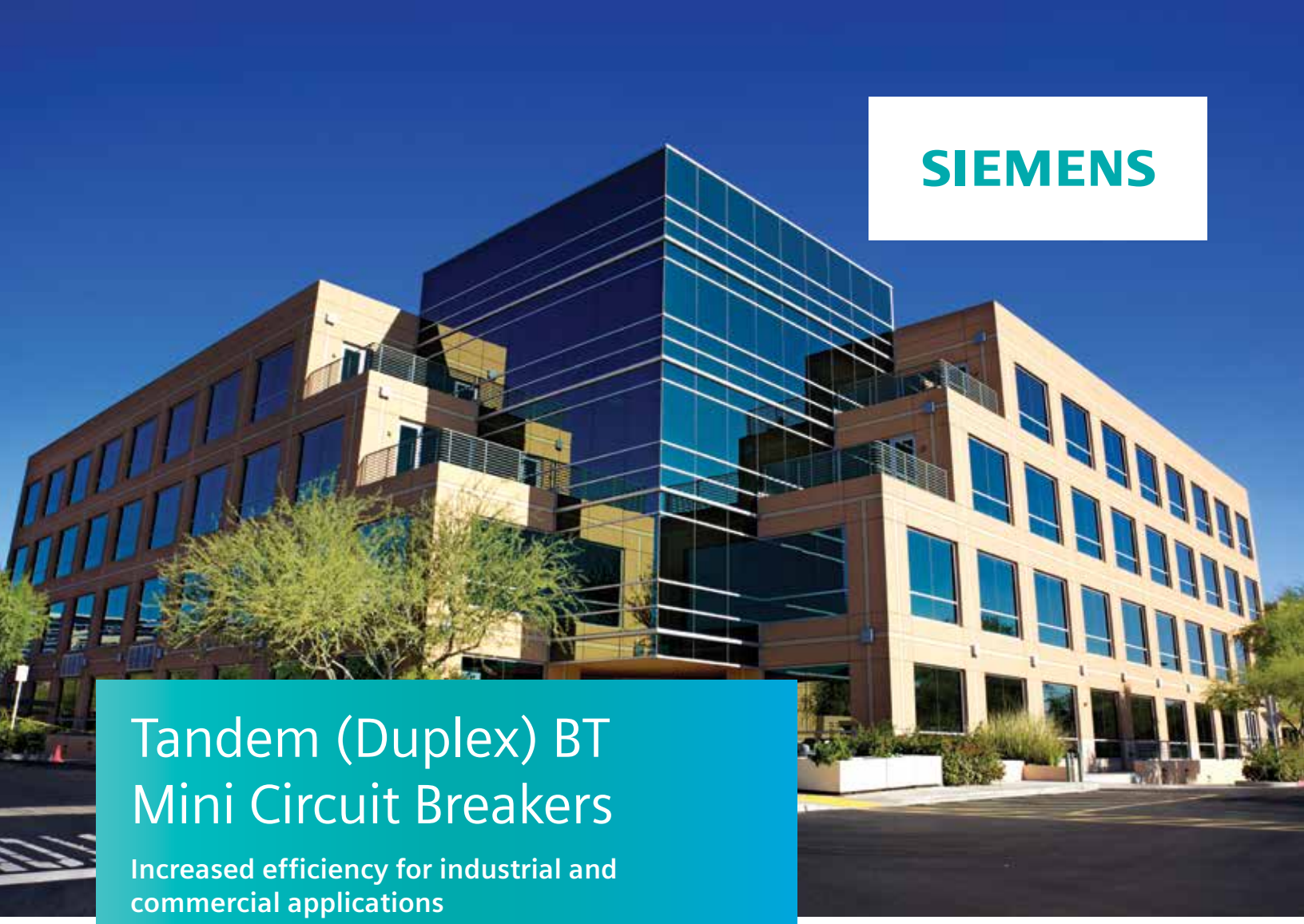
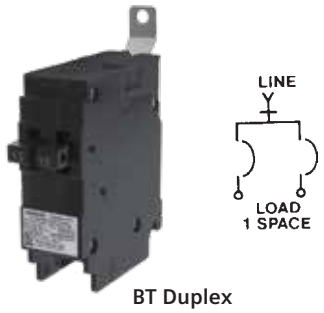


