

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

PRODUCT SNAPSHOT

BRAND
Siemens

FAMILY
SIMATIC HMI TP177B

PART
6AV6642-0BA01-1AX0

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

WHATSAPP / PHONE

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PRODUCT OVERVIEW

Siemens 6AV6642-0BA01-1AX0 provides operator visualization and touch control on an MPI, PROFIBUS DP or Industrial Ethernet automation station in a documented SIMATIC HMI TP177B installation.

 TP177B PN/DP color touch operation

 MPI and PROFIBUS DP protocol support

 Ethernet 10/100 plus RS485, RS422 and USB

 WinCC flexible 2005 configuration

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7 ABB DSDX454 5716075-AT	8 ABB DSBC174 3BSE012211R1	9 ABB DSMB127 57360001-HG

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
Proximity probe	Matched extension cable
Proximitior Sensor	AISI 4140 target

ENGINEERING CONTEXT

The component remains matched to its documented cabinet position, power source, interfaces and approved engineering configuration. Commissioning restores that architecture and verifies the affected control or communication function under controlled conditions.

TECHNICAL DATA

PARAMETER	VALUE
Product designation	TP177B PN/DP Color
Display technology	STN color display, 256 colors
Operator method	Touch operation
Fieldbus protocol	MPI / PROFIBUS DP
Serial interfaces	RS485 / RS422
USB interface	Provided

PARAMETER	VALUE
Industrial Ethernet	10 / 100 Mbit/s
Printer interface	Provided
Memory-card slot	MM card
Configuration software	WinCC flexible 2005
Lifecycle note	Discontinued product with successor

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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.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

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.

PRODUCT PRECAUTIONS

1

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

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.

5

Verify the exact electrical, interface and environmental limits in the manufacturer evidence.

6

Restore protective earth, shielding, wiring, communications and the approved project or

7

Energize under control and review all device, rack, network and process diagnostics.

8

Complete a controlled functional test of operator visualization and touch control on an MPI, PROFIBUS

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ENGINEER FAQ

Q1 Why must the exact product designation value be confirmed when commissioning 6AV6642-0BA01-1AX0?

The official exact-article record identifies 6AV6642-0BA01-1AX0 as TP177B PN/DP Color; match the full marking before installation.

Q2 What does the official record specify for 6AV6642-0BA01-1AX0 display technology?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies display technology as STN color display, 256 colors. Record the installed condition and test the affected function before release.

Q3 What does the official record specify for 6AV6642-0BA01-1AX0 operator method?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies operator method as Touch operation. Record the installed condition and test the affected function before release.

Q4 Where does the fieldbus protocol for 6AV6642-0BA01-1AX0 affect the installed communication architecture?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies fieldbus protocol as MPI / PROFIBUS DP. Record the installed condition and test the affected function before release.

Q5 Which serial interfaces for 6AV6642-0BA01-1AX0 affect the installed communication architecture?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies serial interfaces as RS485 / RS422. Record the installed condition and test the affected function before release.

Q6 How should the documented usb interface for 6AV6642-0BA01-1AX0 affect the installed communication architecture?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies usb interface as Provided. Record the installed condition and test the affected function before release.

Q7 Why must the exact industrial ethernet value be confirmed when commissioning 6AV6642-0BA01-1AX0?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies industrial ethernet as 10 / 100 Mbit/s. Record the installed condition and test the affected function before release.

Q8 Where does the printer interface for 6AV6642-0BA01-1AX0 affect the installed communication architecture?

For 6AV6642-0BA01-1AX0, the official exact-article evidence specifies printer interface as Provided. Record the installed condition and test the affected function before release.

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

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