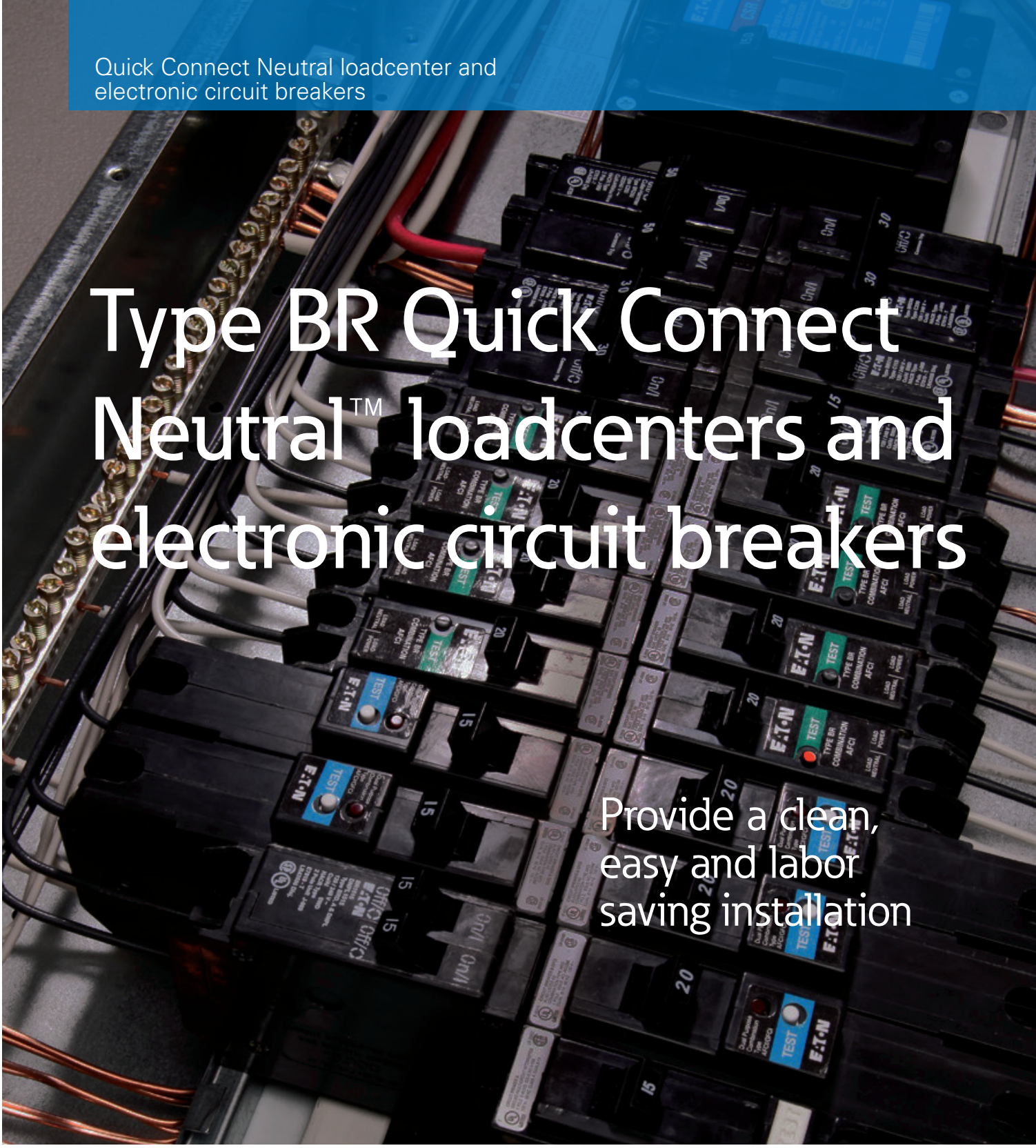
Quick Connect Neutral loadcenter and electronic circuit breakers

