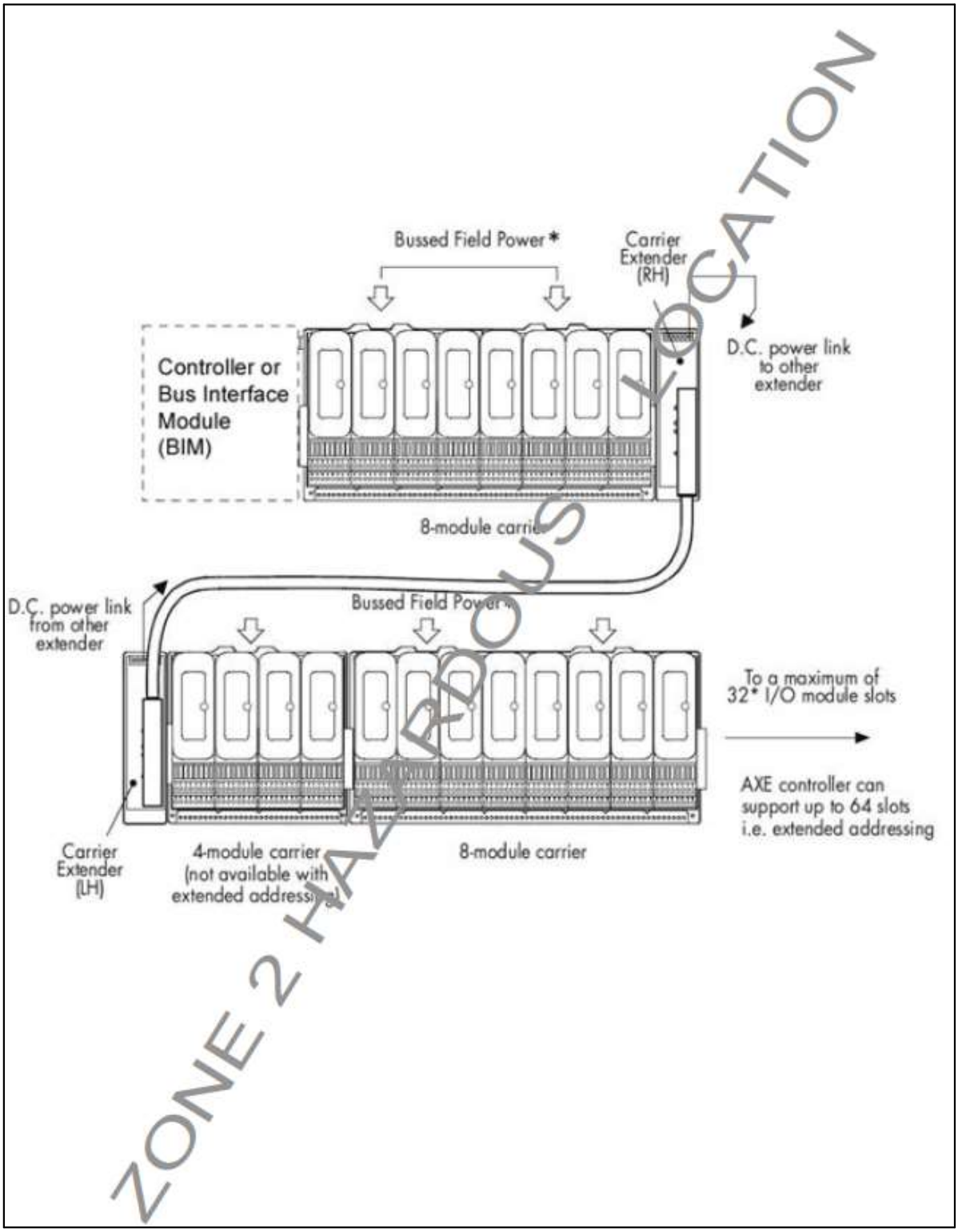
Installation drawing for thePAC8000 system



