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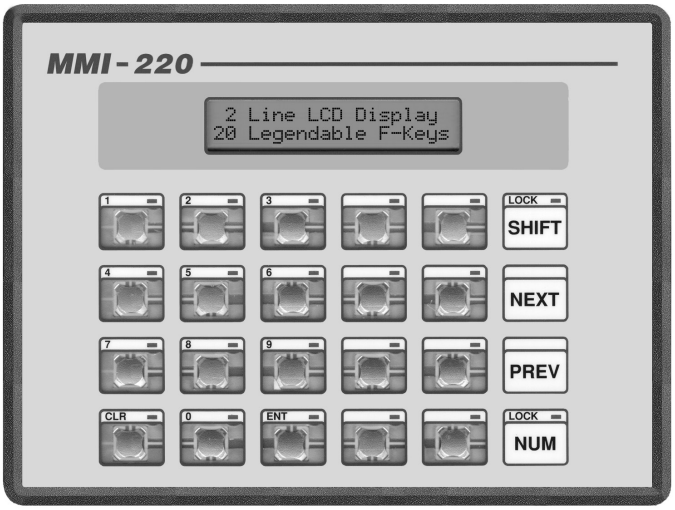
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Find the *Kessler-Ellis Products MMI-220-LA-32* at our website: ***Click HERE***

# MMI-220

## Programmable Push Button and Message Panel




**Features**

- **2 Line by 20 Character Display**
- **Bar Graph Capable**
- **Connects to The PLC's Programming Port**
- **The Number of Messages To View Machine / Process Status is Limited Only by Memory**
- **Recipe Management with Retentive Internal Registers**
- **User Friendly Prompts to Change Data and Presets**
- **20 Programmable (40 using shift key) Push-Buttons and LED's**
- **Setup software can convert projects from one PLC brand to another**
- **Message Chaining and Linking**
- **Serial Printer Port, Beeper and Open Collector Output**

**DESCRIPTION**
The new MMI-220 from KEP is a simple, easy to use, cost effective interface. It communicates with the PLC directly through the programming port. Expensive I/O, interface ladder logic or hard wiring are no longer needed.

**FUNCTION KEYS**
The MMI-220 has 20 (40 using shift key) user definable keys which can be used as push buttons or as selector switches. Each key can be defined to do one of the following functions:

- Turn specified bits ON or OFF
- Hold Specified bits ON or OFF while the key is pressed
- Toggle the status of a specified bit (like a selector switch).
- Edit or download constants and recipe values to the PLC.
- Trigger a message for data entry.
- Trigger a message chain or linked list useful for machine setup etc..

Access to Function keys can be password protected.

**ANNUNCIATOR LEDS**
The MMI-220 has 20 user definable LEDs for the purpose of annunciation The LEDs are mapped to a user definable register In the PLC. A beeper is also provided for annunciation.

**ENTERING DATA --** The NUM key is used for changing bit, register, preset and accumulator values.

A new value may be entered into a register if:
a) The register is not Password protected; or
b) The Password is assigned a value of 0000.

Press the NUM key to change a bit status, register, preset or accumulator value while it is being displayed. You will notice that the last digit of the displayed value or status is flashing. This indicates that the unit is ready to accept a new value. Use the CLR key and Number keys to change the flashing value. Press ENT to accept the value.

If the register or bit is assigned write protection the unit will prompt the operator for the Write Password when the NUM button is pressed. The password is entered the same way that new data is entered as described above.

**MESSAGES**
The MMI-220 can store a large number of messages. A register called the Message Triggering Register (MTR ) is defined in the PLC. The MMI-220 reads the contents of this register in every scan and the message corresponding to the number in the MTR is displayed on the MMI-220. A message can be assigned to each line on the MMI-220. Messages can scroll, flash, have minimum time for display and can be chained or linked to other messages. They can also be designated to be printed through the serial port.

A list of messages can be defined (called linked messages) allowing the operator to scroll through this list of messages simply by pressing the NEXT key.

Messages can have PLC data embedded in Decimal, Hex, Binary or BCD formats. They can also have text dependent on a bit status or can have data displayed as a bar graph making the unit very user friendly.

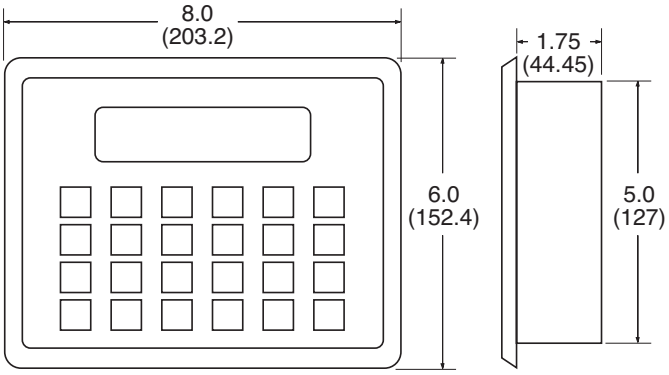
**SETUP**
The MMI-220 is setup on an IBM PC using a Windows™ based setup software package. Simply point and click and you are ready to go!


