Software 907 KP 64 for the communication processor RCOM

General

The programming software 907 KP 64 serves to create programs for the communication processor RCOM 07 KP 64 of the ABB Procontic T200 programmable logic controller (PLC).

The programming software 907 KP 64 is capable of running on commercially available IBM-compatible personal computers type 07 PC 32 and 07 PH 32 (Compaq Portable II and Compaq LTE 286) featuring the following technical characteristics:

- 640 kByte RAM
- Hard disk drive
- Floppy disk drive,
  3 1/2", 1,44 MByte, min. 720 kByte
- Serial RS-232-C (V24) interface for the control system
- Paraliel or Second serial interface for a printer
- MS-DOS operating system V3.1 or higher

The programming software 907 KP 64 permits simple and economical programming of

- Programs for communication by way of the RCOM protocol
  - between ABB MasterPiece 200 control systems and ABB Procontic T200 Systems or
  - between ABB Procontic T200 Systemes

Features of the 07 KP 64 unit

- The unit can be used as an RCOM master or slave.
- Up to 254 RCOM slaves can be operated in one network (up to eight slaves when using Masterpiece 200).
- The RCOM protocol is compatible with MP200/1 with DSCA 180A. All RCOM utilities are available (cold start, warm start, reset, clock synchronization, writing data, reading data and event polling).
- The RCOM interface for connection of the modem conforms to RS-232-C
- An additional operator interface (console) conforming to EIA RS-232-C is available as an aid to commissioning (to display the communication sequence and to setup telephone numbers etc.).
- The software clock and time can be used in the PLC program.

10.1 Interface Cables 07 SK 90 R1, 07 SK 91 R1 and 07 SK 92 R1

for connection of peripheral units to the 9-pole serial interfaces of the basic units 07 KR 91, 07 KT 92, 07 KT 93, 07 KT 93-S, 07 KT 94 and 07 KT 94-S (AC31, AC31-S) and the communication processors 07 KP 62 and 07 KP 64 (ABB Procontic T200) and 07 KP 90 (AC31)

10.1.1 Survey table

The following table shows, which interface cables can be used for connections between peripheral units and the 9-pole interfaces of the AC31/AC31-S basic units and the T200 communication processors.

Connection from the processor unit interface	**via** the system cable (interface cable)	**to the peripheral unit**
07 KR 91 COM1 07 KT 9x COM1 07 KP 62 COM1	07 SK 90	PC programming unit with 907 PC 331
07 KR 91 COM1 07 KT 9x COM1 07 KP 62 COM1	07 SK 90	Operating station in active mode
07 KR 91 COM1 07 KT 9x COM1 07 KP 62 COM1 07 KP 64 CONSOLE 07 KP 90 CONSOLE	07 SK 90	Terminal
07 KR 91 COM1 07 KT 9x COM1 07 KT 9x COM2 07 KP 62 COM1 07 KP 62 COM2	07 SK 91	Operating station in passive mode
07 KR 91 COM1 07 KT 9x COM1 07 KT 9x COM2 07 KP 62 COM1 07 KP 62 COM2 07 KP 64 RCOM 07 KP 90 RCOM	07 SK 92	Modem with a standard interface, for signal names and pin assignment see chapter 10.4