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* NOTES FOR BUSSED FIELD POWER (BFP) WHERE APPLICABLE

Installation Requirements

1. Modules listed in Table-A have BFP termination classified as intrinsically safe (Ex ic). The power supply to these terminals shall be routed through Ex ic certified Zener barrier.
2. Modules listed in Table-B have BFP termination classified as non-arcing (nA). These shall be grouped onto a carrier which has all non-arcing modules assembled.
3. Modules listed in table C & D do not require common Bussed Field power.
4. Modules requiring intrinsically safe (Ex ic) power supply for BFP (Table A) or those which do not need BFP power supply (Table C) shall be assembled onto a carrier which is separate from the one which assembles modules with non-arcing BFP termination (Table B).
5. For live maintenance in Zone 2 hazardous area, always de-energize BFP power supply before proceeding.

Power Supply Requirements

1. The BFP supply voltage must NOT exceed values specified in specific ATEX Cat 3 files in order that the maximum value of Uo for field termination does not exceed. Cat 3 files are published on our support website https://www.Emerson.com/Industrial-Automation-Controls/Support
2. The power supplies which provide this voltage must be certified to EU regulations and should operate within their output current ratings.
3. The power supply providing voltage to non-arcing BFP terminals shall be separate from the power.supply providing voltage to Ex ic BFP terminals.
4. Power supply certified as Ex nA may be used to power Ex nA BFP terminations.

Power Supply Requirements

1. Cables connecting non-arcing BFP termination shall be routed through a separate conduit and will not share the cores with another multi-core cable connected to intrinsically safe (Ex ic) BFP termination.
2. Refer special conditions of use regarding cable requirements specified in the individual ATEX Cat 3 certificates.

Table-A: List of modules/circuits with BFP termination classified as intrinsically Safe (Ex ic)

Sr. No.	Module No.	Recommended carrier	Recommended FT for General purpose	Recommended FT for Div 2/Zone 2	Compatible FT for General purpose	Compatible FT for Div 2/Zone 2
1	8101-HI-TX	8707-CA-08 8709-CA-08 8710-CA-04 8733-CA-08 8734-CA-04 8735-CA-04 8736-CA-08	8602-FT-ST (2W Tx) 8615-FT-4W (4W Tx)	8601-FT-NI (2W Tx) 8615-FT-4W (4W Tx)	8604-FT-FU (2W Tx) None for 4W Tx	8603-FT-FU (2W Tx) None for 4W Tx
2	8102-HO-IP		8602-FT-ST	8601-FT-NI	8604-FT-FU	8603-FT-FU
3	8103-AI-TX		8602-FT-ST	8601-FT-NI	8604-FT-FU	8603-FT-FU
4	8104-AO-IP		8602-FT-ST	8601-FT-NI	8604-FT-FU	8603-FT-FU
5	8110-DI-DC		8602-FT-ST	8601-FT-NI	8604-FT-FU	8603-FT-FU
6	8119-VI-05		8615-FT-4W (4W Tx)	8615-FT-4W (4W Tx)	-	-
7	8121-DI-DC		8617-FT-NI	8617-FT-NI	-	-
8	8123-PI-QU		8602-FT-ST	8601-FT-NI	-	-

Note: Ref. ATEX Cat 3 certificate for additional field terminals compatible for use with specific modules.

