

# Battery Distribution Unit<sup>1</sup>

## 3-BTSEN

### Overview<sup>2</sup>

The 3-BTSEN consists of a circuit breaker and copper bus bars mounted on a sheet metal bracket. The unit provides a backup battery bus for supplying backup power to multiple power supplies fed by a common battery. The 3-BTSEN features a 50 Amp circuit breaker to protect the backup battery. The 3-BTSEN mounts in the BC-1 Battery cabinet or any EST3 "RCC" series enclosure.

### Standard Features<sup>4</sup>

- 50 Amp circuit breaker<sup>5</sup>
- 24 Vdc power distribution bus

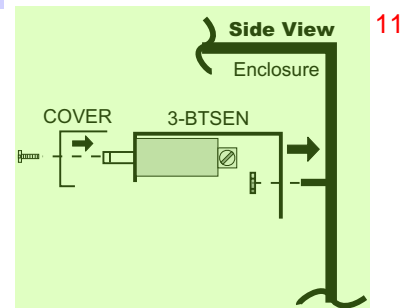
### Application<sup>6</sup>

- <sup>3</sup> The 3-BTSEN is designed to protect and distribute standby 24 Vdc from a large common battery to multiple power supplies in an EST3 cabinet.<sup>7</sup>

### Engineering Specification<sup>8</sup>

<sup>9</sup> Where a remote battery cabinet is required to house large standby batteries for the fire alarm system cabinet, the remote battery cabinet shall be equipped with a circuit breaker and distribution bus.

### Mounting<sup>10</sup>



Typical Wiring 1

Backup Battery Bus Wiring

The diagram shows a battery bus with multiple terminals. Wires connect these terminals to various components: 'To Booster 2 and Booster 3', 'To Driver and Booster 1', and two '12Volts' battery sources. The bus is labeled 'Black' and 'Red'.

Allowable Wire Distance Per Pair Between Remote Battery Cabinet and Power Supplies 2

# of supplies fed by wiring	Wire Size			
	#18 AWG (0.75mm²)	#16 AWG (1.0mm²)	#14 AWG (1.5mm²)	#12 AWG (2.5mm²)
1	8.84 ft (2.7m)	14 ft (4.27m)	22.4 ft (6.83m)	35.4 ft (10.79m)
2	4.43 ft (1.35m)	7 ft (2.13m)	11.2 ft (3.41)	17.7 ft (5.4M)

Specifications 3

Agency Listings	UL, ULC, EN 54-2: 1997 + A1: 2006, EN 54-4: 1997 + A1: 2002 + A2: 2006, and EN 54-16: 2008	4
Mounting	BC-1 or "RCC Series" enclosures	
Power Rating	50 Amps @ 24 Vdc	
Power Bus Connections	#10-32 machine screws	
Operating Environment	32°F (0°C) to 120°F (49°C), 93% RH, non-condensing	

Ordering Information 5

Catalog Number	Description	Shipping Wt., lb (kg)	6
3-BTSEN	Battery Distribution Bus	1 (.45)	
3-BTSEN-E*	Remote battery cabinet interlace, temperature sensing	1 (.45)	

\* EN 54-2: 1997 + A1: 2006, EN 54-4: 1997 + A1: 2002 + A2: 2006, and EN 54-16: 2008 7