

KJ2005X1-SQ1 12P6383X052

DeltaV SQ Controller

INSTALLATION, INTERFACE AND VALIDATION WORKBOOK

Emerson KJ2005X1-SQ1 12P6383X052 is a DeltaV SQ controller assembly. It executes scheduled control strategies and coordinates the installed DeltaV I/O and control-network paths.

STEP	GATE	ENGINEERING PURPOSE
01	IDENTIFY	Confirm article, host and hardware
02	ISOLATE	Secure power and stored energy
03	CONNECT	Restore documented interfaces
04	VALIDATE	Prove diagnostics and function

WORKBOOK PURPOSE

Field-ready identity, isolation, connection, commissioning and closeout records for this exact Emerson article.

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KJ2005X1-SQ1
12P6383X052

Installation Readiness Gate

Complete the identity, host-system and isolation checks before disturbing the installed hardware.

- 1

Confirm Emerson KJ2005X1-SQ1 12P6383X052 and SQ model SE3008.
- 2

Place the controlled process and final elements in the approved maintenance state.
- 3

Isolate the dedicated controller supply and apply ESD controls.
- 4

Record the carrier position, primary and secondary RJ45 paths and all assigned I/O nodes.

Pre-Work Evidence

EVIDENCE ITEM	RECORDED VALUE
Complete article marking	KJ2005X1-SQ1 12P6383X052
Host / carrier	Emerson DeltaV S-series controller system
Primary system role	Executes scheduled DeltaV control strategies
Acceptance boundary	Complete controlled strategy, I/O and redundancy tests before process release.
Source record	DeltaV SQ Controller Product Data Sheet

WORK AUTHORIZATION RECORD

Work order: _____

Drawing / revision: _____

Checked by: _____

Date: _____

Isolation and Access Register

CONTROL POINT	ENGINEER RECORD
Incoming supply	Isolated / proved
Stored energy	Discharged / proved
Field connections	Identified / protected
ESD control	Established / recorded

Pre-Work Documentation

DOCUMENT	ENGINEER RECORD
Connection photograph	Reference / file
Configuration backup	Reference / revision
Diagnostic baseline	Reference / result

Connection and Installation Sequence

INSTALLATION PRINCIPLE

Mount KJ2005X1-SQ1 12P6383X052 on the documented S-series power/controller carrier with its dedicated supply and record both control-network paths before removal. Restore the approved project, software and I/O topology, then verify diagnostics and controlled redundancy transfer where configured.

- 1 Confirm the S-series carrier, dedicated supply and approved DeltaV software version.
- 2 Restore the validated project, controller assignment and I/O topology.
- 3 Review controller, network, I/O and redundancy diagnostics after startup.
- 4 Complete controlled strategy, I/O and redundancy tests before process release.

Connection Record

CONNECTION GROUP	AS-FOUND / AS-LEFT RECORD	STATUS
Power / field connection	Reference / terminal	Checked
Signal / interface	Reference / connector	Checked
Ground / shield	Reference / point	Checked
Accessory / carrier	Reference / part	Checked

MODEL-SPECIFIC RELEASE LIMIT

Confirm Emerson KJ2005X1-SQ1 12P6383X052, SQ model SE3008, carrier, dedicated supply, both RJ45 paths, DeltaV software, project, I/O topology, redundancy license, grounding and diagnostics before commissioning.

Interface Acceptance Criteria

ACCEPTANCE ITEM	REQUIRED EVIDENCE
Identity	KJ2005X1-SQ1 12P6383X052
Host match	Emerson DeltaV S-series controller system
Connection proof	Restore the validated project, controller assignment and I/O topology.
Configuration proof	Review controller, network, I/O and redundancy diagnostics after startup.

Commissioning and Acceptance Record

Record each controlled verification step before the equipment returns to automatic operation.

NO.	ACCEPTANCE CHECK	RESULT	RECORD
1	Article and host identity	PASS / FAIL	Initial / date
2	Mechanical installation	PASS / FAIL	Initial / date
3	Power and field wiring	PASS / FAIL	Initial / date
4	Grounding and shielding	PASS / FAIL	Initial / date
5	Configuration restoration	PASS / FAIL	Initial / date
6	Signal or power-path response	PASS / FAIL	Initial / date
7	Diagnostics and alarms	PASS / FAIL	Initial / date
8	Final functional release	PASS / FAIL	Initial / date

Engineering Notes

RECORD AREA	ENGINEER ENTRY
As-found condition	
Corrective action	
As-left configuration	
Outstanding restriction	
Release authorization	

CONTROLLED COMMISSIONING

Complete controlled strategy, I/O and redundancy tests before process release.

Diagnostics and Release Log

EVENT	ENGINEERING RECORD
Initial energization	Result / observation
Interface or signal response	Result / observation
Alarm and diagnostic review	Result / observation
Functional release	Name / date

ACCEPTANCE AND RELEASE EVIDENCE

Process-unit regulatory control

Executes scheduled loops and calculations for a DeltaV process area.

Sequence and interlock execution

Coordinates equipment logic with the documented I/O topology.

CHARM I/O integration

Processes electronic-marshalling signals through the approved controller project.

Redundant controller service

Supports controlled primary-to-standby verification where licensed.

Maintenance Verification and Closeout

Process-unit regulatory control

Executes scheduled loops and calculations for a DeltaV process area.

Sequence and interlock execution

Coordinates equipment logic with the documented I/O topology.

CHARM I/O integration

Processes electronic-marshalling signals through the approved controller project.

Redundant controller service

Supports controlled primary-to-standby verification where licensed.

Related Engineering Pages

MODEL	ENGINEERING ROLE	APTER POWER PAGE
Emerson A6220	Related Apter Power product	View Emerson A6220 page
Emerson PR9350-02-S2	Related Apter Power product	View Emerson PR9350-02-S2 page
Emerson PR9376-010-011	Related Apter Power product	View Emerson PR9376-010-011 page
Emerson PR9350-02	Related Apter Power product	View Emerson PR9350-02 page
Emerson KJ2005X1-SQ1-12P6383X022	Related Apter Power product	View Emerson KJ2005X1-SQ1-12P6383X022 page
Emerson PR6426-010-140	Related Apter Power product	View Emerson PR6426-010-140 page
Emerson PR6426-000-030	Related Apter Power product	View Emerson PR6426-000-030 page
Emerson PR6424-010-140	Related Apter Power product	View Emerson PR6424-010-140 page

MANUFACTURER SOURCE RECORD

DeltaV SQ Controller Product Data Sheet
Emerson, January 2026

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