Operating & Monitoring Products

LAUER

A company of the AUGUSTA Technologie Group

THE ENTIRE WORLD OF OPERATING

/ OPERATING

/ MONITORING

The strategy
Perfection from the product right through to our customer service, rapid conversion of the customer's requirements into practical and economic automation solutions. Day in, day out, more than 100 highly qualified staff set themselves this challenge. As a customer-facing organisation, we develop innovative products for the world-wide plant and machinery market. Many of our ideas have helped to shape the world of automation. Today, in Germany alone, over 1 000 well-known customers employ our products with total confidence.
Lauer, a synonym for maximum flexibility with maximum economy. Today, tomorrow, always.

The history
Founded in 1971 • 1975 start up in micro-computer technology • 1985 our first steps in automation with text displays • 1988 present the first intelligent operating console, suitable for all PLC systems • 1991 present the first industrial PC with TFT colour flat-panel display • 1992 the supreme operating console, the PCS topline • 1993 the new PCSPRO project planning software revolutionizes the task of project planning • 1995 first operating console with colour • 1997 open-Automation - our entry into total automation • 1999 first embedded PC with Windows CE • 2001 WOP-iT - the Web Operating Panel • 2003 MEI - Manufacturing Execution Interface

CONTROLLING

Create facts ...

he products

om the low-cost LCA text display to the high-tech CS operating console, to the VPC industrial PC, we upply a comprehensive range of automation products r displaying, operating, monitoring and visualization. IO and everything in the automation programme fits gether like a glove: operating, controlling (soft PLC) nd field bus. Open to everything and everyone, from oject planning through to servicing, unlimited and tra-rational - AIO.

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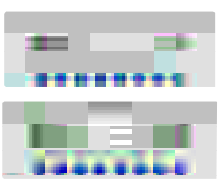
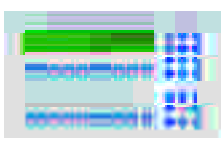
HMI-Products

Program overview

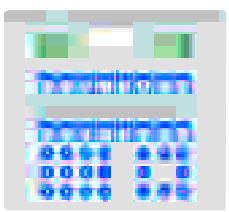
HIGHLIGHT	LCA 200	LCA 300/320	PCS 900 win	PCS 009 win
Project planning with	LCAPRO	LCAPRO	PCSPRO[WIN 1)]	PCSPRO[WIN]
Load project via	RS 232	RS 232	RS 232	RS 232
PLC interfaces	RS 232/422/485/TTY	RS 232/422/485/TTY	RS 232/422/485/TTY	RS 232/422/485/TTY
PLC drivers	parallel via PLC E/A, serial via AS511	Driver overview Page 8 + 9	Driver overview Page 8 + 9	Driver overview Page 8 + 9
BUS systems via PCS 807, PCS 811, PCS 812	-	Module integrated: Profibus-DP, MPI	Profibus DP, INTERBUS-S, MPI	Module integrated: Profibus-DP, INTERBUS-S, MPI
Memory for projects	32 kB	32 kB	128 kB	2 x 32 kB
Printer interface for	-	-	Protocol	–
Recipe manager	-	-	-	–
Intelligent Softkey action	-	-	256 Softkey bars	256 Softkey bars
Display (lines x characters)	LCD-Text display (2 x 40)	LCD-Text display (2/4 x 40)	VF-Text display (2 x 40)	LCD-Text display (4 x 20)
Character set	ASCII, Int. Display	ASCII, Int. Display	Freely def. character set	ASCII, Katakana
Font size in pixels	5 x 8	5 x 8	5 x 7	5 x 8
Process pictures	Texts	Texts	Texts	Texts
Process variables	Texts	Texts	Texts	Texts
Message texts/operating texts History texts	1024	1024/256	1024/256	1024/128
Menus	-	-	127	127
Password levels	-	-	-	
Short-stroke keys/LED	-	8/7	40/44	25/20
Protection type	IP 65	IP 65	IP 65	IP 65
External dimensions in mm (W x H x D) Mounting dimensions in mm (W x H)	216 x 48 x 45 208 x 40	216 x 84 x 60 208 x 76	325 x 190 x 65 304 x 169	144 x 215 x 50 128 x 199
SERIES	Text Panels			

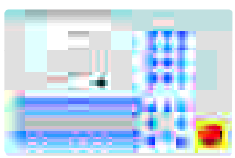




[1)] August 2003

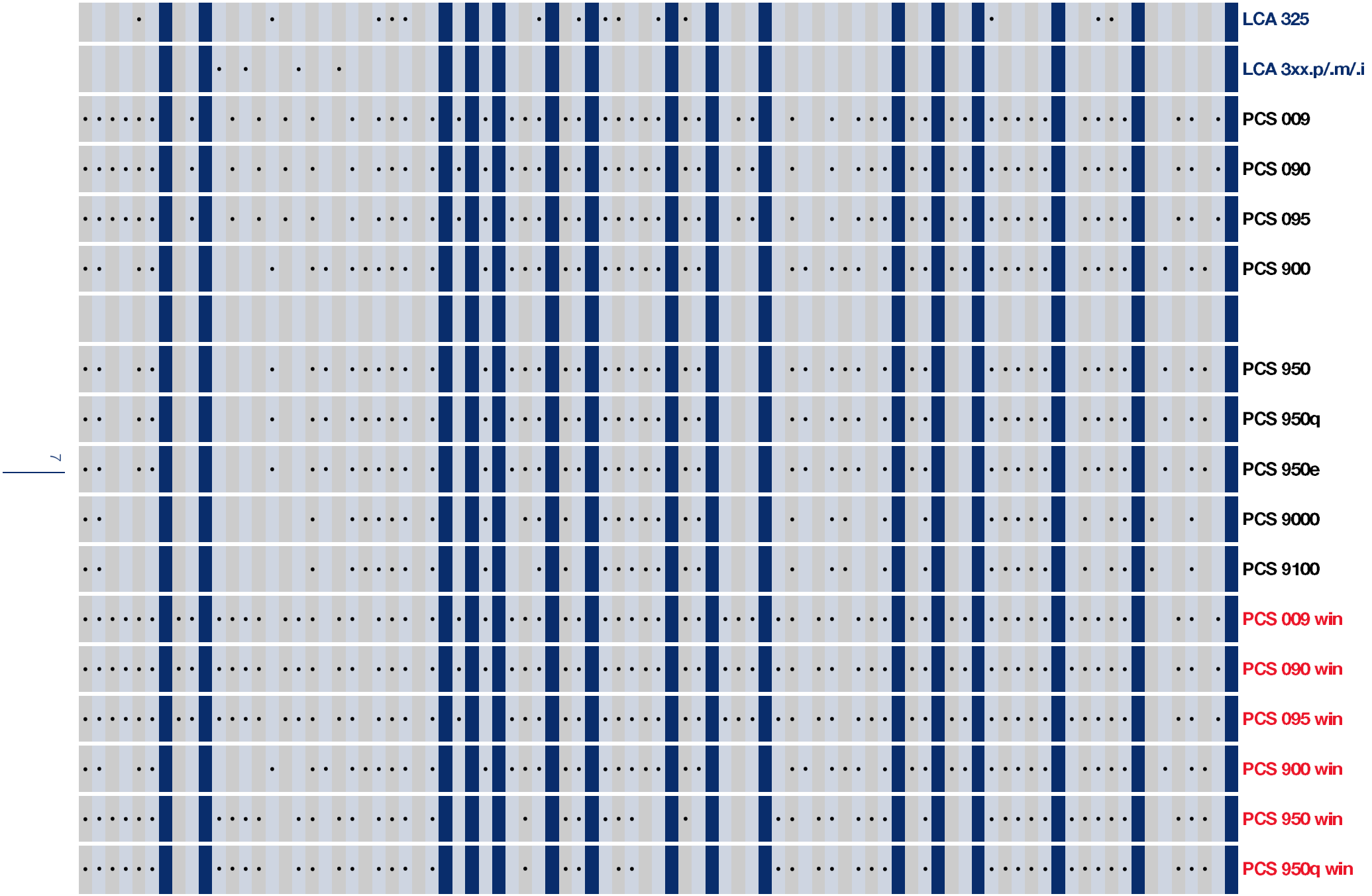
S 090 win	PCS 095 win	PCS 950 win	PCS 950q win
PCSPRO[WIN]	PCSPRO[WIN]	PCSPRO[WIN]	PCSPRO[WIN]
RS 232	RS 232	RS 232	RS 232
2/422/485/TTY	RS 232/422/485/TTY	RS 232/422/485/TTY	RS 232/422/485/TTY
ver overview Page 8 + 9	Driver overview Page 8 + 9	Driver overview Page 8 + 9	Driver overview Page 8 + 9
ule integrated: DP, INTERBUS-S, MPI	Module integrated: Profibus-DP, INTERBUS-S, MPI	Module integrated: Profibus-DP, INTERBUS-S, MPI	Module integrated: Profibus-DP, INTERBUS-S, MPI
2 x 32 kB	4 x 32 kB	640 kB 32 kB Recipes	640 kB 32 kB Recipes
–	–	Protocol, Recipes	Protocol, Recipes
–	–	Yes	Yes
Softkey bars	256 Softkey bars	256 Softkey bars	256 Softkey bars
-Text display (2 x 40)	LCD-Text display (4 x 40)	LCD-Display (320 x 240 Pixel)	LCD-Display (320 x 240 Pixel)
CII, Katakana	ASCII, Katakana	Freely def. character set	Freely def. character set
5 x 8	5 x 8	8 x 10/16 x 20	8 x 10/16 x 20
Texts	Texts	Texts, Graphic	Texts, Graphic
Texts	Texts	Texts, partial graphic	Texts, partial graphic
1024/128	1024/128	1024/127 1024	1024/127 1024
127	127	127	127
		9	9
28/20	36/36	40/44	40/44
IP 65	IP 65	IP 65	IP 65
5 x 144 x 50 194 x 128	224 x 202 x 50 204 x 188	224 x 270 x 65 204 x 259	339 x 219 x 65 325 x 205
		Graphic Panels	



