ABB AC500 / S500

TU532 Terminal Unit

Complete model TU532 | Order number 1SAP 217 000 R0001

Official product identification

Brand	ABB
Product family	AC500 / S500 I/O terminal units
Product type	I/O terminal unit for 120/230 V AC and relay modules
Complete model	TU532
Order number	1SAP 217 000 R0001
Terminal technology	40 spring terminals for signals and process supply voltage
Product status in source	Active

Core function

TU532 provides the spring-terminal wiring and mechanical interface for compatible ABB AC500/S500 I/O modules with 115 V AC to 230 V AC inputs and/or 120/230 V AC relay outputs. The plug-in I/O module is retained by two mechanical locks, while field wiring remains on the terminal unit.

Source scope

Compiled from ABB document 3ADR010074, revision 14, dated 2025-11-28. Relevant source pages: 1-6 and 11. Dimensions are taken from the ABB TU531/TU532 dimension drawing.

Technical data

Number of channels	32
Channel grouping	4 groups of 8 channels
Module circuitry supply	24 V DC supplied through the I/O expansion bus
Process-supply terminals	1.8 to 4.8 and 1.9 to 4.9; maximum 30 V DC; maximum permitted total current 10 A
Signal terminals	1.0 to 1.7, 2.0 to 2.7, 3.0 to 3.7, and 4.0 to 4.7; maximum 300 V AC; maximum permitted current 3 A, subject to the installed I/O module
Bus interfaces	10-pin male I/O bus and 10-pin female I/O bus; plug interfaces for the inserted I/O module
Grounding	Direct connection to the grounded DIN rail or through the mounting screws
Mounting position	Horizontal or vertical
Dimensions	67.5 x 135 x 28 mm overall (width x height x depth), from the official ABB dimension drawing
Weight	200 g
Protection rating	IP20 for the complete PLC system when modules, terminals, option boards, and covers are correctly fitted

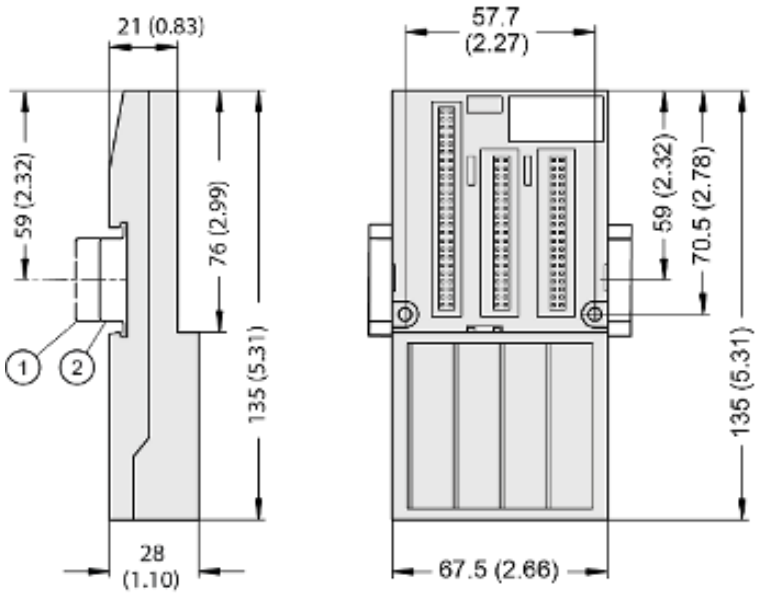


ABB TU531/TU532 dimension drawing; dimensions in millimetres, inch values in brackets.

Installation and environment

DIN rail	35 mm top-hat rail according to IEC 60715; rail depth 7.5 mm or 15 mm
Screw mounting	M4 screws; maximum fastening torque 1.2 Nm; use ABB wall-mounting accessories as specified
Standard operating temperature	0 to +60 degrees C with horizontal mounting; 0 to +40 degrees C with vertical mounting and output load reduced to 50 percent per group
Storage / transport	-40 to +70 degrees C
Humidity	Maximum 95 percent, non-condensing
Operating altitude	Below 2000 m; air pressure above 800 hPa
Vibration resistance	2 to 8.4 Hz at 3.5 mm peak; 8.4 to 150 Hz at 1 g, all three axes
Shock resistance	15 g, 11 ms, half-sine, all three axes
Housing	UL 94 V-2 classification
System standard	Industrial control equipment; IEC 61131-2, zone B

Selection and compatibility

Use TU532 only with an ABB I/O module whose voltage class, terminal assignment, connector layout, current limits, and system generation are explicitly compatible. TU532 uses spring terminals. TU531 uses screw terminals. Hot-swap variants are separately identified as TU532-H and must not be inferred from the TU532 model. Up to 10 terminal units may be attached as described in the ABB mounting instructions.

Official source

ABB TU531/TU532 Data Sheet, document 3ADR010074, revision 14, pages 1-6 and 11.
https://library.e.abb.com/public/c2c74a87ea3748cc9349068ba5a2521d/3ADR010074%2C%2014%2C%20en-US%2C%20TU531_TU532_Data_Sheet.pdf