# CBHX165C 5R 414 Technical Reference

ABB CBHX165C 5R 414 DC-Bus Charging Resistor with verified technical identity, model-specific selection data and controlled commissioning guidance.

## 01 Source-to-marking review

| | |
|---|---|
| **Order reference** | CBHX165C 5R 414 |
| **Hardware class** | DC-Bus Charging Resistor |
| **Installed family** | ABB ACS800-104 drive charging circuits |
| **Manufacturer identity** | ABB |
| **Technical basis** | ABB ACS800-104 Hardware Manual charging-circuit tables, product ID 64803689 |
| **Use limit** | Apply only to the complete marking and documented installed relationship |

## 02 Technical evidence matrix

| | | |
|---|---|---|
| **Global commercial alias** | CBHX 165 C 5R 414 | Confirm global commercial alias against the delivered label or installed record. |
| **Product ID** | 64803689 | Confirm product id against the delivered label or installed record. |
| **Documented function** | Charging resistor | Confirm documented function against the delivered label or installed record. |
| **Resistance per resistor** | 5.00 ohm | Confirm resistance per resistor against the delivered label or installed record. |
| **Drive family** | ACS800-104 | Confirm drive family against the delivered label or installed record. |
| **Circuit position** | DC-bus precharge path | Confirm circuit position against the delivered label or installed record. |
| **Quantity dependency** | Drive type and voltage class | Confirm quantity dependency against the delivered label or installed record. |
| **Parallel-equivalent examples** | 2.50, 1.67, 1.25, 1.00 or 0.83 ohm using multiple units | Confirm parallel-equivalent examples against the delivered label or installed record. |
| **Replacement boundary** | Resistor quantity and charging-circuit design | Confirm replacement boundary against the delivered label or installed record. |

## Evidence classification

**Exact marking**
The complete order reference controls the commercial identity.

**Documented value**
Use only where the technical record supports the stated execution.

**Installed relationship**
Confirm from the existing cabinet, machine or system record.

**Excluded assumption**
Do not infer an adjacent suffix, rating or execution.

## Documented application context

**ACS800 DC-link precharge**
Limit capacitor inrush before the charging bypass closes.

**Parallel resistor assemblies**
Build the documented equivalent resistance with the specified number of units.

**Charging-circuit fault diagnosis**
Check resistor, fuses, contactor and control sequence as one path.

**Installed-base spare selection**
Match product ID, resistor marking, quantity and drive type.

**Discuss the complete marking and installed application with Apter Power**

sales13@apterpower.com | +86 18030235313

Scan the approved QR code for direct contact and quotation support.

## 03 Compatibility decision matrix

| | | |
|---|---|---|
| **Identity gate** | Does the installed marking agree with CBHX165C 5R 414? | Stop if any suffix or auxiliary marking differs. |
| **Platform gate** | Is the arrangement documented for ABB ACS800-104 drive charging circuits? | Confirm the carrier, base, circuit or system record. |
| **Interface gate** | Do physical and electrical interfaces match? | Compare terminals, connectors, mounting and protection. |
| **Rating gate** | Are documented ratings suitable at the operating point? | Check supply, load, duty and companion limits. |
| **Configuration gate** | Can the approved settings be restored? | Retain jumpers, software, wiring and assignments. |
| **Acceptance gate** | Can the installed function be proven? | Define measured evidence before release. |

## Marking-focused review prompts

| | |
|---|---|
| **Confirm global commercial alias** | Expected record: CBHX 165 C 5R 414 |
| **Confirm product id** | Expected record: 64803689 |
| **Confirm documented function** | Expected record: Charging resistor |
| **Confirm resistance per resistor** | Expected record: 5.00 ohm |
| **Confirm drive family** | Expected record: ACS800-104 |
| **Confirm circuit position** | Expected record: DC-bus precharge path |
| **Confirm quantity dependency** | Expected record: Drive type and voltage class |
| **Confirm parallel-equivalent examples** | Expected record: 2.50, 1.67, 1.25, 1.00 or 0.83 ohm using multiple units |

## Offer-screening evidence package

- Photograph the entire CBHX165C 5R 414 marking without cropping suffixes.
- Provide the installed cabinet, machine or circuit reference and companion-part identities.
- Compare interfaces, ratings, configuration and included scope with the approved record.
- Resolve every discrepancy in writing before the item is released for dispatch.

## Engineering acceptance questions

**What resistance is assigned to one CBHX165C 5R 414 unit?**

ABB documents 5.00 ohms per CBHX 165 C 5R 414 resistor.

**Why can the quantity of CBHX165C 5R 414 vary between drives?**

ABB connects multiple units in some ACS800-104 ratings to achieve a lower equivalent charging resistance.

**Which cabinet information is needed before ordering CBHX165C 5R 414?**

Provide the full ACS800-104 type code, voltage class, charging-circuit drawing and installed resistor quantity.

**What must be discharged before servicing CBHX165C 5R 414?**

Follow the approved drive isolation procedure and prove the DC link has discharged to a safe level.

## Verified related product pages

| | |
|---|---|
| **Recommended product** | ABB HITE303278R1 |
| **Recommended product** | ABB SNAT609TAI SNAT 609 TAI |
| **Recommended product** | Bently Nevada 3500/33 149986-01 |
| **Recommended product** | Emerson 8709-CA-08 |

**Discuss the complete marking and installed application with Apter Power**

sales13@apterpower.com | +86 18030235313

Scan the approved QR code for direct contact and quotation support.