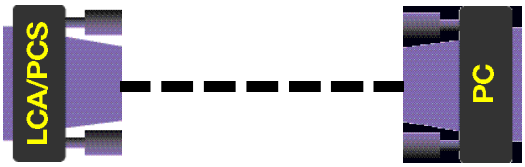
PLC Driver overview

ABB	Interface	Protocol	Ports • cabels	LCA 200	LCA 300
	CS 31	CS 31 direct	COM1, COM2 • PCS 760		
	CS 31	ArcNET	Cassette PCS 808 • PCS 870/871		
	T 200	COM2H	COM2H • PCS 720		
	MP 90	MODBUS	CH2 • PCS 770		
	AC 110	MODBUS	MVI Module • PCS 784		
	AC 110	MODBUS	COM2 • PCS 770		
AEG					
	A 120	LAUER	KOS 201/202 + PCS 859 • PCS 776		
	A 120, A 250	BKOS	PG-Port • PCS 778		•
	MODICON 984	MODBUS	MODBUS 1 SLAVE • PCS 780		•
	A 250	INTERBUS-S	Multibox PCS 811		
	A 250	INTERBUS-S	Interbus-Module integrated		
ALLEN BRADLEY					
	PLC-5/11, 5/20, 5/30, 5/40, 5/60	DF1	CH0 (RS 232) • PCS 789		
	PLC-5/11, 5/20, 5/30, 5/40, 5/60	DF1	CH0 (RS 232) • PCS 729		
	SLC-5/02, 5/03, 5/04	DH 485	PG-Port CH0 • PCS 768/799		
	SLC 5/02, 5/03	DH 485	1747 AIC • PCS 768/799		
	SLC 5/04	DH 485	PG-Port RS 232 • PCS 709		•
BAUMÜLLER					
	Omega	3964R	X4 (RS 232) • PCS 750		
	Omega	3964R	SIO 0202 (RS 422)) • PCS 741		
BERNECKER & RAINER					
	Midi- und Multicontrol	LAUER	PP40 • PCS 756		
	2005/2010 (ab August)	MODBUS			
BOSCH					
	CL 300, CL 400, CL 500, PC 600	LAUER	PCS 830/830.31/830.3 • PCS 736		
	CL 300	BUEP 19	PG-Port • PCS 706		
	CL 200, CL 400, CL 500	BUEP 19E	PG-Port • PCS 706		
	CL 400, CL 500	INTERBUS-S	Cassette PCS 804		
	CL 400 (Phoenix IBS BA AT)	INTERBUS-S	Multibox PCS 811		
	CL 400 (Phoenix IBS BA AT)	INTERBUS-S	Integrated Interbus-Module		
	CL 200, CL 400, CL 500 (ab Sept.)	BUEP 19E	LCA 035/235 • PCS 706	•	•
	CL 400 (DESI-DPIDESI-DP 12)	Profibus-DP	Multibox PCS 807		
	CL 400 (DESI-DPIDESI-DP 12)	Profibus-DP	Integrated Profibus-Module		
ELAU					
	Max-4	RS-422			
	Max-4	Profibus-DP	Multibox PCS 807		
	Max-4	Profibus-DP	Integrated Profibus-Module		
GE-FANUC					
	9020, 9030, 9070	SNP	PG-Port • PCS 708		
	90–30 V5.01	SNPX	PG-Port • PCS 708		•
KLÖCKNER-MOELLER					
	PS 306	SUCOM A	PG-Port • PCS 786		•
	PS 316/416	SUCOM A	PG-Port • PCS 796		
	PS 316	LAUER	PCS 820 • PCS 726		
	PS 4-201	LAUER	ZB4-501-UM2 • PCS 790		•
	PS 4-201	SUCOM A	PG-Port • PCS 785		•
MITSUBISHI					
	FX, FX 0	FX-Series	PG-Port • PCS 748		•
	A1N, A2N, A3N, A1S, A2S, A2C, A3A	A-Series	PG-Port • PCS 751		
OMRON					
	C20H, C28H, C40H, C60H, C200H, C1000H, C2000H, CV500, CV100, CQM1	HOST LINK	PG-Port HOST LINK Unit • PCS 746		•
	C20H, C28H, C40H, C60H, C200H, C1000H, C2000H, CV500, CV100, CQM1	HOST LINK Selektiv	PG-Port HOST LINK Unit • PCS 746		
	C20K, C28K, C40K, C60K				
SAIA					
	PCD 2, 4, 6-S 7	**S-BUS**	**0..3 • PCS 730/740/750**		
SEW					
	MOVI-DYN/TRAC/DRIVE	SEW	PG-Port (RS485) • PCS 7108		
SIEMENS					
	S5 90U, 95U, 100U, 115U	L1	PG-Port • PCS 716		
	S5 90U, 95U, 100U, 115U, 135U	AS511	PG-Port • PCS 717	•	
	S5 90U, 95U, 100U, 115U, 135U	AS511	PG-Port • PCS 716		•
	S5 115U … 155U	LAUER	PCS 810, PCS 810.3 • PCS 736		•
	S5 115U … 155U	LAUER	PCS 840 • PCS 766		•
	S5 115U … 155U, 928, 946, 948, 941–945	INTERBUS-S	Cassette PCS 804		
	S5 mit Interbus-S-Master	INTERBUS-S	Multibox PCS 811		
	S5 mit Interbus-S-Master	INTERBUS-S	Integrated Interbus-Module		
	S5 115U … 155U	ArcNET	Cassette PCS 808 • PCS 870/871		
	S5 oder S7 mit Profibus-Master	Profibus-DP	Multibox PCS 807		
	S5 oder S7 mit Profibus-Master	Profibus-DP	Integrated Profibus-Module		
	S7 200 CPU 214	PPI	PPI-Port • PCS 721		
	S7 200 CP 212/214	Freeport	PPI-Port • PCS 721		•
	S7 300/400	MPI	Multibox PCS 812		
	S7 300/400	MPI	Integrated MPI-Module		
	S7 300/400	Profibus	Multibox PCS 807		
	S7 300/400	Profibus	Integrated Profibus-Module		
SIG					
	SIG Positec (Serie 300): WP-311, WPM-311, WDP5-318, WDP3-31x, WDPM3-314	INTERBUS-S	Multibox PCS 811		
	SIG Positec (Serie 300): WP-311, WPM-311, WDP5-318, WDP3-31x, WDPM3-314	INTERBUS-S	Integrated Interbus-Module		
TELEMECANIQUE					
	TSX: 17-20	TSX direct	PG-Port • PCS 758		
	TSX: 27, 47-1, -201, -10, -20, -30, -40, 67-28, -40, 87-30, -40, 107-40	TSX direct	PG-Port • PCS 759		•
	TSX: 07, 27, 37, 47-1, -201, -10, -20, -30, -40, 67-28, -40, 87-30, -40, 107-40	UNITELWAY direct	TSX SCA 62 • PCS 718, PCS 783 (7)		
	TSX: 17-20, 47-201, 47-20	PL 7-3 UNITELWAY	TSX SCA 62 • PCS 718		
	TSX: 47-30, 47-40, 67-28, 67-40, 87-30, 87-40, 107-40	PL 7-3 UNITELWAY	TSX SCA 62 • PCS 718		
	TSX: 37	UNITELWAY	PG-Port • PCS 783		


LCA 325
LCA 3xx.p/.m/.i
PCS 009
PCS 090
PCS 095
PCS 900
PCS 950
PCS 950q
PCS 950e
PCS 9000
PCS 9100
PCS 009 win
PCS 090 win
PCS 095 win
PCS 900 win
PCS 950 win
PCS 950q win

What else do I need ...

The project planning software package helps you to realize the very unique operating ideas you have quickly and error-free. LCA/PCS introduce thousands of controls and functions for unlimited operation.



The project planning and data handling software as well as the programming cable LCA/PCS 733 are needed once only, however a separate adapter cable is needed for every LCA/PCS!

LCA/PCS 733 programming cable is included to transfer all operating projects created with LCAPRO, PCSPRO, PCSPRO^{WIN} and PCSPRO^{PLUS} to the LCA/PCS. Transferring from the LCA/PCS back to the PC is also possible.

Operating & Monitoring

User manual

User manual

The technical manuals LCA200, LCA301, PCS 091, PCS 991, PCS 995, PCS 996 and PCS 9091 have all of the information concerning the LCA/PCS that you're looking for.

Appendix

LCA/PCS 7xx adapter cable

We have the right driver for every PLC. In the appendix PCS 91. xxx of the manual you will find the data handling software on 3.5" floppy diskette as well as an exact description of the driver. Please ensure that you use the appropriate adapter cable.

LCA-/PCS-Products

Text panels

Be in the know, and at almost no charge. The one-size-fits-all LCA text panels demonstrate what your machine and controller can do 1024 ways, even when it comes to multiple languages. Regardless of the type of data, a precise display or report is easily made via contact points or PLC or serial interfaces.

Despite its compact size, the LCA is extremely high-performance and can be configured to your individual requirements and of course to every PLC.
The PCS are the interface between man and production process.

Project planning is such a breeze that you could be tempted to never stop!

LCA: The first controllable text panels save so much money that they pay for themselves!

LCA 180

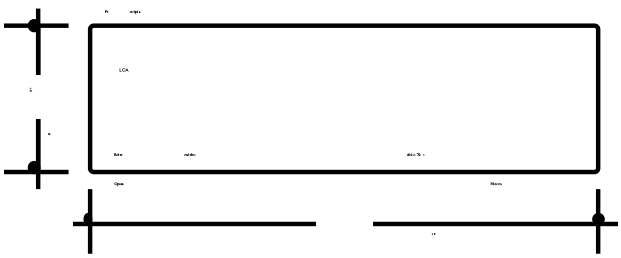
Standard fluorescent text display, 2 lines each 40 characters.
The LCA 180 text monitor is controlled via a RS 232/RS 485 serial interface. You have the choice between a 1:1 direct connection or a 1:x RS 485 bus connection. Texts are either immediately displayed or retrieved via ESC sequences and 3-digit text numbers from internal RAM or EPROM memory.

