Release Notes

Enterprise Envelope | EE-W10

Water-cooled chiller plant optimization with towers

Software Version: 1.0.0

Purpose and Scope:

This document outlines the major changes performed in this release, bug fixes and compatibility between previous versions of this software. Any significant hardware changes that were made to the product alongside this software version or incompatibilities with previous versions are also covered in this document.

New Features:

- Condensed low-cost panel design with limited IO built into the PLC
- Improved support for running chillers, pumps and towers of different capacities
- Built-in compatibility for cloud connectivity
- New vector graphics HMI system

Other Changes:

- The system supports a maximum of 3 chillers, 3 CHWP, 3 CWP and 3 cooling towers
- Improved pump shutdown times by reducing some delays at minimum speed
- Fixed some issues with condenser isolation valves when turning off the controller

Program information:

Program version	1.0.0
HMI version	1.0.0
Minimum hardware firmware version	Niagara 4.12
Upgrade compatibility	1.0.0
Previous version	N4-IPC9521_20220926 EE-W10 is not compatible at all with previous version

Connectivity changes:

	Changes from previous	Notes
Modbus RTU	Unchanged	
Modbus TCP	Unchanged	
BACnet MS/TP	Unchanged	
BACnet IP	Unchanged	
Cloud connectivity	**New**	**Connectivity via Ethernet to switch using Modbus TCP.**
HMI	Unchanged	
IO PLC	**Modified**	IO is supplied by the integrated IO on the PLC

IO changes:

1. The system only supports the following hard wired IO points:
    a. CHWST
    b. CHWRT
    c. CWET
    d. CWLT
    e. Primary flow
    f. Chilled water isolation valve commands
    g. Chilled water isolation valve feedbacks
    h. Condenser water isolation valve commands
    i. Condenser water isolation valve feedbacks
    j. Cooling tower isolation valve commands (1 set)
    k. Cooling tower isolation valve feedbacks (1 set)
    l. Bypass valve command
    m. Bypass valve feedback

All communication with mechanical equipment is done via serial (Modbus/BACnet)

Firmware Change Log:

v1:

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