Type BR Quick Connect Neutral™ loadcenters and electronic circuit breakers



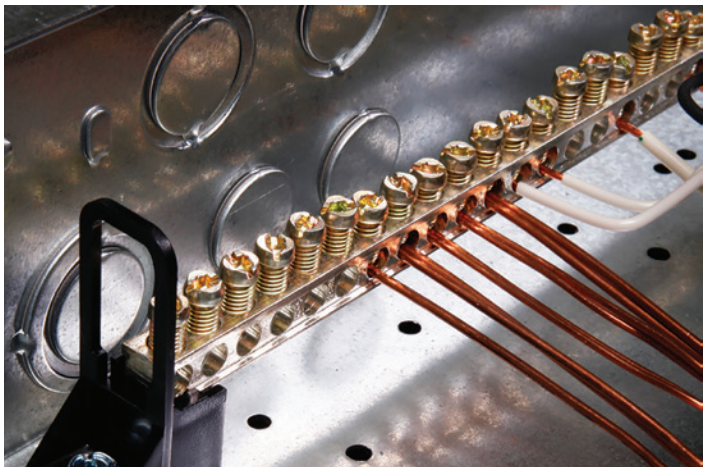
Provide a clean, easy and labor saving installation

Powering Business Worldwide

Simple installation. Clean finished product.

Eaton's Type BR Quick Connect Neutral loadcenter and electronic circuit breaker offering provides a clean solution to contractors installing electronic circuit breakers in the multi-family and single-family residential construction markets. A product platform that leverages existing proven technology, the devices help simplify installations while providing a professional look to the loadcenter.

The Type BR Quick Connect Neutral loadcenter helps improve wire management solutions – an increasingly important factor due to the growing use of electronic circuit breakers due to code changes. The Type BR electronic circuit breaker features diagnostic trip codes, which simplify troubleshooting, as a standard offering.



Full length backed out neutral screws provide the installer with maximum flexibility

Features and benefits

Type BR Quick Connect Neutral loadcenters and electronic breakers each provide innovative features to improve troubleshooting, installation speed and flexibility.

Loadcenters

- Full length neutral bars provide more than 300% neutral terminations to increase installation flexibility
- Backed-out neutral screws increase the speed of electronic breaker installations
- Expanded circuit offering allows Type BR twin breakers to be installed on any bus stab

Breakers

- Cut-to-length neutral wires provide a clean and professional look inside the loadcenter
- Solid-tip neutral wire quickly connects to the neutral bar, improving installation time
- Standard LED diagnostics improve the ease of troubleshooting every electronic circuit breaker

Type BR Quick Connect Neutral Loadcenters ①

Main device	Ampere rating	Spaces	Circuits ②	Incoming lug size	Enclosure type ③	Box size	Ground bar	Number of neutral terminations	Catalog number
BR 10 kAIC	100	30	60	#4–1/0	Indoor	D1	④	96	**BR3060BQN100**
CSR 25 kAIC	150	30	60	#2–300 kcmil	Indoor	G1	④	102	**BR3060BQN150**
CSR 25 kAIC	200	30	60	#2–300 kcmil	Indoor	G1	④	102	**BR3060BQN200**
CSR 25 kAIC	200	40	80	#2–300 kcmil	Indoor	L1	④	128	**BR4080BQN200**
CSR 25 kAIC	200	30	60	#2–300 kcmil	Outdoor	L1R	④	94	**BR3060BQN200R**
CSR 25 kAIC	200	40	80	#2–300 kcmil	Outdoor	G1R	④	128	**BR4080BQN200R**
Main lug only	125	24	48	#6–2/0	Indoor	C2	GBK14	80	**BR2448LQN125G**
Main lug only	125	30	60	#6–2/0	Indoor	D1	(2) GBK10	96	**BR3060LQN125G**
Main lug only	200	30	60	#1–300 kcmil	Indoor	D1	GBK1020 + GBK10	96	**BR3060LQN200G**
Main lug only	200	40	80	#1–300 kcmil	Indoor	G1	GBK1020 + GBK10	122	**BR4080LQN200G**
Main lug only	125	20	40	#6–2/0	Outdoor	C1R	GBK14	68	**BR2040LQN125RG**
Main lug only	200	30	60	#1–300 kcmil	Outdoor	D1R	GBK1420	94	**BR3060LQN200RG**
Convertible	200	30	60	—	Indoor	G1	④	102	**BR3060NQN200**
Convertible	200	40	80	—	Indoor	L1	④	128	**BR4080NQN200**
Convertible	200	30	60	—	Outdoor	G1R	④	94	**BR3060NQN200R**
Convertible	200	40	80	—	Outdoor	L1R	④	128	**BR4080NQN200R**