Technical data

Power supply	
Operating voltage	19 ... 33 V
Power consumption	8 W
Display	
Fluorescence	2 x 40 characters, 5 x 7 matrix, 7 mm Character size
General	
External dimensions	252 x 72 x 60 mm (W x H x D)
Fitting dimensions	248 x 68 mm (W x H)
RAM message text memory	24 kB
EPROM message memory	24 kB
Serial interface	V24/TTY
Temperature	Operation 0 … 55 °C Storage -25 ... 70 °C
Protection type	IP 65
Weight:	950 g

Ordering information

Model	Description
LCA 180	Text monitor, RAM/EPROM, 2-line, RS 232
LCA 180.2	Similar to LCA 180, RS 232/RS 485 network capable up to 80 LCA 180.2
LCA 292	Software for making text entries and EPROM programming on the text monitor LCA 180
LCA 039	Adapter cable from the PC to the LCA 300 cm, 25-pin/9-pin
LCA 180	Device manual for the LCA 180



LCA 245

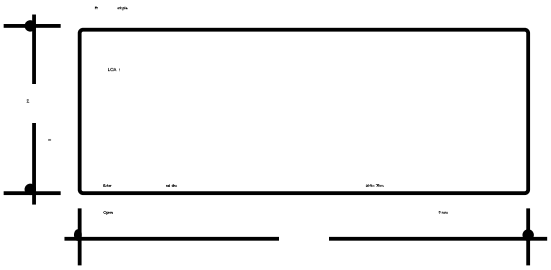
The LCA 245 text display can display up to 512 messages with a maximum of 32 lines (or 1 280 characters). Message texts can be written to the RAM memory. All ASCII characters are permissable.
With the LCA 245 you can select between four message versions (i.e. direct, last, first, and cycle messaging).
The LCA 245 can store every message until it is released. The PLC switches a message on and off and determines how long it remains in the text display via 5 front-facing plastic-covered keys which are easy to use.
The text display can combine 127 external variables and concrete texts in one message. All ASCII and BCD characters are permissable as variables. The number of variables and their positions are optional.
The LCA 245 can be controlled with any PLC when BCD/BIN encoded.

Technical data

Power supply	
Operating voltage	19 ... 23 V
Power consumption	8 W
Display	
Fluorescence	2 x 40 characters, 5 x 7 matrix 7 mm character size
General	
External dimensions	254 x 74 x 58 mm (W x H x D)
Fitting dimensions	248 x 86 mm (W x H)
Messages	Max. 512
Message text memory	RAM
Temperature	Operation 0 … 50 °C Storage -25 ... 70 °C
Protection type	IP 65
Weight:	950 g

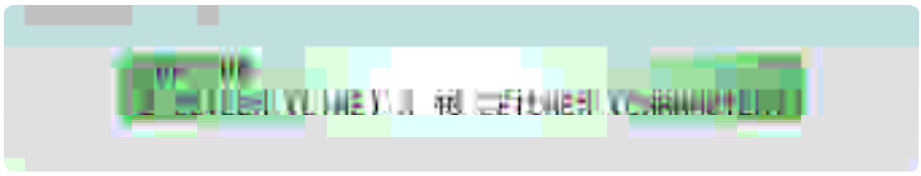
Ordering information

Model	Description
LCA 245	Text display with 2 x 40 characters
LCA 298	Project planning software
LCA 211	Standard keyboard
LCA 222	Industrial adapter
LCA 230	Ribbon cable 200 cm
LCA 234	Copy cable 200 cm
LCA 245	Device manual for the LCA 245



LCA 200

Standard LCD text display, 2 lines each 40 characters. Control via 10 digital pathways or S5-PG interface.
The LCA 200 universal text display can be either binary controlled via a digital pathway or text calls can be made via an RS 232/TTY transformer from an S5-PU interface with the S511 protocol. Complete functional modules are available for the different control versions. In the simplest case, 8 x 9-sized individual messages can be activated directly from message contacts. With a completely extended parallel or serial control, 1024 message texts with 2 main and 30 additional lines, 4 product ID texts and 16 function bits for Help, Quit, Forward and Backward browsing, Select commands, etc. can be controlled.

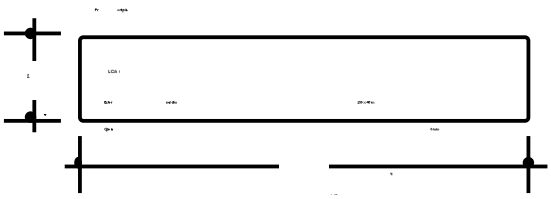


Technical data

Power supply	
Operating voltage	24 VDC
Power consumption	6 W
Display	
LCD	2 x 40 characters, 5 x 7 matrix, 5 mm character size
General	
External dimensions	216 x 48 x 45 mm (W x H x D)
Fitting dimensions	208 x 40 mm (W x H)
Message call	Direct, binary or multiplex
Message pages	Maximum of 1 024
Memory	EPROM 32 kB
Protection type	IP 65
Temperature	Operation 0 … 50 °C
	Storage -25 … 70 °C
Weight	275 g

Ordering information

Model	Description
LCA 200	Text display, EEPROM, 1 024 messages, LCD display
LCAPRO	Master software for LCA project planning
LCA 733	Programming cable
LCA 201	Device manual for the LCA 200

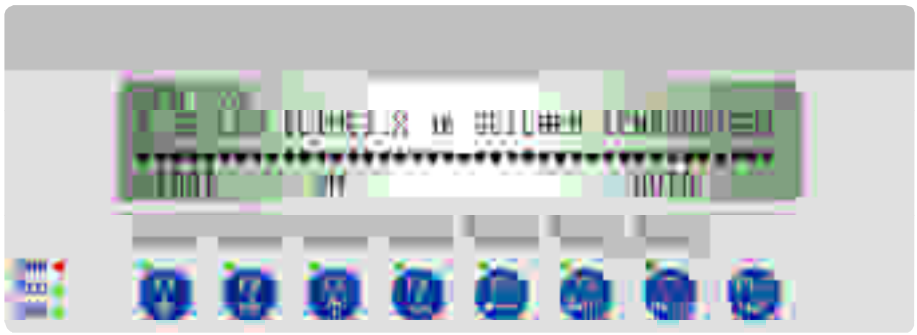


LCA 300/320/325

CA 300/320 text display with perating function

ser-controlled LCD text display. 2/4 ıes each 40 characters with 8 func-ɔn keys with integrated LED.
ontrol via the RS 232/TTY/RS 485 terface with the PU interface proto-ɔl for various PLC manufacturers.
ne LCA 300 text display is a comple- control system with function keys ıat can either be used to activate LC switch operations or enable the splay to be operated. Browsing and diting of variables and the calling of elp functions can be carried out sing the keys. The programming oftware enables variables and mes-ages texts to be easily planned out. om the scaling of display and input alues to priority management of error essages, all important operating nctions are supported by the LCA xt display. Up to 1024 message xts with 2 main lines and 30 additio-al lines, each with 1 help text can be aved. Function keys can be labeled / inserting paper strips.

dditional feature of the LCA 325:
xts can be printed.

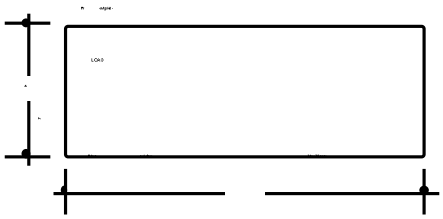


echnical data

ower supply	
perating voltage	24 VDC
ower consumption	8 W
splay	
CD	2 x 40 characters (LCA 300) 4 x 40 characters (LCA 320/325) 5 x 7 matrix, 5 mm character size
eneral	
ternal dimensions	216 x 84 x 57 mm (W x H x D)
ting dimensions	208 x 76 mm (W x H)
essage call	Multiplex
essage pages	Max. 1 024
emory	64 kB flash PROM
otection type	IP 65
mperature	Operation 0 … 50 °C Storage -25 … 70 °C
eight	450 g (LCA 300) 600 g (LCA 320) 950 g (LCA 325)

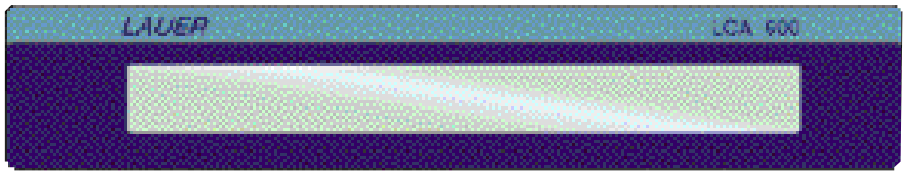
Ordering information

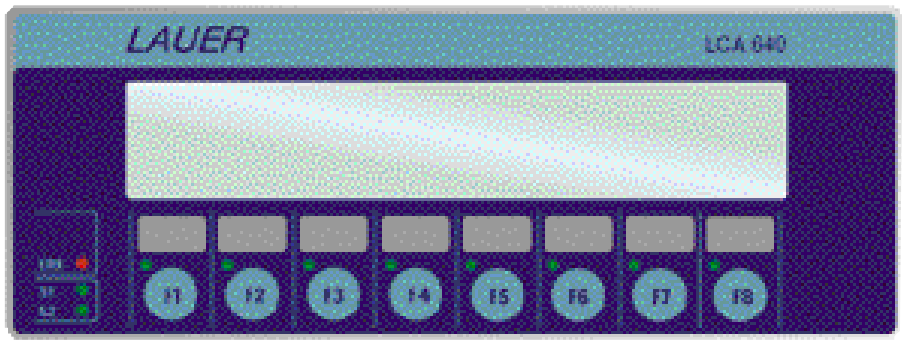
Model	Description
LCA 300.0	Text display with 2 x 40 characters, RS 232/TTY
LCA 300.1	Text display with 2 x 40 characters, RS 232/TTY/RS 485
LCA 300.p	Text display with 2 x 40 characters, ... for Profibus
LCA 300.m	Text display with 2 x 40 characters, ... for MPI
LCA 320.0	Text display with 4 x 40 characters RS 232/TTY
LCA 320.1	Text display with 4 x 40 characters, RS 232/TTY/RS 485
LCA 320.p	Text display with 4 x 40 characters, ... for Profibus
LCA 320.m	Text display with 4 x 40 characters, ... for MPI
LCA 325.1	Text display with 4 x 40 characters, RS 232/TTY, RS 232 printer port
LCA 325.p	Text display with 4 x 40 characters, ... for Profibus
LCA 325.m	Text display with 4 x 40 characters, ... for MPI
LCAPRO	Master software for LCA project planning
LCA 733	Programming cable
LCA 301.xxx	Appendix to manual for LCA 300/320/325 with PLC driver and data handling software
LCA 301	Device manual for LCA 300/320/325



LCA 600/640.1

The background-lit LCD display notifies you of all processes.
Any desired text can be written to the display via the interface (RS 232) or up to 999 double-line texts can be called from the reloadable flash memory. Every text that is called can be combined with a directly transmitted text. Extensive ESC sequences and control codes are available for controlling the display.
All ASCII characters can be represented on the display. Capital and lower case letters are also possible. We ship LCA 693 software for generating the display texts and entering the key codes with the aid of a PC (DOS). Transferring the text to the LCA is made via the RS 232 interface. Compliant with robust industry standard IP 65 protection type with only one 24 V DC power supply.





