KJ3221X1-BA1 12P2531X102 VE4035S2B1

Emerson / DeltaV redundant HART analog output assembly

Emerson KJ3221X1-BA1 12P2531X102 VE4035S2B1 is offered for a DeltaV M-series I/O installation. The VE4035S2B1 catalog reference identifies an 8-channel 4–20 mA HART output assembly.

Product identity and system role

The VE4035S2B1 reference groups a DeltaV I/O card with its specified termination arrangement. In the control system, this output function transfers 4–20 mA HART information between the configured field circuit and controller. The physical KJ3221X1-BA1 and 12P2531X102 markings identify the offered hardware and must be reconciled with the VE assembly code.

The 8-channel catalog arrangement uses redundant standard i/o termination block. The analog output channels send configured 4–20 mA commands and support HART communication with suitable field devices. Wiring and host assignments are governed by the installed project.

Verified technical characteristics

Card family	DeltaV M-series Traditional I/O
Physical card marking	KJ3221X1-BA1
Part number	12P2531X102
Catalog assembly reference	VE4035S2B1
Catalog I/O role	8-channel 4–20 mA HART output assembly
Termination arrangement	Redundant standard I/O termination block
Analog loop	4–20 mA with HART
Catalog point count	8 channels
Catalog pairing	Redundant analog output arrangement

Engineering context

DeltaV output

Deliver proportional field-device commands from the configured control strategy.

Field interface

The redundant standard i/o termination block must match the installed wiring and carrier.

Redundant output pair

Use the redundant catalog arrangement only where output switchover and the matched terminal block are configured in the host project.

System restoration

Return the affected channels to service only after the approved loop, I/O and diagnostic checks pass.

Configuration and verification

Match the complete marking: Compare KJ3221X1-BA1 12P2531X102 VE4035S2B1 with the installed label, part number and any revision.

Preserve the configuration: Record the existing channel assignment, host release and termination arrangement.

Review the field connection: Check the 4–20 mA HART wiring and the approved circuit drawing before transfer.

Protect the process: Place affected loops in their approved safe state and isolate power as required.

Selected engineering questions

How should the installed 4–20 mA HART channel map be preserved when replacing KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Export or record each configured point and termination assignment, then compare the restored mapping with the project and loop drawings.

What could cause a healthy output card to remain offline after fitting KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Check host compatibility, carrier connection, power, module recognition and the control-system diagnostic record before attributing the fault to the card.

How should field wiring be checked before commissioning KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Compare conductor identification, polarity or commons, shielding and terminal assignment with the approved installation drawing.

Can KJ3221X1-BA1 12P2531X102 VE4035S2B1 be exchanged with a visually similar DeltaV card?
Physical fit is insufficient. Match the complete order marking, card role, termination hardware, host release and project configuration.

Which records help diagnose a changed reading or command after fitting KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Compare commanded output, measured loop current, HART status and field-device travel under the approved loop test.

How should redundancy be reviewed for KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Check whether the actual installed assembly is configured as a redundant pair and test the approved failover path; a redundant catalog reference alone is insufficient.

What acceptance test is appropriate after installing KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Exercise or simulate affected points under the site procedure and verify expected controller indication, field response and alarms.

What should be included in the engineering handover for KJ3221X1-BA1 12P2531X102 VE4035S2B1?
Record the full physical marking, revision, installed position, terminal assignment, changed configuration and post-service test results.

Source and application boundary

Emerson DeltaV M-series Traditional I/O Product Data Sheet, September 2023.

VE4035S2B1 catalog characteristics describe the documented assembly. Confirm applicability of those characteristics to the complete KJ3221X1-BA1 12P2531X102 VE4035S2B1 physical marking and installed termination arrangement.

Related product references

Separate product listings for project review; confirm each order code and system fit independently.

Emerson KJ1501X1-BC1 12P2186X032 VE5008	Emerson KJ2003X1-BB1 12P3439X012
Emerson KJ2003X1-BB1 12P3439X012 VE3006	Emerson KJ3002X1-BA1 12P0680X072 VE4003S2B2
Emerson KJ3002X1-BF1 12P1732X082 VE4003S6B1	Emerson KJ3203X1-BA1 12P3270X042 VE4001S2T2B4
Emerson KJ3221X1-BA1 12P2531X102	Emerson KJ3222X1-BA1 12P2532X072 VE4033S2B1

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Send the complete model and installed-system details when requesting a quotation.