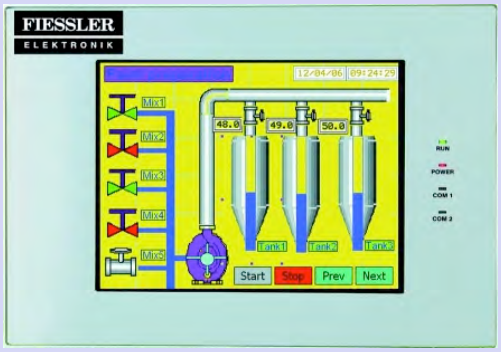
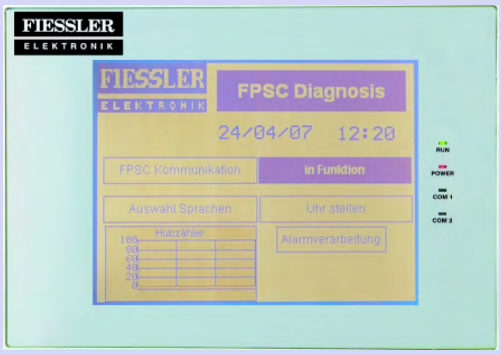
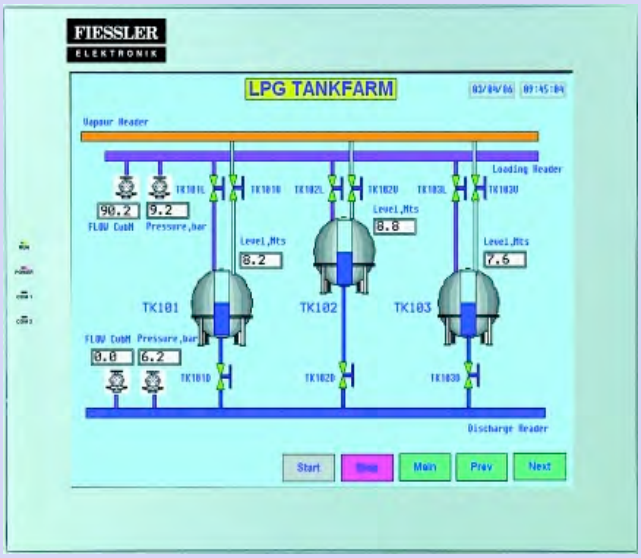
Human Machine Interfaces - HMI







Wide range of products in text and touch screen design

Direct connectable to FPSC and AKAS systems

Integrated PLC functionality in ladder programming mode

Typ 4
EN 61496

2 serial interfaces as standard

optional

Up to 65535 windows per project programmable

LISTED

Integrated RTC with predefined task to manage the different functions

Multiple project languages supported

DIN EN ISO 9001
Reg.Nr. 96007

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Systemdescription, Application areas

The Fiessler Elektonik Human Machine Interfaces (FE-HMI) are used for diagnosis of intelligent controller units like the system families FPSC and AKAS. Due to their integrated intelligence it is possible to realize comfortable and ergonomic operating concepts. Moreover, with the integrated PLC functionality it is possible to make standard controlling tasks. All available display models are programmed by one programming software. For this, a lot of functions are available. The user can decide whether he would like to manage the windows due to predefined tasks or via the PLC function. Different memory areas support a clear and easy use.

With all display models the user can realize an intelligent alarm management. This is also supported by an integrated RTC.

Application areas:

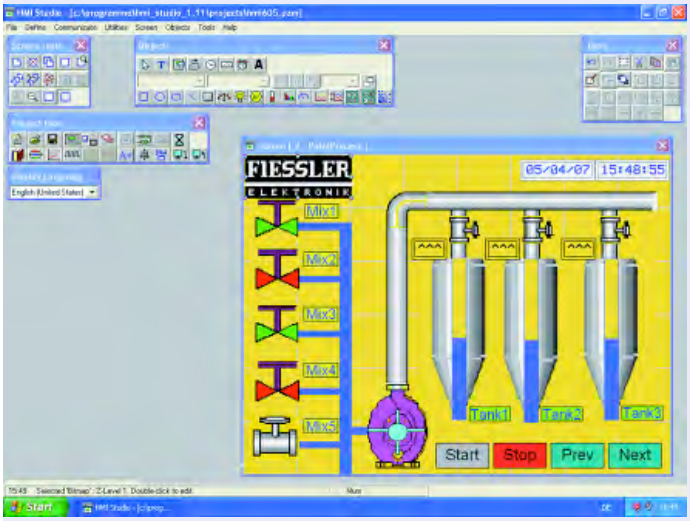
- Machine construction e. g. press brakes, eccentric and hydraulic presses, injection molding machines
- Wood machining e. g. veneer presses, saws
- Systems engineering e. g. conveyors, feeders,
- Special machine construction in general

