

DC Bus Filter Capacitance

M3612RC Common Bus Snubber

The M3612RC Common Bus Snubber is a high frequency filter that limits spikes and ringing in DC bus systems caused by inverter switching, supply noise, bus reactance, and other sources. Limiting these spikes protects attached drives and power supplies, preventing premature failure.

M3612EC DC Bus Filter Capacitor

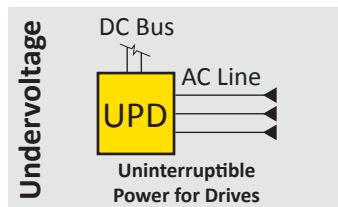
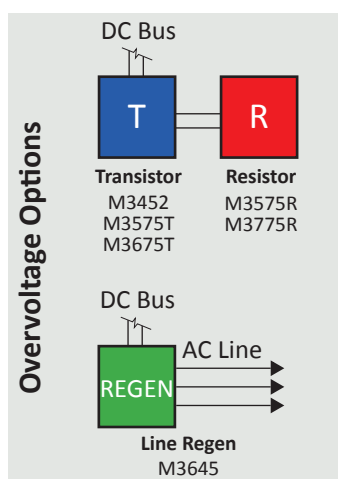
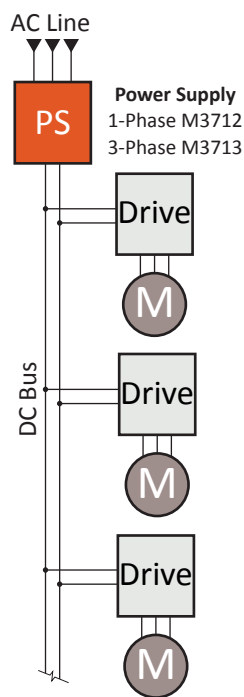
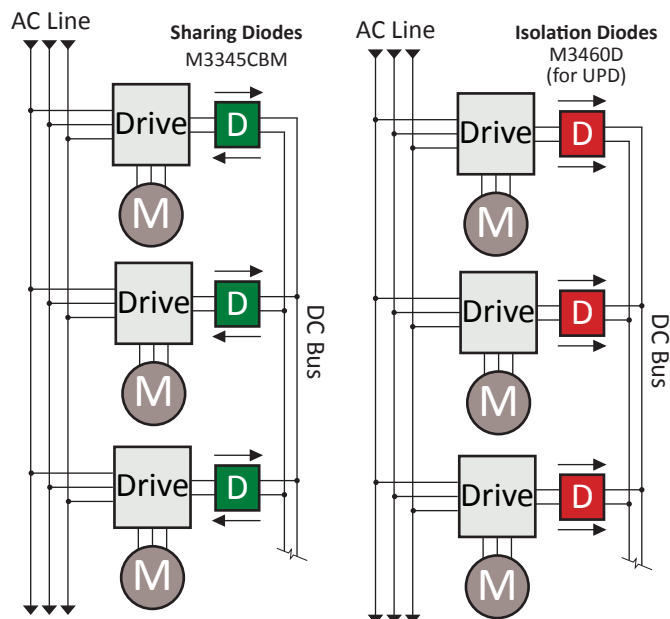
The M3612EC DC Bus Filter Capacitor is a simple add-on for common DC bus drive systems.



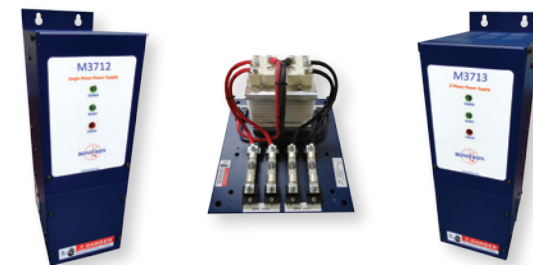
Critical Process Backup Power

- Backing up a common bus system is greatly simplified with Bonitron Undervoltage Solutions.
- System can operate at full power during power dips or outages.
- For critical processes, this is a must.
- See our Undervoltage Solutions for more info.

Configurations



BONITRON



Common DC Bus

- *Single power supply for multiple drives*
- *12 & 18 pulse configurations for IEEE519 compliance*
- *Power 3-phase drives from a single phase source*



Common Bus Solutions

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Bonitron.com

Single Phase Power Supply



M3712 Series

Run 3-phase drives from a single phase source.

- 3-phase motors are the economical choice for motor applications above 10hp, however many locations may only have single phase power available.
- Most 3-phase drives are not designed for single phase operation. Those that are must be oversized by up to 300% when operated from a single phase.
- Achieve the same great advantages of 3-phase control without over-sizing the VFD or motor.
- Protects your drive from high currents typically caused by single phase operation.



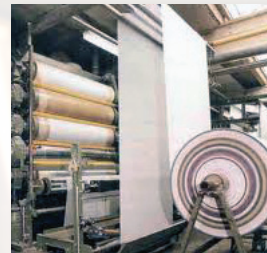
3-Phase Power Supply



M3713 Series

Bonitron 3-Phase Power Supplies are non-regenerative AC to DC rectifiers that can power single or multiple drives.

- Power multiple drives from one power supply
- Available with or without precharge
- 12 and 18 pulse configurations for IEEE519 compliance



Diode Sharing



M3345CBM, M3460D

For systems that have multiple rectifiers, front ends, or AC connections, Bonitron offers an array of diode sharing and isolation modules to make sure your system operates at full capacity without overloading or sharing problems.

- Prevent circulating currents in parallel bridges
- Allows the use of one Regen or Braking unit with multiple drives
- Diode isolation protects individual drives



Why have a common bus?

Applications that require multiple motors and drives can be configured to use a Common DC bus. This is being done more often, and with good reasons, including:

- Reduced component count
- Energy savings
- Cost savings

By connecting the DC busses of multiple VFDs, power that is being regenerated by a motor in one part of the system can be consumed by a motor that is powering the system. This is a great advantage for long stretching, converting, or drawing lines that have motors that are constantly regenerating while others are motoring. Systems like this can also use a common braking regeneration or chopper modules when the line is stopping or decelerating. This reduces component count and points of failure.

Cranes, gantries and other motion systems can also benefit from a common braking solution, as there is typically a single large motor with other smaller motors.

To reduce the component count of your drive system, a single rectifier or power supply can be used with multiple drives to eliminate the need for multiple rectifiers. This can be done with a Bonitron M3712 (Single Phase) or M3713 (3-Phase) Power Supply.

