ABB DSDX452L 5716075-U

System fit and architecture

ABB DSDX452L 5716075-U serves an Advant Master S400 remote I/O station where digital sensing and low-level relay switching share one basic-unit position. The station communicates with its process station on MasterFieldbus SDB.

Input bank: Twenty 24 V DC digital inputs in the DSDX 452L basic unit.

Output bank: Twelve low-level signal relay outputs.

Expansion path: DSDX 451, DSDX 451L or DSDI 451 can extend the basic unit.

Signal role

The DSDX 452L basic unit collects twenty digital inputs and drives twelve low-level relay outputs. The low-signal designation matters when matching the existing output loads; a standard relay-output variant should not be assumed to have the same circuit role.

Bus and diagnostics

MasterFieldbus SDB connects the S400 basic unit with its process station. ABB specifies power-loss, startup self-test and communication monitoring for this unit. Record the existing station address, bus connection and diagnostic indication before replacing hardware.

Expansion boundary

ABB lists DSDX 451, DSDX 451L and DSDI 451 as expansion options for DSDX 452L. Match the connected expansion unit, field connectors and grouped I/O assignment. An S800 migration can reuse selected S400 wiring through a separately designed TU40x termination arrangement; it is not a direct basic-unit substitution.

Inputs	20 × digital, 24 V DC
Outputs	12 × low-level relay
Bus	MasterFieldbus SDB

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Compatibility and acceptance decisions

Installation decision

Use it where the approved S400 design calls for the same 24 V input bank, low-level output circuits and MasterFieldbus SDB connection. Check wiring and controller configuration before considering a different S400 unit or an S800 migration.

S400 remote digital station	Acquire twenty 24 V input states and switch twelve low-level relay circuits in one basic-unit position.
Distributed process I/O	Connect the basic unit to the Advant Master process station over MasterFieldbus SDB.
Expanded station	Pair with the approved DSDX 451, DSDX 451L or DSDI 451 expansion unit when the configured point count requires it.
Field-wiring evolution	Plan any later S800 transition around the specific TU40x termination arrangement and retained S400 field wiring.

Confirm the low-signal version

Check that the installed output loads use the DSDX 452L low-level relay configuration.

Record station address

Capture switch positions and the assigned SDB station before removing the unit.

Map each I/O group

Label twenty inputs, twelve output circuits and the expansion connection separately.

Control the bus state

Put the affected process I/O in the approved maintenance condition before disconnecting SDB.

Lifecycle and supply

The current production and manufacturer-support phase for the complete DSDX452L 5716075-U reference is unconfirmed. Keep the 24 V digital-input grouping, twelve low-level relay-output circuits, SDB communication path and installed expansion-unit type together. Any S800 migration requires a separate engineering plan.

Related product references

ABB DSDX451L 5716075-AH

ABB DSDX452 5716075-P