SIEMENS

Tandem (Duplex) BT Mini Circuit Breakers

Increased efficiency for industrial and commercial applications



BT Duplex

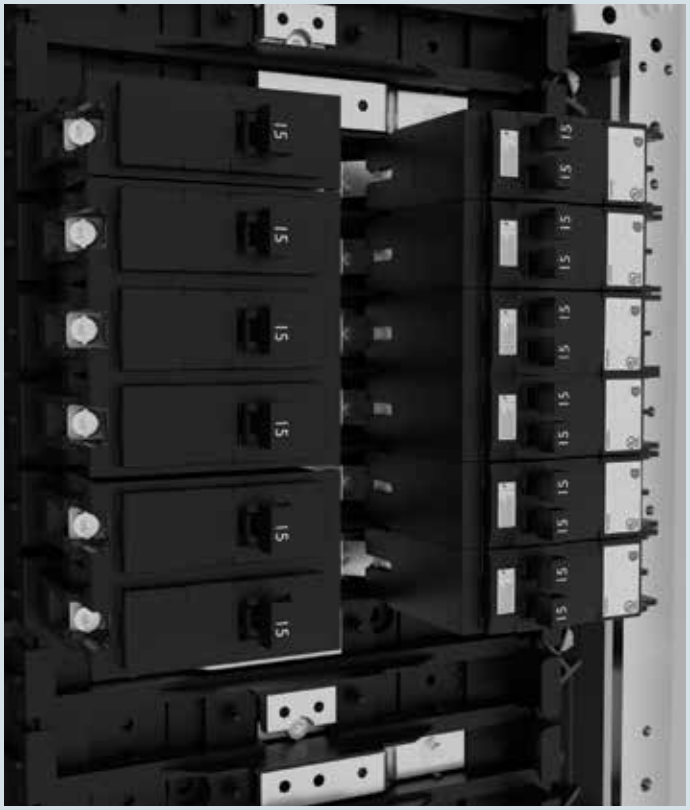
The space saver duplex breakers combine two independent ½" breaker poles in a common unit. This unit bolts into any location that would typically fit a 1-pole BL breaker and requires only 1" of panel space.

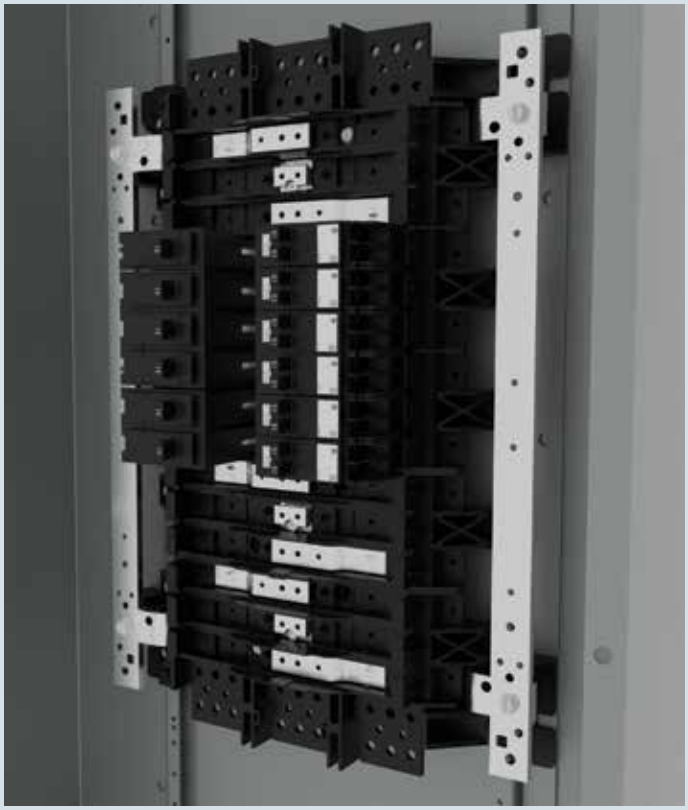
Designed for commercial/industrial applications, the new 1" wide Siemens bolt-on BT breaker is a Tandem/Duplex type which will allow two 1-pole circuits per inch of space instead of just one 1-pole circuit. These are direct replacements for 1-pole BL series in 15A and 20A only. The BT Tandem breakers will help customers reduce the number of total panels needed or the size of panels needed in industrial and commercial settings.

