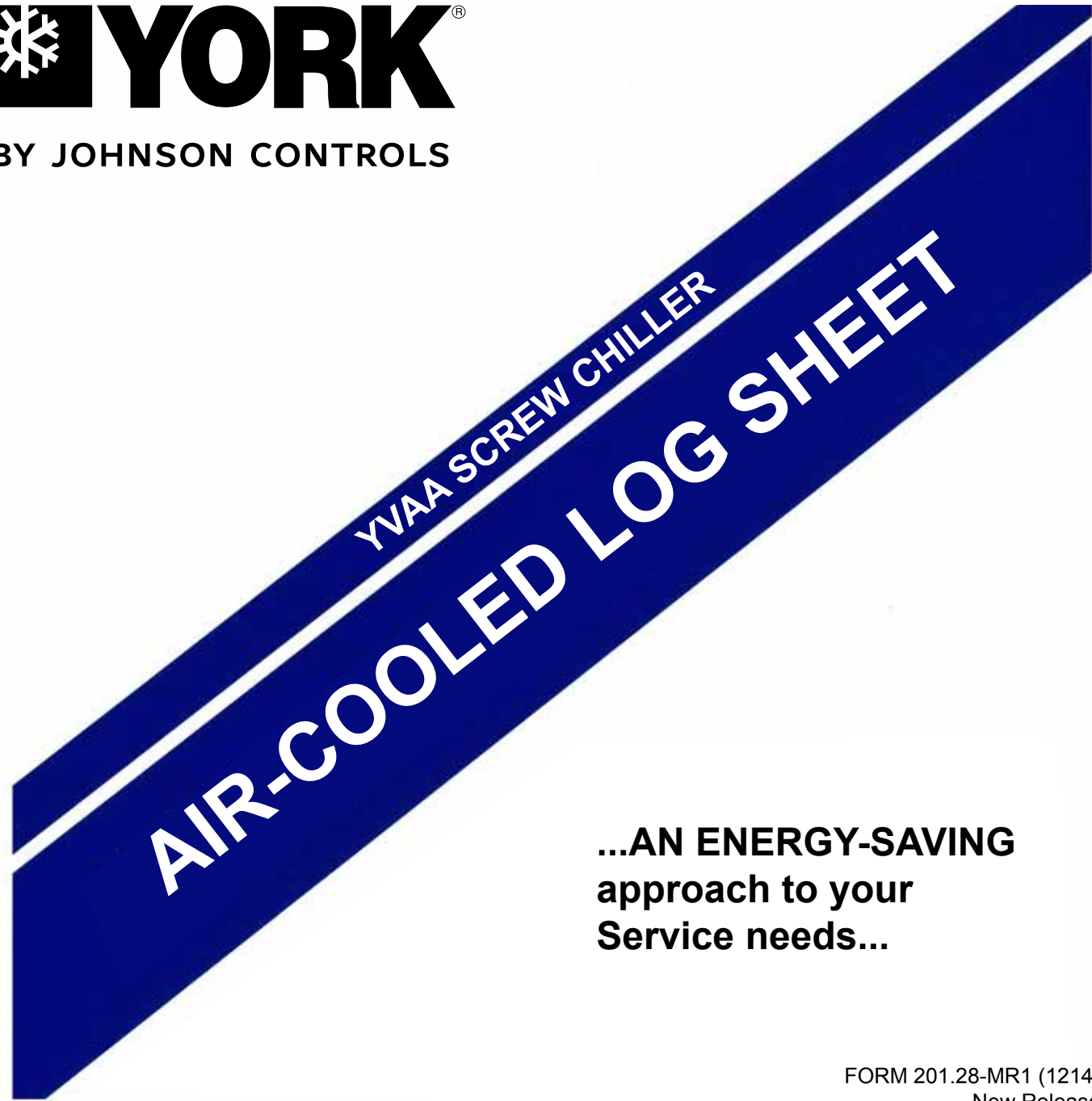




BY JOHNSON CONTROLS



**...AN ENERGY-SAVING  
approach to your  
Service needs...**

ISSUE DATE:  
DECEMBER 30, 2014

FORM 201.28-MR1 (1214)  
New Release





BY JOHNSON CONTROLS

## MAINTENANCE REQUIREMENTS FOR YVAA CHILLERS













































PROCEDURE	WEEKLY	QUARTERLY	SEMI-ANNUALLY	YEARLY	EVERY * __ HRS
Check the oil level in the oil separator sight glass.	X				
Check liquid line sight glass / moisture indicator.	X				
Record system operating pressures and temperatures.	X				
Check programmable operating setpoints and safety cutouts and assure they are correct for the particular application.		X			
Check condenser coils for dirt / debris and clean if necessary.	X				
Check compressor superheat on evaporator and condenser subcooling <sup>1</sup> .			X		
Check compressor heaters for operation. (Also check evaporator heaters - YVAA only)		X			
Sample compressor oil and replace if necessary <sup>1</sup> .				X	
Leak check the chiller <sup>1</sup> .				X	
Disconnect the power source and lock out; check tightness of power wiring connections <sup>1</sup>				X	
	Refer to manufacturer's recommendations				

\* Reserved for customer use for any special site determined requirements.

<sup>1</sup> This procedure must be performed at the specified time interval by an Industry Certified Technician who has been trained and qualified to work on this type of Johnson Controls equipment. A record of this procedure being successfully carried out must be maintained on file by the equipment owner should proof of adequate maintenance be required at a later date for warranty validation purposes.



<b>Date</b>														
<b>Time</b>														
<b>Hour Meter Reading</b>														
<b>Outdoor Ambient Temperature °F</b>														
<b>Water System Conditions</b>	<b>Evaporator Flow</b>	Flow Rate (GPM)												
		Evaporator Pressure Drop, FT/LBS												
		Glycol Freeze Point, °F (°C)												
<b>Condenser Conditions</b>	<b>Air Temp</b>	Air-On Temperature, °F (°C)												
		Air-Off Temperature, °F (°C)												
	<b>Fan Stage (0-4)</b>	Stage 1												
		Stage 2												
<b>VSD Operating Data</b>	<b>Chilled Liquid Entering Temperature, °F (°C)</b>													
	<b>Chilled Liquid Leaving Temperature, °F (°C)</b>													
