

INDUSTRIAL AUTOMATION PRODUCT

6AV6642-0BA01-1AX0

SIMATIC TP177B PN/DP Color Touch Panel

Siemens 6AV6642-0BA01-1AX0 is a SIMATIC TP177B PN/DP color touch panel with MPI/PROFIBUS DP, Ethernet 10/100, RS485/RS422 and USB interfaces. It is configured with WinCC flexible 2005 and provides a memory-card slot and printer interface.

CONTROLLED ENGINEERING COPY

IDENTITY	VERIFIED VALUE
Manufacturer	Siemens
System family	SIMATIC HMI TP177B
Part number	6AV6642-0BA01-1AX0
Document status	Controlled product and system reference

DOCUMENT SCOPE

Exact article identity, official technical data, host matching, installation checks, applications, precautions and controlled acceptance evidence.

MODEL-SPECIFIC ENGINEERING NOTE

Install 6AV6642-0BA01-1AX0 only in the documented SIMATIC HMI TP177B position and preserve its exact wiring, interfaces and configuration. After controlled energization, verify diagnostics and operator visualization and touch control on an MPI, PROFIBUS DP or Industrial Ethernet automation station before service release.

System Role and Architecture

Siemens 6AV6642-0BA01-1AX0 is a SIMATIC TP177B PN/DP color touch panel with MPI/PROFIBUS DP, Ethernet 10/100, RS485/RS422 and USB interfaces. It is configured with WinCC flexible 2005 and provides a memory-card slot and printer interface.

FUNCTION 1
TP177B PN/DP color touch operation

FUNCTION 2
MPI and PROFIBUS DP protocol support

FUNCTION 3
Ethernet 10/100 plus RS485, RS422 and USB

FUNCTION 4
WinCC flexible 2005 configuration

RELATED APTER POWER PAGES

1 ABB NTAC-02

2 ABB NISA-03

3 ABB NAOM01

4 ABB MB510

5 ABB DSDO110 57160001-K

6 ABB RPBA-01 3ABD64606859

7 ABB RDCO-02C 3ABD64606956

8 ABB RRIA-01

9 ABB INTKM01

MATCHED SYSTEM COMPONENTS

NO.	DOCUMENTED COMPONENT / ROLE
01	SIMATIC HMI TP177B
02	Matched SIMATIC HMI TP177B host or field system
03	Documented power, signal, communication and protective interfaces
04	Approved engineering configuration and acceptance record

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	SIMATIC HMI TP177B
Interface role	operator visualization and touch control on an MPI, PROFIBUS DP or Industrial Ethernet automation
Field / power context	documented SIMATIC HMI TP177B installation
Commissioning evidence	Identity, wiring, configuration, diagnostics and controlled response recorded

INSTALLATION AND CONNECTION CHECKS

1 Confirm the complete 6AV6642-0BA01-1AX0 marking and the documented SIMATIC TP177B PN/DP Color Touch Panel execution.

2 Place the machine, controller and affected process in the approved maintenance state.

3 Isolate all hazardous energy and prove the safe state before disconnecting hardware.

4 Record the installed position, every terminal or port, and the active engineering configuration.

Technical Specifications

Technical values below are limited to the named product record and directly applicable manufacturer documentation.

PARAMETER	VALUE	PARAMETER	VALUE
Product designation	TP177B PN/DP Color	Industrial Ethernet	10 / 100 Mbit/s
Display technology	STN color display, 256 colors	Printer interface	Provided
Operator method	Touch operation	Memory-card slot	MM card
Fieldbus protocol	MPI / PROFIBUS DP	Configuration software	WinCC flexible 2005
Serial interfaces	RS485 / RS422	Lifecycle note	Discontinued product with successor
USB interface	Provided		

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9 ABB INTKM01

ENGINEERING BOUNDARY

Confirm 6AV6642-0BA01-1AX0, its exact SIMATIC HMI TP177B host, power source, installed position, interfaces, configuration, diagnostics and controlled acceptance evidence before release.

PRE-INSTALLATION CHECKS

- 1

Confirm the complete 6AV6642-0BA01-1AX0 marking and the documented SIMATIC TP177B PN/DP Color Touch Panel execution.
- 2

Place the machine, controller and affected process in the approved maintenance state.
- 3

Isolate all hazardous energy and prove the safe state before disconnecting hardware.
- 4

Record the installed position, every terminal or port, and the active engineering configuration.

Applications and Engineering Context

Machine operator station

Provides touch-based visualization and command entry for a documented machine.

PROFIBUS DP HMI node

Exchanges operator and process data over the configured DP network.

Ethernet panel integration

Connects to a documented 10/100 Mbit/s control network.

Legacy TP177B replacement

Restores the approved WinCC flexible panel project and interface map.

TECHNICAL NOTE

Install 6AV6642-0BA01-1AX0 only in the documented SIMATIC HMI TP177B position and preserve its exact wiring, interfaces and configuration. After controlled energization, verify diagnostics and operator visualization and touch control on an MPI, PROFIBUS DP or Industrial Ethernet automation station before service release.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	6AV6642-0BA01-1AX0 recorded
Host / carrier	SIMATIC HMI TP177B
Physical interface	Installed terminals, ports and signal paths matched to the as-found record
Configuration	Approved hardware and engineering configuration restored
Functional proof	Controlled test confirms operator visualization and touch control on an MPI, PROFIBUS DP or Industrial Ethernet automation station

IMPORTANT NOTICE

Confirm 6AV6642-0BA01-1AX0, its exact SIMATIC HMI TP177B host, power source, installed position, interfaces, configuration, diagnostics and controlled acceptance evidence before release.

Related Products and Source Record

Brand-qualified Apter Power navigation links are provided for system planning only; manufacturer evidence remains the named source record.

RELATED PRODUCTS ON APTER POWER

1

ABB NTAC-02

View ABB NTAC-02 page

2

ABB NISA-03

View ABB NISA-03 page

3

ABB NAOM01

View ABB NAOM01 page

4

ABB MB510

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ABB RRIA-01

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9

ABB INTKM01

View ABB INTKM01 page

MANUFACTURER SOURCE RECORD

Siemens SiePortal exact-article record for 6AV6642-0BA01-1AX0 | Official manufacturer evidence verified 28 September 2026

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RECOMMENDATION SCOPE

These links support product navigation and comparison. Technical values in this document are sourced only from the manufacturer record above.