- Enhanced efficiency with P1-P3 lighting panels. Two 1-pole circuits in 1" of space.
- Saved space and time in industrial and commercial applications – fewer panels.
- Ideal for new or existing industrial and commercial projects – retrofit allowed in existing panels.

Amperage	Width	Circuits	BT (10K AIC)	BTH (22K AIC)	Details
15-15	1" pole	2	B1515	B1515H	two 15A circuits
20-20	1" pole	2	B2020	B2020H	two 20A circuits

Note: Anywhere a BL 1-pole will fit up to 22kA you can use the BT series.





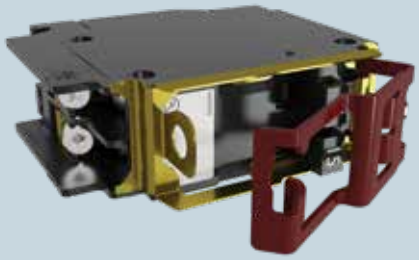
BT/BTH Tandem/Duplex breakers can directly replace a BL/BLH in one inch of space with two 1-pole circuits per inch of space instead of just one 1-pole circuit in new and existing panelboards.

Features:

- Allows for a single 15A or 20A Tandem BT breaker to feed two 15A circuits or 20A circuits in place of 15A or 20A 1-pole BL breakers in a lighting panel or similar device.
- The enhanced density will allow for twice as many single pole circuits in the same space as before to save space and time in applications.
- Utilizes state-of-the-art circuit interruption technology allowing for "cool" operation.
- For existing Siemens lighting panels, existing BL 15A or 20A 1-pole breakers can be replaced with Tandem BT breakers to free up space as needed. The quantity is limited by the available neutral connections in the panel.
- P1-P3 lighting panels, with updated neutrals, are improved in design to allow the following minimum number of Tandem BT breakers*: (see example chart included)
  - 18 circuit panels will allow at least 10 BT twins
  - 30 circuit panels will allow at least 20 BT twins
  - 42, 54, and 66 circuit panels will allow at least 30 BT twins
- Older panels may have fewer neutral connection and will not allow as many BTs as shown.
  - The primary restriction is the number of neutral positions available. It is up to the installer to verify prior to installing in existing panels if there are connections available.

*This is a simplification and each configuration is different as 2-pole and 3-pole breakers only use one neutral position but they take up 2" or 3" of space. For example: replacing the max. recommended BLs with BTs below allows for many more circuits than normal, but some configurations will reach the max. neutral usage before the panel is full of breakers.

External Accessories

Description	Catalog Number	
Padlocking Device	ECPLD1	
	ECPLD1R* *pictured	
Handle Tie	ECQTH2	
Handle Blocking Device	ECBX231M	

Example configurations in Siemens P1 panels: (P2/P3 will have similar neutral count limitations.)

Typical installations using BLs in RP1 panels (all 1-pole assume 15A or 20A only)								Available Neutral Connections	
Panel size	3-pole BL Qty	2-pole BL Qty	1-pole BL Qty	BT Twin Qty (poles)	Total poles	Empty positions	Total used neutral positions	RP1 250A	RP1 400A
18	0	2	14	0 (0)	18	0	16	34	N/A
30	2	2	20	0 (0)	30	0	24	50	50
42	2	2	32	0 (0)	42	0	36	84	100
54	2	2	44	0 (0)	54	0	48	100	100
66	2	2	56	0 (0)	66	0	60	100	100

Replacing BLs with BTs (max 10, 20, 30 recommended as shown)								250A	400A
18	0	2	4	10 (20)	28	0	26	34	N/A
30	2	2	0	20 (40)	50	0	44	50	50
42	2	2	2	30 (60)	72	0	66	84	100
54	2	2	14	30 (60)	84	0	78	100	100
66	2	2	26	30 (60)	96	0	90	100	100

Note: Neutrals have a combination of 1/0 and #6 connections. Branch breakers above 50A will use 1/0 connections only. Unused neutral connections can be used for BT 15/20A as required for more BTs than recommendations shown. It is up to the installer to determine if there are neutral positions available to add more than the recommended qty.

Published by
Siemens 2022

Siemens Canada Limited
1577 North Service Road East
Oakville, ON L6H 0H6

Customer Interaction Centre
Tel: 1 (888) 303-3353
cic.ca@siemens.com

Printed in Canada.
Order No. SI-EP-1778

siemens.ca/powerdistribution