ABB 1KHL178025R0102P-COM02

TECHNICAL REFERENCE / EXACT-MODEL ENGINEERING FILE

ABB 1KHL178025R0102P-COM02 is identified as a industrial communication board for the ABB installed control platform. The complete marking and installed interface arrangement must be matched together before replacement.

01 Identity and evidence boundary

Complete reference	1KHL178025R0102P-COM02
Product type	Industrial Communication Board
System position	ABB installed control platform
Evidence scope	Public exact-model manufacturer data are limited; only the complete identity and verification boundary are treated as exact-model facts.

Board identity
Match the complete 1KHL178025R0102P-COM02 marking and board artwork.

Installed position
Preserve connector orientation, cable map and host position before removal.

Revision boundary
Similar appearance does not establish interface or revision equivalence.

Engineering verification map

Identity decision	Use 1KHL178025R0102P-COM02 as the complete controlling reference.
Installed position	Record the host or carrier position within ABB installed control platform.
Interface evidence	Retain connector orientation, cable ownership, keying and observed indications.
Revision boundary	A similar family name or appearance does not establish interchangeability.
Release evidence	Retain final diagnostics, controlled functional results and open exceptions.

Related portfolio navigation

ABB 3BHE036290R0005 GDC806 B05	Related product page; verify the complete installed model before selection.
ABB DFC02 DFC-02	Related product page; verify the complete installed model before selection.
ABB DO801 3BSE020510R1	Related product page; verify the complete installed model before selection.
ABB SCYC51220-63901075	Related product page; verify the complete installed model before selection.

02 System role and interface architecture

1KHL178025R0102P-COM02 occupies a defined service position in the ABB installed control platform; selection depends on the complete marking and installed boundary.

Identity layer	1KHL178025R0102P-COM02
Installed layer	ABB installed control platform
Interface layer	Carrier or host position, connectors, cables and configured ownership
Functional layer	Industrial Communication Board
Acceptance layer	Observed diagnostics and controlled functional result

Application decisions

Installed-system replacement	Compare the exact code, host position and connected interfaces with the removed item.
Planned maintenance	Capture the as-found label, status and configuration before disturbing the installation.
Controlled commissioning	Restore documented connections and prove the intended signal, communication or control response.
Spare qualification	Keep revision, configuration and acceptance evidence with the spare-part record.

Engineering record map

Before removal	During comparison	After commissioning
Complete marking, host position and connector map.	Artwork, keying, revision evidence and included items.	Final diagnostics, controlled result and unresolved exceptions.

Interface validation matrix

Complete marking	Keep 1KHL178025R0102P-COM02 intact in drawings, service records and quotations.
Physical execution	Compare artwork, connectors, keying and orientation with the removed assembly.
Connected boundary	Trace every cable, terminal or optical path to its documented owner.
Host configuration	Confirm the installed settings or project data that govern the position in ABB installed control platform.
Functional result	Prove the intended industrial communication board role under an approved test state.

03 Verified technical data

Values below are limited to the exact-model or stated platform evidence used for this product.

Complete order code	1KHL178025R0102P-COM02
Equipment role	Industrial Communication Board
System context	ABB installed control platform
Board reference	1KHL178025R0102P-COM02

Engineering interpretation

Complete identity	Use 1KHL178025R0102P-COM02 as one complete reference; do not approve a shortened family name.
Physical comparison	Compare artwork, connector count, keying and installed orientation with the removed item.
System comparison	Confirm the documented position and interface ownership within ABB installed control platform.
Evidence limit	Public exact-model manufacturer data are limited; only the complete identity and verification boundary are treated as exact-model facts.

Evidence allocation matrix

Offered assembly	The complete 1KHL178025R0102P-COM02 marking is the controlling identity.
Board execution	Artwork, connector arrangement and keying are compared with the removed assembly.
Installed ownership	Host position and connected interfaces are retained within the ABB installed control platform record.
Revision decision	A family name or similar appearance is not used as evidence of interchangeability.
Unstated ratings	Electrical limits not established by the exact-model evidence are not assigned.
Acceptance record	Diagnostics and controlled functional results are retained with the as-left configuration.

