



| HMI

System description HMI

Structure and Concept

The VIPA professional Touch Panels with 4,3" to 12,1" TFT display, the Windows Embedded CE 6.0 operating system, and the Movicon 11 visualization system can be used universally.

The VIPA eco Panels in four different display sizes from 4,3" to 15" are characterized by absolute reliability and flexibility and also special longevity and quality because of the special construction.

The VIPA panel PCs in the display sizes 15,6" und 21,5" are a combination of industrial PC with the most modern features and a Touch Panel with optimum display possibilities. The latest Intel Atom Processor technology combined with Windows Embedded Compact 7 or Standard 7 operating systems correspond to state of the art in the PC world.

The VIPA Commander Compact CC 03 with double spaced display and integrated PLC CPU is the ideal device for smaller controlling and operating tasks.

The VIPA Operator Panel OP 03 and the Text Display TD 03 are universal operating units for deployment with VIPA systems and other control systems with MPI interface.



Performance and deployment

VIPA operating and monitoring devices are universal in the manufacturing and process industry, but can also be used in building automation. The line displays and touch panels are designed both for watching and for active operation of machinery, plant and building.

Parameterization and programming

The Text Display TD 03 are parameterized with the free Tool TD Wizard *). The Operator Panel OP 03 and the Commander Compact CC 03 devices are configured with the OP Manager or alternatively with Siemens ProTool. The PLC CPUs, integrated in Commander Compact CC 03, are programmed in addition via VIPA WinPLC7 or Siemens STEP7. The basis for the Touch Panels is Windows Embedded CE operating system from Microsoft. Here the applications and visualizations offered by VIPA (also partially their own) are ported. VIPA Touch Panels are shipped with pre-installed operating system and Movicon. The project, created with the appropriate editor on the PC, is transferred via data cable or memory card from the PC to the Touch Panel.

Memory

The Text Display TD 03 has no built-in memory. The messages, generated with TD-Wizard, are stored in the CPU. The Operator Panel OP 03 make 256 kByte and the Commander Compact CC 03 devices 128 kByte work memory available for projects. Incorporated in the Commander Compact CC 03 devices is an additional 16/24/32 kByte work memory for the PLC program. The touch panels offer up to 2048 MB of user memory (depending on the model). External expansion of the memory can easily be achieved by inserting a CF or MMC-/SD-Card.

Functions

Depending on the device type different and very versatile functions are realizable. The Text Display TD 03 is provided primarily for the simple presentation and the acknowledgement of messages. With the Operator Panels OP 03 advanced operating and monitoring tasks are already being realized with their own projects deposited in OP 03. Touch panels have multi-functional use. Depending on the application projects with up to several thousand variables will be realized on the PC. Thereby CPUs, higher-level systems and other devices are connected for the purpose of data collection, data sharing, visualization and operation.

Communication

The exchange of data with the CPUs occurs at TD 03 and OP 03 via MPI. The Commander Compact CC 03 devices combine display and operating elements as well as PLC CPU with I/O peripherals in one casing. They can thus be used completely self-contained.

*) Downloadable on the tool Demo-CD SW900T0LA or under <http://www.vipa.com/en/service-support/downloads/software/>.

Lines displays



Structure and Function

Line displays are used for the operation and monitoring of process parameters in machinery, plant and buildings.

TD 03 – Text Display

The compact VIPA Text Display TD 03 shows via a backlit LCD display defined message texts. Inputs and outputs, and process parameters can be set through the membrane keys and changed. The configuration of the messages and the parameter block is performed using the TD-Wizard from VIPA. The menu can be selected in English and German. The text display is designed for use in combination with VIPA CPUs 11x, 21x, 31x, 51x and the S7-300/400 CPUs designed by Siemens.

OP 03 – Operator Panel

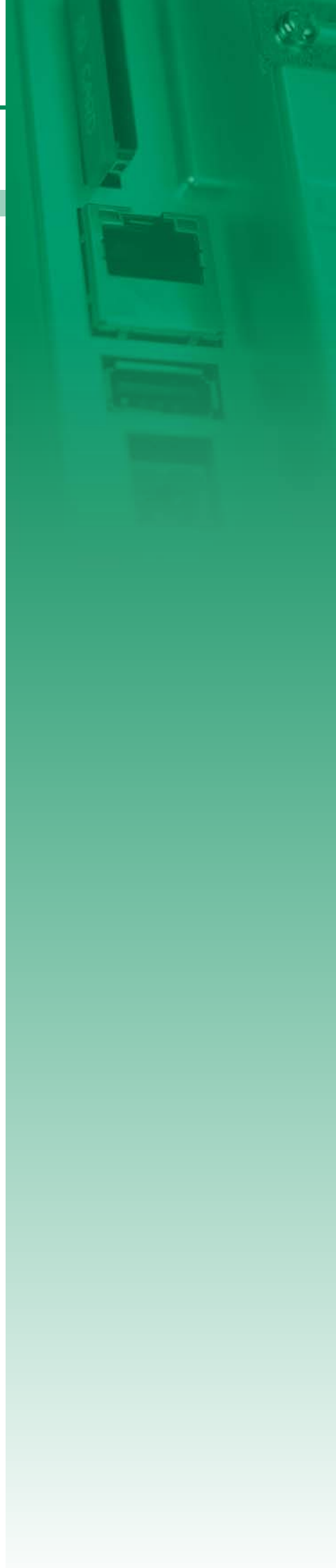
The VIPA Operator Panel OP 03 is particularly suitable for operating and monitoring of small applications in conjunction with VIPA CPUs 11x, 21x, 31x, 51x and Siemens S7-300/400 CPUs. Up to seven OPs can be connected to a CPU and up to 2 CPUs to an OP 03 via the MPI interface. For managing and processing operating notifications and data, 256 kByte user memory is available. Project planning is carried out with VIPA OP-Manager or Siemens ProTool.

CC 03 – Commander Compact

In the VIPA Commander Compact CC 03 a PLC CPU, programmable with Siemens STEP7, is integrated. Besides the 128 kByte user memory, the CPU has 16/24/32 kByte program and 24/32/40 kByte load memory (depending on version). In addition, 16 digital inputs and outputs each are integrated. The CC 03 is expandable with up to four 100V or 200V modules (160 digital inputs/outputs, or up to 32 analog inputs/outputs respectively are supported).

Characteristics

- Backlit LC-Display
- Parameterization capable function keys
- MPI-interface
- Multilingual Language Support
- Operation and project planning friendly
- LED-status indicator (CC 03)
- Compact design



Overview

Order no.	Name/Description	Page
Text displays and operator panels		
603-1TD00	TD 03 - Text Display - Display: 2 x 20 characters - Interface: MP2I - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Visualization of the connected CPU via MPI	574
603-1OP00	OP 03 - Operator Panel - Display: 2 x 20 characters - Interface: MP2I - User memory: 256 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool	574
603-1OP10	OP 03 - Operator Panel - Display: 2 x 20 characters - Interface: MP2I - User memory: 256 kB - Languages: DE (without Umlaut), EN, RU - Project engineering only via VIPA OP-Manager	574
Commander compact		
603-1CC21	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 16/24kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	577
603-1CC22	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 24/32kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	577
603-1CC23	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 32/40kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	577
603-2CC21	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 16/24kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	577
603-2CC22	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 24/32kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	585
603-2CC23	CC 03 - Commander Compact - Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 32/40kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	585

Text displays and operator panels

Lines displays Text displays and operator panels						
603-1TD00						
603-1OP00						
603-1OP10						

Order number	603-1TD00	603-1OP00	603-1OP10	
Figure				
Type	TD 03, Text Display	OP 03, Operator Panel	OP 03, Operator Panel, en, ru	
General information				
Note	-	-	-	
Features	- Display: 2 x 20 characters - Interface: MP2I - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Visualization of the connected CPU via MPI	- Display: 2 x 20 characters - Interface: MP2I - User memory: 256 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool	- Display: 2 x 20 characters - Interface: MP2I - User memory: 256 kB - Languages: DE (without Umlaut), EN, RU - Project engineering only via VIPA OP-Manager	
Display				
Number of rows	2	2	2	
Characters per row	20	20	20	
Character height	5 mm	5 mm	5 mm	
Type of display	STN with LED back-lighting	STN with LED back-lighting	STN with LED back-lighting	
OP functionality				
User memory	-	256	256	
Number of variables	-	4096	4096	
Language	DE/EN/FR/ES/IT/SV/NO/DA	DE/EN/FR/ES/IT/SV/NO/DA	DE (w/o umlauts)/EN/RU	
Operating controls				
Touchscreen	-	-	-	
Keyboard	Membran keyboard	Membran keyboard	Membran keyboard	
Mouse	-	-	-	
Number of system keys	5	8	8	
Number of soft keys	4	5	5	
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	
Reverse polarity protection	✓	✓	✓	
Current consumption (no-load operation)	80 mA	80 mA	80 mA	
Current consumption (rated value)	500 mA	500 mA	500 mA	
Inrush current	16 A	55 A	55 A	
I _{ft}	0.11 A²s	0.34 A²s	0.34 A²s	

Lines displays | Text displays and operator panels

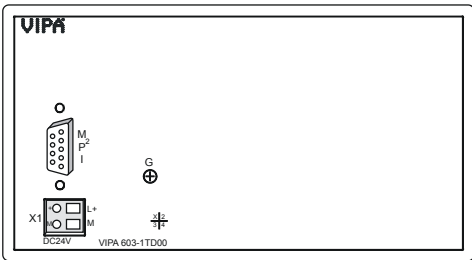
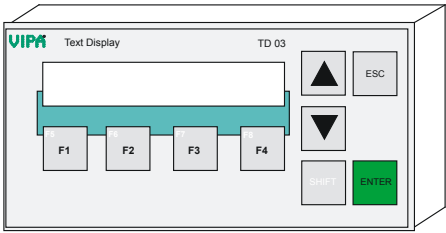
603-1TD00
603-1OP00
603-1OP10

Order number	603-1TD00	603-1OP00	603-1OP10	
Time				
Real-time clock	-	✓	✓	
Clock buffered period (min.)	-	-	-	
Accuracy (max. deviation per day)	-	-	-	
Functionality Sub-D interfaces				
Type	MP2I	MP2I	MP2I	
Type of interface	RS485	RS485	RS485	
Connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	
Electrically isolated	-	-	-	
MPI	✓	✓	✓	
MP2I (MPI/RS232)	✓	✓	✓	
Point-to-point interface	-	-	-	
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum	die-cast aluminum	
Mounting	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever	
Protect type front side	IP 65	IP 65	IP 65	
Protect type back side	IP 20	IP 20	IP 20	
Dimensions				
Front panel	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm	
Rear panel	154 mm x 77 mm x 44 mm	154 mm x 77 mm x 55 mm	154 mm x 77 mm x 55 mm	
Installation cut-out				
Width	156 mm	156 mm	156 mm	
Height	78 mm	78 mm	78 mm	
Minimum	2.5 mm	2.5 mm	2.5 mm	
Maximum front panel thickness	6 mm	6 mm	6 mm	
Weight	610 g	600 g	600 g	
Environmental conditions				
Operating temperature	0 °C to 60 °C	0 °C to 60 °C	0 °C to 60 °C	
Storage temperature	-20 °C to 70 °C	-20 °C to 70 °C	-20 °C to 70 °C	
Certifications				
UL508 certification	yes	yes	-	

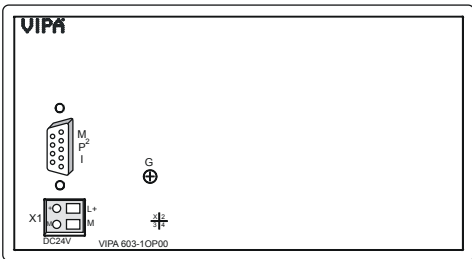
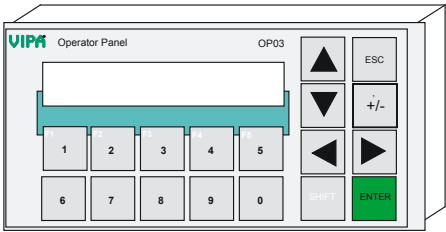
Connections, Interfaces

Lines displays Text displays and operator panels						
603-1TD00						
603-1OP00						
603-1OP10						

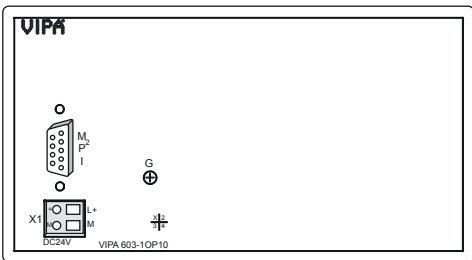
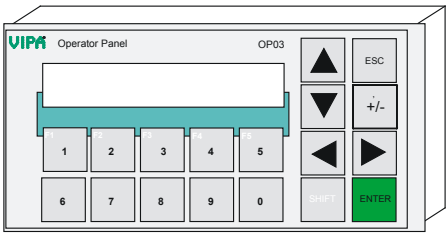
603-1TD00



603-1OP00



603-1OP10



Commander compact

Lines displays | Commander compact

603-1CC21	603-2CC22
603-1CC22	603-2CC23
603-1CC23	
603-2CC21	

Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Figure				
Type	CC 03, Commander Compact	CC 03, Commander Compact	CC 03, Commander Compact	CC 03DP, Commander Compact, PROFIBUS-DP slave
General information				
Note	-	-	-	-
Features	- Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 16/24kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	- Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 24/32kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	- Display: 2 x 20 characters - Interface: MP2I - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 32/40kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	- Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 16/24kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules
Display				
Number of rows	2	2	2	2
Characters per row	20	20	20	20
Character height	5 mm	5 mm	5 mm	5 mm
Type of display	STN with LED back-lighting	STN with LED back-lighting	STN with LED back-lighting	STN with LED back-lighting
OP functionality				
User memory	128 KB	128 KB	128 KB	128 KB
Number of variables	4096	4096	4096	4096
Language	DE/EN/FR/ES/IT/SV/NO/DA	DE/EN/FR/ES/IT/SV/NO/DA	DE/EN/FR/ES/IT/SV/NO/DA	DE/EN/FR/ES/IT/SV/NO/DA
Operating controls				
Touchscreen	-	-	-	-
Mouse	-	-	-	-
Number of system keys	8	8	8	8
Number of soft keys	5	5	5	5
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	130 mA	130 mA	130 mA	150 mA
Current consumption (rated value)	1 A	1 A	1 A	1 A
Inrush current	60 A	60 A	60 A	60 A
I _{Δt}	0.35 A²s	0.35 A²s	0.35 A²s	0.35 A²s
Max. current drain at backplane bus	0.8 A	0.8 A	0.8 A	0.8 A
Power loss	8 W	8 W	8 W	8 W

Lines displays Commander compact						
603-1CC21 603-1CC22 603-1CC23 603-2CC21	603-2CC22 603-2CC23					

Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Reverse polarity protection	✓	✓	✓	✓
Technical data digital inputs				
Number of inputs	16	16	16	16
Cable length, shielded	1000 m	1000 m	1000 m	1000 m
Cable length, unshielded	600 m	600 m	600 m	600 m
Rated load voltage	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Reverse polarity protection of rated load voltage	✓	✓	✓	✓
Current consumption from load voltage L+ (without load)	-	-	-	-
Rated value	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Input voltage for signal "0"	DC 0...5 V	DC 0...5 V	DC 0...5 V	DC 0...5 V
Input voltage for signal "1"	DC 15...28.8 V	DC 15...28.8 V	DC 15...28.8 V	DC 15...28.8 V
Input current for signal "1"	7 mA	7 mA	7 mA	7 mA
Connection of Two-Wire-BEROs possible	✓	✓	✓	✓
Max. permissible BERO quiescent current	1.5 mA	1.5 mA	1.5 mA	1.5 mA
Input delay of "0" to "1"	3 ms	3 ms	3 ms	3 ms
Input delay of "1" to "0"	3 ms	3 ms	3 ms	3 ms
Input characteristic curve	IEC 61131-2, type 1	IEC 61131-2, type 1	IEC 61131-2, type 1	IEC 61131-2, type 1
Initial data size	2 Byte	2 Byte	2 Byte	2 Byte
Technical data digital outputs				
Number of outputs	16	16	16	16
Cable length, shielded	1000 m	1000 m	1000 m	1000 m
Cable length, unshielded	600 m	600 m	600 m	600 m
Rated load voltage	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Reverse polarity protection of rated load voltage	-	-	-	-
Current consumption from load voltage L+ (without load)	50 mA	50 mA	50 mA	50 mA
Total current per group, horizontal configuration, 40°C	4 A	4 A	4 A	4 A
Total current per group, horizontal configuration, 60°C	4 A	4 A	4 A	4 A
Total current per group, vertical configuration	4 A	4 A	4 A	4 A
Output voltage signal "1" at min. current	L+ (-125 mV)	L+ (-125 mV)	L+ (-125 mV)	L+ (-125 mV)
Output voltage signal "1" at max. current	L+ (-0.8 V)	L+ (-0.8 V)	L+ (-0.8 V)	L+ (-0.8 V)
Output current at signal "1", rated value	0.5 A	0.5 A	0.5 A	0.5 A
Output delay of "0" to "1"	max. 100 µs	max. 100 µs	max. 100 µs	max. 100 µs
Output delay of "1" to "0"	max. 350 µs	max. 350 µs	max. 350 µs	max. 350 µs
Minimum load current	-	-	-	-
Lamp load	5 W	5 W	5 W	5 W
Switching frequency with resistive load	max. 1000 Hz	max. 1000 Hz	max. 1000 Hz	max. 1000 Hz
Switching frequency with inductive load	max. 0.5 Hz	max. 0.5 Hz	max. 0.5 Hz	max. 0.5 Hz
Switching frequency on lamp load	max. 10 Hz	max. 10 Hz	max. 10 Hz	max. 10 Hz
Internal limitation of inductive shut-off voltage	L+ (-52 V)	L+ (-52 V)	L+ (-52 V)	L+ (-52 V)

Lines displays | Commander compact

603-1CC21
603-1CC22
603-1CC23
603-2CC21

603-2CC22
603-2CC23

Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Short-circuit protection of output	yes, electronic	yes, electronic	yes, electronic	yes, electronic
Trigger level	1 A	1 A	1 A	1 A
Output data size	2 Byte	2 Byte	2 Byte	2 Byte
Technical data counters				
Number of counters	-	-	-	-
Counter width	-	-	-	-
Maximum input frequency	-	-	-	-
Maximum count frequency	-	-	-	-
Mode incremental encoder	-	-	-	-
Mode pulse / direction	-	-	-	-
Mode pulse	-	-	-	-
Mode frequency counter	-	-	-	-
Mode period measurement	-	-	-	-
Gate input available	-	-	-	-
Latch input available	-	-	-	-
Reset input available	-	-	-	-
Counter output available	-	-	-	-
Status information, alarms, diagnostics				
Status display	yes	yes	yes	yes
Interrupts	no	no	no	no
Process alarm	yes	yes	yes	yes
Diagnostic interrupt	yes	yes	yes	yes
Diagnostic functions	no	no	no	no
Diagnostics information read-out	possible	possible	possible	possible
Supply voltage display	green LED	green LED	green LED	green LED
Group error display	red SF LED	red SF LED	red SF LED	red SF LED
Channel error display	red LED per group	red LED per group	red LED per group	red LED per group
Isolation				
Between channels of groups to	8	8	8	8
Between channels and backplane bus	✓	✓	✓	✓
Insulation tested with	DC 500 V	DC 500 V	DC 500 V	DC 500 V
Load and working memory				
Load memory, integrated	24 KB	32 KB	40 KB	24 KB
Load memory, maximum	24 KB	32 KB	40 KB	24 KB
Work memory, integrated	16 KB	24 KB	32 KB	16 KB
Work memory, maximal	16 KB	24 KB	32 KB	16 KB
Memory divided in 50% program / 50% data	-	-	-	-
Memory card slot	MMC-Card with max. 512 MB	MMC-Card with max. 512 MB	MMC-Card with max. 512 MB	MMC-Card with max. 512 MB
Hardware configuration				
Racks, max.	1	1	1	1
Modules per rack, max.	4	4	4	4
Number of integrated DP master	0	0	0	0
Number of DP master via CP	4	4	4	4
Operable function modules	4	4	4	4

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Operable communication modules PtP	4	4	4	4
Operable communication modules LAN	-	-	-	-
Command processing times				
Bit instructions, min.	0.25 µs	0.25 µs	0.25 µs	0.25 µs
Word instruction, min.	1.2 µs	1.2 µs	1.2 µs	1.2 µs
Double integer arithmetic, min.	2.6 µs	2.6 µs	2.6 µs	2.6 µs
Floating-point arithmetic, min.	50 µs	50 µs	50 µs	50 µs
Timers/Counters and their retentive characteristics				
Number of S7 counters	256	256	256	256
S7 counter remanence	adjustable 0 up to 64	adjustable 0 up to 64	adjustable 0 up to 64	adjustable 0 up to 64
S7 counter remanence adjustable	C0 .. C7	C0 .. C7	C0 .. C7	C0 .. C7
Number of S7 times	256	256	256	256
S7 times remanence	adjustable 0 up to 128	adjustable 0 up to 128	adjustable 0 up to 128	adjustable 0 up to 128
S7 times remanence adjustable	not retentive	not retentive	not retentive	not retentive
Data range and retentive characteristic				
Number of flags	8192 Bit	8192 Bit	8192 Bit	8192 Bit
Bit memories retentive characteristic adjustable	adjustable 0 up to 256	adjustable 0 up to 256	adjustable 0 up to 256	adjustable 0 up to 256
Bit memories retentive characteristic preset	MB0 .. MB15	MB0 .. MB15	MB0 .. MB15	MB0 .. MB15
Number of data blocks	2047	2047	2047	2047
Max. data blocks size	16 KB	16 KB	16 KB	16 KB
Number range DBs	1 ... 2047	1 ... 2047	1 ... 2047	1 ... 2047
Max. local data size per execution level	1024 Byte	1024 Byte	1024 Byte	1024 Byte
Max. local data size per block	1024 Byte	1024 Byte	1024 Byte	1024 Byte
Blocks				
Number of OBs	14	14	14	14
Maximum OB size	16 KB	16 KB	16 KB	16 KB
Totalnumber DBs, FBs, FCs	-	-	-	-
Number of FBs	1024	1024	1024	1024
Maximum FB size	16 KB	16 KB	16 KB	16 KB
Number range FBs	0 ... 1023	0 ... 1023	0 ... 1023	0 ... 1023
Number of FCs	1024	1024	1024	1024
Maximum FC size	16 KB	16 KB	16 KB	16 KB
Number range FC2	0 ... 1023	0 ... 1023	0 ... 1023	0 ... 1023
Maximum nesting depth per priority class	8	8	8	8
Maximum nesting depth additional within an error OB	4	4	4	4
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	30 d	30 d	30 d	30 d
Type of buffering	-	-	-	-
Load time for 50% buffering period	20 h	20 h	20 h	20 h
Load time for 100% buffering period	48 h	48 h	48 h	48 h
Accuracy (max. deviation per day)	10 s	10 s	10 s	10 s
Number of operating hours counter	8	8	8	8

Lines displays | Commander compact

603-1CC21 603-1CC22 603-1CC23 603-2CC21	603-2CC22 603-2CC23					
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Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Clock synchronization	-	-	-	-
Synchronization via MPI	no	no	no	no
Synchronization via Ethernet (NTP)	no	no	no	no
Address areas (I/O)				
Input I/O address area	1024 Bit	1024 Bit	1024 Bit	1024 Bit
Output I/O address area	1024 Bit	1024 Bit	1024 Bit	1024 Bit
Process image adjustable	-	-	-	-
Input process image preset	128 Byte	128 Byte	128 Byte	128 Byte
Output process image preset	128 Byte	128 Byte	128 Byte	128 Byte
Input process image maximal	128 Byte	128 Byte	128 Byte	128 Byte
Output process image maximal	128 Byte	128 Byte	128 Byte	128 Byte
Digital inputs	8192	8192	8192	8192
Digital outputs	8192	8192	8192	8192
Digital inputs central	144	144	144	144
Digital outputs central	144	144	144	144
Integrated digital inputs	16	16	16	16
Integrated digital outputs	16	16	16	16
Analog inputs	512	512	512	512
Analog outputs	512	512	512	512
Analog inputs, central	32	32	32	32
Analog outputs, central	16	16	16	16
Integrated analog inputs	-	-	-	-
Integrated analog outputs	-	-	-	-
Communication functions				
PG/OP channel	✓	✓	✓	✓
Global data communication	✓	✓	✓	✓
Number of GD circuits, max.	4	4	4	4
Size of GD packets, max.	22 Byte	22 Byte	22 Byte	22 Byte
S7 basic communication	✓	✓	✓	✓
S7 basic communication, user data per job	76 Byte	76 Byte	76 Byte	76 Byte
S7 communication	✓	✓	✓	✓
S7 communication as server	✓	✓	✓	✓
S7 communication as client	-	-	-	-
S7 communication, user data per job	160 Byte	160 Byte	160 Byte	160 Byte
Number of connections, max.	16	16	16	16
Functionality Sub-D interfaces				
Type	MP2I	MP2I	MP2I	MP2I
Type of interface	RS485	RS485	RS485	RS485
Connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female
Electrically isolated	-	-	-	-
MPI	✓	✓	✓	✓
MP2I (MPI/RS232)	✓	✓	✓	✓
DP master	-	-	-	-
DP slave	-	-	-	-
Point-to-point interface	-	-	-	-

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Type	-	-	-	DP
Type of interface	-	-	-	RS485
Connector	-	-	-	Sub-D, 9-pin, female
Electrically isolated	-	-	-	✓
MPI	-	-	-	-
MP ² I (MPI/RS232)	-	-	-	-
DP master	-	-	-	-
DP slave	-	-	-	yes
Point-to-point interface	-	-	-	-
Functionality MPI				
Number of connections, max.	16	16	16	16
PG/OP channel	✓	✓	✓	✓
Routing	-	-	-	-
Global data communication	✓	✓	✓	✓
S7 basic communication	✓	✓	✓	✓
S7 communication	✓	✓	✓	✓
S7 communication as server	✓	✓	✓	✓
S7 communication as client	-	-	-	-
Transmission speed, min.	19.2 kbit/s	19.2 kbit/s	19.2 kbit/s	19.2 kbit/s
Transmission speed, max.	187.5 kbit/s	187.5 kbit/s	187.5 kbit/s	187.5 kbit/s
Functionality PROFIBUS slave				
PG/OP channel	-	-	-	-
Routing	-	-	-	-
S7 communication	-	-	-	-
S7 communication as server	-	-	-	-
S7 communication as client	-	-	-	-
Direct data exchange (slave-to-slave communication)	-	-	-	-
DPV1	-	-	-	-
Transmission speed, min.	-	-	-	9.6 kbit/s
Transmission speed, max.	-	-	-	12 Mbit/s
Automatic detection of transmission speed	-	-	-	✓
Transfer memory inputs, max.	-	-	-	64 Byte
Transfer memory outputs, max.	-	-	-	64 Byte
Address areas, max.	-	-	-	-
User data per address area, max.	-	-	-	-
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum	die-cast aluminum	die-cast aluminum
Mounting	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20

Lines displays | Commander compact

603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

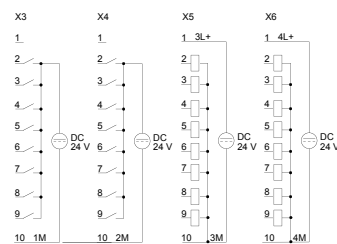
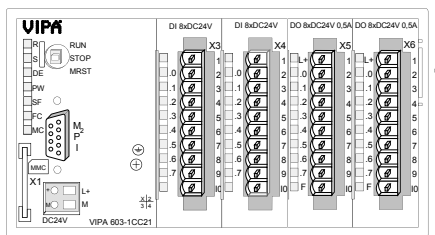
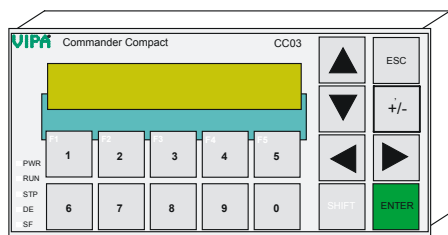
Order number	603-1CC21	603-1CC22	603-1CC23	603-2CC21
Dimensions				
Front panel	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm
Rear panel	154 mm x 77 mm x 55 mm	154 mm x 77 mm x 55 mm	154 mm x 77 mm x 55 mm	154 mm x 77 mm x 55 mm
Installation cut-out				
Width	156 mm	156 mm	156 mm	156 mm
Height	78 mm	78 mm	78 mm	78 mm
Minimum	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Maximum front panel thickness	6 mm	6 mm	6 mm	6 mm
Weight	580 g	580 g	580 g	600 g
Environmental conditions				
Operating temperature	0 °C to 60 °C	0 °C to 60 °C	0 °C to 60 °C	0 °C to 60 °C
Storage temperature	-20 °C to 70 °C	-20 °C to 70 °C	-20 °C to 70 °C	-20 °C to 70 °C
Certifications				
UL508 certification	yes	yes	yes	yes

Connections, Interfaces

Lines displays | Commander compact

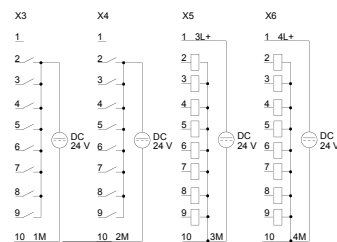
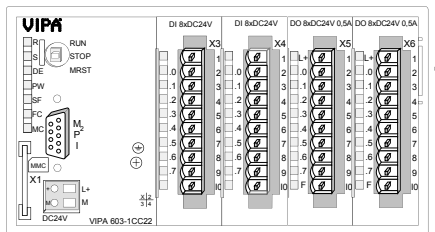
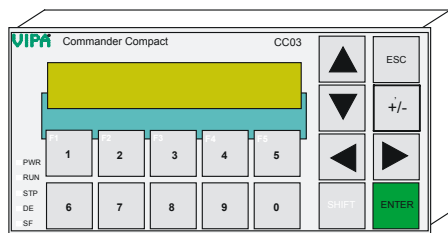
603-1CC21	603-2CC22
603-1CC22	603-2CC23
603-1CC23	
603-2CC21	

603-1CC21



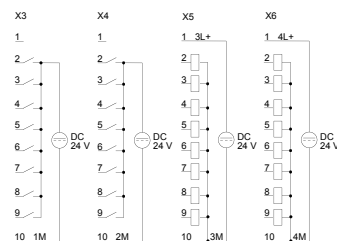
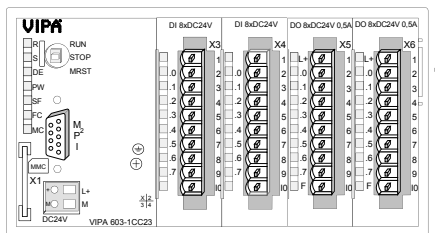
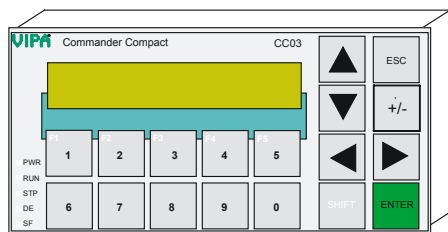
① 9-pin SubD connector, female (System bus extension)

