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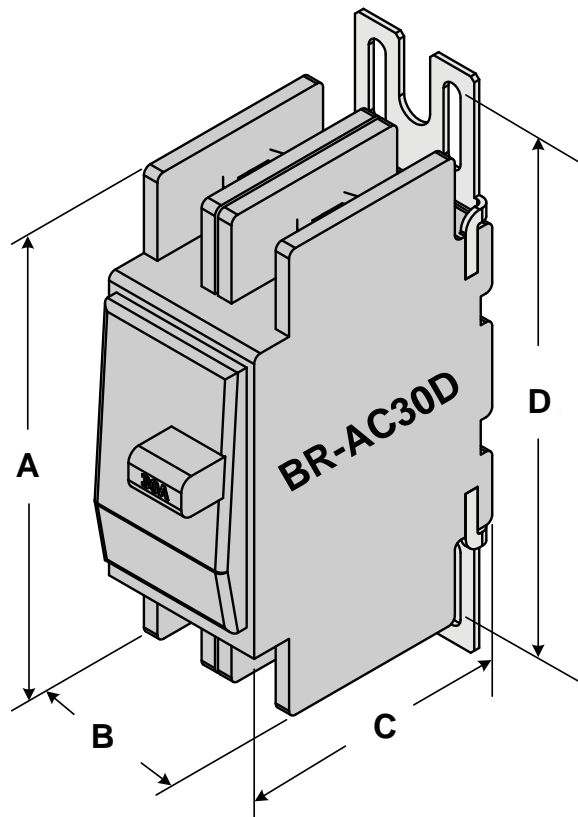
Introduction

The BR-AC30D and BR-AC60S are AC breakers that are used as the disconnect switch and overcurrent protection device for the inverter’s AC input. These circuit breakers come equipped with slots in the molded case for attaching mounting brackets/feet, which allows them to be easily back-mounted to the breaker mounting plate inside the MP (Magnum Panel) enclosure.

Depending on the part number, the breaker is either a 30 amp dual pole (PN: BR-AC30D) or a 60 amp single pole (PN: BR-AC60S), general purpose Square-D QOU™ type, back-mountable, AC circuit breaker.



WARNING: During normal operation the terminals, busbars, and electrical components inside the MP may be energized - DO NOT TOUCH. Disconnect all power sources before removing cover.



Square-D, Type QOU Breaker Specifications	
Approvals:	
<ul style="list-style-type: none"> UL489 Listed - CSA C22.2 #5.1 Certified 	
Continuous Current:	
<ul style="list-style-type: none"> QOU circuit breakers should be applied (per the NEC) to carry 80% of their continuous current ratings as indicated on the handle of each circuit breaker. BR-AC30D dual pole = 30 amps (24 amps derated); BR-AC60S single pole = 60 amps (48 amps derated) 	
Recommended Torque:	
<ul style="list-style-type: none"> Using Terminal Screw = 43 in. lbs. 	
Physical:	
<ul style="list-style-type: none"> Weight: BR-AC60S = ~5.9 oz. (167.3 g); BR-AC30D = ~12 oz. (340.2 g) Terminals: Box-type lugs with slotted terminal screws. UL listed and CSA certified to accept solid or stranded #14 to #2 AWG copper or aluminum conductors. These lugs are UL listed to be used with wire rated at 140°F, 167°F and 194°F (60°C, 75°C and 90°C), sized according to the NEC 176°F (75°C) temperature rating. Mounting: Attaches to the breaker mounting plate with #8-32 x 1/4" (T20 drive) Torx screws using the included field installable mounting brackets/feet. 	

	BR-AC30D	BR-AC60S
A	4.1" (10.4 cm)	4.1" (10.4 cm)
B	1.5" (3.8 cm)	0.75" (1.9 cm)
C	2.4" (6.1 cm)	2.4" (6.1 cm)
D	4.6" (11.7 cm)	4.6" (11.7 cm)

Figure 1, Physical Dimensions

AC Load Breakers Instruction Sheet

Installation Steps:

1. Remove the MP's breaker face plate cover only after all power has been removed from the MP (Magnum Panel) system.
2. Install the mounting feet (A) on each end of the circuit breaker (Figure 2).
3. While holding the AC breaker against the MP's mounting plate, align the breaker's mounting holes with the enclosure's mounting holes (Figure 3).

