

# › em4

## Accessories

### Programmable touch panel MTP8/70

- › 7" TFT-LCD compact resistive touch panels, 65536 colors, LED backlight
- › Graphical resolution: 800 x 480 pixels
- › Wide viewing angle: 70° horizontally and vertically
- › Fan-less cooling system
- › Text, data, graphic, animation display
- › Processing of alarms and recipes
- › 400 MHz core logic, 64 MB RAM
- › 128 MB flash memory storage + SD card slot
- › Communication with one or up to 31 em4 with the Modbus RS485 Interface ref. 88980120
- › Programmable with user-friendly EB software (compatible with Windows XP/Seven)
- › 2 RS232/RS485 serial ports, USB 1.1 port, USB 2.0 port, Ethernet port
- › Sound output



Programmable touch panel MTP8/70

#### Specific Characteristics

Designation	Size	Programming	Connection	Code
MTP8/70 user kit (MTP8/70, fixing brackets)	7"	USB-MiniUSB cable or Ethernet RJ45 crossover cable	Modbus RS232/RS485 serial ports, USB port, Ethernet port	88 970 496

#### Accessories

Description	Code
MTP6/50-MTP8/70 programming kit – USB-MiniUSB connection (EB/helpfile CD, USB-MiniUSB cable)	88 970 501
MTP8/50-MTP8/70 programming kit – Ethernet crossover connection (EB/helpfile CD, RJ45 crossover cable)	88 970 502
Modbus em4 cable MTP8/70 (need ref. 88 980 120 Modbus RS485 Interface)	88 980 172
Modbus cable DB9 MTP8/70 ↔ RJ45 length 2 m to connect Modbus RS485 Millennium 3 device	88 970 504

#### General characteristics

##### Environmental characteristics

Certifications	UL, cUL
Conformity to standards	IEC 61000-4
Operating temperature	0 → +45 °C
Storage temperature	-20 → +60 °C
Relative humidity	10 → 90 % (operation)
Protection rating	IP65 - Dust and droplets Front panel seal watertight at standard
Vibration resistance	10 - 25 Hz, 2G 30 minutes in each of the X, Y, Z axes
Shock resistance	Free fall from 1 meter in each of the X, Y, Z axes

##### Electrical characteristics

Supply voltage	24 VDC Internal insulation via transformer
Voltage limits	19,2 → 28,8 VDC
Consumption	7,2 W max.

**Mechanical characteristics**

Dimensions (l x h x w)	200 x 146 x 42.5 mm Useful screen area: 154 x 93 mm
Panel cut-out	192 x 138 mm Panel thickness 1-10 mm
Mounting	Built-in, fixing by 2 screw clamps (supplied) for 1 to 10 mm panel
Connection	Removable 3-pin screw terminal block (supplied)
Weight	AC 850 g

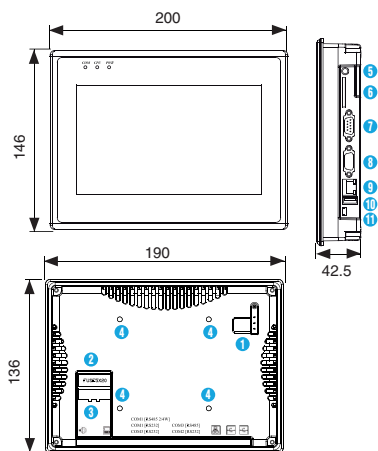
**Display characteristics**

Description	TFT-LCD 7" polychrome, 65536 colors LED backlight Resolution 800 x 480 pixels 400 MHz core logic, 64 MB RAM 128 MB flash memory (programs and recipes backup) SD card memory slot Programmable with EB software Touch panel with user-definable layout Key life: 1 million operations minimum
Display details	Straight lines, free lines, squares, ovals, arcs, polygons, bitmaps, animations.gif, standard fonts
Functions	Buttons, switches, levers, LEDs, messages, data, password-secured buttons, triggers Bar charts, linear gauges, clocks, alphanumeric keyboards, graphics, recipes, alarm lists Text scrolling, multiple windows, data transfer, multiple language, archive
Connection	Programming: PC-MTP8/70 link via USB-MiniUSB cable (accessory) Communication: <b>em4</b> -MTP8/70 link using a Modbus network via the communication cable (supplied)
Real-time clock	Uses <b>em4</b> clock or built-in clock

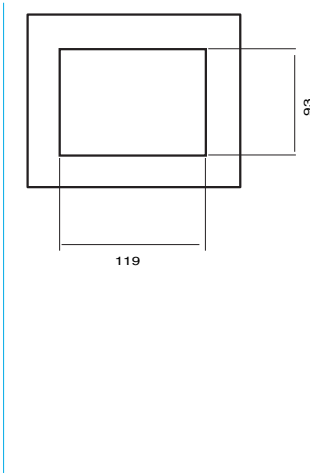
**Diagrams**

**Dimensions (mm)**

**MTP8/70**



**Panel cut-out**



- 1 DIP SW & Reset button
- 2 Fuse
- 3 Power connector
- 4 VESA 75 mm screw holes
- 5 Audio
- 6 SD card slot
- 7 Com1 RS485, Com3 RS485, Com3 RS232
- 8 Com1 RS232, Com2 RS232
- 9 Ethernet port (RJ-45)
- 10 USB Host port
- 11 USB client port (programming)