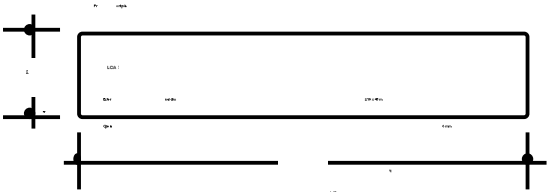
Additional performance characteristics of the LCA 640.1: 10 available LED indicators can each be allocated 4 functions (OFF, ON, SHORT BLINK, LONG BLINK). Eight freely allocatable function keys, whereby each can be allocated two different strings (confirm, release) of lengths 0-16, even with the AUTO-REPEAT function. Every key in the info field can be individually labeled to meet your personal requirements.
The bus protocol in the RS 422 network offers the possibility to address the LCA individually or globally (all network participants).

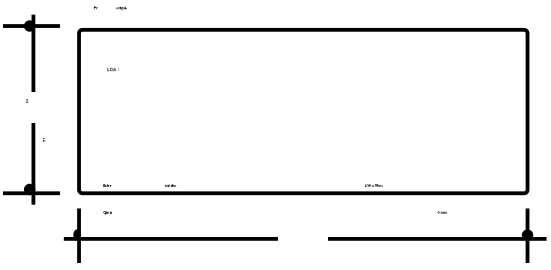
Technical data

Power supply	
Operating voltage	+ 24 VDC ± 20 %
Power consumption	6 W
Display	
LCD	2 x 40 characters, 5 x 7 matrix, 5 mm Character size (LCA 600) 4 x 40 characters, 5 x 7 matrix, 5 mm Character size (LCA 640.1)
General	
Character set	International ASCII, (8 freely definable characters)
Connections	12-pin connector, pluggable 9-pin SUB-D jack, pluggable
Protection type	IP 65
Temperature	Storage -25 … +70 °C Operation 0 ... 50 °C
Weight	Approx. 275 g
Dimensions	
LCA 600 external dimensions	216 x 48 x 45 mm (W x H x D)
Fitting dimensions	208 x 40 mm (W x H)
LCA 640.1 ext. dimensions	216 x 84 x 57 mm (W x H x D)
Fitting dimensions	208 x 76 mm (W x H)
Noise immunity	In accordance with IEC 801-4 on operational voltage.

Ordering information

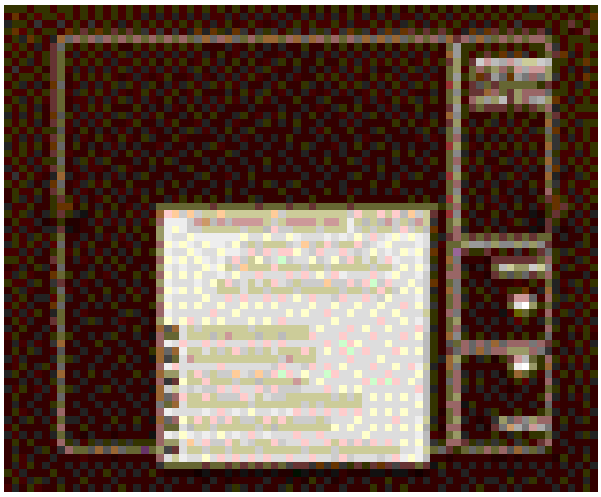
Model	Description
LCA 600	Text display with 2 x 40 characters, LCD display
LCA 640.1	Text display with 4 x 40 characters, LCD display
LCA 693	Project planning software, integrated into LCAPRO
LCA 733	Programming cable
LCA 691	Device manual for the LCA 600/640.1





LCA 710

he need for robust yet easy-to-use -board panel printers is well known. he LCA 710 industry printer was esigned with this in mind. It is a low- ost device for all standard print jobs. ata entry takes place via a serial terface (V24/RS 232).
he printer motor and electronics are ncased in a robust aluminium hou- ng. Exchanging paper and colour bbons is made on the device's front de. The housing dimensions allow e device to be built into a 19" 3HE odule assembly frame or in any esired front panel. A tensioning echanism is used to mount the inter during front-side installation.



echnical data

ower supply

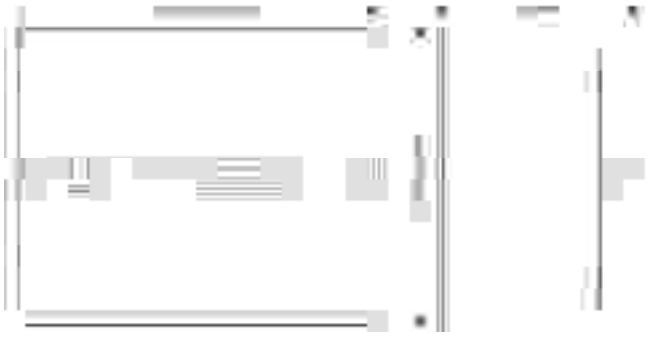
perating voltage	19 ... 30 V
ower consumption	180 mA

eneral

ternal dimensions	128 x 152 x 90 mm (W x H x D)
ting dimensions	112 x 140 mm (W x H)
haracter set	1. US-ASCII 2. German-ASCII
int speed	20 characters/second
audrate	150, 300, 600, 1200
mperature	Operation 0 … 50 °C Storage 10 ... 80 °C

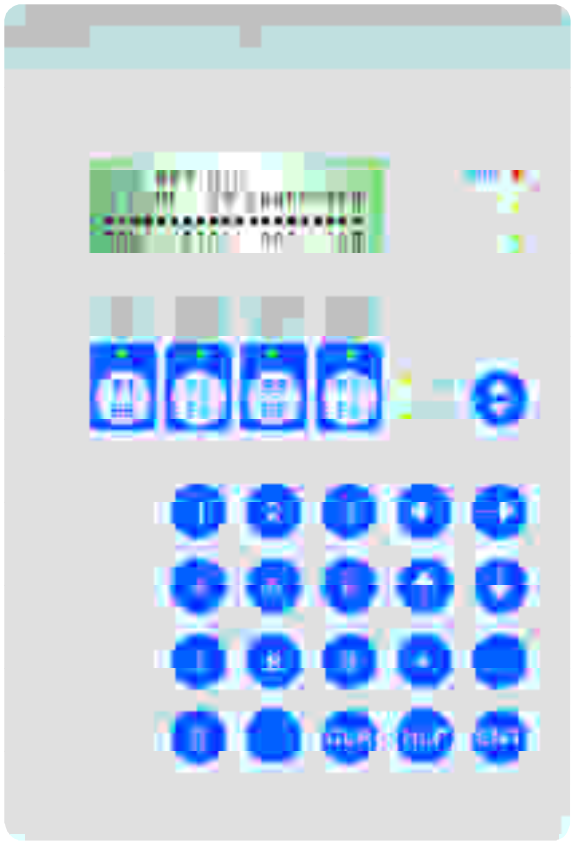
Ordering information

Model	Description
LCA 710	Industry printer for LCA, PCS
LCA 711	Adapter cable from LCA 710 printer to LCA 300/320
LCA 035/235	Adapter cable from LCA 710 printer to LCA, 200 cm
LCA 036	Y cable for LCA 300/320 and printer
LCA 714	Colour ribbons for LCA 710, black Packaging unit = 5 pieces
LCA 715	Paper rolls for LCA 710 Packaging unit = 10 pieces
LCA 710	Device manual for the LCA 710



PCS 009 win

perating console with LCD display 4 lines ach 40 characters (with international cha- cter set), keypad and 4 function keys with egrated LEDs.
ontrol is made via an RS 232/TTY/RS 22/RS 485 interface with the protocol of the spective PLC manufacturer. Connection kes place via the PU interface or a commu- cations card. Integrated bus modules (CAN, terbus, Profibus or S7-MPI) round off the erating console.
he operating console offers an easy-to-use enu with 1024 message texts, fault report anagement, recipe memory management, ftware clock, softkey actions and high-per- rmance variable types with minimal pro- amming necessary. From the scaling of splay and input values to priority manage- ent of fault messages, all important opera- g functions are supported by the PCS ope- ting console.
he menu system manages 127 freely defina- e menus with up to 255 nodes. User ompting takes place automatically via LEDs ilt into the cursor keys. 128 softkey bars an be selected. Every key in the softkey bar an be assigned 8 command lines with AND, R, WRITE as actions. The message text stem encompasses 128 messages with 2 lines each and help text.



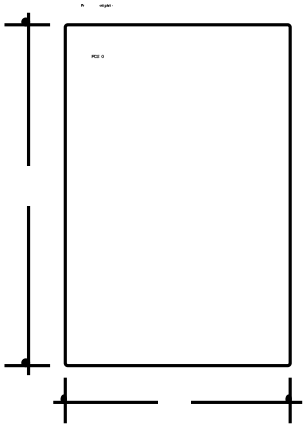
echnical data

ower supply	
ut voltages	24 V DC ± 10 % polarised
ower consumption	Iav = 250 mA at 24 volts
se	630 mA, microfuse, delayed action
splay	
D display	4 x 20 characters 5 x 8 matrix 5 mm character size
eneral	
nt material	Aluminium black anodized
il	Acid-resistant polyester foil
ter dimensions	147 x 215 x 52 mm (W x H x D)
reen dimensions	131 x 199 mm (W x H)
eight	Approx. 1 kg
otection type	IP 65 front/IP 20 housing
mperature	5 ... 45 °C
midity	To 75 % with no dew formation
ration during operation	3 G at 50 Hz in all directions 3 G at 100 Hz in all directions
MC	EMC guideline 89/336 EEC, fault emis- sion in accordance with EN 55022, noise immunity in accordance with EN 50082-2 and EN 61000-6-2
andards	VDE, CE

Ordering information

Model	Description
PCS 009 win*.	Operating console with LCD display, 4 x 20 characters
PCS 733	Programming cable
PCS 91.xxx	Appendix to manual for PCS with PLC driver and data handling software
PCS 7xx	Adapter cable for PLC
PCSPRO^{WIN}	Software for project planning of the PCS 009 win
PCS 096	Device manual for the PCS 009 win

* PCS 009 win.i – ....for Interbus-S (Lead time on request)
PCS 009 win.p – ....for Profibus DP
PCS 009 win.m – ....for MPI
PCS 009 win.c – ....for CAN (Lead time on request)
PCS 009 win.s – ....for serial



PCS 090 win

Operating console with LCD display 2 lines each 40 characters (with international character set), keypad and 8 function keys with 2 integrated LEDs.
Control is made via an RS 232/TTY/RS 422/RS 485 interface with the protocol of the respective PLC manufacturer. Connection takes place via the PU interface or a communications card. Integrated bus modules (CAN, Interbus, Profibus or S7-MPI) round off the operating console.
The operating console offers an easy-to-use menu with 1024 message texts, fault report management, recipe memory management, software clock, softkey actions and high-performance variable types with minimal programming necessary. From the scaling of display and input values to priority management of fault messages, all important operating functions are supported by the PCS operating console.
The menu system manages 127 freely definable menus with up to 255 nodes. User prompting takes place automatically via LEDs built into the cursor keys. 128 softkey bars can be selected. Every key in the softkey bar can be assigned 8 command lines with AND, OR, WRITE as actions. The message text system encompasses 128 messages with 32 lines each and help text.