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## SPECIFICATIONS

| | |
|---|---|
| **Power** | 12 to 24 VDC, 6W Maximum |
| **Display** | **LCD Backlit Liquid Crystal Display; 2 lines; 20 characters per line; character height is 0.2"**<br>VFD Vacuum Fluorescent Display; 2 lines; 20 characters per line; character height is 0.2" |
| **Bezel** | NEMA 4 / IP65 rated membrane keypad |
| **Temperature** | Operating: - 0 to 50 degrees C<br>Storage: -40 to 90 degrees C |
| **Humidity** | 10% to 90% ( Non condensing) |
| **Size** | 8" W x 6" H x 1.75" D<br>(203.2 mm x 152.4 mm x 44.45 mm) |
| **Panel Cutout:** | 7.1"W x 5.1"H<br>(180.3 mmWx 152.4 mm H) |
| **Communication** | Using the programming or the standard communication port of the PLC |
| **Memory** | 32k EEPROM |
| **Open Collector O/P** | 24 Volts at 100 mA maximum |
| **Immunity to ESD** | 8 kV Air, 6 kV Contact as per IEC801-2 |
| **Immunity to Transients** | 2 kV as per IEC801-4<br>2 kV 1 us Impulse Noise |
| **Radiated Susceptibility** | 10 Volts/meter as per 1EC801-3 |
| **Emissions** | EN5501,1 CISPR A |
| **Approvals** | CE Pending |

Dimensions:

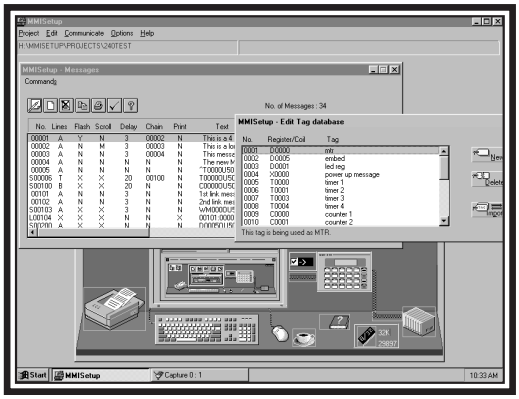



PANEL CUTOUT: 7.1 (180.3) X 5.1 (129.5)

All Dimensions in inches (mm)

## MMI Setup Software Information

The Windows® based MMI setup software is a convenient way to setup this PLC Interface Product.



Our software makes Function Key setup a snap!
Create, Edit and View messages with Point & Click Ease!

## How To Order:

**EXAMPLE: MMI220 V A**

**Series**
MMI-220

**Display Type**
L= LCD
V=VFD

**Options** (add to end of part number)
A = 115 VAC Power
B = 230 VAC Power

**For PLC Type**
Use Smart cable part number as indicated below. Also refer to SMIC Cables in the Accessories Section of this catalog.
The MMI-220 will not operate without a smart cable and software.

**EXAMPLE: SMIC- GE90- 05**

**Series**

**PLC Type**

| | |
|---|---|
| **AB500** | **AB SLC500 types with DH485 port** |
| **ABDF1** | **AB SLC500 5/03, 5/04 with DF1 port** |
| **ABMICRO** | **AB MicroLogix only** |
| **ABAIC** | **For use with AB AIC Modules** |
| **ARO** | **All Aromat FP1 Series** |
| **FUJI** | **Fuji Flex Series NB, NJ and NS** |
| **GE90** | **All GE 90 Series SNP Port** |
| **IDECM1** | **Idec M1 and FA2J** |
| **IDECM3** | **Idec Micro3 Series** |
| **IDECM3C** | **Idec Micro3C Series** |
| **K205** | **Koyo DL230, DL240, DL250** |
| **K305** | **Siemens Simatic 335, Koyo 340** |
| **K405** | **Siemens Simatic 425, 435, Koyo 440** |
| **KEY** | **Keyence KV 10,16,24,40 & 80, KV300** |
| **MOD** | **Modicon Micro 84; 884; 984; Open Modbus & J-Bus** |
| **MODMICRO** | **Modicon Micro 984** |
| **MITFX** | **Mitsubishi FX Series** |
| **MITFXO** | **Mitsubishi FXo only** |
| **OMCK25** | **Omron C Series, (Host link modules)** |
| **OMCH9** | **Omron CH Series** |
| **OMCQM** | **Omron CQM1 Series** |
| **SIS5** | **Siemens S5 Series, 95, 100, 102, 103, 115** |
| **SIS7** | **Siemens S7-200 Series** |
| **TSBT1** | **Toshiba T1 only** |
| **TSBT2** | **Toshiba T2 and T3** |
| **TSX07** | **Telemecanique TSX 07 (nano), TSX 37** |
| **TSX17** | **Telemecanique TSX 17** |
| **TSX47** | **Telemecanique TSX 47-40, TSX 47-20** |

**Cable Length**
05 = 5 feet

**Accessories:**

**ZA9M9F** - Five feet of cable with DB9 male connector and DB9 female connector.
(PC end, normally used for "AT" COM1)

**ZA9M25F** - Five feet of cable with DB9 male connector and DB25 female connector.
(PC end, normally used for "XT" or "AT" COM2)

**Free MMISoft setup software is included with each unit.**


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