1 General System Description

As a member of the ABB Procontic family, ABB Procontic T200 is a modular programmable control system which has been developed and manufactured using advanced design principles and production methods. ABB Procontic T200 masters a wide range of automation tasks at the lower and medium performance levels from 16 to 1856 inputs/outputs and is used for a great variety of applications such as

- Open-loop control
- Computing
- Closed-loop control
- Communication
- Operating and monitoring
- Event indication, measuring and logging
- Positioning

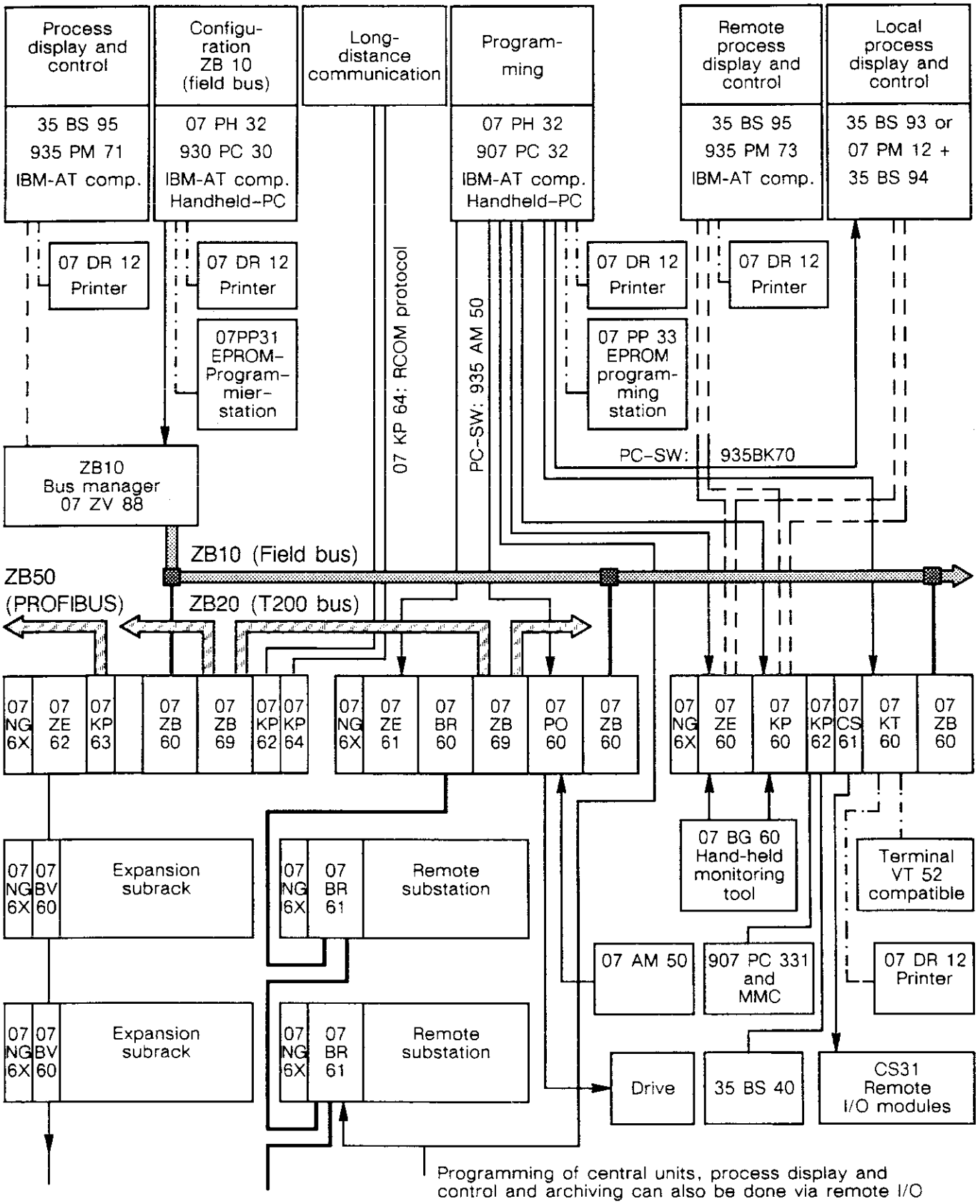
Because of its sturdy modular design ABB Procontic T200 can readily be used even under onerous industrial conditions.

ABB Procontic T200 is characterized by a compact design. Terminal blocks and electronic components are protected by enclosures.

By the adoption of modern gate-array technology and the provision of optimized configuration capabilities the user gets a powerful automation system with the following features:

- Ease of handling
- Simple construction and wiring
- Fast processing
- Adaptable to several input and output voltages
- Appropriate modularity (I/O modules with 4, 8, 16 and 32 channels)
- Provision for clear labeling
- Ease of servicing due to comprehensive diagnostics and error monitoring
- Simple communication also with alien systems by using a standard protocol
- Powerful preprocessors relieve the central unit of tasks such as positioning, communication, logging and visualization.
- Efficient programming by powerful commands, user-friendly structuring with standardized functions (function program blocks)
- Reliable and field-tested programming software allows programming in the form of function block diagram (FBD), ladder diagram (LD), instruction list (IL) and sequential function chart (SFC).

ABB Procontic T200, Configuration of the Entire System



5 expansion subracks maximum

max. 10 substations per line;
max. 4 lines per central unit

2 Technical System Data

The relevant product standard for the ABB Procontic T200 control system is EN 61131–2 ≙ IEC 1131–2.

Operating and environmental conditions

Voltages

Process voltages UP			
	UP1 (incl. ripple)		24 V DC (+ 25 %, – 20 %)
		or	48 V DC (+ 25 %, – 20 %)
	UP3		12 V DC (± 10 %)
	UP5		120 V AC (+ 10 %, – 15 %)
		or	230 V AC (+ 10 %, – 15 %)
	UP7		24 V AC
	UP8		48 V AC
Ripple	U_{pp}	UP1 = 24 V DC	< 4 V
		UP1 = 48 V DC	< 8 V
Reference potential ZP			
	ZP		0 V for process voltage UP
Line voltages UN			
	UN1		230 V AC (+ 10 %, – 15 %)
	UN2		120 V AC (+ 10 %, – 15 %)
Internal voltages UB			
	UB1		5 V DC
	UB4		24 V DC
Reference potential ZB			
	ZB		0 V for internal voltages UB

Temperature

operation	0 °C ... + 55 °C
storage	– 25 °C ... + 75 °C
transport	– 25 °C ... + 75 °C

Humidity

5...95 %, without condensation

Air pressure

operation	≥ 800 hPa/≤ 2000 m
storage	≥ 660 hPa/≤ 3500 m

Creepage distances and clearances

The creepage distances and clearances meet	Overvoltage category II, pollution degree 2

Insulation test voltages

230 V circuits (mains, 230 V inputs/outputs) against other circuitry	2500 V
120 V circuits (mains) against other circuitry	1500 V
24 V circuits (supply, 24 V inputs/outputs), if electrically isolated against other circuitry	500 V
bus against other circuitry	500 V