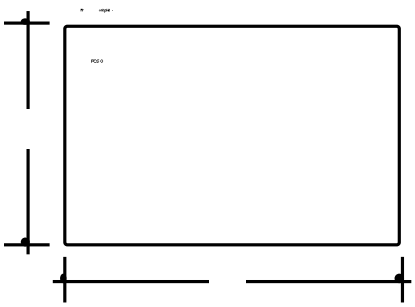
Technical data

Power supply	
Input voltages	24 V DC ± 10 % polarised
Power consumption	Iav = 250 mA at 24 volts
Fuse	630 mA, microfuse, delayed action
Display	
LCD display	2 x 40 characters 5 x 8 matrix 5 mm character size
General	
Front material	Aluminium black anodized
Foil	Acid-resistant polyester foil
Outer dimensions	215 x 144 x 52 mm (W x H x D)
Screen dimensions	194 x 128 mm (W x H)
Weight	Approx. 1 kg
Protection type	IP 65 front/IP 20 housing
Temperature	5 ... 45 °C
Humidity	To 75 % with no dew formation
Vibration during operation	3 G at 50 Hz in all directions 3 G at 100 Hz in all directions
EMC	EMC guideline 89/336 EEC, fault emission in accordance with EN 55022, noise immunity in accordance with EN 50082-2 and EN 61000-6-2
Standards	VDE, CE

Ordering information

Model	Description
PCS 090 win*	Operating console with LCD display, 2 x 40 characters
PCS 733	Programming cable
PCS 91.xxx	Appendix to manual for PCS with PLC driver and data handling software
PCS 7xx	Adapter cable for PLC
PCSPRO^{WIN}	Software for project planning of the PCS 090 win
PCS 096	Device manual for the PCS 090 win

* PCS 090 win.i – ….for Interbus-S (Lead time on request)
PCS 090 win.p – ….for Profibus DP
PCS 090 win.m – ….for MPI
PCS 090 win.c – ….for CAN (Lead time on request)
PCS 090 win.s – ….for serial



PCS 095 win

perating console with LCD display, 4 ıes each 40 characters (with interna- ınal character set), keypad and 8 function ys with 2 integrated LEDs.
ontrol is made via an RS 232/TTY/RS 22/RS 485 interface with the protocol of e respective PLC manufacturer. Connec- ın takes place via the PU interface or a ommunications card. Integrated bus odules (CAN, Interbus, Profibus or S7- PI) round off the operating console.
ıe operating console offers an easy-to- se menu with 1024 message texts, fault port management, recipe memory anagement, software clock, softkey tions and high-performance variable oes with minimal programming necessa- From the scaling of display and input lues to priority management of fault mes- ages, all important operating functions are upported by the PCS operating console.
ıe menu system manages 127 freely efinable menus with up to 255 nodes. ser prompting takes place automatically a LEDs built into the cursor keys. 128 oftkey bars can be selected. Every key in e softkey bar can be assigned 8 com- and lines with AND, OR, WRITE as tions. The message text system encom- asses 128 messages with 32 lines each nd help text..

echnical data

ower supply

out voltages	24 V DC ± 10 % polarised
ower consumption	Iav = 250 mA at 24 volts
ise	630 mA, microfuse, delayed action

splay

CD display	4 x 40 characters, 5 x 8 matrix 5 mm character size

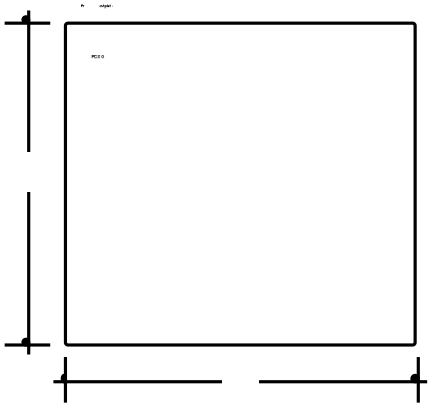
eneral

ont material	Aluminium black anodized
il	Acid-resistant polyester foil
ıter dimensions	224 x 202 x 52 mm (W x H x D)
reen dimensions	204 x 188 mm (W x H)
eight	Approx. 1 kg
otection type	IP 65 front/IP 20 housing
mperature	5 ... 45 °C
ımidity	To 75 % with no dew formation
ration during operation	3 G at 50 Hz in all directions 3 G at 100 Hz in all directions
MC	EMC guideline 89/336 EEC, fault emis- sion in accordance with EN 55022, noi- se immunity in accordance with EN 50082-2 and EN 61000-6-2
andards	VDE, CE

Ordering information

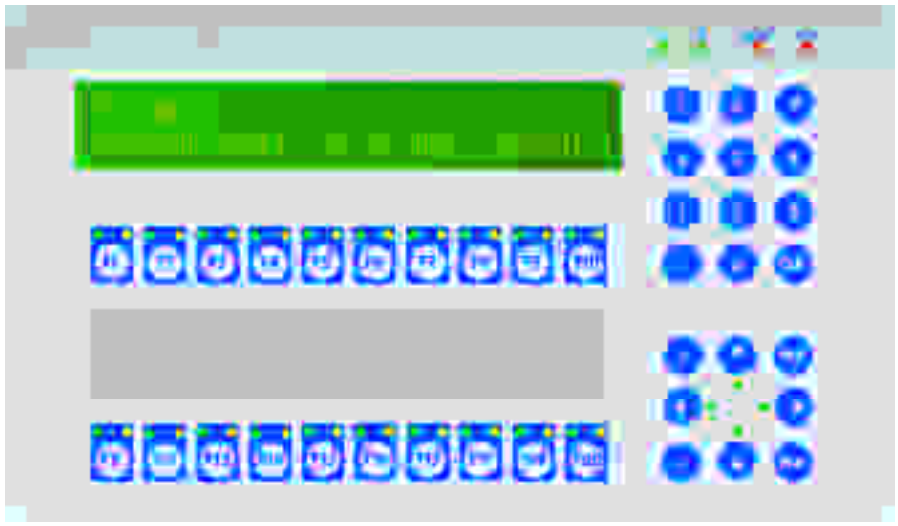
Model	Description
PCS 095plus*	Operating console with LCD display, 4 x 40 characters
PCS 733	Programming cable
PCS 91.xxx	Appendix to manual for PCS with PLC driver and data handling software
PCS 7xx	Adapter cable for PLC
PCSPRO^{WIN}	Software for project planning of the PCS 095 win
PCS 096	Device manual for the PCS 095 win

* PCS 095 win.i – ….for Interbus-S (Lead time on request)
PCS 095 win.p – ….for Profibus DP
PCS 095 win.m – ….for MPI
PCS 095 win.c – ….for CAN (Lead time on request)
PCS 095 win.s – ….for serial



PCS 900 win *

Operating console with vacuum fluorescent display, 2 lines each 40 characters, keypad and 20 function keys with 2 integrated LEDs.
Control is made via an RS 232/TTY/RS 422/RS 485 interface with the protocol of the respective PLC manufacturer. Connection takes place via the PU interface or a communications card.
The operating console offers an easy-to-use menu, fault report management, softkey actions and high-performance variable types with minimal programming necessary. From the scaling of display and input values to priority management of fault messages, all important operating functions are supported by the PCS operating console.
The menu system manages 127 freely definable menus with up to 255 nodes. User prompting takes place automatically via LEDs built into the cursor keys. 256 softkey bars can be selected. Every key in the softkey bar can be assigned 8 command lines with AND, OR, WRITE as actions. The message text system encompasses 1024 messages with 32 lines each and help text. 650 variables can be defined. Protocol function with freely designable print layout. Battery buffering for clock, calendar and history. Print out via the serial



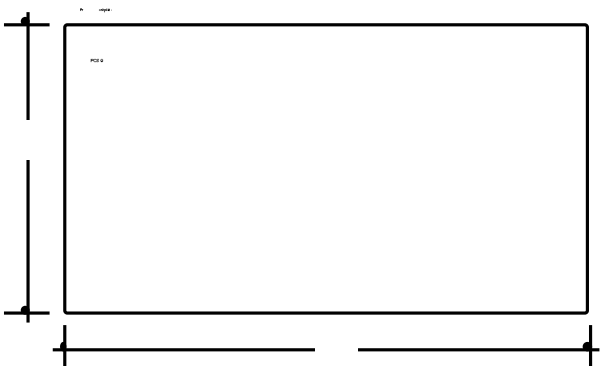
Technical data

Power supply	
Input voltages	24 V DC ± 10 % polarised
Power consumption	Iav = 800 mA at 24 volts
Fuse	1 AT, microfuse, delayed action
Display	
VF display	2 x 40 characters 5 x 7 matrix, 5 mm character size
General	
Front material	Aluminium black anodized
Foil	Acid-resistant polyester foil
Outer dimensions	325 x 190 x 65 mm (W x H x D)
Screen dimensions	304 x 169 mm (W x H)
Weight	Approx. 2 kg
Protection type	IP 65 front/IP 20 housing
Temperature	5 ... 45 °C
Humidity	To 75 % with no dew formation
Vibration during operation	3 G at 50 Hz in all directions 3 G at 100 Hz in all directions
EMC	EMC guideline 89/336 EEC, fault emission in accordance with EN 55022, noise immunity in accordance with EN 50082-2 and EN 61000-6-2
Standards	VDE, CE