603-1CC22



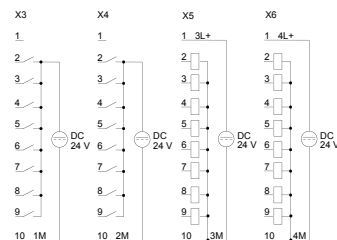
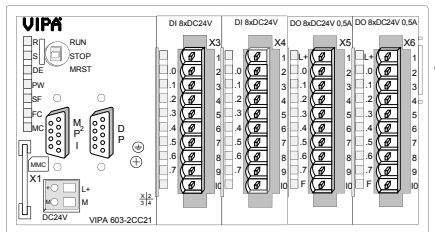
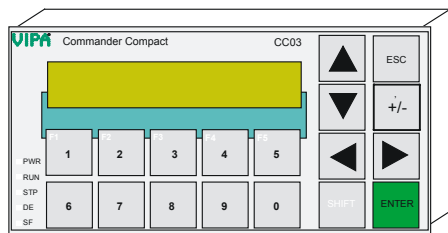
① 9-pin SubD connector, female (System bus extension)

603-1CC23



① 9-pin SubD connector, female (System bus extension)

603-2CC21



① 9-pin SubD connector, female (System bus extension)

Commander compact

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-2CC22	603-2CC23		
Figure				
Type	CC 03DP, Commander Compact, PROFIBUS-DP slave	CC 03DP, Commander Compact, PROFIBUS-DP slave		
General information				
Note	-	-		
Features	- Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 24/32kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules	- Display: 2 x 20 characters - Interface: MP2I, PROFIBUS-DP slave - User memory: 128 kB - Languages: DE, EN, FR, ES, IT, SV, NO, DA - Project engineering via VIPA OP-Manager or Siemens ProTool - Integrated PLC-CPU: 32/40kByte work/load memory, 16 x DI, 16 x DO, up to 4 I/O expansion modules		
Display				
Number of rows	2	2		
Characters per row	20	20		
Character height	5 mm	5 mm		
Type of display	STN with LED back-lighting	STN with LED back-lighting		
OP functionality				
User memory	128 KB	128 KB		
Number of variables	4096	4096		
Language	DE/EN/FR/ES/IT/SV/NO/DA	DE/EN/FR/ES/IT/SV/NO/DA		
Operating controls				
Touchscreen	-	-		
Mouse	-	-		
Number of system keys	8	8		
Number of soft keys	5	5		
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V		
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V		
Reverse polarity protection	✓	✓		
Current consumption (no-load operation)	150 mA	150 mA		
Current consumption (rated value)	1 A	1 A		
Inrush current	60 A	60 A		
I _{Δt}	0.35 A²s	0.35 A²s		
Max. current drain at backplane bus	0.8 A	0.8 A		
Power loss	8 W	8 W		

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-2CC22	603-2CC23		
Reverse polarity protection	✓	✓		
Technical data digital inputs				
Number of inputs	16	16		
Cable length, shielded	1000 m	1000 m		
Cable length, unshielded	600 m	600 m		
Rated load voltage	DC 24 V	DC 24 V		
Reverse polarity protection of rated load voltage	✓	✓		
Current consumption from load voltage L+ (without load)	-	-		
Rated value	DC 24 V	DC 24 V		
Input voltage for signal "0"	DC 0...5 V	DC 0...5 V		
Input voltage for signal "1"	DC 15...28.8 V	DC 15...28.8 V		
Input current for signal "1"	7 mA	7 mA		
Connection of Two-Wire-BEROs possible	✓	✓		
Max. permissible BERO quiescent current	1.5 mA	1.5 mA		
Input delay of "0" to "1"	3 ms	3 ms		
Input delay of "1" to "0"	3 ms	3 ms		
Input characteristic curve	IEC 61131-2, type 1	IEC 61131-2, type 1		
Initial data size	2 Byte	2 Byte		
Technical data digital outputs				
Number of outputs	16	16		
Cable length, shielded	1000 m	1000 m		
Cable length, unshielded	600 m	600 m		
Rated load voltage	DC 24 V	DC 24 V		
Reverse polarity protection of rated load voltage	-	-		
Current consumption from load voltage L+ (without load)	50 mA	50 mA		
Total current per group, horizontal configuration, 40°C	4 A	4 A		
Total current per group, horizontal configuration, 60°C	4 A	4 A		
Total current per group, vertical configuration	4 A	4 A		
Output voltage signal "1" at min. current	L+ (-125 mV)	L+ (-125 mV)		
Output voltage signal "1" at max. current	L+ (-0.8 V)	L+ (-0.8 V)		
Output current at signal "1", rated value	0.5 A	0.5 A		
Output delay of "0" to "1"	max. 100 µs	max. 100 µs		
Output delay of "1" to "0"	max. 350 µs	max. 350 µs		
Minimum load current	-	-		
Lamp load	5 W	5 W		
Switching frequency with resistive load	max. 1000 Hz	max. 1000 Hz		
Switching frequency with inductive load	max. 0.5 Hz	max. 0.5 Hz		
Switching frequency on lamp load	max. 10 Hz	max. 10 Hz		
Internal limitation of inductive shut-off voltage	L+ (-52 V)	L+ (-52 V)		

Lines displays | Commander compact

603-1CC21
603-1CC22
603-1CC23
603-2CC21

603-2CC22
603-2CC23

Order number	603-2CC22	603-2CC23		
Short-circuit protection of output	yes, electronic	yes, electronic		
Trigger level	1 A	1 A		
Output data size	2 Byte	2 Byte		
Technical data counters				
Number of counters	-	-		
Counter width	-	-		
Maximum input frequency	-	-		
Maximum count frequency	-	-		
Mode incremental encoder	-	-		
Mode pulse / direction	-	-		
Mode pulse	-	-		
Mode frequency counter	-	-		
Mode period measurement	-	-		
Gate input available	-	-		
Latch input available	-	-		
Reset input available	-	-		
Counter output available	-	-		
Status information, alarms, diagnostics				
Status display	yes	yes		
Interrupts	no	no		
Process alarm	yes	yes		
Diagnostic interrupt	yes	yes		
Diagnostic functions	no	no		
Diagnostics information read-out	possible	possible		
Supply voltage display	green LED	green LED		
Group error display	red SF LED	red SF LED		
Channel error display	red LED per group	red LED per group		
Isolation				
Between channels of groups to	8	8		
Between channels and backplane bus	✓	✓		
Insulation tested with	DC 500 V	DC 500 V		
Load and working memory				
Load memory, integrated	32 KB	40 KB		
Load memory, maximum	32 KB	40 KB		
Work memory, integrated	24 KB	32 KB		
Work memory, maximal	24 KB	32 KB		
Memory divided in 50% program / 50% data	-	-		
Memory card slot	MMC-Card with max. 512 MB	MMC-Card with max. 512 MB		
Hardware configuration				
Racks, max.	1	1		
Modules per rack, max.	4	4		
Number of integrated DP master	0	0		
Number of DP master via CP	4	4		
Operable function modules	4	4		

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-2CC22	603-2CC23		
Operable communication modules PtP	4	4		
Operable communication modules LAN	-	-		
Command processing times				
Bit instructions, min.	0.25 µs	0.25 µs		
Word instruction, min.	1.2 µs	1.2 µs		
Double integer arithmetic, min.	2.6 µs	2.6 µs		
Floating-point arithmetic, min.	50 µs	50 µs		
Timers/Counters and their retentive characteristics				
Number of S7 counters	256	256		
S7 counter remanence	adjustable 0 up to 64	adjustable 0 up to 64		
S7 counter remanence adjustable	C0 .. C7	C0 .. C7		
Number of S7 times	256	256		
S7 times remanence	adjustable 0 up to 128	adjustable 0 up to 128		
S7 times remanence adjustable	not retentive	not retentive		
Data range and retentive characteristic				
Number of flags	8192 Bit	8192 Bit		
Bit memories retentive characteristic adjustable	adjustable 0 up to 256	adjustable 0 up to 256		
Bit memories retentive characteristic preset	MB0 .. MB15	MB0 .. MB15		
Number of data blocks	2047	2047		
Max. data blocks size	16 KB	16 KB		
Number range DBs	1 ... 2047	1 ... 2047		
Max. local data size per execution level	1024 Byte	1024 Byte		
Max. local data size per block	1024 Byte	1024 Byte		
Blocks				
Number of OBs	14	14		
Maximum OB size	16 KB	16 KB		
Totalnumber DBs, FBs, FCs	-	-		
Number of FBs	1024	1024		
Maximum FB size	16 KB	16 KB		
Number range FBs	0 ... 1023	0 ... 1023		
Number of FCs	1024	1024		
Maximum FC size	16 KB	16 KB		
Number range FC2	0 ... 1023	0 ... 1023		
Maximum nesting depth per priority class	8	8		
Maximum nesting depth additional within an error OB	4	4		
Time				
Real-time clock buffered	✓	✓		
Clock buffered period (min.)	30 d	30 d		
Type of buffering	-	-		
Load time for 50% buffering period	20 h	20 h		
Load time for 100% buffering period	48 h	48 h		
Accuracy (max. deviation per day)	10 s	10 s		
Number of operating hours counter	8	8		

Lines displays | Commander compact

603-1CC21 603-1CC22 603-1CC23 603-2CC21	603-2CC22 603-2CC23					
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Order number	603-2CC22	603-2CC23		
Clock synchronization	-	-		
Synchronization via MPI	no	no		
Synchronization via Ethernet (NTP)	no	no		
Address areas (I/O)				
Input I/O address area	1024 Bit	1024 Bit		
Output I/O address area	1024 Bit	1024 Bit		
Process image adjustable	-	-		
Input process image preset	128 Byte	128 Byte		
Output process image preset	128 Byte	128 Byte		
Input process image maximal	128 Byte	128 Byte		
Output process image maximal	128 Byte	128 Byte		
Digital inputs	8192	8192		
Digital outputs	8192	8192		
Digital inputs central	144	144		
Digital outputs central	144	144		
Integrated digital inputs	16	16		
Integrated digital outputs	16	16		
Analog inputs	512	512		
Analog outputs	512	512		
Analog inputs, central	32	32		
Analog outputs, central	16	16		
Integrated analog inputs	-	-		
Integrated analog outputs	-	-		
Communication functions				
PG/OP channel	✓	✓		
Global data communication	✓	✓		
Number of GD circuits, max.	4	4		
Size of GD packets, max.	22 Byte	22 Byte		
S7 basic communication	✓	✓		
S7 basic communication, user data per job	76 Byte	76 Byte		
S7 communication	✓	✓		
S7 communication as server	✓	✓		
S7 communication as client	-	-		
S7 communication, user data per job	160 Byte	160 Byte		
Number of connections, max.	16	16		
Functionality Sub-D interfaces				
Type	MP2I	MP2I		
Type of interface	RS485	RS485		
Connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female		
Electrically isolated	-	-		
MPI	✓	✓		
MP2I (MPI/RS232)	✓	✓		
DP master	-	-		
DP slave	-	-		
Point-to-point interface	-	-		

Lines displays Commander compact						
603-1CC21	603-2CC22					
603-1CC22	603-2CC23					
603-1CC23						
603-2CC21						

Order number	603-2CC22	603-2CC23		
Type	DP	DP		
Type of interface	RS485	RS485		
Connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female		
Electrically isolated	✓	✓		
MPI	-	-		
MP ² I (MPI/RS232)	-	-		
DP master	-	-		
DP slave	yes	yes		
Point-to-point interface	-	-		
Functionality MPI				
Number of connections, max.	16	16		
PG/OP channel	✓	✓		
Routing	-	-		
Global data communication	✓	✓		
S7 basic communication	✓	✓		
S7 communication	✓	✓		
S7 communication as server	✓	✓		
S7 communication as client	-	-		
Transmission speed, min.	19.2 kbit/s	19.2 kbit/s		
Transmission speed, max.	187.5 kbit/s	187.5 kbit/s		
Functionality PROFIBUS slave				
PG/OP channel	-	-		
Routing	-	-		
S7 communication	-	-		
S7 communication as server	-	-		
S7 communication as client	-	-		
Direct data exchange (slave-to-slave communication)	-	-		
DPV1	-	-		
Transmission speed, min.	9.6 kbit/s	9.6 kbit/s		
Transmission speed, max.	12 Mbit/s	12 Mbit/s		
Automatic detection of transmission speed	✓	✓		
Transfer memory inputs, max.	64 Byte	64 Byte		
Transfer memory outputs, max.	64 Byte	64 Byte		
Address areas, max.	-	-		
User data per address area, max.	-	-		

Lines displays | Commander compact

603-1CC21 603-1CC22 603-1CC23 603-2CC21	603-2CC22 603-2CC23					
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Order number	603-2CC22	603-2CC23		
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum		
Mounting	via integrated pivoted lever	via integrated pivoted lever		
Protect type front side	IP 65	IP 65		
Protect type back side	IP 20	IP 20		
Dimensions				
Front panel	187 mm x 90 mm x 6 mm	187 mm x 90 mm x 6 mm		
Rear panel	154 mm x 77 mm x 55 mm	154 mm x 77 mm x 55 mm		
Installation cut-out				
Width	156 mm	156 mm		
Height	78 mm	78 mm		
Minimum	2.5 mm	2.5 mm		
Maximum front panel thickness	6 mm	6 mm		
Weight	600 g	600 g		
Environmental conditions				
Operating temperature	0 °C to 60 °C	0 °C to 60 °C		
Storage temperature	-20 °C to 70 °C	-20 °C to 70 °C		
Certifications				
UL508 certification	yes	yes		

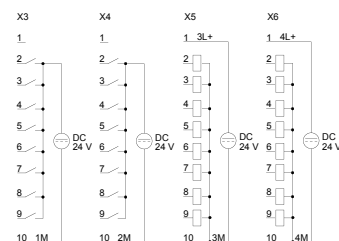
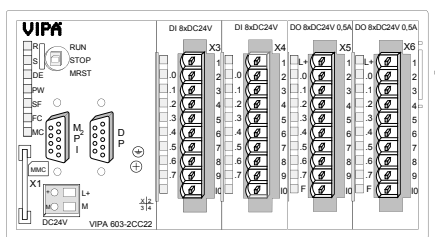
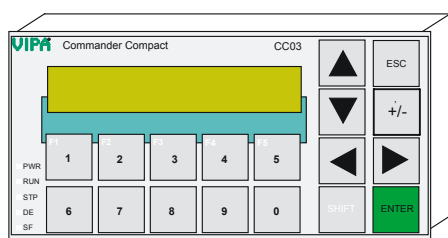
Connections, Interfaces

Lines displays | Commander compact

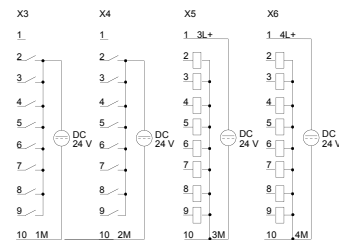
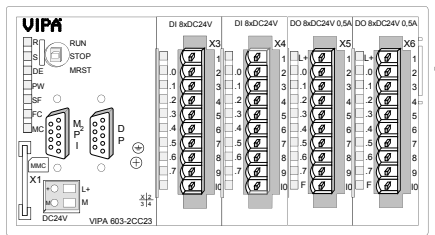
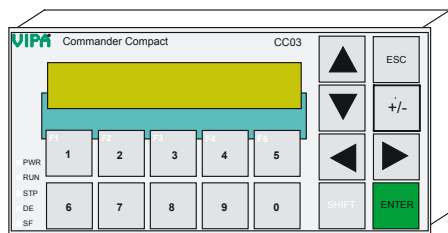
603-1CC21
603-1CC22
603-1CC23
603-2CC21

603-2CC22
603-2CC23

603-2CC22



603-2CC23





Appendix	593
Accessories	
Software	
Solutions	
Safety	
StarterKits	
Teleservice	
HMI	
500S	
300S	
200V	
100V	
SLIO	

professional Panels



Structure and Function

The VIPA Touch Panel family is suited for all applications in the factory, process and building automation. Due to the aluminum die-cast housing the VIPA Touch Panels are mechanically particularly robust. With the front-side IP65 protection, these devices also survive in harsh industrial environments.

