

APTER POWER INSTALLATION & VERIFICATION REFERENCE

3BHB020720R0002-5SHY3545L0016

Field checklist for serialized high-power semiconductor replacement

|                  |                                                 |
|------------------|-------------------------------------------------|
| ENGINEERING LENS | SERIALIZED HIGH-POWER SEMICONDUCTOR REPLACEMENT |
| SYSTEM           | ABB PCS6000 power conversion                    |
| SOURCE CONTROL   | Manufacturer-published information only         |

This separate field reference focuses on serialized high-power semiconductor replacement. It does not replace the current ABB installation, safety, or commissioning instructions.

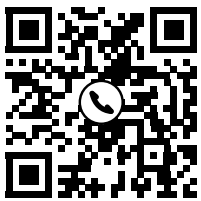
|              |                                               |
|--------------|-----------------------------------------------|
| Manufacturer | ABB                                           |
| Prepared by  | Apter Power                                   |
| Document ID  | AP-ABB-20-3BHB020720R0002-5SHY3545L0016-IV-R1 |
| Revision     | R1                                            |
| Issue date   | 2026-08-14                                    |

APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Engineering clarity for serialized high-power semiconductor replacement.

WHATSAPP / PHONE +86 180 3023 5313  
EMAIL sales13@apterpower.com  
WEBSITE www.apterpower.com



SCAN FOR PRODUCT & QUOTE  
3BHB020720R0002-5SHY3545L0016

## 1. Pre-Installation Decision Gates

| Step | Gate                | Required evidence                                                                                                                                                          |
|------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Identity            | Match every character of 3BHB020720R0002-5SHY3545L0016; photograph all labels, revisions, and option markings.                                                             |
| 2    | Host architecture   | Confirm the exact ABB PCS6000 power conversion rack, slot, controller, project, and approved topology.                                                                     |
| 3    | Primary risk        | Document the evidence for serialized high-power semiconductor replacement before disconnection or energization.                                                            |
| 4    | Electrical / signal | Verify supply, signal type, range, polarity, grounding, shielding, pinout, and load from the exact manufacturer document.                                                  |
| 5    | Lifecycle           | ABB identifies this as the old-type IGCT and documents 5SHY4045L0006 / 3BHB030310R0001 as the one-to-one new-generation replacement. Follow the PCS6000 service procedure. |
| 6    | Commissioning       | Use the manufacturer test procedure, capture measured results, and obtain release authorization before return to service.                                                  |

### Model-Specific Precautions

- Match every character of 3BHB020720R0002-5SHY3545L0016 to the physical nameplate before work.
- Use the exact ABB manual, wiring drawing, and safety instructions for the installed revision.
- De-energize and apply the required lockout, discharge, ESD, and stored-energy controls before removal.
- Back up firmware, parameters, controller project, calibration, and network settings where applicable.
- Verify supply, signal type, polarity, grounding, shielding, connector pinout, load, and environmental limits.
- Commission with the manufacturer test procedure and record results before returning equipment to service.

## 2. Wiring, Configuration and Commissioning Record

| Record item                             | Site entry |
|-----------------------------------------|------------|
| Physical model / article                |            |
| Serial / hardware revision              |            |
| Host system / machine                   |            |
| Rack / slot / physical location         |            |
| Supply and grounding checked            |            |
| Signal type / range / pinout            |            |
| Firmware / project / calibration backup |            |
| Functional or safety test result        |            |
| Technician / reviewer / date            |            |

### Stop Condition

Do not energize 3BHB020720R0002-5SHY3545L0016 if any suffix, supply, pinout, host-system assignment, safety classification, or serialized high-power semiconductor replacement requirement remains unresolved.

### 3. Source Basis and Field Handover

#### Official manufacturer source

ABB PCS6000 Service Manual 3BHS600000 E80 Rev F, serialized power components table.

[https://library.e.abb.com/public/e8e12ee61aec4742b149b8b8bbda577d/3BHS600000\\_E80\\_RevF\\_Service\\_Manual\\_PCS6000.pdf](https://library.e.abb.com/public/e8e12ee61aec4742b149b8b8bbda577d/3BHS600000_E80_RevF_Service_Manual_PCS6000.pdf)

#### Handover Checklist

| Handover item                          | Status |
|----------------------------------------|--------|
| Manufacturer document attached         |        |
| Nameplate photographs archived         |        |
| Project / settings backup archived     |        |
| Test evidence approved                 |        |
| Lifecycle or migration action recorded |        |

#### Important Notice

This Apter Power checklist is not a ABB installation instruction. The current manufacturer documentation, physical nameplate, host-equipment manual, safety study, and site procedures control all work.

#### APTER POWER SALES TEAM

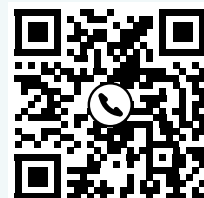
INDUSTRIAL AUTOMATION PRODUCT SUPPORT

**Engineering clarity for serialized high-power semiconductor replacement.**

WHATSAPP / PHONE +86 180 3023 5313

EMAIL [sales13@apterpower.com](mailto:sales13@apterpower.com)

WEBSITE [www.apterpower.com](http://www.apterpower.com)



SCAN FOR PRODUCT & QUOTE

3BHB020720R0002-5SHY3545L0016