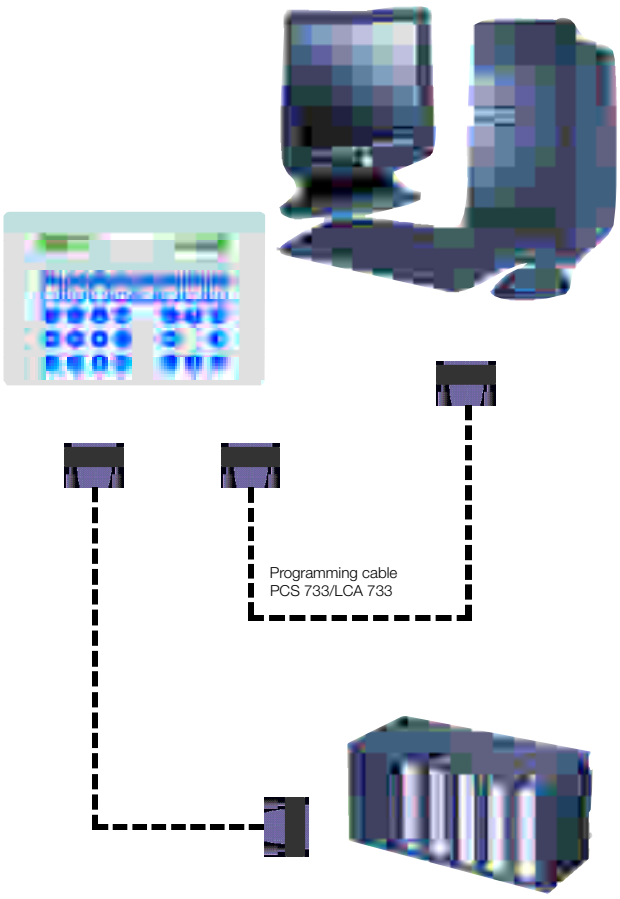
Ordering information

Model	Description
PCS 900 win*	Operating console with VF display, 2 x 40 characters
PCS 733	Programming cable
PCS 91.xxx	Appendix to manual for PCS with PLC driver and data handling software
PCS 7xx	Adapter cable for PLC
PCSPRO^{WIN}	Software for project planning of the PCS 900 win*
PCS 991	Device manual for the PCS 900 win*

* Available August 2003



Six important reasons for rational operation



Feature 1
PCS puts an end to the overabundance of keys, switches, lamps, displays ... that all have to be positioned, wired and mounted.

Feature 2
PCS win: maximum flexibility through several PLC drivers, no difference whether serial or via field-bus.

Feature 3
The PCS guarantees not only a uniform operating interface for many different types of PLC systems, but is also consistent in functionality from the PCS 009 to the PCS 950.

Feature 4
The innovative PCS operating concept is especially economical, understandable and helpful to the user in every situation.

Feature 5
The project planning software PCSPRO^{WIN} ensures lightning-quick, well structured project planning, changes and expansions of a desired operation. No difference whether WIN 98, WIN NT/2000 or WIN XP is used.

Feature 6
The communications principle on which the PCS/PLC is based is simple: The PCS writes a numerical target value (BIN or BCD) in a defined data word area. This target value is read by the PLC. The PLC sets a bit from log 0 to log 1 in a PCS-type data word. The PCS recognizes this bit and calls a message text. Special PLC drivers ensure perfect timing between the PCS and PLC.

PCS-Products

Graphic Panels

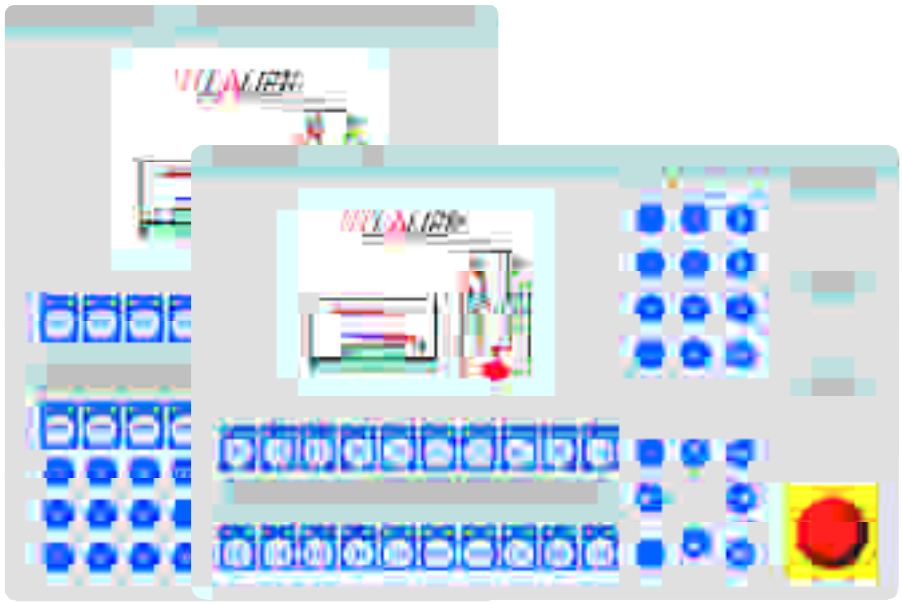
PCS operating consoles are the interfaces between man and production process.

A wide product range allows for an optimal selection for machines and systems. PCS is designed for use in all industries, from chemical/pharmaceutical to food and industrial construction engineering.

The overlying philosophy of operation is to make project planning flexible and efficient, from line-based to graphically-oriented displays. With the PCS project planning tool, you can create operating applications quickly and easily. The wide range of functionality of intelligent operating and observing elements puts you in a position to create a universal machine operating concept. No matter if it is a single operating field or a decentralised operating field structure, PCS guarantees a comfortable experience. The large number of PLC drivers guarantees communication to all well-known automated controllers and international application.

PCS 950 win / 950q win

Operating console with background lit CFL-LCD display, 320 x 240 pixels, keypad and 20 function keys with 2 integrated LEDs 2 sizes available. Control is made via an RS 232/TTY/RS 422/RS 485 interface with the protocol of the respective PLC manufacturer. Connection takes place via the PU interface or a communications card. Integrated bus modules (CAN, Interbus, Profibus or S7-MPI) round off the operating console. The operating console offers an easy-to-use menu with 1024 message texts, fault report management, overlaying softkey bars with action assignment and high-performance variable types with minimal programming necessary. Numerical message calling, 5 delete methods. From the scaling of display and input values to priority management of fault messages to recipe management, all important operating functions are supported by the PCS operating console.



The menu system manages 127 freely definable menus with up to 255 nodes. User prompting takes place automatically via LEDs built into the cursor keys. 99 static bitmap pictures are able to be saved as wallpaper. 262 softkey bars can be selected and overlaid independently of the picture currently displayed. Every key in the softkey bar can be assigned 8 command lines with AND, OR, WRITE as actions. A 4-digit password with 10 levels of authorisation is able to protect every operating page. The message text system encompasses 1024 messages with 32 lines each and help text. Protocol function with freely designable print layout. Battery buffering for clock, calendar and history. Entry, exit and quit records can be printed out via the serial printer interface or displayed on-screen by first or last log times.

Additional performance characteristics of the PCS 950q win: prepared for 4 x 22,5 Ø switches/keys.

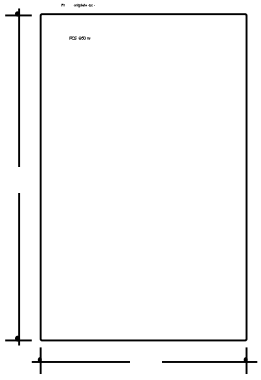
Technical data

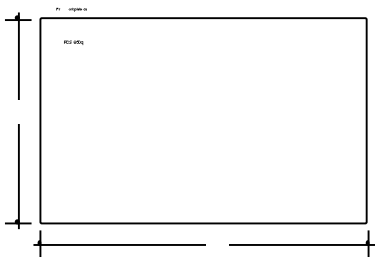
Power supply	
Input voltages	24 V DC ± 10 % polarised
Power consumption	Iav = 800 mA at 24 volts
Fuse	1 AT, microfuse, delayed action
Display	
LCD display	5,7” 320 x 240 Pixels
General	
Front material	Aluminium black anodized
Foil	Acid-resistant polyester foil
Outer dimensions PCS 950	224 x 270 x 65 mm (W x H x D)
Fitting dimensions	204 x 259 mm (W x H)
Outer dimensions PCS 950q	339 x 219 x 65 mm (W x H x D)
Fitting dimensions	325 x 205 mm (W x H)
Weight	Approx. 2.5 kg
Protection type	IP 65 front/IP 20 housing
Temperature	5 ... 45 °C
Humidity	To 75 % with no dew formation
Vibration during operation	3 G at 50 Hz in all directions 3 G at 100 Hz in all directions
EMC	EMC guideline 89/336 EEC, fault emission in accordance with EN 55022, noise immunity in accordance with EN 50082-2 and EN 61000-6-2
Standards	VDE, CE

Ordering information

Model	Description
PCS 950 win*	Operating console with LCD display, 320 x 240 pixels
PCS 950q win	Like the PCS 950, prepared for switch elements Ø 22.5
PCS 733	Programming cable
PCS 91.xxx	Appendix to manual for PCS with PLC driver
PCS 7xx	Adapter cable for the PLC
PCSPRO^{WIN}	Master software for project planning on the PCS 950 win/950q win
PCS 996	Device manual for the PCS 950plus/950q plus

* PCS 950 win.i – .for Interbus-S (Lead time on request)
PCS 950 win.p – .for Profibus DP
PCS 950 win.m – .for MPI
PCS 950 win.c – .for CAN (Lead time on request)
PCS 950 win.s – .for serial





What you see is was you get

nlimited, supersonic operating, planning nd simulation potential

CSPRO^{WIN} assist you in creating operating nd display projects for the PCS*WIN* operating onsoles.