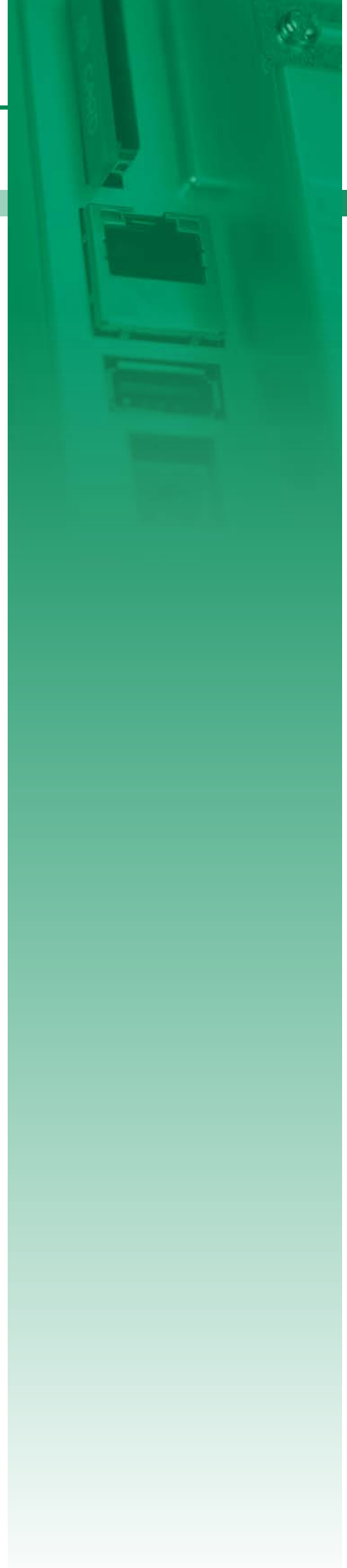
The portfolio ranges from 5.7" TFT up to 12.1" TFT color display. The compact design allows the use of VIPA Touch Panels also in confined spaces. The panels can be operated either horizontally or vertically.

Features:

- › Display size: 5.7" up to 12.1"
- › Type of display: TFT color
- › Processor: XScale 800 MHz
- › Interfaces: RS232, RS485, RS422, MPI, PROFIBUS-DP slave, Ethernet RJ45, USB-A, USB-B (depending on type of panel)
- › Memory: already integrated, also with SD, MMC and CF card expandable
- › Including VIPA PLCTOOL: (allows upload/download of programs from VIPA- and STEP7 based controls, reading of the diagnosis buffer, as well as start and stop of the connected CPUs without using a programming unit)
- › Including the operating system Windows Embedded CE 6.0 Professional and the visualization system Movicon

Visualization system Movicon:

- › Editor for vector graphics with powerful and attractive library of characters
- › Extensive I/O driver library (import of variables from the PLC possible)
- › Powerful alarm management
- › Multilingual support
- › Interference and operation data acquisition including evaluation possibility
- › Archiving of process data with trend curves
- › Extensive driver library
- › Scalability of the project of basic systems to Movicon Scada platform
- › Multilingual support
- › Save and extensive user management
- › Remote management for projecting and remote maintenance
- › Remote access via standard VNC client possible
- › Integrated Ethernet TCP/IP networking
- › Integrated AWL logic (STEP5/STEP7)
- › Also deployable in combination with many controllers of different manufacturers



Overview

Order no.	Name/Description	Page
professional Panels		
62F-FEE0-CB	Touch Panel TP 605CQ › 5,7", TFT, 320x240 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 › Windows Embedded CE 6.0 Professional, Movicon Runtime	596
62F-FEE0-CX	Touch Panel TP 605CQ › 5,7", TFT, 320x240 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 › Windows Embedded CE 6.0 Professional, without Movicon Runtime	596
62G-FEE0-CB	Touch Panel TP 606C › 6,5", TFT, 640x480 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 › Windows Embedded CE 6.0 Professional, Movicon Runtime	596
62G-FEE0-CX	Touch Panel TP 606C › 6,5", TFT, 640x480 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 › Windows Embedded CE 6.0 Professional, without Movicon Runtime	596
62I-IEE0-CB	Touch Panel TP 608C › 8,4", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, Movicon Runtime	600
62I-IEE0-CX	Touch Panel TP 608C › 8,4", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, without Movicon Runtime	600
62K-JEE0-CB	Touch Panel TP 610C › 10,4", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, Movicon Runtime	600
62K-JEE0-CX	Touch Panel TP 610C › 10,4", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, without Movicon Runtime	600
62M-JEE0-CB	Touch Panel TP 612C › 12,1", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, Movicon Runtime	604
62M-JEE0-CX	Touch Panel TP 612C › 12,1", TFT, 800x600 pixel › XScale processor, 800MHz › 128 MB work memory, 2.048 MB user memory › MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 › Windows Embedded CE 6.0 Professional, without Movicon	604

professional Panels

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62F-FEE0-CB	62F-FEE0-CX	62G-FEE0-CB	62G-FEE0-CX
Figure				
Type	Touch Panel TP 605CQ	Touch Panel TP 605CQ	Touch Panel TP 606C	Touch Panel TP 606C
General information				
Note	-	-	-	-
Features	5,7", TFT, 320x240 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 - Windows Embedded CE 6.0 Professional, Movicon Runtime	5,7", TFT, 320x240 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 - Windows Embedded CE 6.0 Professional, without Movicon Runtime	6,5", TFT, 640x480 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 - Windows Embedded CE 6.0 Professional, Movicon Runtime	6,5", TFT, 640x480 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, Ethernet RJ45 - Windows Embedded CE 6.0 Professional, without Movicon Runtime
Display				
Display size (diagonal)	5.7 "	5.7 "	6.5 "	6.5 "
Display size (width)	115.2 mm	115.2 mm	132.5 mm	132.5 mm
Display size (height)	86.4 mm	86.4 mm	99.4 mm	99.4 mm
Resolution	240 x 320 / 320 x 240	240 x 320 / 320 x 240	480 x 640 / 640 x 480	480 x 640 / 640 x 480
Aspect ratio	4:3	4:3	4:3	4:3
Type of display	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)
MTBF Backlights (25°C)	50000 h	50000 h	50000 h	50000 h
System properties				
Processor	Xscale 800 MHz	Xscale 800 MHz	Xscale 800 MHz	Xscale 800 MHz
Operating system	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.
User software	Movicon 11 CE Standard	-	Movicon 11 CE Standard	-
Work memory	128 MB	128 MB	128 MB	128 MB
User memory	2 GB	2 GB	2 GB	2 GB
Available memory (user data)	1800 MB	1800 MB	1800 MB	1800 MB
SD/MMC Slot	✓	✓	✓	✓
CF Card Slot Typ II	✓	✓	✓	✓
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	6 w	6 w	6 w	6 w
Type of buffering	-	-	-	-
Load time for 50% buffering period	10 h	10 h	10 h	10 h
Load time for 100% buffering period	48 h	48 h	48 h	48 h
Accuracy (max. deviation per day)	10 s	10 s	10 s	10 s

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62F-FEE0-CB	62F-FEE0-CX	62G-FEE0-CB	62G-FEE0-CX
Operating controls				
Touchscreen	resistive	resistive	resistive	resistive
Keyboard	external via USB	external via USB	external via USB	external via USB
Mouse	external via USB	external via USB	external via USB	external via USB
Interfaces				
MPI, PROFIBUS-DP	RS485 isolated	RS485 isolated	RS485 isolated	RS485 isolated
MPI, PROFIBUS-DP connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female
Serial, COM1	RS232	RS232	RS232	RS232
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Serial, COM2	RS422/485 isolated	RS422/485 isolated	RS422/485 isolated	RS422/485 isolated
COM2 connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female
Number of USB-A interfaces	1	1	1	1
USB-A connector	USB-A (host)	USB-A (host)	USB-A (host)	USB-A (host)
Number of USB-B interfaces	1	1	1	1
USB-B connector	USB-B (device)	USB-B (device)	USB-B (device)	USB-B (device)
Number of ethernet interfaces	1	1	1	1
Ethernet	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit
Ethernet connector	RJ45	RJ45	RJ45	RJ45
Integrated ethernet switch	-	-	-	-
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	0.26 A	0.26 A	0.34 A	0.34 A
Current consumption (rated value)	0.45 A	0.45 A	0.5 A	0.5 A
Inrush current	6 A	6 A	6 A	6 A
I _{pt}	0.2 A²s	0.2 A²s	0.2 A²s	0.2 A²s
Power loss	6.2 W	6.2 W	8.2 W	8.2 W
Status information, alarms, diagnostics				
Supply voltage display	yes	yes	yes	yes
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum	die-cast aluminum	die-cast aluminum
Mounting	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20

professional Panels | professional Panels

62F-FEE0-CB
62F-FEE0-CX
62G-FEE0-CB
62G-FEE0-CX

62I-IEE0-CB
62I-IEE0-CX
62K-JEE0-CB
62K-JEE0-CX

62M-JEE0-CB
62M-JEE0-CX

Order number	62F-FEE0-CB	62F-FEE0-CX	62G-FEE0-CB	62G-FEE0-CX
Dimensions				
Front panel	212 mm x 156 mm x 7.5 mm	212 mm x 156 mm x 7.5 mm	212 mm x 156 mm x 7.5 mm	212 mm x 156 mm x 7.5 mm
Rear panel	198 mm x 142 mm x 37 mm	198 mm x 142 mm x 37 mm	198 mm x 142 mm x 37 mm	198 mm x 142 mm x 37 mm
Installation cut-out				
Width	200 mm	200 mm	200 mm	200 mm
Height	144 mm	144 mm	144 mm	144 mm
Minimum	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Maximum front panel thickness	6 mm	6 mm	6 mm	6 mm
Weight	1382 g	1382 g	1614 g	1614 g
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Storage temperature	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C
Certifications				
UL508 certification	in preparation	in preparation	in preparation	in preparation

Connections, Interfaces

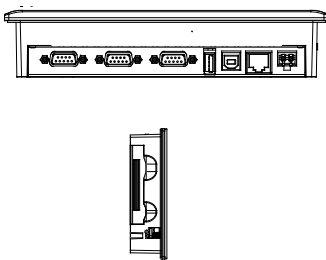
professional Panels | professional Panels

62F-FEE0-CB
62F-FEE0-CX
62G-FEE0-CB
62G-FEE0-CX

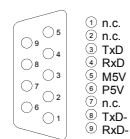
62I-IEE0-CB
62I-IEE0-CX
62K-JEE0-CB
62K-JEE0-CX

62M-JEE0-CB
62M-JEE0-CX

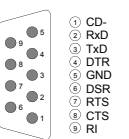
62F-FEE0-CB



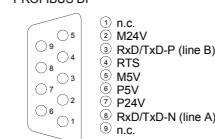
RS422/485



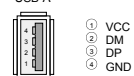
RS232



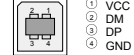
MPI PROFIBUS DP



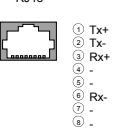
USB-A



USB-B



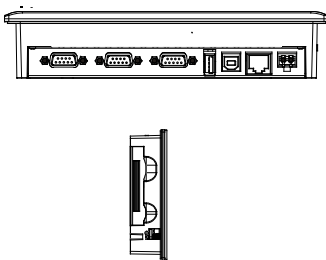
RJ45



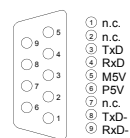
DC 24V



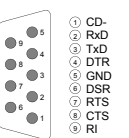
62F-FEE0-CX



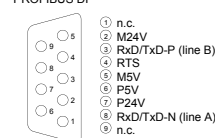
RS422/485



RS232



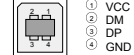
MPI PROFIBUS DP



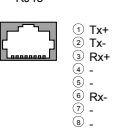
USB-A



USB-B



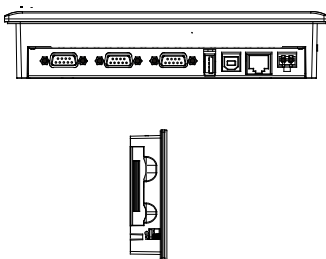
RJ45



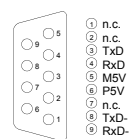
DC 24V



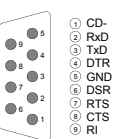
62G-FEE0-CB



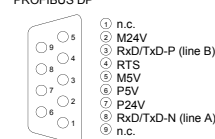
RS422/485



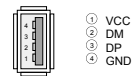
RS232



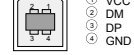
MPI PROFIBUS DP



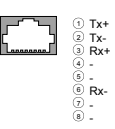
USB-A



USB-B



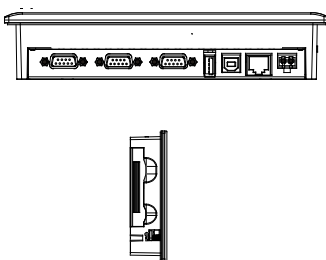
RJ45



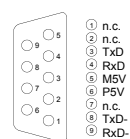
DC 24V



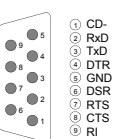
62G-FEE0-CX



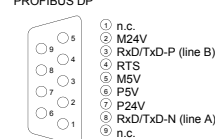
RS422/485



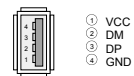
RS232



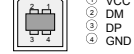
MPI PROFIBUS DP



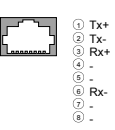
USB-A



USB-B



RJ45



DC 24V



professional Panels

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62I-IEE0-CB	62I-IEE0-CX	62K-JEE0-CB	62K-JEE0-CX
Figure				
Type	Touch Panel TP 608C	Touch Panel TP 608C	Touch Panel TP 610C	Touch Panel TP 610C
General information				
Note	-	-	-	-
Features	8,4", TFT, 800x600 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 - Windows Embedded CE 6.0 Professional, Movicon Runtime	8,4", TFT, 800x600 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 - Windows Embedded CE 6.0 Professional, without Movicon Runtime	10,4", TFT, 800x600 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 - Windows Embedded CE 6.0 Professional, Movicon Runtime	10,4", TFT, 800x600 pixel - XScale processor, 800MHz 128 MB work memory, 2.048 MB user memory - MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 - Windows Embedded CE 6.0 Professional, without Movicon Runtime
Display				
Display size (diagonal)	8.4 "	8.4 "	10.4 "	10.4 "
Display size (width)	170.4 mm	170.4 mm	211.2 mm	211.2 mm
Display size (height)	127.8 mm	127.8 mm	158.4 mm	158.4 mm
Resolution	600 x 800 / 800 x 600	600 x 800 / 800 x 600	600 x 800 / 800 x 600	600 x 800 / 800 x 600
Aspect ratio	4:3	4:3	4:3	4:3
Type of display	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)
MTBF Backlights (25°C)	50000 h	50000 h	50000 h	50000 h
System properties				
Processor	Xscale 800 MHz	Xscale 800 MHz	Xscale 800 MHz	Xscale 800 MHz
Operating system	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.
User software	Movicon 11 CE Standard	-	Movicon 11 CE Standard	-
Work memory	128 MB	128 MB	128 MB	128 MB
User memory	2 GB	2 GB	2 GB	2 GB
Available memory (user data)	1800 MB	1800 MB	1800 MB	1800 MB
SD/MMC Slot	✓	✓	✓	✓
CF Card Slot Typ II	✓	✓	✓	✓
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	6 w	6 w	6 w	6 w
Type of buffering	-	-	-	-
Load time for 50% buffering period	10 h	10 h	10 h	10 h
Load time for 100% buffering period	48 h	48 h	48 h	48 h
Accuracy (max. deviation per day)	10 s	10 s	10 s	10 s