Engineering questions

How should 1KHL178025R0102P-COM02 be identified before a replacement is approved?	Compare every token in the complete marking, installed position and documented industrial communication board role. Confirm the physical label before approval.
What evidence should be retained before removing 1KHL178025R0102P-COM02?	Record the mounting position, connected interfaces, status indications and current ABB installed control platform configuration. Photograph the complete label before disconnection.
How should the interfaces for 1KHL178025R0102P-COM02 be checked during installation?	Map each connector, terminal and cable to the as-found record and applicable manufacturer documentation. Preserve keying and shielding arrangements.

04 Configuration and diagnostic logic

Verification boundary	Match board artwork, connectors and host position

Physical path	Confirm supported host position, optical medium, connector cleanliness and link partner.
Link state	Observe the port indication before and after the approved connection is made.
Traffic proof	Use the host diagnostics to prove the intended data path, not only optical link.
As-left record	Retain slot, transceiver type, fiber path and final diagnostic state.

Release decision matrix

Approve identity?	Only after the complete 1KHL178025R0102P-COM02 marking and execution match the approved reference.
Approve physical fit?	Only after artwork, keying, connectors and host position match the installed boundary.
Approve configuration?	Only after interface ownership and applicable project or hardware settings are restored.
Approve service return?	Only after diagnostics and the intended controlled-system function pass the approved test.

Diagnostic decision path

No expected indication	Recheck host power, seating and the as-found connector map before changing configuration.
Unexpected host alarm	Compare complete marking, board position and revision evidence with the removed assembly.
Intermittent response	Inspect mating connectors and cable condition, then repeat the controlled test with timestamps.
Function still absent	Separate the board role from carrier, field wiring and host-configuration faults.
Result accepted	Archive final indications, functional proof and every remaining exception with the model identity.

As-left evidence

Identity record 1KHL178025R0102P-COM02 marking and installed position.	**Interface record** Restored connector, cable and configuration ownership.	**Acceptance record** Observed diagnostics and approved functional result.

Close-out control

Identity closed	The as-left record names 1KHL178025R0102P-COM02 without a shortened family reference.
Interfaces closed	Every restored connection is traceable to the pre-work record.
Function closed	The intended industrial communication board role has a recorded controlled-test result.

05 Evidence, decisions and navigation

Evidence scope	Public exact-model manufacturer data are limited; only the complete identity and verification boundary are treated as exact-model facts.
Installation boundary	The exact installed carrier, terminals, cables and project configuration remain site-specific.
Technical reference	Complete supplied marking and installed ABB system records

Engineering FAQ

How can a suspected 1KHL178025R0102P-COM02 fault be separated from wiring or carrier faults?	Verify supply and reference conditions, then inspect mating hardware and external wiring. Use controlled substitution only after both signal paths are documented.
What should be verified after fitting 1KHL178025R0102P-COM02?	Confirm normal indications, communication or signal continuity and the intended controlled-system response under an approved test state.
Can 1KHL178025R0102P-COM02 be replaced by a similar-looking assembly?	No direct equivalence is established by appearance. Compare the complete code, revision, interface execution and installed configuration.

Source identity

Complete supplied marking and installed ABB system records

Related product references

Hirschmann M4-FAST-8-SFP	Related product page; verify the complete installed model before selection.
Hirschmann M-FAST SFP-MM/LC	Related product page; verify the complete installed model before selection.
OPTILOGTC OL2109	Related product page; verify the complete installed model before selection.
General Electric DS200IMCPG1CGC	Related product page; verify the complete installed model before selection.
Bently Nevada 3300/47	Related product page; verify the complete installed model before selection.

Discuss the complete 1KHL178025R0102P-COM02 marking and installed configuration.
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Scan the WhatsApp QR to share nameplate and installed-system evidence.