10.2 **Interface Cable 07 SK 90 R1** with adaptor

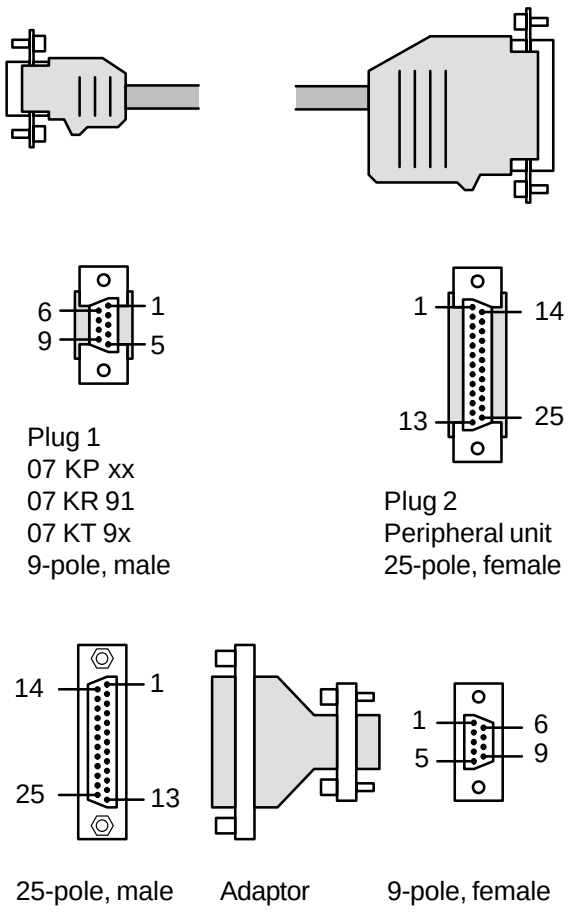


Fig. 10.2-1:
Interface cable 07 SK 90 R1 with adaptor

Intended purpose

The cable 07 SK 90 is used to connect a 9-pole interface connector of AC31 basic units or T200 communication processors with a peripheral unit in order to operate in programming or active mode (see 10.1.1 Survey table). If the peripheral has a 9-pole interface, the adaptor provided with (25-pole to 9-pole) can be employed for adaption.

Mechanical design

Plug 1

SUB-D plug, 9-pole male on the side of 07 KP 6x, 07 KR 91, 07 KT 9x. The housing is metal-plated, the shield is connected to the metal plate.

Plug 2

SUB-D plug, 25-pole female, on the side of the peripheral unit. The plugs are mounted to both interfaces by means of screws.

Cable type

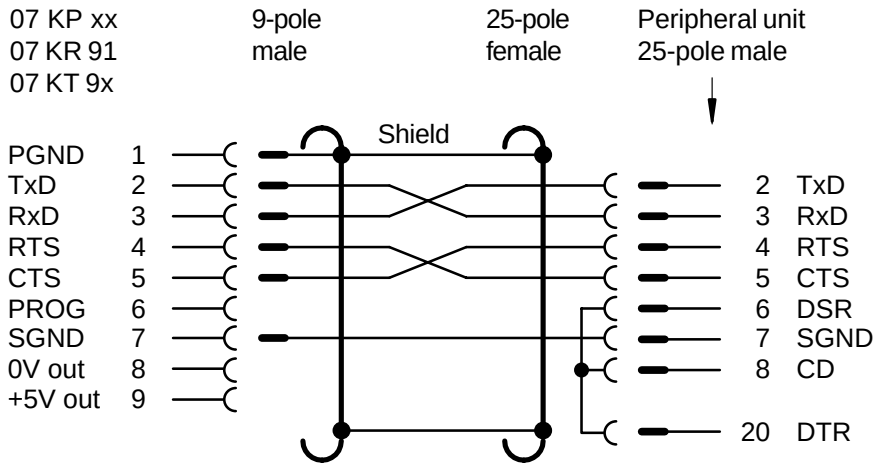
LICYCY 5 x 0.14/15

Adaptor provided

25-pole male/9-pole female for connection of peripheral units with 9-pole interfaces (male).

Technical data

Length	5 m
Weight	220 g
Order number	GJR5 2502 00 R1



PGND	Protective Ground	PROG	Switch over between active and passive mode
TxD	Transmit Data		
RxD	Receive Data	CD	Carrier Detect
RTS	Request To Send	DSR	Data Set Ready
CTS	Clear To Send	DTR	Data Terminal Ready
		SGND	Signal Ground

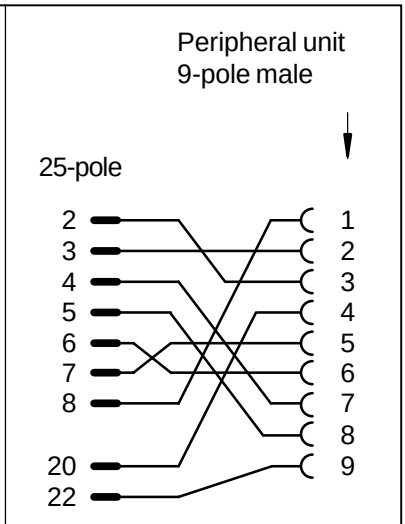
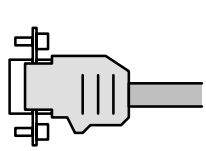
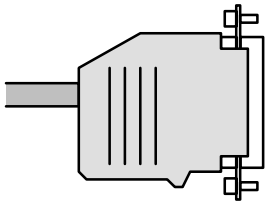


Fig. 10.2-2: Terminal assignment of the 07 SK 90 interface cable and the adaptor provided with