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62I-IEE0-CB	62I-IEE0-CX	62K-JEE0-CB	62K-JEE0-CX
Operating controls				
Touchscreen	resistive	resistive	resistive	resistive
Keyboard	external via USB	external via USB	external via USB	external via USB
Mouse	external via USB	external via USB	external via USB	external via USB
Interfaces				
MPI, PROFIBUS-DP	RS485 isolated	RS485 isolated	RS485 isolated	RS485 isolated
MPI, PROFIBUS-DP connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female
Serial, COM1	RS232	RS232	RS232	RS232
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Serial, COM2	RS422/485 isolated	RS422/485 isolated	RS422/485 isolated	RS422/485 isolated
COM2 connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female	Sub-D, 9-pin, female
Number of USB-A interfaces	1	1	2	2
USB-A connector	USB-A (host)	USB-A (host)	USB-A (host)	USB-A (host)
Number of USB-B interfaces	1	1	1	1
USB-B connector	USB-B (device)	USB-B (device)	USB-B (device)	USB-B (device)
Number of ethernet interfaces	2	2	2	2
Ethernet	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit
Ethernet connector	RJ45	RJ45	RJ45	RJ45
Integrated ethernet switch	✓	✓	✓	✓
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	0.4 A	0.4 A	0.51 A	0.51 A
Current consumption (rated value)	0.6 A	0.6 A	0.7 A	0.7 A
Inrush current	7 A	7 A	7 A	7 A
I _{pt}	0.25 A²s	0.25 A²s	0.25 A²s	0.25 A²s
Power loss	9.6 W	9.6 W	12.2 W	12.2 W
Status information, alarms, diagnostics				
Supply voltage display	yes	yes	yes	yes
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum	die-cast aluminum	die-cast aluminum
Mounting	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20

professional Panels professional Panels						
62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				

Order number	62I-IEE0-CB	62I-IEE0-CX	62K-JEE0-CB	62K-JEE0-CX
Dimensions				
Front panel	264 mm x 189 mm x 7.5 mm	264 mm x 189 mm x 7.5 mm	304 mm x 233 mm x 7.5 mm	304 mm x 233 mm x 7.5 mm
Rear panel	248 mm x 173 mm x 43 mm	248 mm x 173 mm x 43 mm	285 mm x 215 mm x 45 mm	285 mm x 215 mm x 45 mm
Installation cut-out				
Width	250 mm	250 mm	287 mm	287 mm
Height	175 mm	175 mm	217 mm	217 mm
Minimum	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Maximum front panel thickness	6 mm	6 mm	6 mm	6 mm
Weight	2325 g	2325 g	3251 g	3251 g
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Storage temperature	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C
Certifications				
UL508 certification	in preparation	in preparation	in preparation	in preparation

Connections, Interfaces

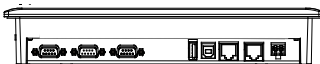
professional Panels | professional Panels

62F-FEE0-CB
62F-FEE0-CX
62G-FEE0-CB
62G-FEE0-CX

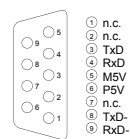
62I-IEE0-CB
62I-IEE0-CX
62K-JEE0-CB
62K-JEE0-CX

62M-JEE0-CB
62M-JEE0-CX

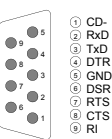
62I-IEE0-CB



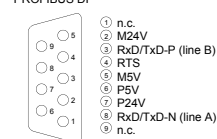
RS422/485



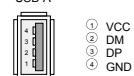
RS232



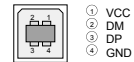
MPI PROFIBUS DP



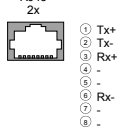
USB-A



USB-B



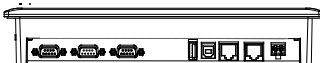
RJ45 2x



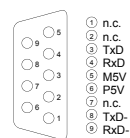
DC 24V



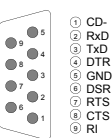
62I-IEE0-CX



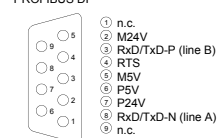
RS422/485



RS232



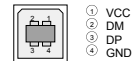
MPI PROFIBUS DP



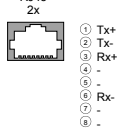
USB-A



USB-B



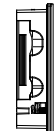
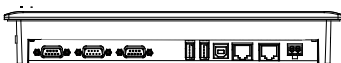
RJ45 2x



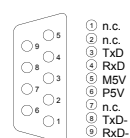
DC 24V



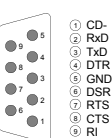
62K-JEE0-CB



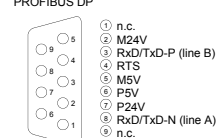
RS422/485



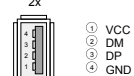
RS232



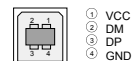
MPI PROFIBUS DP



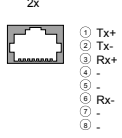
USB-A 2x



USB-B



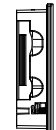
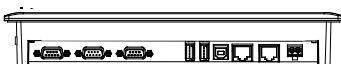
RJ45 2x



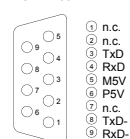
DC 24V



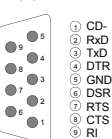
62K-JEE0-CX



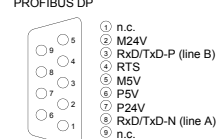
RS422/485



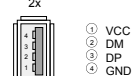
RS232



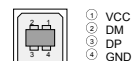
MPI PROFIBUS DP



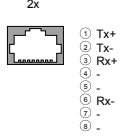
USB-A 2x



USB-B



RJ45 2x



DC 24V



professional Panels

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62M-JEE0-CB	62M-JEE0-CX		
Figure				
Type	Touch Panel TP 612C	Touch Panel TP 612C		
General information				
Note	-	-		
Features	▸ 12,1", TFT, 800x600 pixel ▸ XScale processor, 800MHz ▸ 128 MB work memory, 2.048 MB user memory ▸ MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 ▸ Windows Embedded CE 6.0 Professional, Movicon Runtime	▸ 12,1", TFT, 800x600 pixel ▸ XScale processor, 800MHz ▸ 128 MB work memory, 2.048 MB user memory ▸ MPI/PROFIBUS-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 ▸ Windows Embedded CE 6.0 Professional, without Movicon		
Display				
Display size (diagonal)	12.1 "	12.1 "		
Display size (width)	246 mm	246 mm		
Display size (height)	184.5 mm	184.5 mm		
Resolution	600 x 800 / 800 x 600	600 x 800 / 800 x 600		
Aspect ratio	4:3	4:3		
Type of display	TFT color (64K colors)	TFT color (64K colors)		
MTBF Backlights (25°C)	50000 h	50000 h		
System properties				
Processor	Xscale 800 MHz	Xscale 800 MHz		
Operating system	Windows CE 6.0 Prof.	Windows CE 6.0 Prof.		
User software	Movicon 11 CE Standard	-		
Work memory	128 MB	128 MB		
User memory	2 GB	2 GB		
Available memory (user data)	1800 MB	1800 MB		
SD/MMC Slot	✓	✓		
CF Card Slot Typ II	✓	✓		
Time				
Real-time clock buffered	✓	✓		
Clock buffered period (min.)	6 w	6 w		
Type of buffering	-	-		
Load time for 50% buffering period	10 h	10 h		
Load time for 100% buffering period	48 h	48 h		
Accuracy (max. deviation per day)	10 s	10 s		

professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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Order number	62M-JEE0-CB	62M-JEE0-CX		
Operating controls				
Touchscreen	resistive	resistive		
Keyboard	external via USB	external via USB		
Mouse	external via USB	external via USB		
Interfaces				
MPI, PROFIBUS-DP	RS485 isolated	RS485 isolated		
MPI, PROFIBUS-DP connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female		
Serial, COM1	RS232	RS232		
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male		
Serial, COM2	RS422/485 isolated	RS422/485 isolated		
COM2 connector	Sub-D, 9-pin, female	Sub-D, 9-pin, female		
Number of USB-A interfaces	2	2		
USB-A connector	USB-A (host)	USB-A (host)		
Number of USB-B interfaces	1	1		
USB-B connector	USB-B (device)	USB-B (device)		
Number of ethernet interfaces	2	2		
Ethernet	Ethernet 10/100 MBit	Ethernet 10/100 MBit		
Ethernet connector	RJ45	RJ45		
Integrated ethernet switch	✓	✓		
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V		
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V		
Reverse polarity protection	✓	✓		
Current consumption (no-load operation)	0.66 A	0.66 A		
Current consumption (rated value)	0.8 A	0.8 A		
Inrush current	7 A	7 A		
I _{pt}	0.25 A²s	0.25 A²s		
Power loss	15.8 W	15.8 W		
Status information, alarms, diagnostics				
Supply voltage display	yes	yes		
Mechanical data				
Housing / Protection type				
Material	die-cast aluminum	die-cast aluminum		
Mounting	via integrated pivoted lever	via integrated pivoted lever		
Protect type front side	IP 65	IP 65		
Protect type back side	IP 20	IP 20		
Dimensions				
Front panel	325 mm x 263 mm x 7.5 mm	325 mm x 263 mm x 7.5 mm		
Rear panel	309 mm x 247 mm x 45 mm	309 mm x 247 mm x 45 mm		

professional Panels professional Panels						
62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				

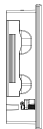
Order number	62M-JEE0-CB	62M-JEE0-CX		
Installation cut-out				
Width	311 mm	311 mm		
Height	249 mm	249 mm		
Minimum	1.5 mm	1.5 mm		
Maximum front panel thickness	6 mm	6 mm		
Weight	3674 g	3674 g		
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C		
Storage temperature	-20 °C to 60 °C	-20 °C to 60 °C		
Certifications				
UL508 certification	in preparation	in preparation		

Connections, Interfaces

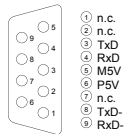
professional Panels | professional Panels

62F-FEE0-CB 62F-FEE0-CX 62G-FEE0-CB 62G-FEE0-CX	62I-IEE0-CB 62I-IEE0-CX 62K-JEE0-CB 62K-JEE0-CX	62M-JEE0-CB 62M-JEE0-CX				
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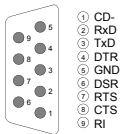
62M-JEE0-CB



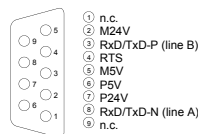
RS422/485



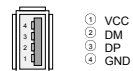
RS232



MPI PROFIBUS DP



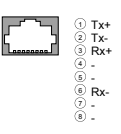
USB-A 2x



USB-B



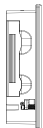
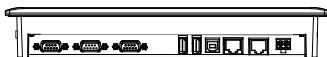
RJ45 2x



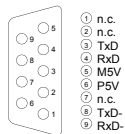
DC 24V



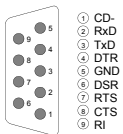
62M-JEE0-CX



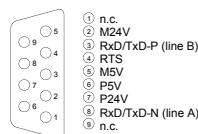
RS422/485



RS232



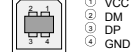
MPI PROFIBUS DP



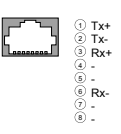
USB-A 2x



USB-B



RJ45 2x



DC 24V



eco Panels



Structure and Function

The new ecoPanels enable completely new and attractive possibilities for mechanical and system engineers: efficient visualization at attractive prices: Manifold application possibilities. The ecoPanel series are not only distinguished by uncompromising reliability and performance, but impressive by an unsurpassed price-performance ratio. Of course, we also paid attention to durability and quality of the products. This is achieved amongst others by a special construction, which enables a fanless and disc free operation. This means there are no moving parts inside the unit.

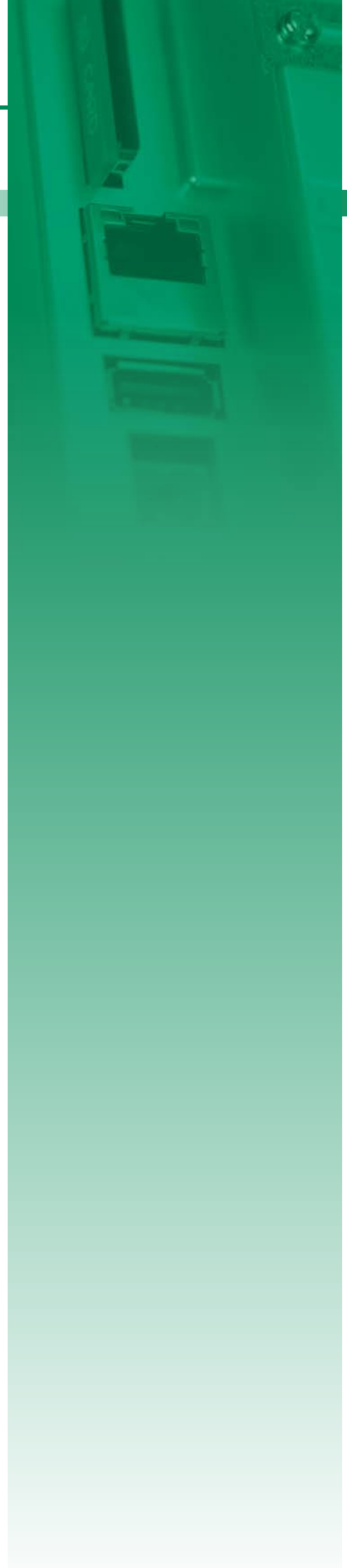
The VIPA ecoPanels in combination with Movicon Basic (full-valued + unlimited Basic license) offers incomparable advantages. The software concentrates the powerful Movicon technology in a simplified form into an extremely user friendly editing environment. This enables a high scalability and a considerable increase in performance for every project.

Characteristics

- › Display size: 4,3", 7", 10", 15"
- › Type of display: TFT Color
- › Processor: ARM11 533MHz+ / Cortex-A8 1000MHz
- › Interfaces: RS232, RS485, RS422, MPI, PROFIBUS-DP slave, Ethernet RJ45, USB-A, USB-B (depending on type of panel)
- › Memory: already integrated, also with SD and USB-Stick expendable
- › Including VIPA PLCTOOL: (allows upload/download of programmes from VIPA- and Step7 based controls, reading of the diagnosis buffer, as well as start and stop of the connected CPUs without using a programming unit)
- › Including of the operating system Windows Embedded CE 6.0 Core and visualization system Movicon BASIC

Visualization system Movicon:

- › Editor for vector graphics with powerful and attractive library of characters
- › Extensive I/O driver library (import of variables from the PLC possible)
- › Powerful alarm management
- › Interference and operation data acquisition including evaluation possibility
- › Archiving of process data with trend curves
- › Extensive driver library
- › Scalability of the project of basic systems to Movicon Scada platform
- › Multilingual support
- › Save and extensive user management
- › Remote management for projecting and remote maintenance
- › Remote access via standard VNC client possible
- › Integrated Ethernet TCP/IP networking
- › Integrated AWL logic (STEP5/STEP7)
- › Also deployable in combination with many controllers of different manufacturers



