APTER POWER

INDUSTRIAL AUTOMATION PRODUCT

RPBA-01 3ABD64606859

PROFIBUS DP Adapter Module

ABB RPBA-01 3ABD64606859 is an optional PROFIBUS DP adapter module for ABB drives. It connects the installed drive as a slave to a PROFIBUS DP or DP-V1 control network.

IDENTITY	VERIFIED VALUE
Manufacturer	ABB
System family	ABB drive PROFIBUS DP communication system
Part number	RPBA-01 3ABD64606859
Product role	Links an ABB drive to a PROFIBUS DP or DP-V1 master
Lifecycle	Installed product record

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING NOTE

Fit RPBA-01 only in the documented drive option slot and reproduce the recorded PROFIBUS address, PPO type, baud-rate detection, GSD and process-data mapping. De-energize the drive, wait for DC-link discharge, preserve bus termination and shield grounding, then verify cyclic and acyclic communication before drive enable.

APTER POWER SALES TEAM

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RPBA-01 3ABD64606859

PRODUCT TECHNICAL REFERENCE

Technical Specifications

Technical values below are limited to the named ABB product record and directly applicable manufacturer documentation.

PARAMETER	VALUE	PARAMETER	VALUE
Country of origin	Sweden	Hardware address range	00 to 99
HS code	8537101190	Supported PPO types	1 to 6
Type designation	RPBA-01	Maximum cyclic input data	28 bytes
Manufacturer item number	3ABD64606859	Maximum cyclic output data	28 bytes
Supported fieldbus	PROFIBUS DP, PROFIBUS DP-V1	Maximum cyclic I/O total	56 bytes
Network role	Slave	Maximum acyclic I/O	240 bytes input / 240 bytes output
PROFIBUS connector	9-pin female D-sub	Current consumption	350 mA maximum at 5 V
Drive connection	34-pin parallel bus connector	Degree of protection	IP20
Station address range	0 to 126	Supported baud rates	9.6 kbit/s to 12 Mbit/s

Verified Product Record

DATA GROUP	VERIFIED VALUE
Installed host / carrier	ABB drive PROFIBUS DP communication system
Primary system role	Links an ABB drive to a PROFIBUS DP or DP-V1 master
Connection boundary	Fit RPBA-01 only in the documented drive option slot and reproduce the recorded PROFIBUS address, PPO type, baud-rate detection, GSD and process-data mapping. De-energize the drive, wait for DC-link discharge, preserve bus termination and shield grounding, then verify cyclic and acyclic communication before drive enable.
Controlled acceptance duty	PROFIBUS-controlled motor drives

ENGINEERING BOUNDARY

Confirm RPBA-01, 3ABD64606859, the installed ABB drive and option slot, adapter hardware version, 9-pin PROFIBUS connector, 34-pin drive connector, node address, PPO type, GSD, bus wiring and termination, shield grounding, drive firmware and parameters, and controlled communication and run-test results before commissioning.

Pre-Installation Checks

1. Confirm RPBA-01 and manufacturer item number 3ABD64606859 before work.
2. Isolate the ABB drive and wait at least five minutes for DC-link discharge.
3. Use ESD controls and record the installed option slot, hardware revision and connector orientation.
4. Record the node address, selected GSD, PPO type and process-data mapping before removal.

Documented Service Record

RECORD ITEM	REQUIRED ENTRY
As-found article	RPBA-01 3ABD64606859
Installed host	ABB drive PROFIBUS DP communication system
Connection record	Capture before removal
Controlled release	Diagnostics and functional proof

System Role and Architecture

ABB RPBA-01 3ABD64606859 is an optional PROFIBUS DP adapter module for ABB drives. It connects the installed drive as a slave to a PROFIBUS DP or DP-V1 control network.

FUNCTION 1

Links an ABB drive to a PROFIBUS DP or DP-V1 master

FUNCTION 2

Transfers drive control words, references, status and actual values

FUNCTION 3

Supports cyclic PPO communication and acyclic DP-V1 services

FUNCTION 4

Automatically detects the configured PROFIBUS transmission rate

Matched System Components

NO.	DOCUMENTED COMPONENT / ROLE
1	ABB drive PROFIBUS DP communication system
2	8537101190
3	PROFIBUS-controlled motor drives
4	Fit RPBA-01 only in the documented drive option slot and reproduce the recorded PROFIBUS address, PPO type, baud-rate detection, GSD and process-data mapping. De-energize the drive, wait for DC-link discharge, preserve bus termination and shield grounding, then verify cyclic and acyclic communication before drive enable.