Note: AC breakers are installed in the left enclosure of a MP dual enclosure.



Info: The holes in the mounting plate — for the Torx screws that hold the breakers — are NOT pre-threaded. Prior to mounting the breaker, pre-thread the holes using a power-driver and the self-threading Torx screws (T20 drive) that are provided.

4. Use the supplied #8-32 x 1/4" T20 screws to hold the AC breaker in place. Do not fully tighten the screws, that will be done in the next step after ensuring proper alignment with the MP's breaker face plate cover.
5. Place the MP's face plate cover over the AC breakers to ensure each breaker aligns correctly into the spaces (knockouts removed from the face plate cover). If the fit and alignment are correct, use a hand driver to tighten the Torx screws to secure each AC breaker.

The AC breaker is now ready to be wired to the inverter and the AC loads.

NOTE: The BR-AC60S has single slotted mounting feet (x2); BR-AC30D has dual slotted mounting feet (x2)

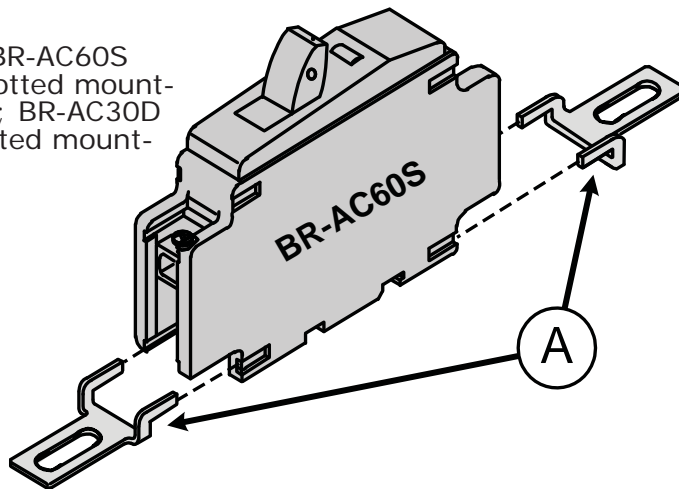


Figure 2, Attaching Mounting Feet to AC Load Breaker

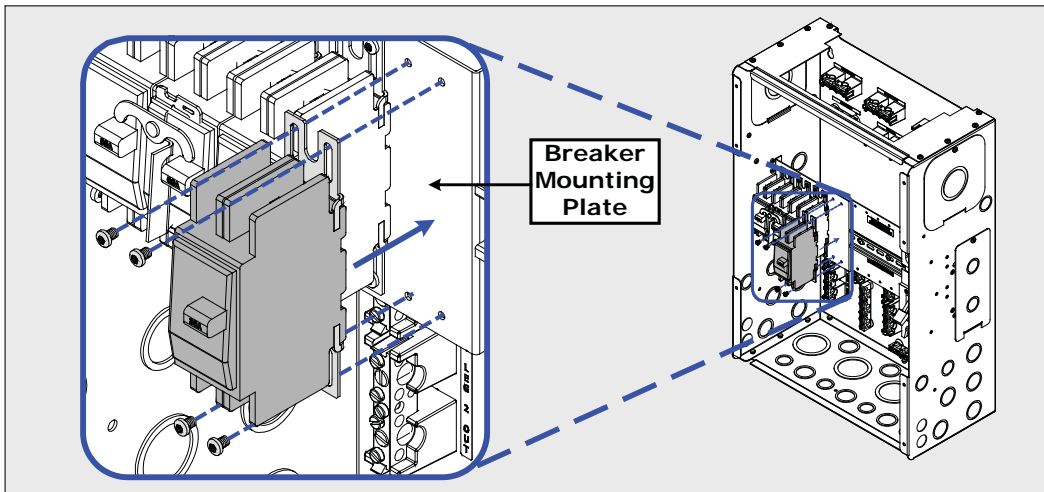


Figure 3, Installing AC Load Breaker Within a MP Single Enclosure