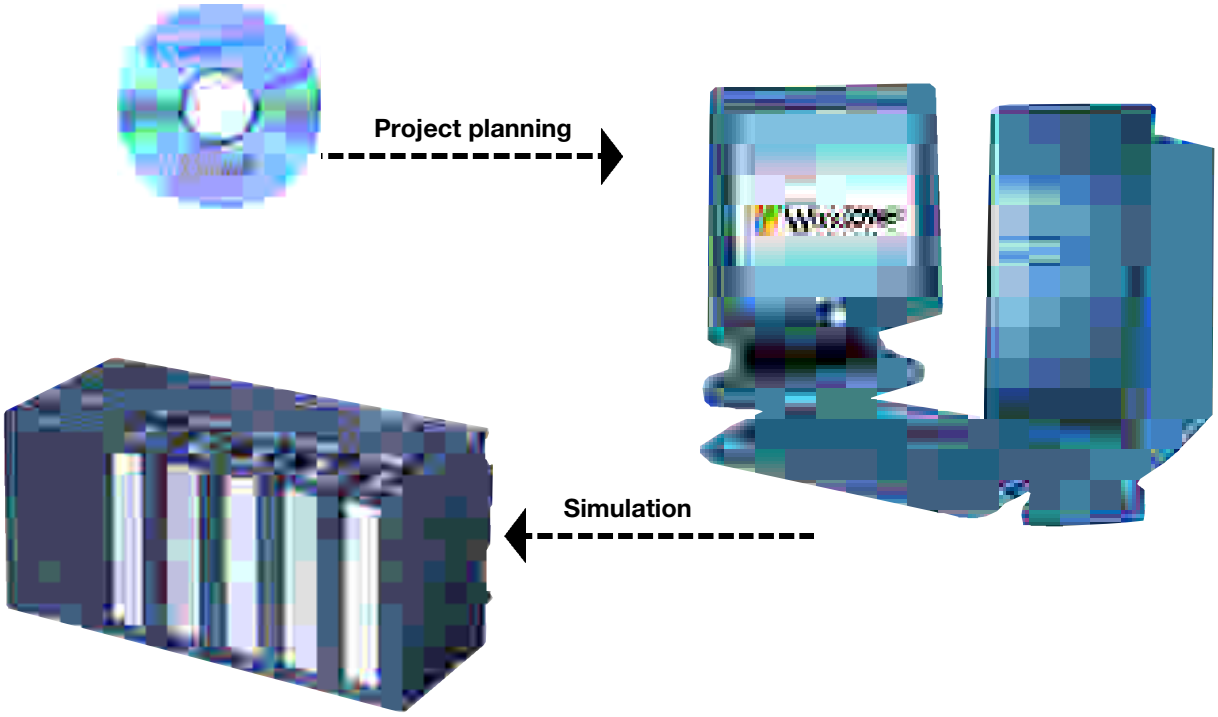
ror-free log lists stored in project files are writ- n to the PCS in compiled format via downlo- d and, if necessary, reimported.

the main menu you can select the PLC ystem along with the special data or flag orga- sation, the corresponding PLC driver and the CS. It doesn't get any simpler than this!

upport for copying, pasting and deleting of ariables and texts is also included as is the ell-designed menu structure and a complete verview of the data word and address ranges elected. The PCSPRO^{WIN} project planning soft- are are self-explanatory and have help files for very function. The software presents all pictu- s as they will be displayed later on.

The project planning software simulates the PLC, thereby allowing a comprehensive test of the PCS to be conducted at your desktop. Changes or corrections are able to be made immediately.

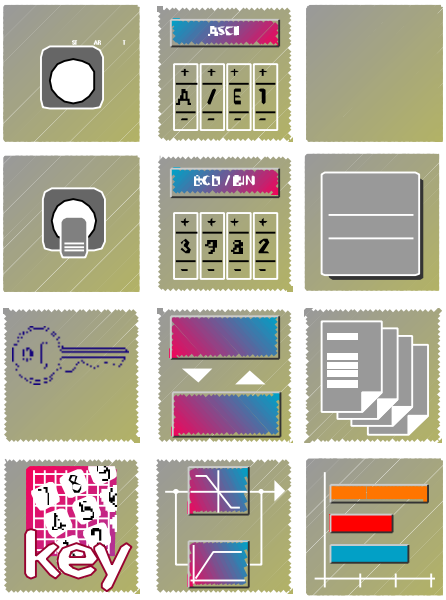
The project planning software runs on all PCs and PUs where Windows operating systems are installed. The PCSPRO^{WIN} runs either on Windows 98, NT, 2000 and XP.



Operating controls and functions

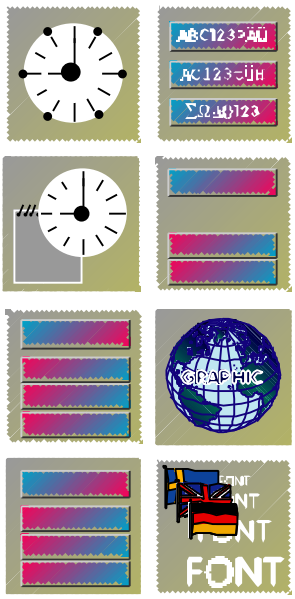
The PCS*WIN* has an answer for all of your needs, from observing and operating with text and pictures, to protocols and statistics, to machine reports, to actual value display and menu-operated target value entry, to recipe management, to fault display and user guidance, to monitoring and registering.
The PCS comes with a wide range of ready-made functions and operating controls that you can simply select through the project planning software and use for your application. You can realize your most demanding operating desires with ease and in no time flat. Regardless of the PLC your PCS uses. The possibilities the PCS*WIN* opens up for the automation professional and those working at the machine are fantastic. With the PCS*WIN*, every machine and every control is kept in firm grasp.

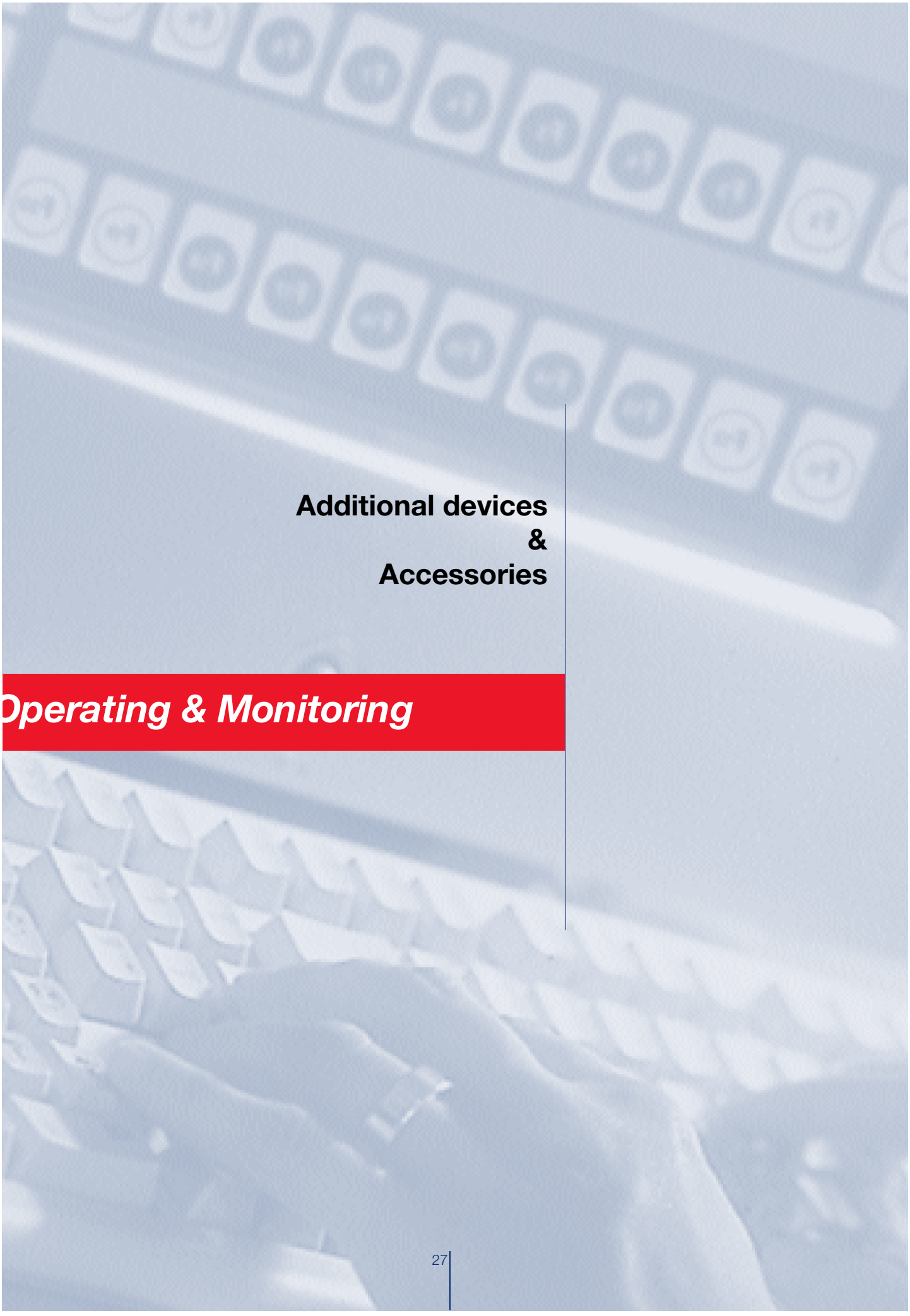
PCS for all industry sectors
The PCS can be used in all aspects of apparatus, systems and machine construction; in warehouse engineering; in chemical, pharmaceutical and cosmetic applications; in beverage canning and bottling systems; for automating air conditioning, heating and ventilation systems and for building and installation engineering; in silo and sewage treatment plants, in water treatment facilities and in environmental protection; in weigh stations and in control rooms; in mail distribution; in the manufacturing of ships and road vehicles, in railway and signal technology; and for education and advanced training in plants, schools and universities.



Even when the operating project is not able to be accessed, on-site changes pose no problem: just load the PCS*WIN* operator into your PC and voilà!... you can manipulate every project just as you like.