Overview

Order no.	Name/Description	Page
eco Panels		
62E-MDC0-DH	Touch Panel TP 604LC › 4,3", TFT, 480x272 Pixel › ARM11 processor, 533MHz › 128 MB work memory, 128 MB user memory › RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62E-MDC0-DH)	610
62E-MGC0-CB	Touch Panel TP 604LC › 4,3", TFT, 480x272 Pixel › ARM11 processor, 533MHz › 128 MB work memory, 128 MB user memory › RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62E-MDC0-DH)	610
62H-MDC0-DH	Touch Panel TP 607LC › 7", TFT, 800x480 pixel › ARM11 processor, 533MHz › 128 MB work memory, 128 MB user memory › RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62H-MDC0-DH)	610
62H-MGC0-CB	Touch Panel TP 607LC › 7", TFT, 800x480 pixel › ARM11 processor, 533MHz › 128 MB work memory, 128 MB user memory › RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62H-MDC0-DH)	610
62K-NHC0-DH	Touch Panel TP 610LC › 10", TFT, 1024x768 Pixel › Cortex-A8 processor, 1000MHz › 256 MB work memory, 128 MB user memory › RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62K-NHC0-DH)	614
62K-NHC0-CB	Touch Panel TP 610LC › 10", TFT, 1024x768 Pixel › Cortex-A8 processor, 1000MHz › 256 MB work memory, 128 MB user memory › RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62K-NHC0-DH)	614
62P-NHC0-DH	Touch Panel TP 615LC › 15", TFT, 1024x768 pixel › Cortex-A8 processor, 1000MHz › 256 MB work memory, 128 MB user memory › RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62P-NHC0-DH)	614
62P-NHC0-CB	Touch Panel TP 615LC › 15", TFT, 1024x768 pixel › Cortex-A8 processor, 1000MHz › 256 MB work memory, 128 MB user memory › RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) › Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62P-NHC0-DH)	614
Optional interfaces		
961-OMP0	MPI/PROFIBUS-DP interface › For optional retrofitting of the MPI/DP interfaces at eco panels series	618

eco Panels

eco Panels | eco Panels

62E-MDC0-DH
62E-MGC0-CB
62H-MDC0-DH
62H-MGC0-CB

62K-NHC0-DH
62K-NHC0-CB
62P-NHC0-DH
62P-NHC0-CB

Order number	62E-MDC0-DH	62E-MGC0-CB	62H-MDC0-DH	62H-MGC0-CB
Figure				
Type	Touch Panel TP 604LC	Touch Panel TP 604LC	Touch Panel TP 607LC	Touch Panel TP 607LC
General information				
Note	-	-	-	-
Features	▸ 4,3", TFT, 480x272 Pixel ▸ ARM11 processor, 533MHz ▸ 128 MB work memory, 128 MB user memory ▸ RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) ▸ Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62E-MDC0-DH)	▸ 4,3", TFT, 480x272 Pixel ▸ ARM11 processor, 533MHz ▸ 128 MB work memory, 128 MB user memory ▸ RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) ▸ Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62E-MDC0-DH)	▸ 7", TFT, 800x480 pixel ▸ ARM11 processor, 533MHz ▸ 128 MB work memory, 128 MB user memory ▸ RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) ▸ Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62H-MDC0-DH)	▸ 7", TFT, 800x480 pixel ▸ ARM11 processor, 533MHz ▸ 128 MB work memory, 128 MB user memory ▸ RS232, RS422/485, USB-A, Ethernet RJ45 (MPI/DP interface optional available) ▸ Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62H-MDC0-DH)
Display				
Display size (diagonal)	4.3 "	4.3 "	7 "	7 "
Display size (width)	95 mm	95 mm	152 mm	152 mm
Display size (height)	54 mm	54 mm	91 mm	91 mm
Resolution	272 x 480 / 480 x 272	272 x 480 / 480 x 272	480 x 800 / 800 x 480	480 x 800 / 800 x 480
Aspect ratio	16:9	16:9	5:3	5:3
Type of display	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)
MTBF Backlights (25°C)	30000 h	30000 h	50000 h	50000 h
System properties				
Processor	ARM11 533 MHz	Cortex-A8 667 MHz	ARM11 533 MHz	Cortex-A8 667 MHz
Operating system	Windows CE 6.0 Core	Windows CE 6.0 Prof.	Windows CE 6.0 Core	Windows CE 6.0 Prof.
User software	Movicon 11 CE Basic	Movicon 11 CE Standard	Movicon 11 CE Basic	Movicon 11 CE Standard
Work memory	128 MB	256 MB	128 MB	256 MB
User memory	128 MB	128 MB	128 MB	128 MB
Available memory (user data)	50 MB	50 MB	50 MB	50 MB
SD/MMC Slot	✓	✓	✓	✓
CF Card Slot Typ II	-	-	-	-
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	26 w	26 w	26 w	26 w
Type of buffering	-	-	-	-
Load time for 50% buffering period	5 h	5 h	5 h	5 h
Load time for 100% buffering period	24 h	24 h	24 h	24 h
Accuracy (max. deviation per day)	2 s	2 s	2 s	2 s

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62E-MDC0-DH	62K-NHC0-DH				
62E-MGC0-CB	62K-NHC0-CB				
62H-MDC0-DH	62P-NHC0-DH				
62H-MGC0-CB	62P-NHC0-CB				

Order number	62E-MDC0-DH	62E-MGC0-CB	62H-MDC0-DH	62H-MGC0-CB
Operating controls				
Touchscreen	resistive	resistive	resistive	resistive
Keyboard	external via USB	external via USB	external via USB	external via USB
Mouse	external via USB	external via USB	external via USB	external via USB
Interfaces				
MPI, PROFIBUS-DP	optional	optional	optional	optional
MPI, PROFIBUS-DP connector	-	-	-	-
Serial, COM1	RS232	RS232	RS232	RS232
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Serial, COM2	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485
COM2 connector	Sub-D, 25-pin, female	Sub-D, 25-pin, female	Sub-D, 25-pin, female	Sub-D, 25-pin, female
Number of USB-A interfaces	1	1	1	1
USB-A connector	USB-A (host)	USB-A (host)	USB-A (host)	USB-A (host)
Number of USB-B interfaces	-	-	-	-
USB-B connector	-	-	-	-
Number of ethernet interfaces	1	1	1	1
Ethernet	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit
Ethernet connector	RJ45	RJ45	RJ45	RJ45
Integrated ethernet switch	-	-	-	-
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	0.16 A	0.16 A	0.24 A	0.24 A
Current consumption (rated value)	0.3 A	0.3 A	0.4 A	0.4 A
Inrush current	75 A	75 A	85 A	85 A
I ² t	0.36 A²s	0.36 A²s	0.43 A²s	0.43 A²s
Power loss	6 W	6 W	8 W	8 W
Status information, alarms, diagnostics				
Supply voltage display	none	none	none	none
Mechanical data				
Housing / Protection type				
Material	PC	PC	PC	PC
Mounting	mounting clips	mounting clips	mounting clips	mounting clips
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20
Dimensions				
Front panel	140 mm x 116 mm x 6 mm	140 mm x 116 mm x 6 mm	212 mm x 156 mm x 6 mm	212 mm x 156 mm x 6 mm
Rear panel	122 mm x 98 mm x 51 mm	122 mm x 98 mm x 51 mm	196 mm x 140 mm x 51 mm	196 mm x 140 mm x 51 mm

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62E-MDC0-DH	62K-NHC0-DH					
62E-MGC0-CB	62K-NHC0-CB					
62H-MDC0-DH	62P-NHC0-DH					
62H-MGC0-CB	62P-NHC0-CB					

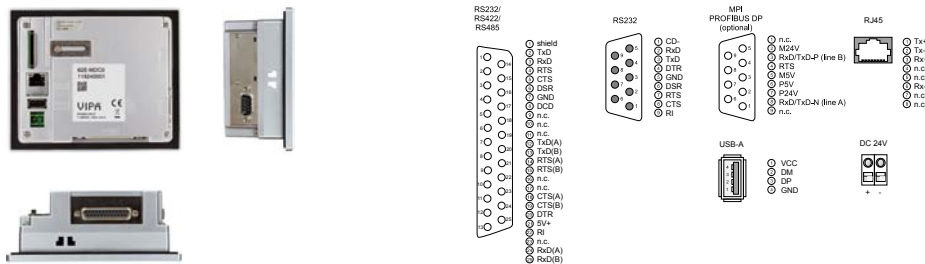
Order number	62E-MDC0-DH	62E-MGC0-CB	62H-MDC0-DH	62H-MGC0-CB
Installation cut-out				
Width	123 mm	123 mm	198 mm	198 mm
Height	99 mm	99 mm	142 mm	142 mm
Minimum	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Maximum front panel thickness	6 mm	6 mm	6 mm	6 mm
Weight	500 g	500 g	1200 g	1200 g
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Storage temperature	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C
Certifications				
UL508 certification	yes	yes	yes	yes

Connections, Interfaces

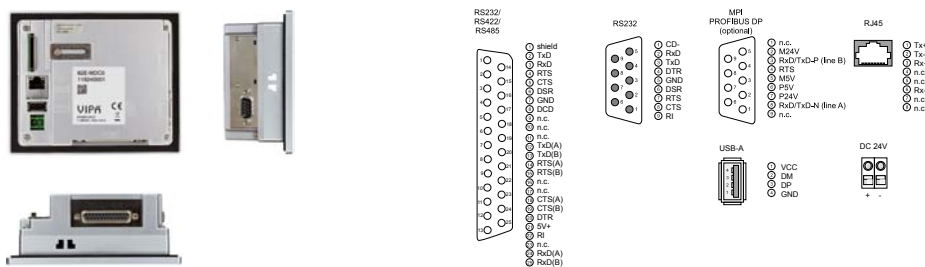
eco Panels | eco Panels

62E-MDC0-DH	62K-NHC0-DH
62E-MGC0-CB	62K-NHC0-CB
62H-MDC0-DH	62P-NHC0-DH
62H-MGC0-CB	62P-NHC0-CB

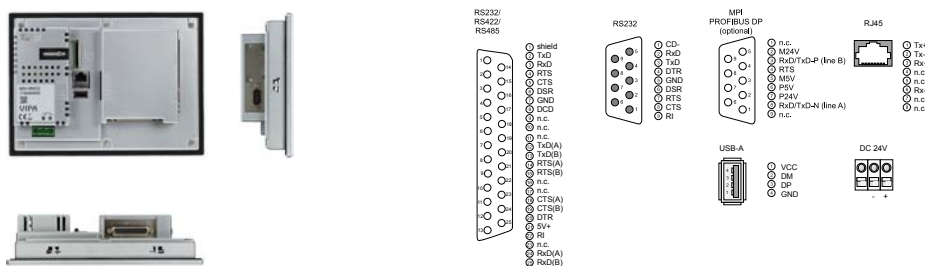
62E-MDC0-DH



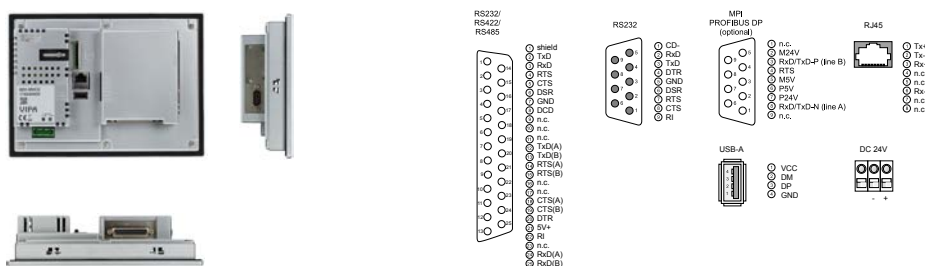
62E-MGC0-CB



62H-MDC0-DH



62H-MGC0-CB



eco Panels

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62E-MDC0-DH 62E-MGC0-CB 62H-MDC0-DH 62H-MGC0-CB	62K-NHC0-DH 62K-NHC0-CB 62P-NHC0-DH 62P-NHC0-CB				
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Order number	62K-NHC0-DH	62K-NHC0-CB	62P-NHC0-DH	62P-NHC0-CB
Figure				
Type	Touch Panel TP 610LC	Touch Panel TP 610LC	Touch Panel TP 615LC	Touch Panel TP 615LC
General information				
Note	-	-	-	-
Features	10", TFT, 1024x768 Pixel - Cortex-A8 processor, 1000MHz 256 MB work memory, 128 MB user memory - RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) - Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62K-NHC0-DH)	10", TFT, 1024x768 Pixel - Cortex-A8 processor, 1000MHz 256 MB work memory, 128 MB user memory - RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) - Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62K-NHC0-CB)	15", TFT, 1024x768 pixel - Cortex-A8 processor, 1000MHz 256 MB work memory, 128 MB user memory - RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) - Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62P-NHC0-DH)	15", TFT, 1024x768 pixel - Cortex-A8 processor, 1000MHz 256 MB work memory, 128 MB user memory - RS232, RS232/RS422/485, USB-A, 2x Ethernet RJ45 (MPI/DP interface optional available) - Windows Embedded CE 6.0 Core, Movicon Basic Runtime (62P-NHC0-CB)
Display				
Display size (diagonal)	10 "	10 "	15 "	15 "
Display size (width)	203 mm	203 mm	304 mm	304 mm
Display size (height)	152 mm	152 mm	228 mm	228 mm
Resolution	768 x 1024 / 1024 x 768	768 x 1024 / 1024 x 768	768 x 1024 / 1024 x 768	768 x 1024 / 1024 x 768
Aspect ratio	4:3	4:3	4:3	4:3
Type of display	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)	TFT color (64K colors)
MTBF Backlights (25°C)	50000 h	50000 h	50000 h	50000 h
System properties				
Processor	Cortex-A8 1000 MHz	Cortex-A8 1000 MHz	Cortex-A8 1000 MHz	Cortex-A8 1000 MHz
Operating system	Windows CE 6.0 Core	Windows CE 6.0 Prof.	Windows CE 6.0 Core	Windows CE 6.0 Prof.
User software	Movicon 11 CE Basic	Movicon 11 CE Standard	Movicon 11 CE Basic	Movicon 11 CE Standard
Work memory	256 MB	256 MB	256 MB	256 MB
User memory	128 MB	128 MB	128 MB	128 MB
Available memory (user data)	50 MB	50 MB	50 MB	50 MB
SD/MMC Slot	✓	✓	✓	✓
CF Card Slot Typ II	-	-	-	-
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	26 w	26 w	26 w	26 w
Type of buffering	-	-	-	-
Load time for 50% buffering period	5 h	5 h	5 h	5 h
Load time for 100% buffering period	24 h	24 h	24 h	24 h
Accuracy (max. deviation per day)	2 s	2 s	2 s	2 s

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62E-MDC0-DH 62E-MGC0-CB 62H-MDC0-DH 62H-MGC0-CB	62K-NHC0-DH 62K-NHC0-CB 62P-NHC0-DH 62P-NHC0-CB					
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Order number	62K-NHC0-DH	62K-NHC0-CB	62P-NHC0-DH	62P-NHC0-CB
Operating controls				
Touchscreen	resistive	resistive	resistive	resistive
Keyboard	external via USB	external via USB	external via USB	external via USB
Mouse	external via USB	external via USB	external via USB	external via USB
Interfaces				
MPI, PROFIBUS-DP	optional	optional	optional	optional
MPI, PROFIBUS-DP connector	-	-	-	-
Serial, COM1	RS232	RS232	RS232	RS232
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Serial, COM2	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485
COM2 connector	Sub-D, 25-pin, female	Sub-D, 25-pin, female	Sub-D, 25-pin, female	Sub-D, 25-pin, female
Number of USB-A interfaces	1	1	1	1
USB-A connector	USB-A (host)	USB-A (host)	USB-A (host)	USB-A (host)
Number of USB-B interfaces	-	-	-	-
USB-B connector	-	-	-	-
Number of ethernet interfaces	2	2	2	2
Ethernet	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit	Ethernet 10/100 MBit
Ethernet connector	RJ45	RJ45	RJ45	RJ45
Integrated ethernet switch	-	-	-	-
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	0.24 A	0.24 A	0.24 A	0.24 A
Current consumption (rated value)	1.36 A	1.36 A	2.46 A	2.46 A
Inrush current	85 A	85 A	85 A	85 A
I ² t	0.34 A²s	0.34 A²s	0.37 A²s	0.37 A²s
Power loss	15 W	15 W	27 W	27 W
Status information, alarms, diagnostics				
Supply voltage display	none	none	none	none
Mechanical data				
Housing / Protection type				
Material	aluminum, galvanized steel	aluminum, galvanized steel	aluminum, galvanized steel	aluminum, galvanized steel
Mounting	mounting clips	mounting clips	mounting clips	mounting clips
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20
Dimensions				
Front panel	325 mm x 263 mm x 6 mm	325 mm x 263 mm x 6 mm	400 mm x 310 mm x 6 mm	400 mm x 310 mm x 6 mm
Rear panel	310 mm x 248 mm x 50 mm	310 mm x 248 mm x 50 mm	367 mm x 289 mm x 50 mm	367 mm x 289 mm x 50 mm

