392 & 1-, SASO, RoHS, CB Certificates.
- SEC approval is awaited



## 4- Feeder Pillar with Steel Enclosure

### Applications:

- Industrial parks.
- commercial buildings.
- infrastructure projects requiring compact power distribution solutions.

### Key Features:

- IP54 rated for dust and water protection.
- Short-circuit withstand: 25 kA for 1 second.
- Generator plug-in compartment (optional).

### Technical Specifications:

- Voltage:  $230V \pm 5\%$ ,  $400V \pm 5\%$
- Insulation Voltage: 1000V
- Frequency: 50/60/Hz

### Certifications:

- IEC 61439-5, SASO, RoHS.
- SEC approval is awaited



## 5- Dry-type, air-core reactors

### Applications:

- High-voltage direct current (HVDC) transmission.
- Offshore wind farms & renewable energy integration.
- Seismic-sensitive regions & harsh environments.
- Phase-shifting and current-limiting in converter stations.

### Key Features:

- Precision Engineering: Real-time thermal sensors for optimal performance monitoring.
- Unmatched Durability : 0.5g seismic-resistant dry-type air-core reactors with anti-corrosion protection.
- Future-Ready Scalability: Adjustable inductance up to 140mH for evolving grid demands.
- Proven Reliability: 10-year winding guarantee with ISO9001 quality assurance.

### Technical Specifications:

- Voltage Range: Up to  $\pm 800$  kV DC
- Current Capacity: Up to 5000 A
- Inductance: Scalable up to 140 mH
- Environmental Resilience: -40°C to +50°C operation, IP54 protection
- Testing Compliance: Full IEC 600766- & IEC 61869 validation

### Certifications:

- IEC 600766- ,IEC 61869
- ISO Certifications: ISO 9001
- Specialized Testing: CNAS-accredited seismic & corrosion resistance certification.
- SEC approval is awaited



## 6- Circuit Breakers

### Applications:

- Residential buildings
- Residential buildings
- Commercial complexes
- Industrial facilities
- Infrastructure projects
- 

### Key Features:

- Types: MCBs: e.g. AKBS, AKBH series.
- MCCBs
- RCBOs: e.g. AROH, AKSO series.
- RCCBs: e.g. AAUR8 series.
- Isolators: e.g. AKBL series.
- AFDDs: e.g. AMASH series.
- Enhanced safety against overloads, short circuits, arc faults and earth leakage and fast tripping mechanisms.

### Technical Specifications:

#### Current Ratings:

- MCBs: 1A to 125A (e.g., AKBS: 1–63A; AKBH: 10–125A).
- RCBOs/RCCBs: 6A to 100A (e.g., AROH: 6–63A; AAUR8: 16–100A).
- Isolators: 63A to 125A (AKBI series).

#### Pole Configurations:

- 1P, 1P+N, 2P, 3P, 3P+N, 4P.

#### Residual Current Sensitivity:

- 10mA, 30mA, 100mA, 300mA (selectable for RCBOs/RCCBs).

#### Breaking Capacity:

- Up to 10kA (standard) and 20kA (AKBH series).
- Termination:
- Cable termination up to 50mm<sup>2</sup> (e.g., AKBI isolators).

### Certifications:

- IEC/EN , CE, CB Scheme, RoHS, SASO.
- SEC approval is awaited



AKBH 10kA MCB



AKBI Isolator Switch



AKBS 10kA MCB



AKSO 10kA RCBO

## 7-Self-Powered Relay

### Applications:

- Power distribution networks, industrial plants, and
- renewable energy systems.

### Key Features:

- Self-powered design (no external auxiliary supply needed).
- Advanced protection features: Overcurrent, SOTF, Thermal Overload.

### Technical Specifications:

- Current Input: 1A or 5A CT.
- Auxiliary Supply: 100-230-V AC/DC or 2450-V DC.
- Certifications: IEC 60255, IEEE C37.90, CE.
- SEC approval is awaited



# Smart Grid Components

Awal's smart grid portfolio combines advanced automation, real-time monitoring, and intelligent fault management to create resilient power networks.