Functions without end
Line-based or graphic display, various character sets and languages; 4-picture simultaneous display; bitmap graphic freely positionable; up to 1024 message texts combinable with variables at 3 message priority levels, 4 message and display modi and 5 delete modi, menus with a maximum of 255 nodes or menu points; 650 switches that can be labeled for function and switch position, operating text for menus combinable with variables; message help text for menus and operating; up to 9 priority levels; key switch or password for allocation of various levels of authorisation; operating hour metre; internal clock and date; programmable alarm trigger; programmable counter and timer switches; selector switch with a maximum of 255 switch positions that can be labeled for function and switch position; statistics generation; report generation; message protocolling (with ENTRY, EXIT and QUIT TIMES); protocol printable or displayable; capturing of operational data; freely definable print-outs; digital BCD/BIN target value entry via 10-key punch or the ± key; target and actual variables: BCD 4-digit, BCD 8-digit, BIN 16-bit, BIN 32-bit; numerical variables: automatic conversion of target and actual values from BCD/BIN to decimals and back, signs, variable limit values, scaling; unlimited possibilities for representation and alteration of a data word bit pattern in the PCS with word variables; graphical bit and string variables; bar graphs; bit, string, ASCII and timer variables; quick softkey actions that save programming time; recipe manager; reimporting of projects from the PCS into the PC.





Additional devices & Accessories

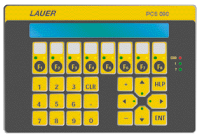
Operating & Monitoring

Additional devices

PCS 009

Text Panel topline
LCD-Display 4 Lines x 20 Characters, Softkeys
serial Interface RS 232/TTY, RS 422/485, 24 V DC

External dimensions: 147 x 215 x 52 mm (W x H x D)
Mounting dimensions: 131 x 199 mm (W x H)



PCS 090

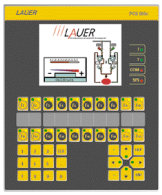
Text Panel topline
LCD-Display 2 Lines x 40 Characters, Softkeys
serial Interface RS 232/TTY, RS 422/485, 24 V DC

External dimensions: 215 x 144 x 52 mm (W x H x D)
Mounting dimensions: 194 x 128 mm (W x H)

PCS 095

Text Panel topline
LCD-Display 4 Lines x 40 Characters, Softkeys, printer port,
serial Interface RS 232/TTY, RS 422/485, 24 V DC

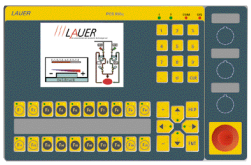
External dimensions: 224 x 202 x 52 mm (W x H x D)
Mounting dimensions: 204 x 188 mm (W x H)



PCS 950

Graphic Panel topline
LCD-Graphic display 320 x 240 Pixel, Softkeys, recipe, printer port,
serial Interface RS 232/TTY, RS 422/485, 24 V DC

External dimensions: 224 x 270 x 65 mm (W x H x D)
Mounting dimensions: 204 x 259 mm (W x H)



PCS 950q

Graphic Panel topline
LCD-Graphic display 320 x 240 Pixel, Softkeys, recipe, printer port,
serial Interface RS 232/TTY, RS 422/485, 24 V DC
prepared for 4 x 22,5 mm switches/keys

External dimensions: 339 x 219 x 65 mm (W x H x D)
Mounting dimensions: 325 x 205 mm (W x H)

PCS 950e

Graphic Panel topline
LCD-Graphic display 320 x 240 Pixel, Softkeys, recipe, printer port, serial Interface RS 232/TTY, RS 422/485, 24 V DC
Protection type EExib IICT4 and conformity BVS 95.D.2022

External dimensions: 224 x 270 x 65 mm (W x H x D)
Mounting dimensions: 204 x 259 mm (W x H)

PCS 9000

Graphic Panel topline
LCD-Active-Graphic display 640 x 480 Pixel, Softkeys, recipe, printer port, Multi-Window-System, 24 V DC
PCS 8010: serial Interface RS 232/TTY, RS 422/485

External dimensions: 410 x 266 x 75 mm (W x H x D)
Mounting dimensions: 388 x 244 mm (W x H)

PCS 9100

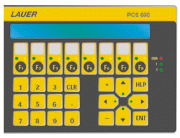
Graphic Panel topline
LCD-Active-Graphic display 640 x 480 Pixel, Softkeys, recipe, printer port, Multi-Window-System, addtional 10 vertical Function keys, 24 V DC
PCS 8010: serial Interface RS 232/TTY, RS 422/485

External dimensions: 410 x 266 x 75 mm (W x H x D)
Mounting dimensions: 388 x 244 mm (W x H)

PCS 609

Text Panel Industrial Terminal
LCD-Display 4 Lines x 20 Characters, Softkeys
serial Interface RS 232/TTY, RS 422/485, 24 V DC

External dimensions: 147 x 215 x 52 mm (W x H x D)
Mounting dimensions: 131 x 199 mm (W x H)



PCS 690

Text Panel Industrial Terminal
LCD-Display 2 Lines x 40 Characters, Softkeys
serial Interface RS 232/TTY, RS 422/485, 24 V DC

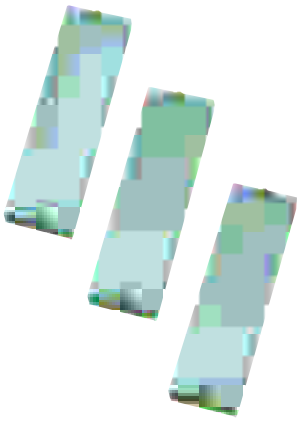
External dimensions: 215 x 144 x 52 mm (W x H x D)
Mounting dimensions: 194 x 128 mm (W x H)

PCS 695

Text Panel Industrial Terminal
LCD-Display 4 Lines x 40 Characters, Softkeys,
serial Interface RS 232/TTY, RS 422/485, 24 V DC

External dimensions: 224 x 202 x 52 mm (W x H x D)
Mounting dimensions: 204 x 188 mm (W x H)

Accessories



PCS 8010

Interface module for PCS 9000/9100
This module enables the connection to all standard PLC systems via the RS 232/RS 422/RS 485/TTY interface via the PLC-PU port or via communications cards.

PCS 81xx

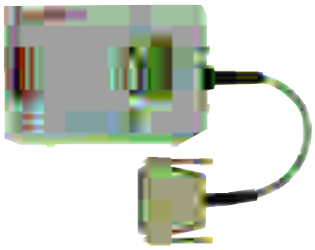
Program memory module for PCS 9000/9100
This module expands the size of the program memory. Up to 3 modules can be free combined.

PCS 8110	Memory Pack (2 MB PageROM)

PCS 8120

Program- and data memory module for PCS 9000/9100
This module expands the size of the program memory to 512 kB. In addition, a power failure-safe recipe memory module with 16 kB of EEPROM is built in. A second 64 kB CMOS RAM module enables caching of fault messages for the history display and the data to be sent to the printer.

PCS 8xx



Multibox für PCS
The multibox enables all PCS operating consoles to be connected to field-bus systems. Connection takes place via the RS 232 interface. The cable required for this is already firmly attached to the multibox. The multibox is able to be finely tuned to bus system features via a configurable number of I/O words dedicated to communication.

PCS 807	Profibus-DP-Multibox
PCS 811	Interbus-S-Multibox
PCS 812	S7-MPI-Multibox

PCS 80x

Memory cassette for PCS 900/950
The cassette enables PCS parameters to be transmitted between the internal and external EEPROM memory. Additional data records can also be saved in order to switch languages, for example.

PCS 802	Memory Pack (64 kB EEPROM)
PCS 806	Memory Pack (128 kB EEPROM)

PCS 810.3

3way interface unit: for SIMATIC S5

PCS 830.1

1way interface unit: for Bosch CL 300/400/500

Accessories

CS 010	Replacement battery for PCS 900, 950, 950q, 9000, 9100
CS 91.xxx	Appendix to manual for PCS operating console with PLC driver and data handling software on 3.5” floppy disk. Example: PCS 91.SIE = Siemens, PCS 91.PHI = Philips, ...
CS 001.0	Customer specific foil, 2-color for PCS 009/090/095 and PCS 009win/090win/095win
CS 002.0	Customer specific foil, 2-color for PCS 900/950/950q
CS 003.0	Customer specific foil, 2-color for PCS 9000/9100
CS 001.n	for every additional color (Example: n = 3 , 3-color; n = 6, 6-color)
CA 020..223	Industry adapter for LCA 245
CA 301.xxx	Appendix to manual for LCA text display with PLC driver and data handling software on 3.5” floppy disk. Example: LCA 301.SIE = Siemens, LCA 301.PHI = Philips, LCA 301.IBS = Interbus-S, ...
CA 001.0	Customer specific foil, 2-color for LCA 300/320/325
CA 001.n	for every additional color (Example: n = 3 , 3-color; n = 6, 6-color)

dapter- and Programming cable

CS/LCA 733	Programming cable for PCS, LCA
CS 734	Data cable PCS 950e for the connection between front and control unit
CS 736	PCS 810, 810.3, 830, 830.3 for PCS, LCA
CS 737	Programming cable PCS classic, LCA starline
CS 739	Programming cable PCS classic, LCA starline
CS 7xx	Adapter cable to the prevailing PLC (on request)
CA 036	Y cable for LCA
CA 039	Adapter cable from PC to LCA, 300 cm (25-pole/9-pole)
CA 237	Adapter cable from PC to LCA, 300 cm (25-pole/25-pole)
CA 238.x	Round cable 24-pole (Example: x = 2, 200 cm; x = 4, 400 cm; x = 6, 600 cm)
CA 711	Adapter cable from the Industry printer LCA 710 to the LCA and PCS

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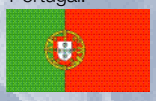

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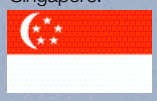

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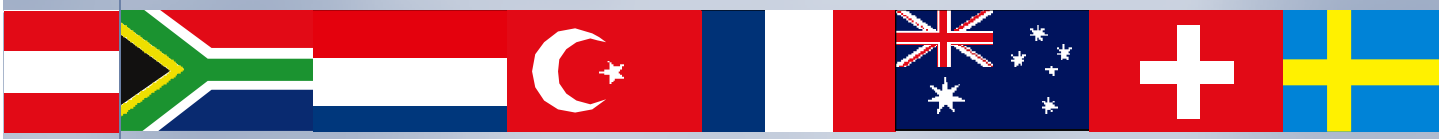

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