① BR Quick Connect Neutral loadcenters accept both standard and Quick Connect Neutral breakers.
② Loadcenters accept Type BR twin breakers.
③ Combination cover included with every indoor loadcenter.
④ Ground bar kit not included. Purchase separately.

Type BR Quick Connect Neutral Electronic Breakers

Ampere rating	Poles	Wire size	Breaker type	LED diagnostics included	Catalog number
15	Single-pole	10 kAIC #14–4	Combination AFCI	Yes	**BRCAF115QN**
20	Single-pole	10 kAIC #14–4	Combination AFCI	Yes	**BRCAF120QN**
15	Single-pole	10 kAIC #14–4	Arc fault/ground fault	Yes	**BRLAFGF115QN**
20	Single-pole	10 kAIC #14–4	Arc fault/ground fault	Yes	**BRLAFGF120QN**

Features, benefits and functions

Extra 1.5-inch (38.1 mm) knockout

- Larger knockout provides easier installation and time savings

Top or bottom feed

- Straight-in wiring saves labor and material
- One panel for either top or bottom applications

Drywall marking on enclosure

- Indicates proper mounting depth for flush applications

Type BR Quick Connect Neutral AFCI & AF/GF Breakers

- Cut-to-length neutral wire provides clean, professional look
- Solid-tip neutral wire allows for quick connection to neutral bar
- Compact AFCI design provides easier wiring and improved wireway access
- Standard LED diagnostics indicates 1 of 6 trip codes for easy troubleshooting