System Integration Record

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	ABB drive PROFIBUS DP communication system
Interface role	Links an ABB drive to a PROFIBUS DP or DP-V1 master
Field / power context	The adapter is mounted in the approved drive option slot and communicates with a compatible PROFIBUS DP master through the 9-pin D-sub port. Engineering work covers the selected GSD file, node address, PPO telegram, parameter mapping, cable shield, segment termination and controlled drive diagnostics.
Commissioning evidence	Verify master recognition, cyclic I/O, acyclic access, drive diagnostics and a controlled run test.

Installation and Connection Checks

1. Inspect the D-sub connector, 34-pin drive connector, shield and protective-ground arrangement.
2. Confirm termination is active only at the first and last station of the PROFIBUS segment.
3. Restore the approved drive parameters and network configuration before controlled energization.
4. Verify master recognition, cyclic I/O, acyclic access, drive diagnostics and a controlled run test.

MANUFACTURER SOURCE RECORD

RPBA-01 PROFIBUS DP Adapter Module User's Manual
ABB 3AFE64504215, Revision F

Applications and Engineering Context

PROFIBUS-controlled motor drives

Connects a documented ABB drive to the plant PROFIBUS master for command and status exchange.

Drive reference and actual-value transfer

Carries the approved speed or torque reference and corresponding process feedback.

Drive parameter service over DP-V1

Supports authorized acyclic parameter access from a compatible engineering or control station.

Existing PROFIBUS drive replacement

Preserves node addressing, PPO mapping and bus-segment behavior during controlled drive service.

TECHNICAL NOTE

Fit RPBA-01 only in the documented drive option slot and reproduce the recorded PROFIBUS address, PPO type, baud-rate detection, GSD and process-data mapping. De-energize the drive, wait for DC-link discharge, preserve bus termination and shield grounding, then verify cyclic and acyclic communication before drive enable.

Model-Specific Acceptance Evidence

CHECK	ACCEPTANCE CONDITION
Identity	RPBA-01 3ABD64606859 recorded
Host / carrier	ABB drive PROFIBUS DP communication system
Physical interface	Links an ABB drive to a PROFIBUS DP or DP-V1 master
Configuration	Restore the approved drive parameters and network configuration before controlled energization.
Functional proof	Verify master recognition, cyclic I/O, acyclic access, drive diagnostics and a controlled run test.

IMPORTANT NOTICE

Confirm RPBA-01, 3ABD64606859, the installed ABB drive and option slot, adapter hardware version, 9-pin PROFIBUS connector, 34-pin drive connector, node address, PPO type, GSD, bus wiring and termination, shield grounding, drive firmware and parameters, and controlled communication and run-test results before commissioning.

Controlled Release Summary

RELEASE ITEM	MODEL-SPECIFIC CONDITION
Article identity	RPBA-01 3ABD64606859
Approved role	PROFIBUS-controlled motor drives
Final validation	Verify master recognition, cyclic I/O, acyclic access, drive diagnostics and a controlled run test.

Engineering Precautions

1. Confirm RPBA-01 and manufacturer item number 3ABD64606859 before work.
2. Isolate the ABB drive and wait at least five minutes for DC-link discharge.
3. Use ESD controls and record the installed option slot, hardware revision and connector orientation.
4. Record the node address, selected GSD, PPO type and process-data mapping before removal.
5. Inspect the D-sub connector, 34-pin drive connector, shield and protective-ground arrangement.
6. Confirm termination is active only at the first and last station of the PROFIBUS segment.
7. Restore the approved drive parameters and network configuration before controlled energization.
8. Verify master recognition, cyclic I/O, acyclic access, drive diagnostics and a controlled run test.

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
YPC111B	optical distribution board	View YPC111B page
3BHB003041R0101	drive control board	View 3BHB003041R0101 page
ZINT-592	inverter main circuit board	View ZINT-592 page
ZCU-14	3AXD50000182992 control unit	View ZCU-14 page
ZCU-14	3AXD50000005164 control unit	View ZCU-14 page
XVC772A102	3BHE032285R0102 control board	View XVC772A102 page
NBRA-657C	braking chopper	View NBRA-657C page
RMIO-11C	3AUA0000035408 control board	View RMIO-11C page

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