

## Application Note – Safe implementation of AC15/20 Drives

At Parker Hannifin's Electric Motion & Pneumatic Division (EMPD) we want to ensure our products are safe and reliable. However, correct installation and implementation are an essential part of maintaining electrical and functional safety. Please consider the below information in addition to the safety information contained in the enclosed quick start booklet.

- Always perform a risk assessment of the machinery and application before installing or configuring the inverter. Most Parker inverters provide Safe Torque Off (STO) functionality, however other functions, such as mechanical brake control, cannot be considered functionally safe. It may be necessary to incorporate additional safety mechanisms.
- AC15 and AC20 products are supplied with their DC and dynamic brake electrical connections blanked off. The blanks are present to maintain the IP rating of the drive, but also to prevent accidental connection of the supply or motor connections to the DC bus of the drive. These plastic blanks should be removed only if a dynamic brake resistor is being connected.
- Never attempt to apply power to a drive that has failed and blown input fuses and/or tripped its circuit breaker protection. Always return a drive that has failed in this way to Parker, or an approved repair centre, for investigation. Applying power to a drive that has previously blown a fuse could be unsafe and may result in further damage.
- STO can be used to prevent an unexpected start-up of a machine, or to achieve an emergency stop. Whenever possible, the motor should be brought to standstill in a controlled way before applying the STO. STO does not provide electrical isolation of the motor and voltage may still be present on the motor output terminals when STO is active. Install additional isolation devices as necessary.



If you have any other questions or require support, please do not hesitate to contact your local Parker contact or distributor.