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Table-B: List of modules/circuits with BFP termination classified as non-arcing (Ex nA)

Sr. No.	Module No.	Recommended carrier	Recommended FT for General purpose	Recommended FT for Div 2/Zone 2	Compatible FT for General purpose	Compatible FT for Div 2/Zone 2
1	8111-DI-AC	8707-CA-08 8709-CA-08 8710-CA-04 8733-CA-08 8734-CA-04 8735-CA-04 8736-CA-08	8602-FT-ST	8601-FT-NA	8604-FT-FU	8611-FT-FU
2	8112-DI-AC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
3	8113-DI-AC		8602-FT-ST	8610-FT-NI	8604-FT-FU	8611-FT-FU
4	8114-DI-AC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
5	8115-DO-DC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
6	8116-DO-AC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
7	8117-DO-DC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
8	8118-DO-AC		8604-FT-FU	8611-FT-FU	8602-FS-ST	8610-FT-NA
9	8125-DI-DC		8617-FT-NI	8617-FT-NI	8619-FT-MT	8619-FT-MT
10	8127-DI-SE		8617-FT-NI	8617-FT-NI	8619-FT-MT	8619-FT-MT
11	8129-IO-DC		8610-FT-NA	8610-FT-NA	8604-FT-FU	8611-FT-FU
12	8132-AI-UN		8608-FT-NI	8607-FT-TC	8607-FT-TC	8608-FT-NI
13	8133-HI-TX		8601-FT-NI	8601-FT-NI	8603-FT-FU	-
14	8139-SH-DC		8610-FT-NA	8610-FT-NA	8611-FT-FU	-
15	8140-DI-AC		8612-FT-NA	8612-FT-NA	-	-
16	8142-DO-DC		8612-FT-NA	8612-FT-NA	8619-FT-MT	-
17	8810-HI-TX		8601-FT-NI	8601-FT-NI	8603-FT-FU	-
18	8811-IO-DC		8610-FT-NA	8610-FT-NA	8611-FT-FU	-
19	8750-CA-NS		-	-	-	-
20	8751-CA-NS		-	-	-	-
21	8752-CA-NS		-	-	-	-

Note: Ref. ATEX Cat 3 certificate for additional field terminals compatible for use with specific modules.

Table-C: List of modules/circuits where BFP is not required

Sr. No.	Module No.	Recommended carrier	Recommended FT for General purpose	Recommended FT for Div 2/Zone 2	Compatible FT for General purpose	Compatible FT for Div 2/Zone 2
1	8105-TI-TC	8707-CA-08 8709-CA-08 8710-CA-04 8733-CA-08 8734-CA-04 8735-CA-04 8736-CA-08	8605-FT-TC	8605-FT-TC	-	-
2	8106-TI-RT		8606-FT-RT	8606-FT-RT	-	-
3	8109-DI-DC		8602-FT-ST	8610-FT-NA	8604-FT-FU	8611-FT-FU
4	8122-DI-DC		8617-FT-NI	8617-FT-NI	-	-

Note: Ref. ATEX Cat 3 certificate for additional field terminals compatible for use with specific modules.

Table-D: List of 2/1 modules/circuits separate BFP is not required

Sr. No.	Module No.	Recommended carrier	Matching FT for General purpose	Matching FT for Div 2/Zone 2
1	8201-HI-IS#	Ref drawing SCI-784 for this information		
2	8202-HO-IS#			
3	8204-AO-IS#			
4	8205-TI-IS#			
5	8206-TI-IS#			
6	8215-DO-IS#			
7	8220-DI-IS#			
8	8223-PI-IS#			
9	8230-AI-IS#			
10	8922-RB-IS#			

Note: Ref. ATEX Cat 3 certificate for additional field terminals compatible for use with specific modules.

 # NOTES FOR 2/1 SERIES MODULES WHEN INSTALLED IN CAT 3 ZONE 2 HAZARDOUS LOCATIONS:

1. These 2/1 series modules shall be installed as per this drawing when installed in Cat 3 Zone 2 hazardous location and are connected to field devices installed in Cat 3 Zone 2 hazardous location.
2. Refer drawing SCI-784 when these modules are required to be installed in safe area and are additionally required to be connected to field devices installed in Cat 1 Zone 0 or Cat 2 Zone 1 hazardous location.
3. Refer drawing SCI-784 to know matching carriers and field terminals for these modules.

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