

# KMC21V

## Circular Knitting Machine Controller



# SPECIFICATIONS

- **Panel Size** : 190 x 230 mm or 7.48 x 9 inch
- **Panel Cutout Size** : 177 x 215 mm or 6.96 x 8.46 inch
- **Body Type** : Metal body (fabricated using CNC technology and powder coating)
- Fully automatic **Micro-Controller** based design.
- **Operating Voltage** : 24V AC
- **Counter Range** : 0 to 65000
- **R.P.M. Range** : 0 to 99.9 R.P.M.
- **TOTAL Counter Range** : 0 to 99999999
- **FABRIC ROLL Counter Range** : 0 to 65000
- A, B, C **Shift Counter** upto 65000
- **Display** : 20 x 4 LCD
- **FABRIC LAMP** : 220V / 24V AC (Selectable)
- **DOOR** : NO / NC (Selectable)
- **CUTTER Output Voltage** : 24V / 220V AC (Selectable)
- **STOP Buttons** : NO / NC (Selectable)
- **Machine Speed Change** : Panel Box and AC Drive both
- **Oiler Coil** : Contact Output

- **User Interface** : Easy & Simple operation
- **Compatibility** : White Plugs

## STANDARD FEATURES

- Allows you to digitally control all the operations of the machine.
- STOPS the machine and shows INDICATION when –
  - Yarn breaks (TOP or BOTTOM).
  - Needle breakage.
  - Door opens.
  - Counter value reaching Set value.
  - Take Up breakdown.
  - Oil finishes in the oiler.
  - AC drive errors.
  - Design Computer Errors.
- Manages JOG, STOP, and RUN operations with buttons, indications and display.
- Regulates JOG and RUN speeds separately, with buttons and a speed display allowing for 96 steps of speed adjustment, ensuring precise and stable speed control.

- Counts the revolutions separately for A, B, and C working shifts (by selecting the required shift).
- Records and displays machine revolutions and speed in revolutions per minute.
- Automatically stores operational data with 10-year memory retention.
- Operates the machine only on JOG while the COMPEL or FORCED JOG function is activated (through COMPEL button as well as by pressing the STOP button) .
- Counts the TOTAL revolutions separately regardless of fabric roll cutting.
- Manages ON/OFF functions (with buttons and indications) for TOP LAMP, FABRIC LAMP, TOP FANS, AC DRIVE, and COMPEL functions.
- Controls OILER ON/OFF with indication.
- Operates POWER ON/OFF for the entire panel box with buttons and indications.
- Controls FABRIC CUTTER.

# PREMIUM FEATURES OFFERED ONLY BY ACXA

**Displays Cause of Machine Stoppage :** Our panel shows the reason for machine stoppage. Access it through settings to quickly identify issues without needing an electrician. Our panel provides you all the details about your machine, making repairs quick and hassle-free. It also highlights mechanical issues for faster maintenance, saving time and boosting production.

**Power Saving Feature :** Side lamps are automatically turned on when the door is opened for fabric roll cutting and off when the door is closed, eliminating the need to keep them on continuously.

**Total Fabric Roll Counting :** Now you don't have to count the rolls manually, our panel will count the total number of fabric rolls produced and will display it to help you track production.

**RESET Button Lock :** The reset button is automatically locked while the machine is running or jogging to prevent accidental counter resets.

**DOOR NO/NC :** Door type (NO/NC) can be configured via settings, eliminating the need to alter the machine's wiring. Simply go to settings and select the DOOR type (NO/NC) your machine uses.

**Push Button Indication on Display :** If the jog, run, or stop push button is pressed, stuck, or becomes direct, it will be displayed on the screen. Unlike other panels that lack this feature, our display immediately alerts the machine operator or electrician to the issue. This saves time and eliminates the need to check every aspect of the machine to identify the problem.

**Stop Button NO/NC Setting :** STOP button type (NO/NC) can be configured via software from the SET button, eliminating the need to alter the machine's wiring. Simply go to settings and select the button type (NO/NC) your machine uses.

**Roll Completion Indication :** Roll completion status is displayed on the screen.

**Button ON/OFF Memory :** If TOP Lamp, FAB Lamp, or FAN button were ON before a power failure, they will automatically be switched ON with a small delay upon power restoration, increasing the lifespan of switches.

**Reset Option :** When a fabric roll completes, the counter can be reset from the panel's reset button or by pressing STOP and RUN push buttons together, increasing the lifespan of the reset switch.

**Counter Auto Reset :** The counter resets automatically when the gate opens for roll cutting, but only if the counter has reached the set value.

**COMPEL 1 Option :** The COMPEL 1 function can be activated from the COMPEL button or by pressing JOG and STOP push buttons together.

# PROTECTION AGAINST COMMON PROBLEMS, OFFERED ONLY BY ACXA

**AC Drive Protection :** When the machine is running at full power, the motor cannot be turned off directly via the motor button to prevent damage to the AC drive caused by sudden voltage drop.

**Machine Protection (Mechanically) :** The panel gradually decreases the machine speed step-by-step to 1/4 of the total speed in the last 2 rounds before roll completion rather than suddenly turning the machine OFF after roll completion, reducing mechanical stress and extending machine lifespan.

**IRO Short Circuit Protection :** Protects the panel if TOP, BOTTOM, or NEEDLE wire directly contacts the machine body, preventing the need for frequent panel replacements or repairs.

**SENSOR Short Circuit Protection** : Safeguards the panel if the sensor's positive and negative wires are shorted by any cause, preventing unnecessary repairs or replacements.

## ACXA BENEFITS

Say goodbye to unreliable Chinese panels with no warranty. Upgrade to ACXA and experience :

- 2 years of warranty with cost-free repairs.
- Premium quality and exceptional reliability compared to Chinese panels.
- Unique features to boost your machine's productivity.
- Exclusive accident protection and prevention functions not offered by any other company.
- Production tracking features to help you keep record.
- Power saving and short- circuit protection features.
- The most affordable price range in the market.

- A durable lifespan with complete repairability.
- A simple and straightforward installation process for user convenience.
- Custom features provided at lower prices based on your requirements and budget.
- Compatibility with all brands and types of circular knitting machines.