

ABB DP620 3BHT300016R1

High-Speed Counter / Exact identity and technical profile

The technical reference joins exact product identity with five counters, supported levels, frequency class and measurement modes.

Manufacturer product ID	3BHT300016R1
ABB type designation	DP620
Counter channels	5
Input levels	5 V or 24 V DC
Maximum frequency class	Below 100 kHz
Per-counter inputs	Two counting inputs plus strobe and set inputs

TECHNICAL MARKER

Five counter channels

TECHNICAL MARKER

5 V or 24 V DC inputs

TECHNICAL MARKER

Up to 100 kHz class

TECHNICAL MARKER

Multiple count and measurement modes

Technical boundary

The exact model and its published data govern this reference. Similar family names, suffixes or physical appearance do not establish the same electrical or software behavior.

Identity evidence	Read DP620 3BHT300016R1 from the installed label and procurement record
Function evidence	Confirm the published high-speed counter role in the S600 I/O system
Configuration evidence	Retain the project, mapping, range, address or interface assigned to this position
Release evidence	Link final diagnostics to a witnessed field or operator response

TECHNICAL DECISION

Accept DP620 3BHT300016R1 only when its identifier and installed-system role agree.

CHANGE BOUNDARY

Any redesign beyond the documented DP620 3BHT300016R1 position requires separate engineering approval.

ABB DP620 3BHT300016R1

High-Speed Counter / Published characteristics

This matrix groups the published DP620 3BHT300016R1 characteristics that control identification, configuration and engineering review. Each entry remains tied to the exact high-speed counter record.

Manufacturer product ID	3BHT300016R1
ABB type designation	DP620
Counter channels	5
Input levels	5 V or 24 V DC
Maximum frequency class	Below 100 kHz
Per-counter inputs	Two counting inputs plus strobe and set inputs
Isolation	Inputs individually isolated
Modes	Up, down, frequency, differential, position and speed measurement

INTERPRETATION

Use every DP620 3BHT300016R1 value with the exact installed configuration.

DESIGN RECORD

Retain the drawing, project and channel or interface assignments that make DP620 3BHT300016R1 data actionable.

Nameplate check	Manufacturer and full reference agree with the controlled record
Range check	Published operating or signal data agree with the configured use
Interface check	Backplane, terminal, cable, network or memory arrangement is documented
Limit check	Loading, channel count, supply or lifecycle constraint is reviewed
Evidence close	Source title and applicable product record are retained with the decision

NO BORROWED VALUES

Another ABB suffix cannot fill a missing DP620 3BHT300016R1 parameter.

ENGINEERING OUTPUT

Record the exact value used, its purpose and any unresolved item before selection.

ABB DP620 3BHT300016R1

High-Speed Counter / System role and data flow

Pulse accumulation
Counts supported 5 V or 24 V pulse trains for machine totals.

Frequency measurement
Converts repetitive field pulses into configured rate values.

Position and speed feedback
Processes documented directional input pairs for motion measurement.

Exact counter replacement
Restores mode, scaling and control-input assignments for the DP620 position.

Signal and configuration path

Field layer	Sensors, loads, terminal or operator interface assigned by the design
Module layer	DP620 3BHT300016R1 performs its published high-speed counter role
Control layer	PLC project, address map or runtime application interprets the exchanged data
Acceptance layer	Diagnostics and intended process response are witnessed together

Engineering boundary

Application examples describe system roles only. They do not establish automatic interchangeability, replacement approval or suffix equivalence.

Observed input	Field, network or operator condition presented to DP620 3BHT300016R1
Published action	The documented high-speed counter function processes that condition
Configured interpretation	PLC logic, HMI project or station mapping assigns system meaning
Expected output	A defined state, value, message or command is produced
Acceptance proof	The complete path is witnessed under controlled conditions

APPLICATION RECORD
Tie each DP620 3BHT300016R1 use case to the installed drawing or project tag.

EXCEPTION CONTROL
Document and resolve any behavior that differs from the approved response.

ABB DP620 3BHT300016R1

High-Speed Counter / Engineering decisions

SUPPORTED IDENTITY

DP620 3BHT300016R1

SYSTEM CONTEXT

S600 I/O

PUBLISHED FUNCTION

High-Speed Counter

UNSUPPORTED INFERENCE

A nearby model, suffix or family resemblance

Model-specific questions

How many counters does ABB DP620 3BHT300016R1 provide?

The exact product record identifies five high-speed counter channels.

What frequency class applies to ABB DP620 3BHT300016R1?

The S600 overview states pulse counting below 100 kHz.

What inputs belong to each ABB DP620 3BHT300016R1 counter?

ABB describes two count inputs plus strobe and set control inputs.

How should ABB DP620 3BHT300016R1 shielding be checked?

Use the installed pulse-source and cabinet grounding design; do not create an unapproved second reference path.

Which electrical levels does ABB DP620 3BHT300016R1 support?

ABB documents 5 V or 24 V DC inputs.

Which measurement modes are documented for ABB DP620 3BHT300016R1?

The catalogue lists up, down, frequency, differential, position and speed measurement.

What must be retained before replacing ABB DP620 3BHT300016R1?

Keep level, mode, scaling, direction, preset, address and terminal records.

How is ABB DP620 3BHT300016R1 commissioned?

Apply a controlled pulse source and verify count, direction, frequency or motion value against the configured scale.

Decision closeout

Close the DP620 3BHT300016R1 technical review with the exact identifier, applicable published limits and the installed configuration assumptions explicitly recorded.

Question coverage	Identity, function, configuration and field handling addressed
Open item	Any unanswered exact-model point is listed without guessed data
Decision owner	Responsible engineering or maintenance role identified
Supporting record	Drawing, project revision, readings and witnessed result attached

APPROVAL

The DP620 3BHT300016R1 decision is accepted only within the documented scope.

REVIEW TRIGGER

A different suffix, wiring arrangement, project or application requires a new review.

ABB DP620 3BHT300016R1

High-Speed Counter / Evidence and support

Exact product	ABB DP620 3BHT300016R1
Technical class	High-Speed Counter
Platform	S600 I/O
Evidence use	Exact-model characteristics and engineering boundary
Record with	Installed drawing, project and acceptance evidence
Retained evidence	Nameplate, source title, configuration baseline and field record
Installation evidence	Isolation, conductor/connector record and post-work inspection
Commissioning evidence	Diagnostics, measurements and intended response
Final record	Responsible witness, date, exceptions and approved disposition

VERIFIED APTER POWER CATALOG REFERENCES

Navigation only; compatibility, substitution and manufacturer endorsement are not implied.

ABB BB174 3BSE003879R1

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ABB DSTD196 3BSE004725R1

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MANUFACTURER EVIDENCE RECORD

ABB DP620 Exact Product Record and Advant Controller 110 Overview

3BHT300016R1 / 3BDD 010 003R0003

CONTACT APTER POWER

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com

Send the exact model, quantity, destination and requested condition for a quotation.