- Remote Terminal Unit
- Auto recloser

## 1- Remote Terminal Unit

### Applications:

- Ring network cabinets
- Distribution rooms/substations
- Renewable energy grid integration
- Industrial power management

### Key Features:

- Ultra-Fast Fault Isolation: Millisecond-level response
- Multi-Protocol Support: IEC 10161850, 104/, DNP3.0, Modbus
- Comprehensive Monitoring: 40 DI/8 DO, 9 current/3 voltage inputs
- Environmental Resilience: -40°C to +70°C, IP54-rated
- Smart Grid Ready: NTP/IRIG-B time sync, SCADA integration

### Certifications:

- IEC 61850, IEC 60870104/101-5-, CE, DL/T, ISO 9001



## 2-Auto recloser

### Applications:

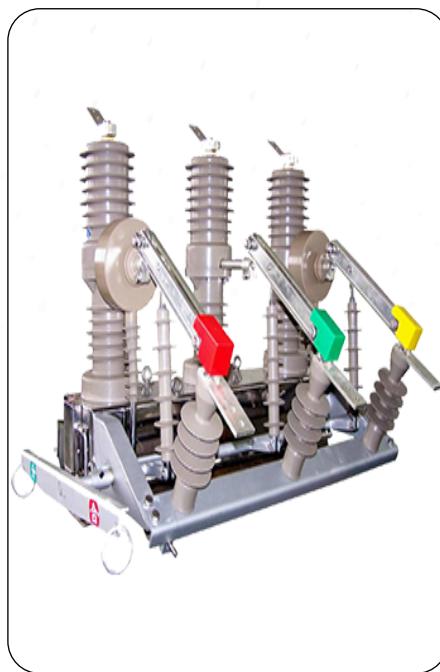
- Overhead power distribution networks.
- Rural and urban grid systems.
- Renewable energy integration points.
- Mining and industrial power supply.
- Fault-prone overhead lines.

### Key Features:

- Smart Operation - 46- customizable reclosing sequences.
- Wide Current Range - 400A-630A continuous rating.
- Advanced Protection - Overcurrent, earth fault, surge protection.
- Durable Design - IP67 rated, -40°C to +70°C operation.
- Remote Control - SCADA compatible with GSM/GPRS options.
- Easy Maintenance - Modular design with hot-swappable components.

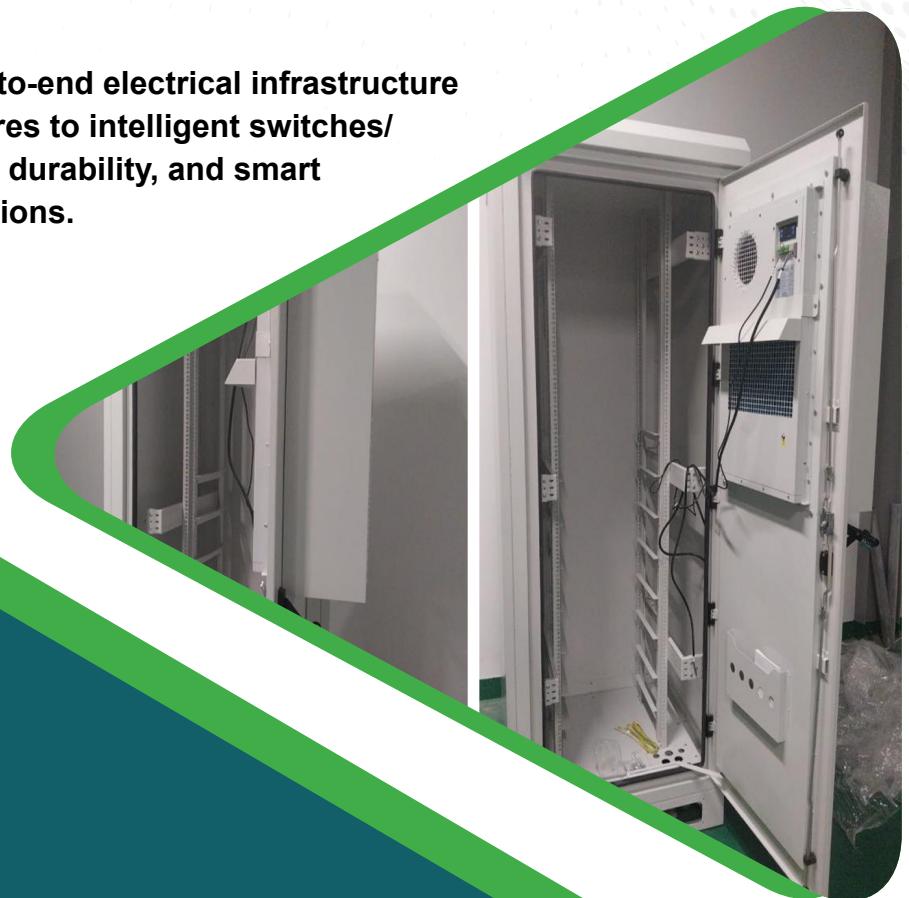
### Certifications:

- IEC 62271111-, IEC 60694 , KEMA, CE, DL/T, ISO 9001 .



