for use with: ABB ACH550 VFD YES NO N/A **EQUIPMENT LOCATION** Are the drive(s) mounted in their permanent location(s)? Is the work area around the drive(s) accessible? Does the work facility have safety provisions ? (e.g., first aid, fire extinguishers, etc.) POWER CONNECTIONS (POWER SUPPLY SIDE) Has the supply voltage been verified and agree with the VFD being installed? Is the proper sized incoming power connections installed and completely terminated? Are the incoming power leads in the standard (A-B-C) rotation pattern? Have proper grounding practices been followed? (National Electrical Code) MOTOR CONNECTIONS (LOAD SIDE of DRIVE) Have the proper motor(s) been installed, wired correctly and ready to run? Are the motor leads completely terminated between the VFD and motor? Can the motor be run at FULL speed in Bypass mode? COOLING TOWER Is the cooling tower installed and ready? Will hot water over the tower be available during start-up? (not required) Do the fan tips rotate freely without hitting the fan cylinder? Has the motor, driveshaft, geareducer, and fan been properly coupled and aligned? CONTROL CIRCUIT WIRING Has a Marley supplied 4-20mA RTD been specified? (Provides temperature reference input signal.) If an RTD is to be used, has it been installed properly with a shielded analog signal cable? If a vibration switch is used is it wired to the "RUN ENABLE" OR "SAFETY INTERLOCK" of the drive? Is control wiring separated from the power wiring? If used, does the shielded analog signal cable have the shielding connected at the VFD only? Multiple VFDs: Are the output power cables independently routed with respect to other VFD cables? OTHER USER INTERFACES The supplied VFD is designed to be controlled externally from a building automation system or a supplied RTD with a 4-20 mA transmitter. When interfacing with a building automation system, automatic VFD operation is the responsibility of others, such as a controls / programming specialist contractor. In this case, controls contractor needs to be present and their control wiring / BAS installed and operational. **AUTHORIZED PERSONNEL** Will the person(s) responsible for the entire process be available to verify final operation? Will all necessary UNION trade personnel be ready and available if they need to be present? TRAINING VFD operation will be reviewed at time of start-up. Will the maintenance person be available? SPECIAL REQUIREMENTS (Please list any SPECIFIC concerns/comments): **CUSTOMER'S "READINESS" ACKNOWLEDGMENT** I / We have verified and answered all checklist questions. All questions with a YES response indicate a "readiness" state for the start-up to be efficient and successful. Explanation(s) for any question with a NO response is listed in the SPECIAL REQUIREMENTS section above. Please note: When authorized service personnel arrive on-site and the above necessary items are not completed, additional charges will apply. Additional charges will be assessed for extended idle time or return visit. Name: Company Name: ______ - ______ - ______ Signature:_____ Date:_____

Customer's Start-up Checklist