Type BR twin breakers

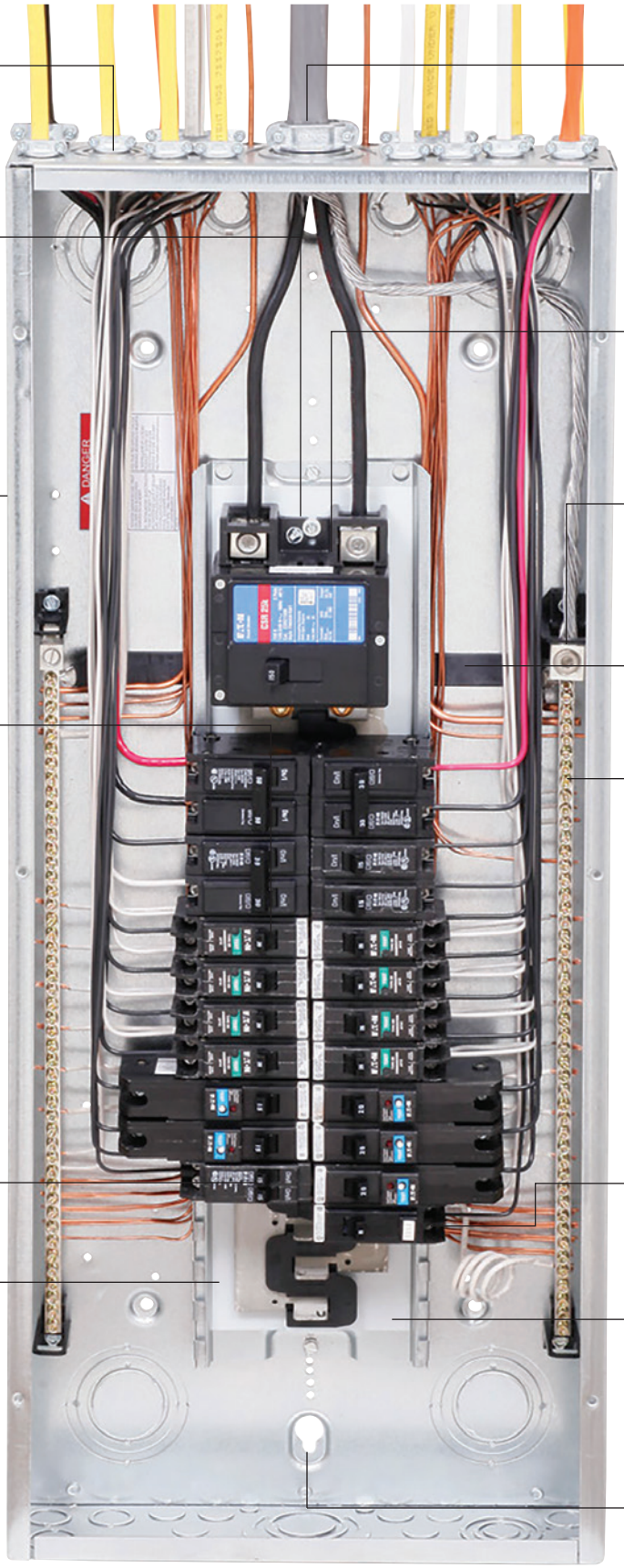
- Accepts Type BR twin breakers for maximized circuit options (ex. 30/60, 40/80)

Standard Tin-Plated Aluminum Bus

- Excellent conductivity and corrosion resistance

Warranty

10-year warranty on all Type BR loadcenters and circuit breakers



"Tangential" center knockout

- Easier installation for conduit applications

Commercial grade main breaker

- 25 kAIC series rated main breaker for superior protection

2/0 Lug

- Easily removable and can be installed in any location on the neutral bar

Neutral bus (strap)

- Easily removable for sub-panel applications

Twin neutral bars

- Full length neutral bars extend to last bus stab for installation flexibility
- Backed out neutral screws provide quick connection for neutral and ground wires
- Minimum 300% neutral termination capacity

Existing Type BR electronic breakers

- Accepts existing pigtail neutral wire breakers

Steel backpan

- Provides solid and reliable breaker mounting–single piece design for stability and durability

Single keyhole mounting

- One keyhole at the top and bottom provides easier mounting and leveling

Troubleshooting descriptions

AFCI trip code

- **Thermal trip/manual disconnect**—The breaker has detected an overload, short circuit or was manually turned off (no blink pattern)
- **Series arc**—A low current arc has been detected within one of the current pathways (LED blink pattern = 1)
- **Parallel arc**—A high current arc has been detected between two conductors (LED blink pattern = 2)
- **Short delay**—An electronic backup to the short-circuit mechanism (LED blink pattern = 3)
- **Overvoltage**—Voltage of 160 V rms or greater (LED blink pattern = 4)
- **Ground fault**—Current has found an alternate path to ground (LED blink pattern = 5)
- **Self-test failure**—The breaker continually tests the internal electronics and software to ensure that the arc fault detection technology is working properly (LED blink pattern = 6)

Why Eaton

The world's demand for power continues to increase. Eaton is helping customers do more with less energy, while also improving the reliability of critical systems and processes.

Eaton's Type BR Quick Connect Neutral loadcenters and breakers provide enhanced efficiency during installation and improved safety and troubleshooting. With over 300 percent neutral wire terminations, these product solutions provide contractors with increased flexibility.

For more information on Eaton's Type BR Quick Connect Neutral loadcenter and electronic breakers visit:
www.eaton.com/brquickconnect

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