Programming Software Fiessler HMI Studio

The programming software Fiessler HMI Studio (FE-HMI-Studio) is a very user-friendly software tool to configure and program the different display models.

By means of this software, the user can download the respective PLC-drivers for the interfaces, can manage the different memory areas as well as design the shape of the windows. A lot of predefined function will help the user to manage the windows, set the RTC, calculate with mathematical functions, or alarm managing.

Additionally there are functions to support multiple language window management for the end user. With the use of the integrated PLC function, complex application can also be solved by the displays. The PLC will be programmed in ladder mode.



A clearly arranged display of the different project tools supports the user to program the displays fast and easily.

Fiessler Elektronik HMI 201

The basic unit FE-HMI 201 is an alpha numerical text display with 2 lines of 16 characters each.

Main features:

- o Keypad with numeric keys 0-9 and 8 function keys
- o very good price / benefit ratio
- o open for ergonomical operating concepts
- o 24 V DC power supply, no special power supply necessary
- o very compact design
- o 2 serial interface ports as standard

Technical data FE-HMI 201

Display	
Resolution	16x2 (char. x lines)
Objects	Alpha numerical text
Display type	STN Monochrom
Color	Yellow-green
Contrast control	potentiometer
MTBF Backlit	100.000 hours
Character dots (W x H)	2,95 x 4,35
Dot size (WxH) [mm]	0,55 x 0,5
Windows fonts	not available
Operator input	
Data entry	Keypad
Function keys	8
Numeric entry buttons	0-9
Memory	
Total memory	512 kB
Application	120 kB
Data logging	not available
Data back up	not available
Ladder memory	max. 62 kB
CF card capacity	not available
Interface ports	
Serial ports, 9 Pin Dtype	2
Ethernet	not available
USB	not available

Function overview	
Ladder programming	Yes
Bar graph	Yes
"Real" Time Alarms	256
"Historical" Alarms	30
Unicode supported	not available
Graphical objects	not available
Printer port (serial)	Yes
Screen saver	not available
Electrical data	
Power supply	24V DC +/- 10%
Consumption	3 W
Inrush current	400 mA
Power ON LED	not available
Battery	3V Lithium, CR1225FH
Mechanical data	
Size (B x H x T) [mm]	108 x 70 x 72
Panel cut (B x H) [mm]	101 x 63
Installation	Panel mount
Net weight	150 g
Environmental data	
Operating temperature	0° bis 50° C
Storage temperature	-20° to 50° C
Humidity	10% to 90%
Condensation	not permitted
Protection class front	IP 65

Fiessler Elektronik HMI 401, 4,1"

With the small touch screen display FE-HMI 401 the user gets a very flexible and easy-to-program display with a good price / benefit ration. All control elements can be programmed with the software tool FE-HMI Studio.

Main features:

- **o integrated keypad object for data entry**
- **o industrial touch screen**
- **o integrated Real Time Clock**
- **o 24 V power supply**

Technical data FE-HMI 401, 4,1"

Display	
Resolution	192 x 64 pixels
Objects	pixel graphics
Display type	STN Monochrom
Color	Yellow-green
Contrast control	potentiometer
MTBF Backlit	50.000 hours
Character dots (W x H)	5x7; 7x14; 10x14; 20x28
Dot size (WxH) [mm]	0,46 x 0,46
Windows fonts	Yes
Operator input	
Data entry	Touch Screen
Function keys	projectable
Numeric entry buttons	Keypad objects integr.
Memory	
Total memory	512 kB
Application	120 kB
Data logging	not available
Data back up	not available
Ladder memory	max. 62 kB
CF card capacity	not available
Interface ports	
Serial ports, 9 Pin Dtype	2
Ethernet	not available
USB	not available