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62E-MDC0-DH	62K-NHC0-DH					
62E-MGC0-CB	62K-NHC0-CB					
62H-MDC0-DH	62P-NHC0-DH					
62H-MGC0-CB	62P-NHC0-CB					

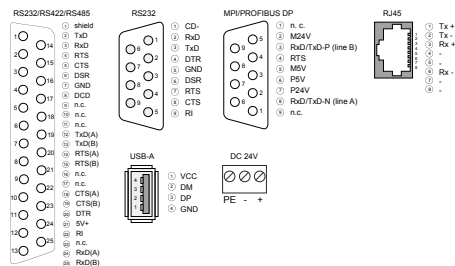
Order number	62K-NHC0-DH	62K-NHC0-CB	62P-NHC0-DH	62P-NHC0-CB
Installation cut-out				
Width	311 mm	311 mm	368 mm	368 mm
Height	249 mm	249 mm	290 mm	290 mm
Minimum	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Maximum front panel thickness	6 mm	6 mm	6 mm	6 mm
Weight	3350 g	3350 g	4900 g	4900 g
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Storage temperature	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C	-20 °C to 60 °C
Certifications				
UL508 certification	yes	yes	yes	yes

Connections, Interfaces

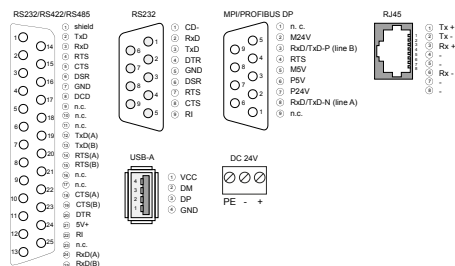
eco Panels | eco Panels

62E-MDC0-DH	62K-NHC0-DH
62E-MGC0-CB	62K-NHC0-CB
62H-MDC0-DH	62P-NHC0-DH
62H-MGC0-CB	62P-NHC0-CB

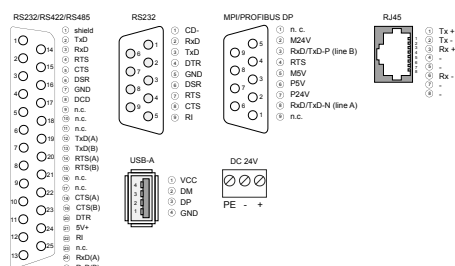
62K-NHC0-DH



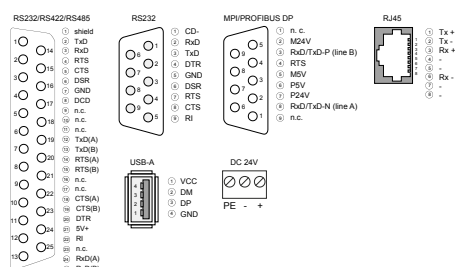
62K-NHC0-CB



62P-NHC0-DH



62P-NHC0-CB



Optional interfaces

eco Panels Optional interfaces						
961-0MP0						

Order number	961-0MP0			
Figure				
Type	-			
General information				
Note	-			
Features	▶ For optional retro-fitting of the MPI/DP interfaces at eco panels series			

Connections, Interfaces

eco Panels Optional interfaces						
961-0MP0						

961-0MP0



RS485

①	n.c.	⑤	
②	M24V	⑥	
③	RxD/TxD-P (line B)	⑦	
④	RTS	⑧	
⑨	M5V	⑩	
⑪	PSU	⑬	
⑫	P24V	⑭	
⑮	RxD/TxD-N (line A)	⑯	
⑰	n.c.	⑱	

Panel PC



Structure and concept

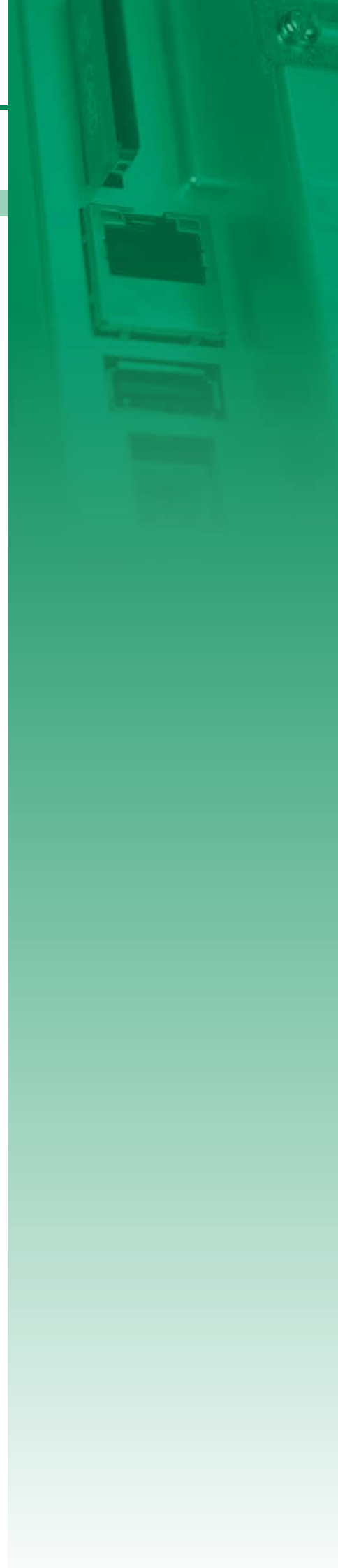
The combination of industrial PC with state of the art performance features and a Touch Panel with ideal display capabilities enables the user to concentrate high performance into the smallest space. The latest Intel Atom processor technology, large integrated work memory and display resolutions of up to Full HD with the 21.5" panel PC are state of the art. The panels have also numerous useful interfaces just like other VIPA Touch Panels. The pre-installed operating systems Windows Embedded Compact 7 or Windows Embedded Standard 7 are state of the art in the PC world. For visualization your own programs or optionally the latest pre-installed Movicon visualization can be chosen.

Features

- › Display size: 15,6" wide (16:9) und 21,5" wide (16:9)
- › Display resolution: 1366x768 (15,6") und 1920x1080 (21,5")
- › Display type: PCAP, Multitouch
- › Housing: metal
- › Processor: Intel Atom D2550 dualcore@1,86 GHz
- › Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out
- › Memory: work memory 2GB
- › Operating system and user memory: 8GB mit WES7, 2GB mit WEC7
- › Memory card slot: CFast
- › Operating system: Windows Embedded Compact 7 oder Windows Embedded Standard 7
- › Visualization: optional Movicon 11 CE Standard pre-installed

Visualization system Movicon

- › Vector graphics editor with powerful and clear symbol library
- › Comprehensive I/O driver library (variables import from the PLC possible)
- › Efficient alarm management
- › Multi-lingual language support
- › Disturbance and operating data acquisition
- › Archiving process data with trend curves
- › Comprehensive driver library
- › Project scalability of Movicon basic systems to Movicon SCADA platform
- › Secure and comprehensive user management
- › Remote management for project planning and remote maintenance
- › Remote access via standard VCN client possible
- › Integrated Ethernet TCP/IP networking
- › Integrated IL logic (STEP5/STEP7)
- › Also deployable, of course, in combination with many controllers of other producers



Overview

Order no.	Name/Description	Page
Panel PC		
67P-PNJ0-EB	Panel PC PPC015 CE ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 8 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 15,6" ▶ Incl. Betriebssystem Windows Embedded Compact 7 and Runtime Movicon CE Standard	622
67P-PNL0-JB	Panel PC PPC015 ES ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 8 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 15,6" ▶ Incl. operating system Windows Embedded Standard 7	622
67P-PNL0-JX	Panel PC PPC015 ES ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 8 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 15,6" ▶ Incl. operating system Windows Embedded Standard 7	622
67S-PNJ0-EB	Panel PC PPC021 CE ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 2 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 21,5" ▶ Incl. operating system Windows Embedded Standard 7 and Runtime Movicon CE Standard	622
67S-PNL0-JB	Panel PC PPC021 ES ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 8 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 21,5" ▶ Incl. operating system Windows Embedded Standard 7	626
67S-PNL0-JX	Panel PC PPC021 ES ▶ Processor: Intel Atom D2550 dualcore @1,86 GHz ▶ Work memory: 2 GB ▶ Operating system and user memory: 8 GB ▶ Memory card plug-in place: CFast ▶ Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232,RS422/RS485), Audio out ▶ Display: 21,5" ▶ Incl. operating system Windows Embedded Standard 7	626

Panel PC

Panel PC | Panel PC

67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					
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Order number	67P-PNJ0-EB	67P-PNL0-JB	67P-PNL0-JX	67S-PNJ0-EB
Figure				
Type	Panel PC PPC015 CE	Panel PC PPC015 ES	Panel PC PPC015 ES	Panel PC PPC021 CE
General information				
Note	-	-	-	-
Features	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 8 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 15,6" - Incl. Betriebssystem Windows Embedded Compact 7 and Runtime Movicon CE Standard	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 8 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 15,6" - Incl. operating system Windows Embedded Standard 7	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 8 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 15,6" - Incl. operating system Windows Embedded Standard 7	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 2 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 21,5" - Incl. operating system Windows Embedded Standard 7 and Runtime Movicon CE Standard
Display				
Display size (diagonal)	15.6 "	15.6 "	15.6 "	21.5 "
Display size (width)	344 mm	344 mm	344 mm	478 mm
Display size (height)	195 mm	195 mm	195 mm	269 mm
Resolution	1366 x 768	1366 x 768	1366 x 768	1920 x 1080
Aspect ratio	16:9	16:9	16:9	16:9
Type of display	TFT color (16.7M colors)	TFT color (16.7M colors)	TFT color (16.7M colors)	TFT color (16.7M colors)
MTBF Backlights (25°C)	50000 h	50000 h	50000 h	50000 h
System properties				
Processor	Intel Atom Dualcore 1,86 GHz	Intel Atom Dualcore 1,86 GHz	Intel Atom Dualcore 1,86 GHz	Intel Atom Dualcore 1,86 GHz
Operating system	Windows embedded Compact 7	Windows embedded Standard 7	Windows embedded Standard 7	Windows embedded Compact 7
User software	Movicon 11 CE Standard	Movicon 11 Win Standard	-	Movicon 11 CE Standard
Work memory	2 GB	2 GB	2 GB	2 GB
User memory	2 GB	8 GB	8 GB	2 GB
Available memory (user data)	1200 MB	1000 MB	1400 MB	1200 MB
SD/MMC Slot	-	-	-	-
CF Card Slot Typ II	-	-	-	-

Panel PC | Panel PC

67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					
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Order number	67P-PNJ0-EB	67P-PNL0-JB	67P-PNL0-JX	67S-PNJ0-EB
Time				
Real-time clock buffered	✓	✓	✓	✓
Clock buffered period (min.)	4 y	4 y	4 y	4 y
Type of buffering	lithium battery	lithium battery	lithium battery	lithium battery
Load time for 50% buffering period	-	-	-	-
Load time for 100% buffering period	-	-	-	-
Accuracy (max. deviation per day)	10 s	10 s	10 s	10 s
Operating controls				
Touchscreen	PCAP	PCAP	PCAP	PCAP
Keyboard	external via USB	external via USB	external via USB	external via USB
Mouse	external via USB	external via USB	external via USB	external via USB
Interfaces				
MPI, PROFIBUS-DP	-	-	-	-
MPI, PROFIBUS-DP connector	-	-	-	-
Serial, COM1	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Serial, COM2	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485	RS232 / RS422 / RS485
COM2 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male	Sub-D, 9-pin, male
Number of USB-A interfaces	4	4	4	4
USB-A connector	USB-A (host)	USB-A (host)	USB-A (host)	USB-A (host)
Number of USB-B interfaces	-	-	-	-
USB-B connector	-	-	-	-
Number of ethernet interfaces	2	2	2	2
Ethernet	Ethernet 10/100/1000 MBit	Ethernet 10/100/1000 MBit	Ethernet 10/100/1000 MBit	Ethernet 10/100/1000 MBit
Ethernet connector	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Integrated ethernet switch	-	-	-	-
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V	DC 24 V	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V	DC 20.4...28.8 V
Reverse polarity protection	✓	✓	✓	✓
Current consumption (no-load operation)	1.2 A	1.2 A	1.2 A	1.2 A
Current consumption (rated value)	1.3 A	1.3 A	1.3 A	1.3 A
Inrush current	1.3 A	1.3 A	1.3 A	1.3 A
I _{pt}	0.35 A²s	0.35 A²s	0.35 A²s	0.35 A²s
Power loss	32 W	32 W	32 W	32 W

Panel PC Panel PC						
67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					

Order number	67P-PNJ0-EB	67P-PNL0-JB	67P-PNL0-JX	67S-PNJ0-EB
Status information, alarms, diagnostics				
Supply voltage display	none	none	none	none
Mechanical data				
Housing / Protection type				
Material	coated aluminum steel plate	coated aluminum steel plate	coated aluminum steel plate	coated aluminum steel plate
Mounting	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever	via integrated pivoted lever
Protect type front side	IP 65	IP 65	IP 65	IP 65
Protect type back side	IP 20	IP 20	IP 20	IP 20
Dimensions				
Front panel	417.8 mm x 312.8 mm x 6.2 mm	417.8 mm x 312.8 mm x 6.2 mm	417.8 mm x 312.8 mm x 6.2 mm	562.4 mm x 382.4 mm x 6.7 mm
Rear panel	396 mm x 291 mm x 57.6 mm	396 mm x 291 mm x 57.6 mm	396 mm x 291 mm x 57.6 mm	542 mm x 362 mm x 54.2 mm
Installation cut-out				
Width	401 mm	401 mm	401 mm	547 mm
Height	296 mm	296 mm	296 mm	367 mm
Minimum	3 mm	3 mm	3 mm	3 mm
Maximum front panel thickness	12 mm	12 mm	12 mm	12 mm
Weight	6.2 kg	6.2 kg	6.2 kg	9.1 kg
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Storage temperature	-20 °C to 75 °C	-20 °C to 75 °C	-20 °C to 75 °C	-20 °C to 75 °C
Certifications				
UL508 certification	yes	yes	yes	yes

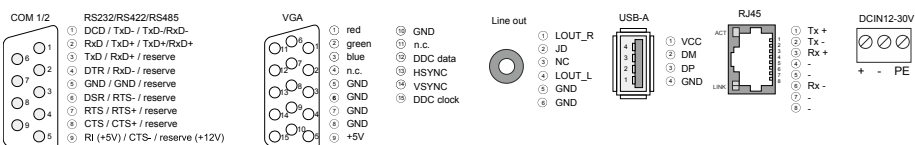
Connections, Interfaces

Panel PC | Panel PC

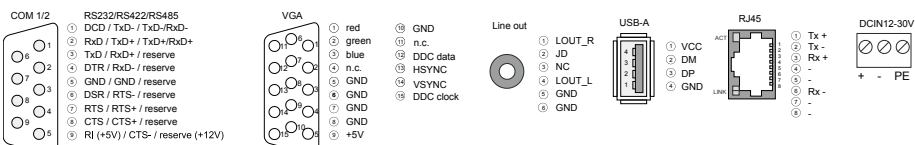
67P-PNJ0-EB
67P-PNL0-JB
67P-PNL0-JX
67S-PNJ0-EB

