Barber-Colman ASD

Niagara Framework Driver

The Barber-Colman ASD driver connects Network 8000 controllers on the ASD bus directly to Tridium Niagara over RS-485. Niagara takes the place of the Global Control Module as bus master, giving end-of-life Network 8000 systems a modern, supported front end. No gateway or protocol converter is needed.

Existing controllers require no reprogramming. The driver supports the MicroZone II, MicroFlo II, LIM and PEM, and MicroNet 2000 controllers behind an MN-ASDI integrator, under every Barber-Colman, Invensys, TAC and Schneider Electric label. Controllers of different models can share one trunk.

Devices are discovered automatically, and point discovery reads only the blocks each controller has programmed, named as in its program. The driver reads, writes, and overrides block values and EMS inputs, and imports the controllers' own trend logs into Niagara histories. A newly added point is read straight away, without waiting for the next poll, and every controller's clock is kept in step with the station.

- ✓ Works with Barber-Colman, TAC and Schneider Network 8000 ASD controllers
- ✓ Replaces the Global Control Module as master of the ASD bus
- ✓ Direct RS-485 connection, 1200 to 19200 baud
- ✓ Discovers devices across all 254 bus addresses
- ✓ Learns the programmed blocks, named as in the controller
- ✓ Reads, writes, and overrides block values and EMS inputs
- ✓ Imports controller trend logs into Niagara histories
- ✓ Clock synchronization and optional automatic baud rate
- ✓ No controller reprogramming required
- ✓ No annual fees
- ✓ Free technical support and upgrades

Database

Name	Type	Out	Block	Number	Attribute
RGRP_RMOTE	Boolean Writable	false {ok} @ def	RGRP	1	RMOTE
SCHED_OCC	Boolean Writable	true {ok} @ def	SCHED	1	OCC
A3-ST/TA_OUT	Numeric Writable	249.42 {ok} @ def	UI	1	OUT
A3-BL/FA_OUT	Numeric Writable	249.42 {ok} @ def	UI	2	OUT
A4-ST/TA_OUT	Numeric Writable	249.42 {ok} @ def	UI	3	OUT
A4-BL/FA_OUT	Numeric Writable	249.42 {ok} @ def	UI	4	OUT
AHU3-SAT_OUT	Numeric Writable	121.02 °C {ok} @ def	UI	5	OUT
AHU3-RAT_OUT	Numeric Writable	0.00 °C {stale} @ def	UI	6	OUT
AHU4-SAT_OUT	Numeric Writable	121.02 °C {ok} @ def	UI	7	OUT
AHU4-RAT_OUT	Numeric Writable	121.02 °C {ok} @ def	UI	8	OUT
AHU-3-ST_OUT1	Numeric Writable	-175.00 {ok} @ def	UTIL	1	OUT1
AHU-3-TA_OUT1	Numeric Writable	-74.42 {ok} @ def	UTIL	2	OUT1
AHU-3-BL_OUT1	Numeric Writable	-175.00 {ok} @ def	UTIL	3	OUT1

MicroZone II Points Learned with the Controller's Own Names

SUPPORTED DEVICES

MicroZone II	LIM	MN-ASDI[1]	MN-HPFC
MicroFlo II	PEM	MN-FLO	

SYSTEM REQUIREMENTS

- ✓ Niagara framework 4.8 or later, including OEM versions
- ✓ JACE with an RS-485 port, or a serial device server with a virtual COM port
- ✓ Barber-Colman ASD driver license

CONNECTIVITY

RS-485 ASD Bus

Wire the JACE RS-485 port to the ASD+, ASD- and SHLD terminals of the trunk in place of the Global Control Module. Up to 254 addresses per trunk and 32 controllers per segment, extended with RPTR-83100 repeaters.

Serial Device Server

Connect the trunk to an RS-485 serial device server and use its virtual COM port driver, so Niagara opens it as a local serial port over TCP/IP.

ORDERING INFORMATION

Part Number	Description
ASD-J-250	Barber-Colman ASD for JACE, 250 points
ASD-J-1000	Barber-Colman ASD for JACE, 1000 points
ASD-J-UNL	Barber-Colman ASD for JACE, unlimited points
ASD-SUP	Barber-Colman ASD for Supervisor, first 500 points
ASD-SUP-500	Barber-Colman ASD for Supervisor, extra 500 points

[1] MicroNet 2000 integrator; MN-FLO and MN-HPFC controllers are reached through it