Function overview	
Ladder programming	Yes
Bar graph	Yes
"Real" Time Alarms	256
"Historical" Alarms	30
Unicode supported	Yes
Graphical objects	Yes
Printer port (serial)	Yes
Screen saver	Yes
Electrical data	
Power supply	24V DC +/- 10%
Consumption	3,5 W
Inrush current	550 mA
Power ON LED	not available
Battery	3V Lithium, CR1225FH
Mechanical data	
Size (B x H x T) [mm]	140 x 77 x 35
Panel cut (B x H) [mm]	132 x 70
Installation	panel mount
Net weight	270 g
Environmental data	
Operating temperature	0° bis 50° C
Storage temperature	-20° to 50° C
Humidity	10% to 90%
Condensation	not permitted
Protection class front	IP 65

Fiessler Elektronik HMI 601, 5,7"

The touch screen display FE-HMI 601 is the ideal unit for the development of medium HMI concepts. With a size of 5,7" the display offers a lot of opportunities to create ergonomical and good-looking windows.

Main features:

- o large memory
- o integrated keypad objects for data entry
- o industrial touch screen
- o real time and historical alarms management
- o 4 LEDs for online diagnosis

Technical data FE-HMI 601, 5,7"

Display	
Resolution	320 x 240 pixel
Objects	pixel graphics
Display type	STN Monochrom
Color	16 grey scales
Contrast control	potentiometer
MTBF Backlit	50.000 hours
Character dots (W x H)	5x7; 7x14; 10x14; 20x28
Dot size (WxH) [mm]	0,34 x 0,34
Windows fonts	Yes
Operator input	
Data entry	Touch Screen
Function keys	projectable
Numeric entry buttons	Keypad objects integr.
Memory	
Total memory	4 MB
Application	max. 3 MB
Data logging	max. 2 MB
Data back up	512 kB SRAM
Ladder memory	max. 128 kB
CF card capacity	not available
Interface ports	
Serial ports, 9 Pin Dtype	2
Ethernet	on request
USB	not available

Function overview	
Ladder programming	Yes
Bar graph	Yes
"Real" Time Alarms	256
"Historical" Alarms	2000
Unicode supported	Yes
Graphical objects	Yes
Printer port (serial)	Yes
Screen saver	Yes
Electrical data	
Power supply	24V DC +/- 10%
Consumption	10 W
Inrush current	1 A
Power ON LED	Yes
Battery	3V Lithium, CR1225FH
Mechanical data	
Size (B x H x T) [mm]	197 x 139 x 58
Panel cut (B x H) [mm]	184 x 126
Installation	panel mount
Net weight	650 g
Environmental data	
Operating temperature	0° to 50° C
Storage temperature	-20° to 50° C
Humidity	10% to 90%
Condensation	not permitted
Protection class front	IP 65

Fiessler Elektronik HMI 605, 5,7"

The coloured touch screen display FE-HMI 601 is the ideal unit for the development of medium HMI concepts. With a size of 5,7" the display offers a lot of opportunities to create ergonomical and good-looking windows.

Main features:

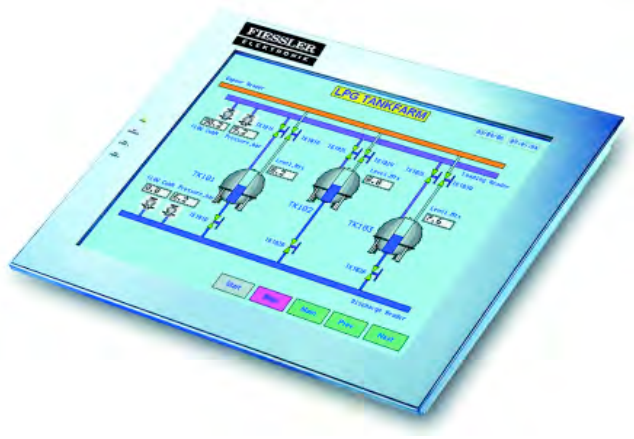
- **o 256 colour display**
- **o large memory**
- **o integrated keypad objects for data entry**
- **o industrial touch screen**
- **o real time and historical alarms management**

Technical Data FE-HMI 605, 5,7"