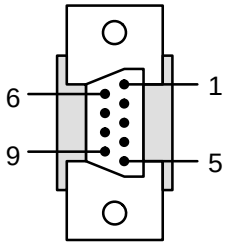
10.4 Interface cable 07 SK 92 R1





Plug 1
07 KP xx
07 KR 91
07 KT 9x
9-pole, male

Plug 2
Modem
25-pole, male



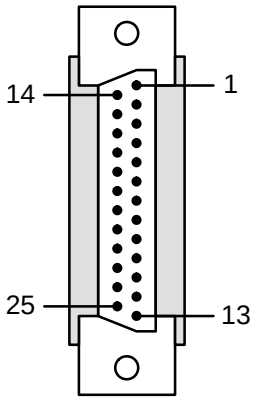


Fig. 10.4-1:
Interface cable 07 SK 92 R1

Intended purpose

The cable 07 SK 92 is used to connect a 9-pole interface connector of AC31 basic units or T200 communication processors to a modem with a standard interface (see 10.1.1 Survey table). If another modem has to be connected, the cable has to be modified possibly.

Mechanical design

Plug 1

SUB-D plug, 9-pole male on the side of 07 KP 6x, 07 KR 91, 07 KT 9x. The housing is metal-plated, the shield is connected to the metal plate.

Plug 2

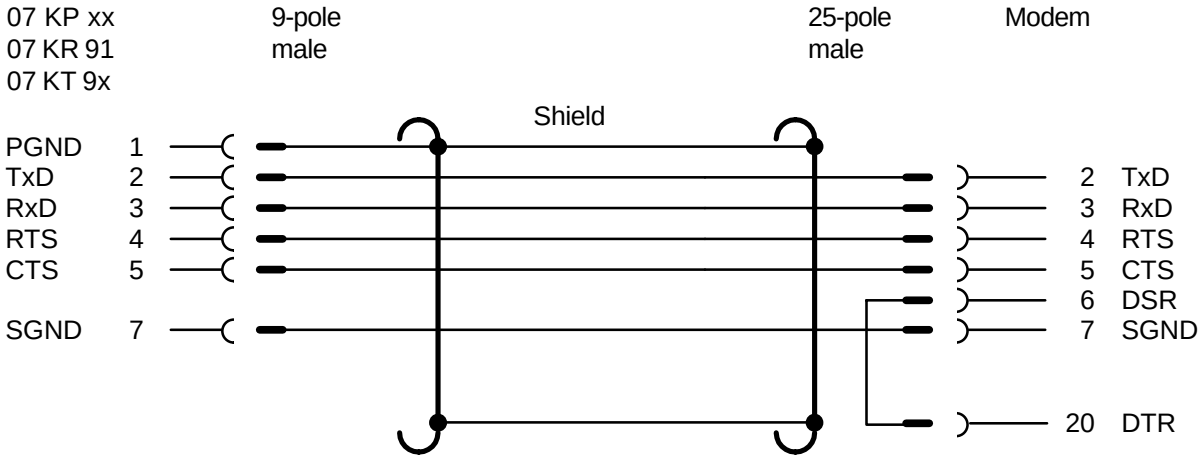
SUB-D plug, 25-pole male on the side of the modem.
The plugs are mounted to both interfaces by means of screws.

Cable type

LICYCY 5 x 0.14/15

Technical data

Length	5 m
Weight	220 g
Order number	GJR5 2504 00 R1



PGND	Protective Ground
TxD	Transmit Data
RxD	Receive Data
RTS	Request To Send
CTS	Clear To Send
DSR	Data Set Ready
DTR	Data Terminal Ready
SGND	Signal Ground

Fig. 10.2-4: Terminal assignment 07 SK 92

ABB Procontic T200

Interface Equipment, Pre-processors



07 KP 60 R1
Communication processor with RS-232 and RS-422 interface. The device communicates with external computers through a defined protocol. 2 slots in the basic module rack.

07 KP 62 R101
Communication processor with 2 interfaces RS-232 for connecting devices with ASCII interface. (Freely definable message structure and protocol).

07 KP 64 R101
Communication processor with 2 interfaces RS-232 for communicating through the RCOM protocol.

07 PO 60 R1
Positioning device with microprocessor for 5 V/ 15 V increment encoder for one axis, with analog setpoint output. The control unit 35 AB 50 is used for entering and displaying programs. 2 slots.

07 IR 60 R1
Industrial Computer Basic with 3 interfaces RS-232. High-performance realtime computer with 16 tasks. Memory capacity 115 kbyte. Programming with IBM-compatible Personal Computer with easy to use software. 3 slots in the basic module rack.