

# Connector

## Akira Family Latter

### Dear Family Members

They say there are seven wonders of the world. This month, let's celebrate an eighth wonder — the endless pursuit of knowledge and learning through our newsletter. Together, let's embark on a journey as travelers exploring the vast and fascinating world of reading.

### Our Core Values

Honesty

Trust

Transparency

Working in Alliance

Learning

Sensitivity

Our core values are the way used to make our vision happen. Creating a healthy customer experience will not happen unless we exercise the right choices. To exercise the right choices, one must learn to know the context, learn to know and accept one's role and learn to play one's role without disturbances.

### Special Days in June

Date	Special Day/Event Name
June 1	Global Day of Parents/ World Milk Day
June 3	World Bicycle Day
June 5	World Environment Day
June 7	World Food Safety Day
June 8	World Oceans Day
June 12	World Day Against Child Labour
June 14	World Blood Donor Day
June 15	Father's Day
June 21	International Yoga Day
June 21	World Music Day
June 23	International Olympic Day

### Celebrating the Journey



*Congratulations...*

# Welcoming our new commandos



## Technical Tips

### Over Voltage

Over voltage is a condition where the incoming AC voltage rises above the safe operating limit of the equipment connected. For most industrial and commercial devices, this safe range is typically between 180V to 250V (for single-phase) or 360V to 440V (for three-phase systems).

Uncontrolled over voltage can lead to:

- Insulation breakdown in motors and transformers
- Excessive heat generation
- Equipment malfunction or permanent damage
- Fire hazards in sensitive electronics

### Root Causes of Over Voltage in the Field

#### 1. Grid/Utility Supply Fluctuation

- Voltage supplied by electricity boards can vary due to load shifting, transformer tapping issues, or maintenance work.
- In rural or industrial areas, over voltage at night is common due to low power consumption and poor regulation.

#### 2. Unbalanced Load Conditions

- In 3-phase systems, if one phase is lightly loaded or disconnected, that phase can experience over voltage (called "floating neutral" in star configurations).
- This is particularly dangerous in buildings with improper phase load balancing.

### 3. Generator-Related Surges

- Improper AVR calibration or sudden removal of heavy loads from the generator can spike voltage.
- A faulty generator controller may fail to regulate voltage under load variations.

### 4. Lightning Strikes / External Surges

- Lightning or electrical switching surges in nearby lines can cause a sudden and dangerous spike in supply voltage.

### 5. Incorrect Stabilizer Settings

- If input high voltage cutoff is not properly set during commissioning, the stabilizer might continue delivering high output voltage.

### Protection Features Built into Our Servo Stabilizers

#### 1. Over Voltage Sensing & Output Cut-Off

- The stabilizer continuously senses the input voltage.
- If input exceeds a preset high voltage limit (e.g., 270V or 460V), the output is instantly cut off to avoid damage.

#### 2. Relay/Magnetic Contactor Based Protection

- Output lines are disconnected through a high-speed relay or MCB once over voltage is detected.
- Some models use digital relays with programmable delay and trip settings.

#### 3. Wide Input Voltage Handling Range

- Designed to handle voltages from as low as 140V to as high as 280V (single-phase) and 300V–470V (three-phase).
- This avoids unnecessary cutoffs during minor surges and keeps the system stable.

#### 4. Soft Start Feature

- After an over-voltage trip, the output is not turned ON immediately.
- The stabilizer waits for a stable input and then gradually ramps up voltage, protecting the load from inrush currents.

#### 5. Digital Display & Alarm Indication

- Real-time display of input and output voltages.
- Buzzer/LED indication for over voltage conditions.
- Helps maintenance team to diagnose without delay.

#### 6. Microcontroller-Based Intelligent Control

- All our stabilizers use MCU logic to monitor voltage continuously and make precise decisions.
- Prevents false tripping due to momentary spikes.

Let's  
Think!







## Seasonal Tip

### Mango

Mango is often called the “**King of Fruits**” because of its rich taste, delightful aroma, and high nutritional value. It mainly grown in India, Southeast Asia, and parts of Africa and South America. Its **Scientific Name** is *Mangifera indica*. Mango fruits are rich in **Vitamin A**, **Vitamin C**, and **antioxidants**, provides **dietary fiber**, helps improve digestion and immunity and contains natural sugars that provide instant energy. Mango trees can live and bear fruit for more than 100 years!

## Akira Controls 20 Years of Successful Journey!

Akira Controls proudly marks 20 years of excellence in the field of Electronics, a journey defined by innovation, dedication, and the trust of our valued customers.

On 6th June 2025, we joyfully celebrated our 20th Anniversary, reflecting on two decades of growth, achievements, and shared success.

*“ We extend our heartfelt thanks to every customers, partners, and team members who made this journey possible. Together, let's continue to move towards greater success!”*



**20** Years  
Anniversary  
Celebration