Display	
Resolution	320 x 240 pixel
Objects	pixel graphics
Display type	STN Colour
Color	256 Colour
Contrast control	potentiometer
MTBF Backlit	50.000 hours
Character dots (W x H)	5x7; 7x14; 10x14; 20x28
Dot size (WxH) [mm]	0,34 x 0,34
Windows fonts	Yes
Operator input	
Data entry	Touch Screen
Function keys	projectable
Numeric entry buttons	Keypad objects integr.
Memory	
Total memory	4 MB
Application	max. 3 MB
Data logging	max. 2 MB
Data back up	512 kB SRAM
Ladder memory	max. 128 kB
CF card capacity	not available
Interface ports	
Serial ports, 9 Pin Dtype	2
Ethernet	on request
USB	not available

Function overview	
Ladder programming	Yes
Bar graph	Yes
"Real" Time Alarms	256
"Historical" Alarms	2000
Unicode supported	Yes
Graphical objects	Yes
Printer port (serial)	Yes
Screen saver	Yes
Electrical data	
Power supply	24V DC +/- 10%
Consumption	10 W
Inrush current	1 A
Power ON LED	Yes
Battery	3V Lithium, CR1225FH
Mechanical data	
Size (B x H x T) [mm]	197 x 139 x 58
Panel cut (B x H) [mm]	184 x 126
Installation	panel mount
Net weight	650 g
Environmental data	
Operating temperature	0° to 50° C
Storage temperature	-20° to 50° C
Humidity	10% to 90%
Condensation	not permitted
Protection class front	IP 65

Fiessler Elektronik HMI 1205, 12,1"



The "high-end" display FE-HMI 1205 offers the user high flexibility, no limits in memory management and is easy to program. The good ratio between benefit and price provides an optimal support of the HMI concepts.

Main features:

- **o 32 MB basic memory, expandable**
- **o 12,1" display size**
- **o a lot of predefined objects**
- **o real time and historical alarms management**
- **o industrial touch screen**

Technical data FE-HMI-1205, 12,1"

Display	
Resolution	800 x 600 pixel
Objects	pixel graphics
Display type	TFT colour
Color	256 colour
Contrast control	potentiometer
MTBF Backlit	50.000 Stunden
Character dots (W x H)	5x7; 7x14; 10x14; 20x28
Dot size (WxH) [mm]	0,34 x 0,34
Windows fonts	Yes
Operator input	
Data entry	Touch Screen
Function keys	projectable
Numeric entry buttons	Keypad objects integr.
Memory	
Total memory	32 MB
Application	max. 25 MB
Data logging	max. 25 MB
Data back up	512 kB SRAM
Ladder memory	2 MB
CF card capacity	256 MB on request
Interface ports	
Serial ports, 9 Pin Dtype	2
Ethernet	on request
USB	not available

Function overview	
Ladder programming	Yes
Bar graph	Yes
"Real" Time Alarms	256
"Historical" Alarms	2000
Unicode supported	Yes
Graphical objects	Yes
Printer port (serial)	Yes
Screen saver	Yes
Electrical data	
Power supply	24V DC +/- 10%
Consumption	20 W
Inrush current	1 A
Power ON LED	Yes
Battery	3V Lithium, CR1225FH
Mechanical data	
Size (B x H x T) [mm]	312 x 246 x 47
Panel cut (B x H) [mm]	295 x 227
Installation	panel mount
Net weight	2,8 kg
Environmental data	
Operating temperature	0° to 50° C
Storage temperature	-20° to 50° C
Humidity	10% to 90%
Condensation	not permitted
Protection class front	IP 65

Order identifier for Fiessler HMI units and accessories

HMI units	
Alpha numerical text display, 2 lines of 16 characters each	FE-HMI-201-S
Touch Screen display, 4,1", monochrome	FE-HMI-401-S
Touch Screen display, 5,7", monochrome	FE-HMI-601-S
Touch Screen display, 5,7", 256 colours	FE-HMI-605-S
Touch Screen display, 12,1", 256 colours	FE-HMI-1205-S

Software	
Programming software for all Fiessler Elektronik HMI units	FE-HMI-Studio

Accessories	
RS 232 programming cable. Connection of HMI display and PC	FE-HMI-Cable
Additional operating manual on CD, english	FE-HMI-Manual-GB