

TD330N16KOF

1600 V 330 A Thyristor/Diode Power Block

Infineon TD330N16KOF is a 1600 V, 330 A thyristor/diode phase-control power block in the BG-PB50AT-1 package for industrial power conversion and motor-control service.

PRODUCT SNAPSHOT

BRAND
Infineon

FAMILY
Infineon 50 mm Power Block

PART
TD330N16KOF

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

WHATSAPP / PHONE

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WEBSITE

www.apterpower.com



PRODUCT OVERVIEW

TD330N16KOF provides a documented SCR/diode phase-control power path in a 50 mm isolated-base power-block package.



1600 V blocking class



330 A average on-state current at 85 C



10 kA surge-current capability at 10 ms



Pressure-contact isolated-base construction

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
TD330N16KOF product assembly	Matched host system
Documented field interfaces	Approved configuration record

ENGINEERING CONTEXT

The power block is matched to the installed converter, heat sink, gate-drive circuit and protection network. Commissioning preserves polarity, clamping, cooling and firing sequence before controlled current loading.

TECHNICAL DATA

PARAMETER	VALUE	PARAMETER	VALUE
Device configuration	SCR / diode phase control	Maximum junction temperature	130 C
Repetitive peak voltage	1600 V	Threshold voltage VT0	0.8 V
Average on-state current	330 A at 85 C	I2t	500 x 10^3 A2s
Surge current	10000 A at 10 ms	Package	BG-PB50AT-1
Critical di/dt	250 A/us	Ordering product number	TD330N16KOFHPSA2
Slope resistance rT	0.5 mOhm	Compliance	Lead-free and RoHS compliant
Thermal resistance RthJC	0.112 K/W		

RELATED GE PRODUCT PAGES

1 ABB 3hac029105-002

2 ABB 3hac025466-001

3 ABB 3hac058040-001

4 ABB 3hac033388-001

5 ABB dsqc323-3hab5956-1

6 ABB 3hac17484-8

7 ABB dsqc332

8 ABB 3hna006565-001

9 ABB 3hna003882-001-02

TECHNICAL NOTE

Verify TD330N16KOF, package, polarity, heat-sink interface, clamping arrangement, gate leads and semiconductor protection before replacement. The module uses pressure-contact construction; do not infer mounting or cooling details from a nearby power-block rating.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Industrial motor drive

Controls the documented phase-controlled power path.

HVAC power control

Supports the approved high-current switching stage.

Power-converter repair

Restores the exact SCR/diode module position.

Controlled rectifier maintenance

Preserves polarity, firing and thermal interfaces.

PRODUCT PRECAUTIONS

1

Confirm TD330N16KOF and ordering product number TD330N16KOFHPSA2.

2

Place the converter and driven process in the approved maintenance state.

3

Isolate incoming power and prove all stored energy discharged.

4

Record busbar polarity, gate leads, protection components and heat-sink position.

5

Use ESD controls and protect the pressure-contact surfaces.

6

Restore the documented clamping, thermal interface and gate wiring.

7

Review firing, protection and temperature diagnostics after controlled energization.

8

Increase load under control and record current and thermal response before release.

ENGINEER FAQ

Q1 How is the exact TD330N16KOF execution identified?

Match TD330N16KOF, TD330N16KOFHPSA2 and BG-PB50AT-1.

Q2 What documented function does TD330N16KOF perform?

It provides one SCR/diode phase-control power path rated 1600 V and 330 A at 85 C.

Q3 Which installed system must be matched before fitting TD330N16KOF?

Match the converter, heat sink, gate drive and protection network.

Q4 Which interfaces must be recorded for TD330N16KOF?

Record busbar polarity, gate leads, clamping points and thermal interface.

Q5 What handling controls apply to TD330N16KOF?

Prove stored energy discharged and protect all pressure-contact surfaces.

Q6 What must be restored after installing TD330N16KOF?

Restore polarity, clamping, cooling, gate wiring and protection devices.

Q7 What evidence confirms TD330N16KOF is ready for service?

Retain firing, current, protection and thermal test results.

Q8 Which manufacturer record supports the TD330N16KOF page?

Infineon's TD330N16KOF product record supplies the exact electrical and package data.

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9 ABB 3hna003882-001-02

SOURCE TD330N16KOF Thyristor/Diode Power Module | Infineon Technologies product record

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