

REVISIONS				
ECN	REV.	DESCRIPTION	DATE	APPROVED
1061	1	FIRST RELEASE	2016-04-28	XY
1083	A	CHANGE TO BAC-BOX	2016/06/01	XY

**BAC-Box (Q-Controller BACnet Converter):**

The BAC-Box allows Q-Controller to communicate on a BACnet network. The BAC-Box works as a translator between the two networks allowing Q-Controller Gas System (gas concentrations, switch status and relay status) to show up as individual BACnet-compliant devices on a BACnet /IP network. It supports up to 192 AI objects, 32 AO objects, 16 BI objects and 64 BO objects for a Q-Controller Gas System.

**BACnet Application Specific Controller (B-ASC)**

**List all BACnet Interoperability Building Blocks Supported (Annex K):**

- BIBB-Data sharing-ReadProperty-B (DB-RP-B)
- BIBB-Data sharing-ReadPropertyMultiple-B (DB-RPM-B)
- BIBB-Data sharing-WriteProperty-B (DB-WP-B)
- BIBB-Device Management-Device Communication Control-B (DM-DCC-B)
- BIBB-Device Management-TimeSynchronization-B (DM-TS-B)
- BIBB-Device Management-UTC TimeSynchronization-B (DM-UTC-B)

**Standard Object Types Supported:**

- Device Object
- Analog Input Object
- Analog Output Object
- Binary Input Object
- Binary Output Object

**Data Link Layer Options:**     BACnet IP, (Annex J)

**Device Address Binding:**

- Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.)  Yes  No

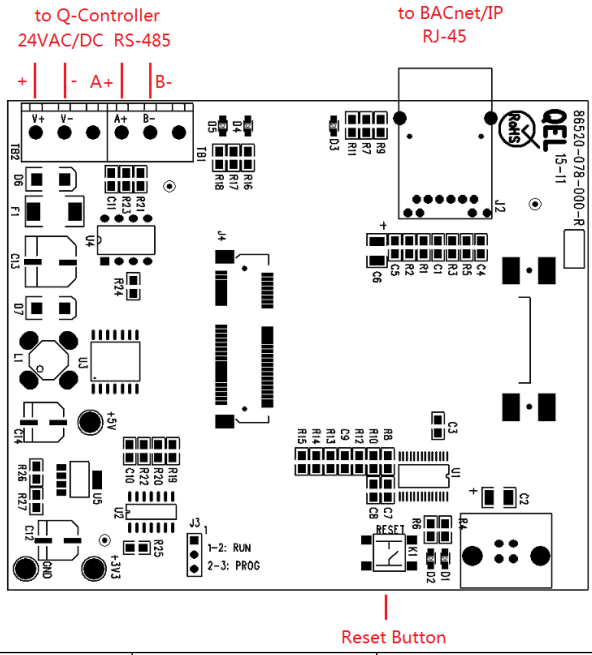
**Networking Options:**

- Does the BBMD support registrations by Foreign Devices?  Yes  No
- Does the BBMD support network address translation?  Yes  No

