

# Installation Instructions

## **3BHB006457R0001 DIODE D1031SH45TS02**

igct controller module

ABB AC 800PEC

## **Before work begins**

- 01 Confirm the exact 3BHB006457R0001 DIODE D1031SH45TS02 article number and installed equipment position.
- 02 Place the equipment in a safe state, isolate all energy sources and follow the applicable ABB discharge or lockout procedure.
- 03 Record terminals, connectors, signal cables, cooling provisions and protective-earth conductors.
- 04 Use ESD controls and qualified industrial-service personnel throughout the replacement.

## Model-specific connection checks

|                         |                                     |
|-------------------------|-------------------------------------|
| Reverse Voltage         | 4500V+                              |
| Forward Current         | 250–5000A                           |
| Switching Speed         | <100 $\mu$ C                        |
| Trigger Voltage/Current | +15/-15V pulses                     |
| Turn-On/Off Time        | 300–500 ns                          |
| Exact Article Code      | 3BHB006457R0001 DIODE D1031SH45TS02 |
| Device Designation      | DIODE D1031SH45TS02                 |
| Product Family          | ABB AC 800PEC                       |
| Semiconductor Type      | IGCT                                |
| Switching Position      | Drive power converter stage         |

## Installation sequence

- Inspect the replacement for transport damage, contamination, bent pins and altered keying.
- Install without forcing connectors or terminals; restore all shields, grounds and cooling provisions.
- Secure power and signal connections under the applicable manufacturer procedure.

## Commissioning and return to service

- 01 Insulation and gate-circuit test.
- 02 Check insulation and protective-earth continuity before energising..
- 03 Restore auxiliary and main power in the approved sequence..
- 04 Observe controller, interface and equipment diagnostics..
- 05 Test the connected signal, network, motor or power function at a controlled operating point..
- 06 Record the final article number, test results and maintenance approval..

This AMIKON installation reference supplements the applicable ABB controlled documentation and the site safety procedure. Warranty: 12 months from AMIKON.