# Electrical Components and Enclosures

Awal Company delivers end-to-end electrical infrastructure solutions, from robust enclosures to intelligent switches/sockets , engineered for safety, durability, and smart functionality across all applications.



- Smart meter box
- Data center cabinet & Racks (Indoor and Outdoor)
- Steel Switch Boxes
- Switches and Sockets

## 1-Smart meter box

### Applications:

- Residential buildings, commercial complexes,
- industrial facilities, and public infrastructure.

### Key Features:

- Measuring your electricity usage, just like traditional meters.
- Code-compliant with Saudi Arabian electrical standards.
- IP54 rating to prevent the dust and water.

### Certifications:

- IEC 61439\_5.
- SEC approval is awaited



## 2- Data center cabinet & Racks (Indoor and Outdoor)

### Applications:

- A business's IT.
- communication, and security equipment such as servers, routers, switches, patch panels, firewalls, and UPSs.

### Key Features:

- Enhanced Security, Environmental protection, Cable management, Flexibility and placement
- Standardized size, Weight support, Cooling solution, Customization and Accessibility.
- Code-compliant with Saudi Arabian electrical standards.

### Certifications:

- IEC 61439\_5.
- SEC approval is awaited



### 3- Steel Switch Boxes

#### Applications:

- Residential buildings, commercial complexes,
- industrial facilities, and public infrastructure.

#### Key Features:

- Hot-dipped galvanized steel construction.
- Code-compliant with Saudi Arabian electrical standards.

#### Certifications:

- ISO, CE, RoHS, UL.
- SEC and SASO approvals are awaited



3x3 GI Box



3x6 GI Box



1+1 Gang GI Box



1+1+1 Gang GI Box



1+2 Gang GI Box



1+1 Gang Switch and Socket Box



M835



M836



M837



M838

## 4-Switches and Sockets

### Applications:

- Residential buildings, commercial complexes,
- industrial facilities, and public infrastructure.

### Key Features:

- Wide variety: Toggle, Rocker, Dimmer switches.
- Safety features: Childproof mechanisms, overload protection.

### Certifications:

- ISO, CE, RoHS, UL.



# Energy Storage Systems

Awal Company Delivers a complete range of high-performance lithium batteries (12V/24V/48V, 10Ah-300Ah+) and Battery Energy Storage Systems. Featuring cloud-connected BMS, 98% round-trip efficiency, UL1973 safety, liquid cooling, and 8-year/6,000-cycle warranty, our smart energy storage solutions power solar, EV, industrial, and grid-scale applications with reliability and intelligence.

- Lithium Batteries
- Battery Energy Storage System (BESS)

## 1-Lithium Batteries:

### Applications:

- Solar Energy Storage (Photovoltaic Systems)
- Outdoor Activities (Camping, RVs, Marine)
- Uninterruptible Power Supplies (UPS)
- Electric Vehicles (Golf Carts, Touring Cars, Yachts)
- Industrial and Commercial Backup Power

### Key Features:

- High Energy Density: Compact design with high-capacity storage (e.g., 3840Wh for NOW-MC12300A).
- Long Cycle Life: Durable performance with stable capacity retention.
- Multiple Voltage Options: 12.8V and 25.6V models available.
- Wide Capacity Range: From 10Ah to 300Ah to suit diverse power requirements.
- Robust Build: Varied dimensions and form factors for flexible installation.
- Safety: LiFePO4 chemistry ensures thermal stability and reduced risk of overheating.

### Certifications:

- UL, IEC, ISO, CE, RoHS



## 2-Battery Energy Storage System (BESS)

### Applications:

- Residential Energy Storage.
- Commercial & Industrial (C&I).
- Utility-Scale Energy Storage.
- Specialized Uses: Data centers, telecom towers, hospitals, and emergency power.

### Key Features:

- High-Performance LiFePO4 Cells.
- Modular & Scalable.
- Advanced Cooling Systems.
- Smart Energy Management.
- Safety & Reliability.
- Flexible Configurations.

### Certifications:

- UL, IEC, ISO, CE, RoHS, UN, MSDS



# EV & Renewable Solutions

Awal company offers end-to-end energy solutions, featuring high-performance EV chargers and PV inverters that promote sustainable mobility and renewable energy. Our EV chargers are OCPP-compliant, IP65-rated, and boast 98.6% efficiency, with smart connectivity and a 5-year warranty. Similarly, our PV inverters achieve the same efficiency, providing grid-tied and hybrid options with cloud monitoring. Both products are rugged (-30°C to +60°C), have automatic fault isolation, and support future firmware upgrades, ensuring seamless integration for solar-powered EV charging and energy storage.



