

# The Brain of Your Electrical System

Advanced Power Distribution Centers | Quality Assurance | Safety | Control & Longevity

## What is an Electrical Panel?

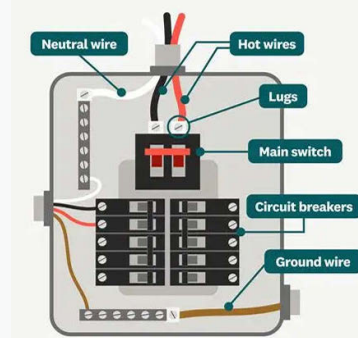
An electrical panel (also widely recognized as a distribution board or breaker panel) serves as the primary gateway and central nervous system for your entire property's electrical infrastructure. Housed within an engineered metallic enclosure equipped with a safety access door, it takes power arriving from the external meter utility and safely splits it among various sub-circuits.

**Automatic Safeguards:** At its core, the panel prevents electrical overloads and short circuits. The internal breaker switches automatically trip and cut mechanical connections when contemporary current values exceed nominal limits, averting damage to devices and stopping electrical fires before they can start.

## Core Production Categories

- **Standard Electrical Panels:** Traditional structural configurations optimized for basic commercial/residential power routing.
- **Smart Electrical Panels:** Equipped with smart digital monitoring assistants to track live power distribution metrics, phase loads, and historic energy parameters.
- **Circuit Breaker Panels:** Focused directly on localized electrical asset isolation, protective trip curves, and component grounding.
- **Electrical Control Panels:** Purpose-built heavy-duty arrays engineered specifically to handle large industrial machines, motors, and manufacturing setups.

## Inside the Control Center



**Main Incomer Breaker:** The heavy-duty master switch controlling all current ingress into the facility. Instantly cuts off the layout framework during emergency situations.

**Legacy Fuse Systems Warning:** Vintage screw-type configurations often struggle to pass home insurance inspection parameters due to higher fire risks. Upgrading to a modern circuit board is highly advised.

## Technical Classifications & Product Architecture

Gawade Green Power boards are built to precise engineering standards, categorizing arrays into definitive application, construction, and voltage levels:

### ⚙️ BY APPLICATION

- **Power Control Centers (PCCs):** Engineered to isolate and distribute power from primary sources (Utility grids / industrial generator lines). Integrates full fault current interruption switchgears.
- **Motor Control Centers (MCCs):** Houses coordinated motor starters, precise thermal overload relays, and digital instrumentation for complex pumping and motor loops.
- **Switchgear Assemblies:** High-reliability clusters dedicated strictly to heavy fault trip sequencing and safe operational insulation lines.
- **Process Control Panels:** Customized setups featuring high-end PLCs, human-machine HMIs, and automation sensory interfaces.

### ⚙️ BY CONSTRUCTION ELEMENTS

- **Indoor Enclosures:** Dust-protected chassis intended for internal structural substations.
- **Outdoor Enclosures:** All-weather weatherproof housings constructed to endure harsh open-air environments.
- **Metal-Clad Assemblies:** Partitioned internal steel compartments prioritizing maximal crew operator protection.

### ⚡ BY VOLTAGE GRADING

- **Low-Voltage (LV) Panels:** Operations sustained comfortably below 1000 Volts. Perfect for domestic networks, corporate buildings, and commercial blocks.
- **Medium-Voltage (MV) Panels:** Standard ratings from 1 kV extending up to 35 kV. Highly optimized for massive regional grid infrastructure and substation distribution lines.
- **High-Voltage (HV) Panels:** Specialized industrial clusters handling levels exceeding 35 kV, built exclusively for heavy national power transmission systems.

### ⚡ SPECIALTY SOLUTIONS MANAGED

- **Synchronizing Panels** & Auto Load Sharing arrays.
- **Single Contactor AMF Panels** for emergency backup configurations.
- **LT Panelboards** & Modular Distribution Blocks.
- **Load Centers** intended for clean sub-circuit grouping.

### Determining Structural Load Demands

Modern buildings normally mandate current ratings ranging between **60 and 400 Amps**. Most standard installations legally enforce a minimum baseline capacity of **100 Amps** to support multi-appliance loads safely. Operating under 100 Amps often poses insurance issues and warrants an immediate system panelboard upgrade.

Gawade Green Power Pvt Ltd  
Industrial Switchgear & Control Panel Manufacturing Plant  
Pune, Maharashtra, India.

⚡ **Safe. Reliable. Energy-Efficient.**

## Product Showcase - Heavy Industrial Panel Lineup

Explore our production floor layout of genuine, custom-welded electrical panels engineered at our Pune facility.



### AMF Panel System

Automatic Mains Failure panel featuring automated grid-to-genset transfer mechanisms.



### Auto Load Sharing Panel

Parallel controller optimizing load sharing between multiple running generator units.



### Distribution Panel board

Multi-tier power distribution switchboard ensuring reliable downstream protection loops.



### LT (Low Tension) Switchboard

Main Low Tension switchgear panel managing high-current distribution grids.



### Synchronizing Control Panel

Dual breaker synchronizer aligning phases and frequencies across multi-source setups.

**Gawade Green Power Pvt Ltd**

Official Component & Product Gallery Brochure  
Pune, Maharashtra, India.

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