67S-PNL0-JB
67S-PNL0-JX

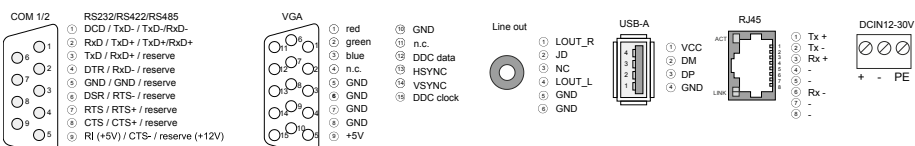
67P-PNJ0-EB



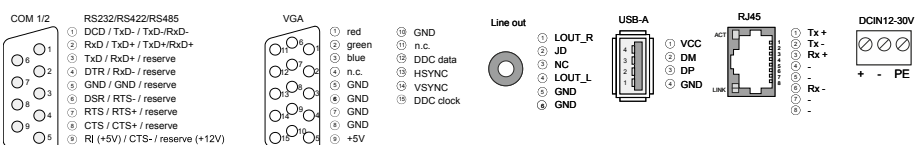
67P-PNL0-JB



67P-PNL0-JX



67S-PNJ0-EB



Panel PC

Panel PC | Panel PC

67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					
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Order number	67S-PNL0-JB	67S-PNL0-JX		
Figure				
Type	Panel PC PPC021 ES	Panel PC PPC021 ES		
General information				
Note	-	-		
Features	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 8 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 21,5" - Incl. operating system Windows Embedded Standard 7	- Processor: Intel Atom D2550 dualcore @1,86 GHz - Work memory: 2 GB - Operating system and user memory: 8 GB - Memory card plug-in place: CFast - Interfaces: 2x Ethernet (10/100/1000), 4x USB 2.0, 2x serial (RS232, RS422/RS485), Audio out - Display: 21,5" - Incl. operating system Windows Embedded Standard 7		
Display				
Display size (diagonal)	21.5 "	21.5 "		
Display size (width)	478 mm	478 mm		
Display size (height)	269 mm	269 mm		
Resolution	1920 x 1080	1920 x 1080		
Aspect ratio	16:9	16:9		
Type of display	TFT color (16.7M colors)	TFT color (16.7M colors)		
MTBF Backlights (25°C)	50000 h	50000 h		
System properties				
Processor	Intel Atom Dualcore 1,86 GHz	Intel Atom Dualcore 1,86 GHz		
Operating system	Windows embed-ded Standard 7	Windows embed-ded Standard 7		
User software	Movicon 11 Win Standard	-		
Work memory	2 GB	2 GB		
User memory	8 GB	8 GB		
Available memory (user data)	1000 MB	1400 MB		
SD/MMC Slot	-	-		
CF Card Slot Typ II	-	-		

Panel PC | Panel PC

67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					
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Order number	67S-PNL0-JB	67S-PNL0-JX		
Time				
Real-time clock buffered	✓	✓		
Clock buffered period (min.)	4 y	4 y		
Type of buffering	lithium battery	lithium battery		
Load time for 50% buffering period	-	-		
Load time for 100% buffering period	-	-		
Accuracy (max. deviation per day)	10 s	10 s		
Operating controls				
Touchscreen	PCAP	PCAP		
Keyboard	external via USB	external via USB		
Mouse	external via USB	external via USB		
Interfaces				
MPI, PROFIBUS-DP	-	-		
MPI, PROFIBUS-DP connector	-	-		
Serial, COM1	RS232 / RS422 / RS485	RS232 / RS422 / RS485		
COM1 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male		
Serial, COM2	RS232 / RS422 / RS485	RS232 / RS422 / RS485		
COM2 connector	Sub-D, 9-pin, male	Sub-D, 9-pin, male		
Number of USB-A interfaces	4	4		
USB-A connector	USB-A (host)	USB-A (host)		
Number of USB-B interfaces	-	-		
USB-B connector	-	-		
Number of ethernet interfaces	2	2		
Ethernet	Ethernet 10/100/1000 MBit	Ethernet 10/100/1000 MBit		
Ethernet connector	2 x RJ45	2 x RJ45		
Integrated ethernet switch	-	-		
Technical data power supply				
Power supply (rated value)	DC 24 V	DC 24 V		
Power supply (permitted range)	DC 20.4...28.8 V	DC 20.4...28.8 V		
Reverse polarity protection	✓	✓		
Current consumption (no-load operation)	1.2 A	1.2 A		
Current consumption (rated value)	1.3 A	1.3 A		
Inrush current	1.3 A	1.3 A		
I ₂ t	0.35 A²s	0.35 A²s		
Power loss	32 W	32 W		

Panel PC Panel PC						
67P-PNJ0-EB 67P-PNL0-JB 67P-PNL0-JX 67S-PNJ0-EB	67S-PNL0-JB 67S-PNL0-JX					

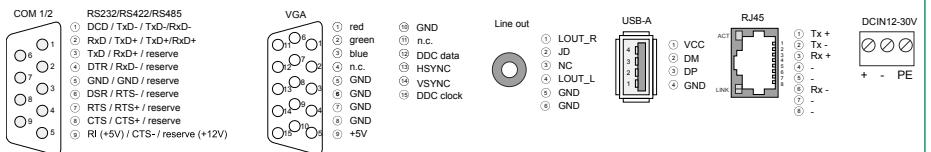
Order number	67S-PNL0-JB	67S-PNL0-JX		
Status information, alarms, diagnostics				
Supply voltage display	none	none		
Mechanical data				
Housing / Protection type				
Material	coated aluminum steel plate	coated aluminum steel plate		
Mounting	via integrated pivoted lever	via integrated pivoted lever		
Protect type front side	IP 65	IP 65		
Protect type back side	IP 20	IP 20		
Dimensions				
Front panel	562.4 mm x 382.4 mm x 6.7 mm	562.4 mm x 382.4 mm x 6.7 mm		
Rear panel	542 mm x 362 mm x 54.2 mm	542 mm x 362 mm x 54.2 mm		
Installation cut-out				
Width	547 mm	547 mm		
Height	367 mm	367 mm		
Minimum	3 mm	3 mm		
Maximum front panel thickness	12 mm	12 mm		
Weight	9.1 kg	9.1 kg		
Environmental conditions				
Operating temperature	0 °C to 50 °C	0 °C to 50 °C		
Storage temperature	-20 °C to 75 °C	-20 °C to 75 °C		
Certifications				
UL508 certification	yes	yes		

Connections, Interfaces

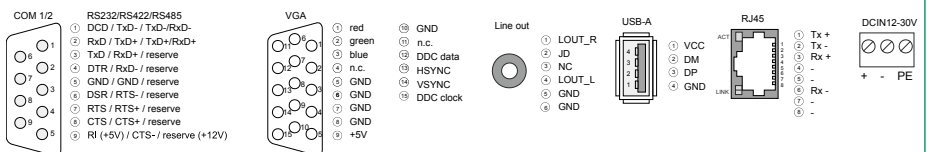
Panel PC | Panel PC

67P-PNJ0-EB	67S-PNL0-JB
67P-PNL0-JB	67S-PNL0-JX
67P-PNL0-JX	
67S-PNJ0-EB	

67S-PNL0-JB



67S-PNL0-JX



HMI software



Structure and Function

The touch panel software and tools extend the capabilities of both the operating system as well as the visualization of Movicon and thus also the application possibilities of the touch panel.

Operating System

The VIPA Touch Panels are supplied together with the operating system Windows embedded CE 6.0. These worldwide-distributed operating systems guarantee a high degree of availability, flexibility and expandability.

Movicon-Runtime

The runtime version of Movicon provides VBA support, include a graphic interface, an extensive symbol and driver library as well as an automatic reconnect and data synchronization. In addition, various function libraries are available, such as the integration of intelligent peripherals and communication modules.

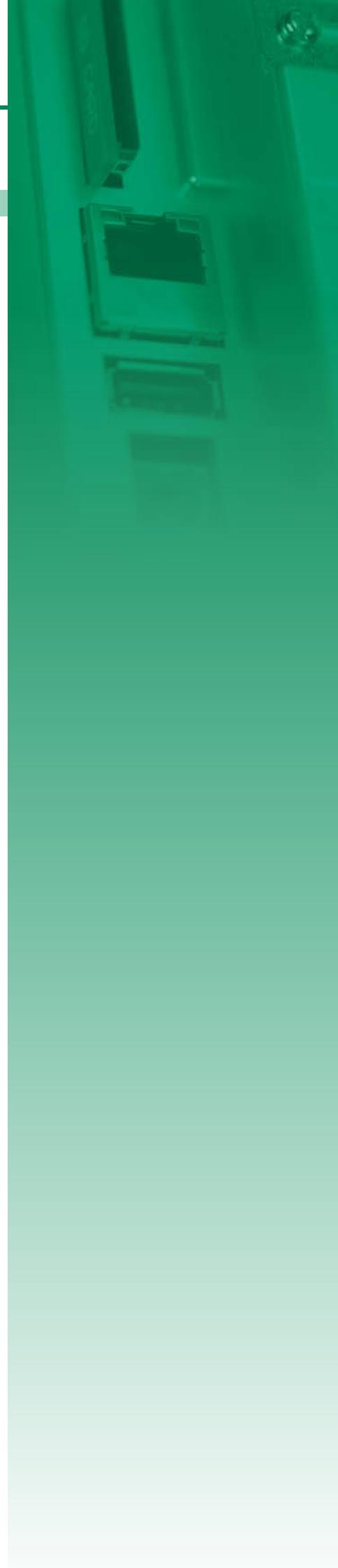
The use of the preinstalled runtime version of Movicon facilitate the immediate release of visualization projects.

Movicon-Editors

Movicon is a HMI/SCADA platforms with an open and flexible architecture for industrial automation, which allows the user vertical applications for visualization, data acquisition, logging as well as maintenance quickly and easily. Movicon with its graphically-intuitive interface and many integrated tools is easy to use for the operator.

Characteristics

- Java™ support
- Upgrade option to newer runtime versions
- Expansion of the existing run-time functionality
- Web server support
- Enlargement of the trend and archive server function



HMI software - Editors

Movicon®

Order number	SW614E1MB	SW614E1MAUB		
Type	Movicon11 Editor	MoviconX Editor		
General information				
Note	-	-		
Features	▸ Movicon11 Editor for Windows CE projects, incl. USB dongle	▸ Upgrade to Movicon 11		
Software attributes				
Premise (minimum)	Celeron 1.6 GHz o.ä., 512 MB RAM	Celeron 1.6 GHz o.ä., 512 MB RAM		
Premise (recommended)	Pentium IV 3 GHz, 1 GB RAM	Pentium IV 3 GHz, 1 GB RAM		
Target platform	Windows XP (SP3), Vista, 7 (32Bit/64Bit), 8 (32Bit/64Bit), Server 2003, 2008, 2008R2, 2012	Windows XP (SP3), Vista, 7 (32Bit/64Bit), 8 (32Bit/64Bit), Server 2003, 2008, 2008R2, 2012		
License model	single user license	single user license		

HMI software - Runtime



Order number	SW514S31B	SW514S33B	SW514S35B	SW514X11B1
Type	-	-	-	-
General information				
Note	-	-	-	-
Features	▶ USB dongle, executable only on VIPA Panel PCs with Movicon basic license (128 IO bytes) ▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond	▶ USB dongle, executable only on VIPA Panel PCs with Movicon basic license (512 IO bytes) ▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond	▶ USB dongle, executable only on VIPA Panel PCs with Movicon basic license (2048 IO bytes) ▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond	▶ Expansion by 1 web client for Movicon version 11.x for Windows up to 128 IO bytes ▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond
Software attributes				
Premise (minimum)	-	-	-	-
Premise (recommended)	-	-	-	-
Target platform	-	-	-	-
License model	single user license	single user license	single user license	single user license

Order number	SW514X11B2	SW514X13B1	SW514X13B2	SW514X15B1
Type	-	-	-	-
General information				
Note	-	-	-	-
Features	▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond ▶ Expansion by 2 web clients for Movicon version 11.x for Windows up to 128 IO bytes	▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond ▶ Expansion by 1 web client for Movicon version 11.x for Windows up to 512 IO bytes	▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond ▶ Expansion by 2 web clients for Movicon version 11.x for Windows up to 512 IO bytes	▶ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond ▶ Expansion by 1 web client for Movicon version 11.x for Windows up to 2048 IO bytes
Software attributes				
Premise (minimum)	-	-	-	-
Premise (recommended)	-	-	-	-
Target platform	-	-	-	-
License model	single user license	single user license	single user license	single user license

Order number	SW514X15B2			
Type	-			
General information				
Note	-			
Features	▸ Online upgrade, executable only on VIPA Panel PCs, expansion for a Movicon 11 Win Standard license, the number of the IO bytes has to correspond ▸ Expansion by 2 web clients for Movicon version 11.x for Windows up to 2048 IO bytes			
Software attributes				
Premise (minimum)	-			
Premise (recommended)	-			
Target platform	-			
License model	single user license			

HMI accessories



Structure and Function

System accessories enable and expand the use of the system and facilitate starting.

Memory Expansion

Standard Memory Type Compact Flash (CF) or Secure Disk (SD) can be used to expand the internal memory.

Cables

Accessories, such as USB and Ethernet programming cables, OP/AG cables with diagnostic connector or peripheral extension cables, as well as an extensive number of different protective films, support the versatile use of the systems.

Manuals

The technical documentation of the respective modules encompasses various manuals with the necessary hardware and programming information, detailed descriptions of each module, and instructions for structure and assembly.

Memory modules for Touch Panels



Order number	Type	Description	Note
574-2AH00	Compact Flash (CF) 1GByte	for VIPA professional Panels	
574-2AI00	Compact Flash (CF) 2GByte	for VIPA professional Panels	
953-1SI00	Secure Disc (SD) 2GByte	for VIPA eco and professional Panels	

Protective foil

Order number	Type	Description	Note
574-1AE01	Protective foil TP606	for professional Panels 6.5", 10 pieces	
574-1AF01	Protective foil TP608	for professional Panels 8.4", 10 pieces	
574-1AG01	Protective foil TP610	for professional Panels 10.4", 10 pieces	
574-1AH10	Protective foil TP612	for professional Panels 12.1", 10 pieces	
574-1BS01	Protective foil TP605	for professional Panels 5.7", 10 pieces	
574-1BC01	Protective foil TP605	for professional Panels 5.7", 10 pieces	

Cables



Order number	Type	Description	Note
670-0KB20	Ethernet programming cable	for Touch Panels with Movicon 3.0 m	
670-0KB00	OP/AG cable 0°/90° with PU/Diagnostic port	for VIPA CC 03, OP 03, TD 03	
670-0KB01	OP/AG cable 90°/90° with PU/Diagnostic port	PU-/Diagnostic port, 2.5 m	
660-0KB00	Periphery expansion cable CC 03	for up to 4 expansion modules EM 123 or Sytem 200V modules, 0.5 m	
950-0KB50	PC/AG programming cable	MPI cable with PU-/Diagnostic port, 2.5 m; use as PC/AG or TP/AG	

Manuals and operating instructions



Order number	Title	Contents	Language
HB116D	Manual Line displays - Compendium, German	HB116D_CC incl. operations list, HB116D_OP, HB116D_TD	DE
HB116E	Manual Line displays - Compendium, English	HB116E_CC incl. operations list, HB116E_OP, HB116E_TD	EN
HB116D_CC03	Manual Line displays - German	Commander Compact CC 03, incl. operations list	DE
HB116E_CC03	Manual Line displays - English	Commander Compact CC 03, incl. operations list	EN
HB116D_OP03	Manual Line displays - German	Operator Panel OP 03	DE
HB116E_OP03	Manual Line displays - English	Operator Panel OP 03	EN
HB116D_TD03	Manual Line displays - German	Text Display TD 03	DE
HB116E_TD03	Manual Line displays - English	Text Display TD 03	EN
HB160D_TP_X8	Manual Touch Panel, XScale 800 MHz - Compendium, German	Manual Touch Panel, XScale 800 MHz - Compendium, German	DE
HB160E_TP_X8	Manual Touch Panel, XScale 800 MHz - Compendium, English	Manual Touch Panel, XScale 800 MHz - Compendium, English	EN
HB160D_TP-ECO	Manual Touch Panel, ARM11 533MHz - Compendium, German	Manual Touch Panel, ARM11 533MHz - Compendium, German	DE
HB160E_TP-ECO	Manual Touch Panel, ARM11 533MHz - Compendium, English	Manual Touch Panel, ARM11 533MHz - Compendium, English	EN
HB160D_PPC	Manual Panel PC PPC	Compendium, German	DE
HB160E_PPC	Manual Panel PC PPC	Compendium, English	EN