01 / Product and system dashboard

ABB

DSTA170 57120001-FC

Analog Connection Unit

Product role

ABB DSTA170 57120001-FC provides field-wiring connections for eight DSAO120 analog-output channels in an Advant S100 I/O installation.

DSAO120
Eight converted outputs

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DSTA170
Voltage/current connections

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Field circuit
Controlled equipment

Engineering scope

DSTA170 57120001-FC is the connection unit for the DSAO120 analog-output arrangement. Output range and conversion resolution belong to the paired output board; cables and the board are separate items.

02 / Verified identity and technical relationships

Property	Applicable fact	Property	Applicable fact
Connection function	Analog-output field wiring	Signal selection	By connection to voltage or current terminals
Paired output board	DSAO120	Current-path configuration	Diode with solder-jumper bypass
Output channels	8	Normal current configuration	Bypass jumper fitted
Voltage connections	8	Parallel-current configuration	Relevant bypass jumper open
Current connections	8	Isolation boundary	DSAO120 arrangement is non-isolated

Configuration boundary

DSTA170 57120001-FC is the connection unit for the DSAO120 analog-output arrangement. Output range and conversion resolution belong to the paired output board; cables and the board are separate items.

03 / Applications and system integration

Analog field termination

Connect eight DSAO120 output channels to the field equipment through the appropriate screw-terminal circuits.

Voltage-output wiring

Select the voltage connection and matching return for channels configured to drive a voltage-controlled load.

Current-output wiring

Use the current connection and return for the intended loop, respecting the non-isolated board arrangement.

Parallel-current circuit service

Maintain the documented diode-bypass arrangement when two output channels serve the same control object.

Functional context

The unit provides eight voltage-output connections and eight current-output connections, allowing the required signal function to be chosen through the field connection for each channel. The DSAO120 arrangement is not galvanically isolated. The load and return wiring therefore need to follow the circuit design for that board rather than the isolated DSAO120A arrangement.

04 / Service and installation decisions

Confirm the paired board

Match DSTA170 to the installed DSAO120 arrangement; do not substitute DSTA171 or assume DSAO120A behavior.

Identify every channel

Record voltage/current selection and return wiring before disconnecting the field conductors.

Respect the isolation boundary

Treat the DSAO120 circuits as non-isolated and assess grounding and common-potential connections.

Preserve solder jumpers

Record the current-path bypass state. Change it only under the applicable ABB circuit procedure.

Isolate the affected process

Secure controlled equipment and isolate applicable supplies before wiring or connection-unit replacement.

Verify the restored outputs

Perform a controlled channel check against the intended voltage or current signal and confirm the field response.

05 / Reference basis and related portfolio

Lifecycle and supply

A current manufacturer lifecycle phase has not been confirmed. Request current support and replacement guidance using the complete DSTA170 57120001-FC identity. Apter Power availability is confirmed separately in the quotation.

Reference basis

ABB S100 I/O Hardware Reference Manual, 3BSE002413R501, March 2004; Advant Controller 450 Product Guide, 3BSE015953R201 Rev. B.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

ABB PM864AK01-3BSE018161R1

ABB DSAO120A 3BSE018293R1

ABB DP620 3BHT300016R1

Discuss your installed configuration

Send the full unit marking and connection details.

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