**Network Security Options:**

Non-secure Device - is capable of operating without BACnet Network Security

**Character Sets Supported:**     ANSI X3.4

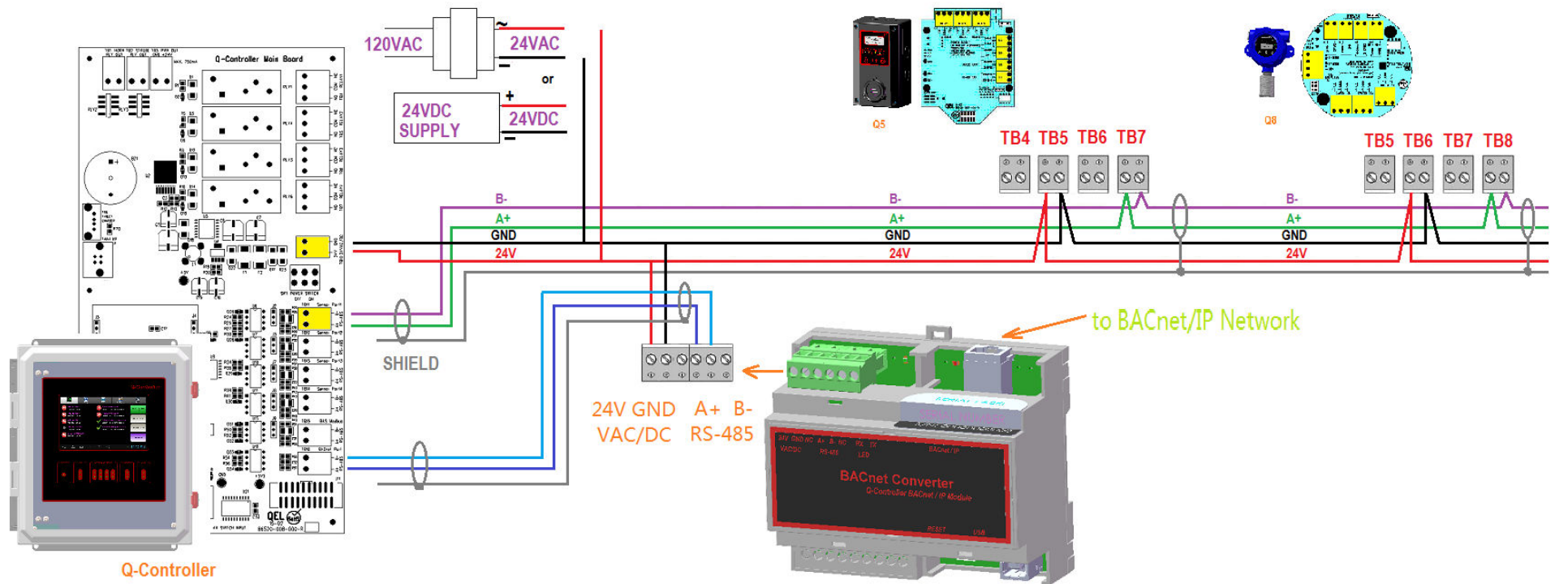


**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF QUATROSENSE ENVIRONMENTAL LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF QUATROSENSE ENVIRONMENTAL LTD IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME		DATE		QUATROSENSE ENVIRONMENTAL LTD.	
		DIMENSIONS ARE IN INCHES		DRAWN		XY		16-04-28	
		TOLERANCES:		CHECKED				TITLE:	
		FRACTIONAL ±		ENG APPR.				BAC-BOX Installation Drawing	
		ANGULAR: MACH ± BEND ±		MFG APPR.					
		TWO PLACE DECIMAL ±		Q.A.				SIZE	
		THREE PLACE DECIMAL ±		COMMENTS:				DWG. NO.	
		INTERPRET GEOMETRIC TOLERANCING PER:						86550-009-000	
		MATERIAL						REV	
		FINISH						A	
NEXT ASSY		USED ON						SCALE: 1:2	
APPLICATION		DO NOT SCALE DRAWING						WEIGHT:	
								SHEET 1 OF 2	

# Q-Controller & BAC-Box Connection

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-



- Note:
1. The power supply can be 24VAC or DC as every device uses a half-wave rectifier in the drawing
  2. The power negative may be grounded or floating
  3. Don't mix full wave rectifiers device with this system
  4. Before power up, the polarity of the 24VAC power supply should be checked carefully, reversing polarity on the network will cause the RS-485 driver chips blow up

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF QUATROSENSE ENVIRONMENTAL LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF QUATROSENSE ENVIRONMENTAL LTD IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:	NAME	DATE	QUATROSENSE ENVIRONMENTAL LTD
		DIMENSIONS ARE IN INCHES	DRAWN		TITLE: <b>BAC-BOX Installation Drawing</b>
		TOLERANCES:	CHECKED		
		FRACTIONAL: ±	ENG APPR.		
		ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		COMMENTS:
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			
		SIZE	DWG. NO.	REV	
		<b>B</b>	86550-009-000	<b>A</b>	
		SCALE: 1:4		SHEET 2 OF 2	