	<b>Outdoor Ambient Temperature OAT, °F (°C)</b>													
	<b>VSD DC Bus 1 Voltage, VDC</b>													
	<b>VSD Frequency</b>	Actual Stage 1, Hz												
		Actual Stage 2, Hz												
		Command Stage 1, Hz												
		Command Stage 2, Hz												
	<b>VSD Internal Ambient Temperature, °F (°C)</b>													
	<b>VSD Cooling System Status On or Off</b>													
	<b>VSD IGBT Baseplate Temps</b>	T1, °F (°C)												
		T2, °F (°C)												
	<b>VSD Compressor Current</b>	System 1 Amps												
		System 2 Amps												
System 1 %FLA														
System 2 %FLA														

<b>Date</b>													
<b>Time</b>													
<b>Hour Meter Reading</b>													
<b>Outdoor Ambient Temperature °F</b>													
<b>System Operating Conditions</b>	<b>Economizer Valve % Open</b>	System 1											
		System 2											
	<b>Cond. Drain Valve % Open</b>	System 1											
		System 2											
	<b>VSD Fan Speed</b>	System 1		___%	___%	___%	___%	___%	___%	___%	___%	___%	___%
		System 2		___%	___%	___%	___%	___%	___%	___%	___%	___%	___%
	<b>VI Step Solenoid</b>	VI Step SOL 1 (ON/OFF)											
		VI Step SOL 2 (ON/OFF)											
	<b>Separator Oil Level</b>	System 1	<b>Examples:</b>  Top  Btm										
		System 2											
<b>Evaporator Level</b>	System 1	<b>Examples:</b>  Top  Btm											
	System 2												



Date														
Time														
Hour Meter Reading														
Outdoor Ambient Temperature °F														
<b>System Operating Pressure, Temperature &amp; Current Readings</b> (Note: Cooler Ambients will produce higher sub-cooling)	<b>Motor Temperatures °F(°C)</b>	T1	System 1											
			System 2											
		T2	System 1											
			System 2											
		T3	System 1											
			System 2											
	<b>System Temperature Oil °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Eductor °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Cond Liquid °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Subcooling °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Sat Discharge °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Discharge °F(°C)</b>	System 1												
		System 2												
	<b>System Temperature Discharge Superheat °F(°C)</b>	System 1												
		System 2												

## NOTES