- PV inverter
- EV Chargers

## 1- PV inverter

### 1. Applications:

- **Grid-Tied Inverters:**
  - Homes/businesses connected to the utility grid.
  - Net metering and feed-in tariff programs.
- **Off-Grid Inverters:**
  - Remote locations (cabins, farms, telecom towers).
  - Emergency backup systems.
- **Hybrid Inverters:**
  - Solar+storage systems for self-consumption.
  - Peak shaving and time-of-use (TOU) optimization.

### 2. Key Features:

- **High Efficiency:** Up to 98.6% conversion efficiency.
- **Smart Monitoring:** Real-time tracking via Cloud app.
- **Battery Ready:** Seamless integration with LiFePO4/lead-acid batteries (hybrid models).
- **Robust Safety:**
  - Anti-islanding, surge protection, and arc-fault detection.
  - IP66 rating (dust/waterproof for outdoor use).
- **Scalability:**
  - 150% DC oversizing (maximizes solar harvest).
  - Parallel connection support for expansion.
- **Fast Switching:** <10ms transition to backup power (hybrid models).

### 3. Certifications:

- **Grid-Tied:** CE, IEC 62109, VDE-AR-N 4105 (EU grid compliance).
- **Off-Grid/Hybrid:** UN38.3 (battery safety), IEC 624771-.
- **Global Standards:** CQC (China), RD 1699 (Spain), AS/NZS 4777 (Australia)



## 2- EV Chargers

### 1. Applications:

- AC Chargers: Homes, workplaces, public parking
- DC Chargers: Highways, fleets, fast-charging hubs

### 2. Key Features:

- Fast Charging – AC: 3.722-kW | DC: 60180-kW
- Smart Control – App monitoring, RFID, OCPP 1.62.0/
- Universal Fit – Type 2 (AC) / CCS2, CHAdeMO (DC)
- All-Weather – IP54/IP65 protection
- Safe & Reliable – Surge/overcurrent protection

### 3. Certifications:

- CE, IEC 618511-, RoHS
- OCPP compliant, local grid standards



# Safety & Infrastructure

Awal Company integration system that Features addressable detection and stainless-steel components, these EN 54-certified systems operate in low-power standby mode. A 5-year system warranty and annual inspection reminders enhance reliability.



- Fire Alarm System
- Fire fighting System

## 1- Fire Alarm System

### Applications:

- Residential buildings, commercial complexes,
- industrial facilities, and public infrastructure

### Key Features:

- Types: Conventional, Addressable, Wireless Fire Alarm Systems.
- Components: Smoke Detectors, Heat Detectors, CO Detectors, Manual Call Points, Bell, Sounder Strobe, Control Panels.

### Certifications:

- LPCB, CE, EN 54.



## 2- Fire fighting System

### Applications:

- Residential buildings, commercial complexes, industrial facilities, and public infrastructure

### Key Features:

- Types: Fire hose cabinets, Fire Extinguishers, Fire pumps, Fire Suppression Systems.

### Certifications:

- CE, SASO



# IT Infrastructure

Powered by AI-driven analytics and Tier IV data hosting, these ISO 27001- certified solutions ensure 99.9% uptime (SLA). Automated monitoring and dedicated account managers deliver end-to- end support.

## 1- ICT solutions & services

### Overview:

- A leading provider of BPO, IT solutions, digital marketing, and cybersecurity services.

### Core Services:

- BPO & Contact Center Solutions.
- IT & Software Development.
- Healthcare IT .
- Digital Marketing & Brand Development.
- Animation, VFX & Game Art.
- Cybersecurity & Compliance (Concave Fort).
- Managed IT & Cloud Services.

### Why Choose AWAL?

- Global reach and expertise.
- Award-winning solutions.
- Tech-driven approach (AI, Automation, Analytics).

# Quality, Customer Care & Warranty

## ISO Certification and Quality Commitment

- ISO 9001 (Quality Management Systems)
- ISO 14001 (Environmental Management Systems)
- ISO 45001 (Occupational Health and Safety Management Systems)

## Customer Service

- Dedicated support team available for inquiries and after-sales and maintenance service.
- Contact : Phone number, email, and office hours provided.

## Warranties

- Comprehensive warranty coverage for all products.
- Easy-to-follow process for warranty claims.

## Sustainability Efforts

- Commitment to eco-friendly manufacturing processes.
- Use of sustainable materials and energy- efficient production techniques.





# TOGETHER, WE CAN CREATE

BETTER  
CUSTOMER  
EXPERIENCES

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