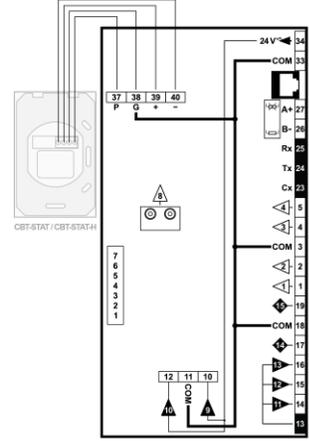
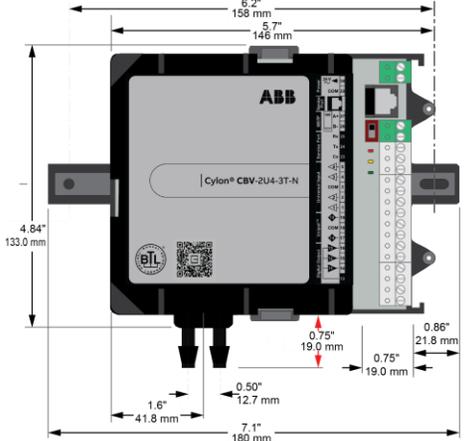
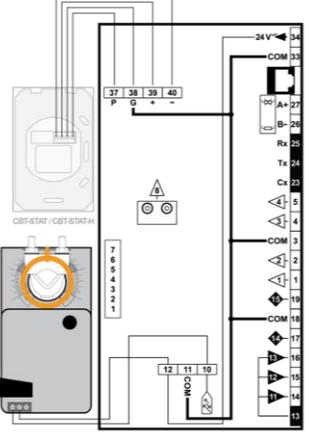
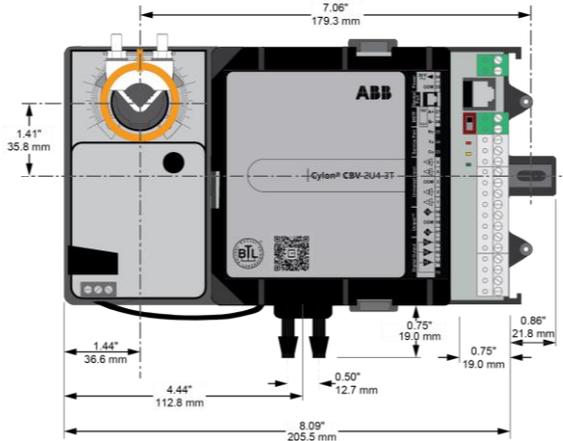


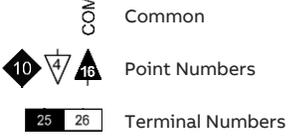
INSTALLATION AND WIRING

BDS0023 rev 9

CBV-2U4-3T, CBV-2U4-3T-N



Note: Terminals 3, 18 and 33 are connected internally.



Location	Illustration	Terminal Number	Description
		1 ... 5	Universal Inputs
		17 ... 19	UniPut™
		13	Triac Common
		14 ... 16	Triac Outputs
		23 ... 25	Service Port (screw terminal)

Note: Service Port must not be connected until after the device is powered on.



Location	Illustration	Terminal Number	Description																				
		26, 27	BACnet MS/TP Port Important: In order for the BACnet MS/TP bus to operate reliably, the common power connection (terminal 33) must be connected to Earth. Cylon recommend that this is done at the 24 V AC transformer.																				
		33, 34	Power 24 V AC Important: The common power connection (terminal 33) must be connected to Earth. Cylon recommend that this is done at the 24 V AC transformer.																				
		37, 38	Sensor Power supply																				
		39, 40	Sensor RS485																				
		10 ... 12	(CBV-2U4-3T-N only) External Actuator Terminal. Accessed by removing the top cover																				
Actuator Port jumper settings:																							
		Internal Actuator <i>(requires appropriate strategy)</i>																					
		External Actuator <i>(requires appropriate strategy)</i>																					
			BACnet MS/TP Terminator OFF (BACnet MS/TP bus not terminated at this controller) ON (BACnet MS/TP bus terminated at this controller)																				
			7-way MS/TP Address Switch The controller's BACnet MAC address can be set either electronically (USB or BACnet) or manually using the 8-way DIP switch. 1. Manual setting for ease of replacement: Setting the 7-way DIP switch and then cycling the power, will force the controller to update its MAC address to match the DIP settings. 2. Electronic setting for remote configuration: Setting the 7-way DIP switch to all zeros will allow the MAC address to be set electronically either locally by USB or remotely over BACnet. The address is set in binary, from 1 (0000001) to 127 (1111111). A switch moved to the left (towards the 'ON' mark) represents 1, moved to the right represents 0. The bottom-most switch is the least-significant bit, the switch on the top is the most-significant bit.																				
			Indicator LEDs																				
			<table border="1"> <thead> <tr> <th></th> <th>Off</th> <th>On</th> <th>Slow Blink</th> <th>Fast blink</th> </tr> </thead> <tbody> <tr> <td> Red LED (Power)</td> <td>Power is off</td> <td>Power is on. Optional battery is healthy.</td> <td>Indicates no battery / battery is low.</td> <td>----</td> </tr> <tr> <td> Green LED (Status)</td> <td>Unit is not running</td> <td>Strategy servicing and no comms.</td> <td>MSTP comms, and Strategy servicing.</td> <td>Strategy not servicing.</td> </tr> <tr> <td> Yellow LED (override)</td> <td>Normal operation.</td> <td>Priority Array set above 16, for one or more Hardware Points, by external BACnet Client, or by CXpro^{HD}.</td> <td>----</td> <td>----</td> </tr> </tbody> </table> <p>Note: When Service Port is in use, the Green LED blinks off as Service Port comms are received. Note: Battery is present only on custom versions.</p> <p>During firmware upgrade the Yellow LED will remain on while the strategy/comms section reboots, and then the LEDs will rotate Green-Yellow-Red while the IO section reboots.</p> <p>CAUTION - DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISPOSE OF USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.</p>		Off	On	Slow Blink	Fast blink	Red LED (Power)	Power is off	Power is on. Optional battery is healthy.	Indicates no battery / battery is low.	----	Green LED (Status)	Unit is not running	Strategy servicing and no comms.	MSTP comms, and Strategy servicing.	Strategy not servicing.	Yellow LED (override)	Normal operation.	Priority Array set above 16, for one or more Hardware Points, by external BACnet Client, or by CXpro ^{HD} .	----	----
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			Service Port (RJ-45) Note: Service Port must not be connected until after the device is powered on.																				
			Airflow Sensor External connection at bottom of housing																				
			Terminal accessed by removing the top cover																				
			Rotary Actuator																				
			Damper Manual Override																				
			Actuator direction selector																				