Project Name and Address	**Authority Having Jurisdiction**
Name:	Enforcement Agency:
Address:	Permit Number:
City, Zip Code:	Permit Application Date:

Building:	Floor:	Room:	Control/tag:

☐ Construction inspection and functional testing comply ☐ Does not comply	Date Submitted to AHJ:

Intent:	This document is used to demonstrate compliance with acceptance requirements for variable speed screw compressors. Reference NRCC-PRC-E. Submit one Certificate of Acceptance for each system that must demonstrate compliance. Reference Section 120.6(a)5C, 120.6(a)7F and NA7.10.4.

Table A: Construction Inspection

Prior to functional testing, verify and document all of the following:

Step	Entry	Item	Code Reference
1.0	☐ Pass ☐ Fail	All single open-drive screw compressors dedicated to a suction group have variable speed control.	NA7.10.4.1(a)
2.1	☐ Pass ☐ Fail	All compressor suction and discharge pressure sensors read accurately using a standard.	NA7.10.4.1(b)
2.2	psig ☐ N/A	Provide appropriate pressure offset (psig), if applicable.	NA7.10.4.1(b)
3.1	☐ Pass ☐ Fail	All input or control temperature sensors read accurately using temperature standard	NA7.10.4.1(c)
3.2	°F ☐ N/A	Provide appropriate temperature offset (°F), if applicable.	NA7.10.4.1(c)
4.0	☐ Pass ☐ Fail	All sensor readings used by the condenser controller convert or calculate to the correct conversion units at the controller.	NA7.10.4.1(d)
5.0	☐ Pass ☐ Fail	Compressor speed controls are operational and connected to compressor motors.	NA7.10.4.1(e)
6.0	☐ Pass ☐ Fail	All speed controls are in "auto" mode.	NA7.10.4.1(f)
7.0	☐ Pass ☐ Fail	Compressor panel control readings for "RPMs," "% speed," "kW", and "amps" match the readings from the PLC or other control systems.	NA7.10.4.1(g)
8.0	☐ Pass ☐ Fail	Verify that compressor nameplate data is correctly entered into the PLC or other control system.	NA7.10.4.1(h)
9.0	☐ Pass ☐ Fail	Check "Pass" if construction inspection complies with all requirements. Check "Fail" if construction inspection does not comply with all requirements.	N/A

Table B: Functional Testing

The system cooling load must be sufficiently high to run the test. Artificially increasing or decreasing evaporator loads (add or shut off zone loads, change setpoints, etc.) may be required to perform the Functional Testing.

Step	Entry	Functional Test	Code Reference
1.0	No Entry	Override any conflicting controls before performing the Functional Tests.	NA7.10.4.2 Step 1
2.0	No Entry	Measure and document **all** of the following operating conditions in Steps 2.1 and 2.2.	NA7.10.4.2 Step 2
2.1		Measure and document the current compressor operating suction pressure. (psig)	NA7.10.4.2 Step 2
2.2		Measure and document the current compressor operating saturated suction temperature (SST). (°F)	NA7.10.4.2 Step 2
3.0	No Entry	Document the "test suction pressure/saturated suction temperature setpoint". Follow Steps 3.1, 3.2, and 3.3 to determine this setpoint.	NA7.10.4.2 Step 3
3.1	☐ psig ☐ °F	Document the suction pressure setpoint (psig) or the saturated suction temperature setpoint (°F).	NA7.10.4.2 Step 3
3.2	No Entry	Program into the control system a target setpoint equal to the current operating condition measured in Step 2.	NA7.10.4.2 Step 3
3.3	No Entry	Allow 5 minutes for system to normalize.	NA7.10.4.2 Step 3
4.0	No Entry	Verify the compressor operation below maximum speed with Steps 4.1, 4.2, 4.3, and 4.4.	NA7.10.4.2 Step 4
4.1	No Entry	Raise the test suction setpoint in 1 psi increments until the compressor controller modulates to decrease compressor speed.	NA7.10.4.2 Step 4
4.2	☐ Pass ☐ Fail	Verify that the compressor speed decreases.	NA7.10.4.2 Step 4(a)
4.3	☐ Pass ☐ Fail	Verify that the compressor speed continues to decrease to minimum speed.	NA7.10.4.2 Step 4(b)
4.4	☐ Pass ☐ Fail	Verify that any slide valve or other unloading means does not unload until after the minimum speed is reached.	NA7.10.4.2 Step 4(c)
5.0	No Entry	Verify the compressor operation at maximum speed with Steps 5.1, 5.2, 5.3, and 5.4.	NA7.10.4.2 Step 5
5.1	No Entry	Lower the test suction setpoint in 1 psi increments until the compressor controller modulates to increase compressor speed.	NA7.10.4.2 Step 5
5.2	☐ Pass ☐ Fail	Verify that any slide valve or other unloading first goes to 100% before compressor increases from minimum speed.	NA7.10.4.2 Step 5(d)

Step	Entry	Functional Test	Code Reference
5.3	☐ Pass ☐ Fail	Verify that the compressor begins to increase speed.	NA7.10.4.2 Step 5(e)
5.4	☐ Pass ☐ Fail	Verify that the compressor speed continues to increase to 100%.	NA7.10.4.2 Step 5(f)
6.0	No Entry	Restore suction setpoints back to original settings documented in Step 3.	NA7.10.4.2 Step 6
7.0	No Entry	Restore any controls disabled in Step 1.	NA7.10.4.2 Step 7
8.0	☐ Pass ☐ Fail	Verify that the Functional Test complies with all requirements.	N/A

Document Author I assert that this Certificate of Acceptance documentation is accurate and complete	Author Name Company Name Author Signature Date Signed
Field Technician I certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Acceptance is true and correct. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician). The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.	Field Tech. Name Company Name Title Phone Field Tech. Signature Date Signed
Responsible Person I assert the following under penalty of perjury, under the laws of the State of California: I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building. I understand that a completed, signed copy of this Certificate of Acceptance shall be posted, or made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to fulfill this requirement. I understand that a signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to ensure this requirement.	Responsible Name Company Name License No. Title Phone Responsible Signature Date Signed