

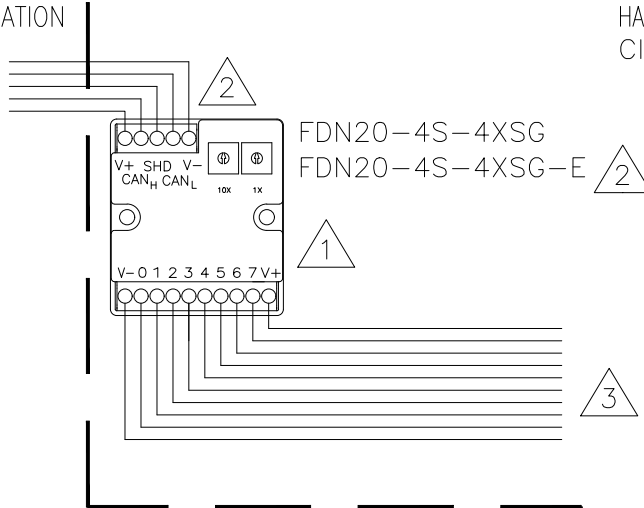
FM Approved Devicenet I/O Stations

FDN20 Busstop Stations in Class I, Division 2



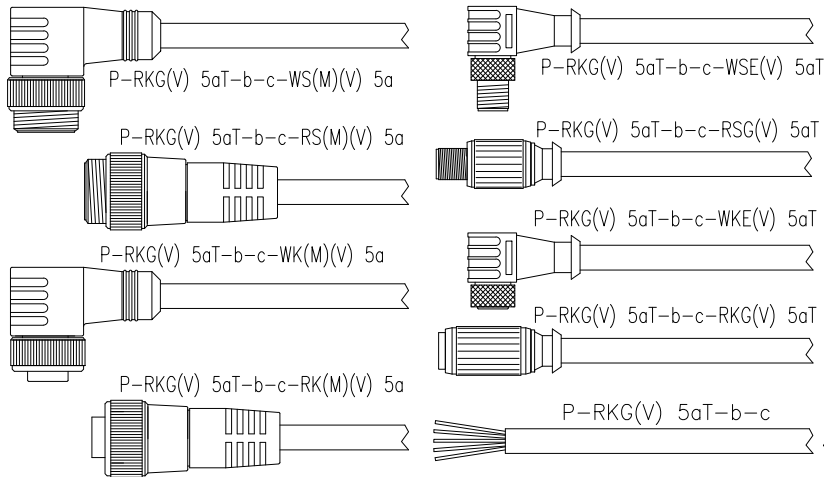
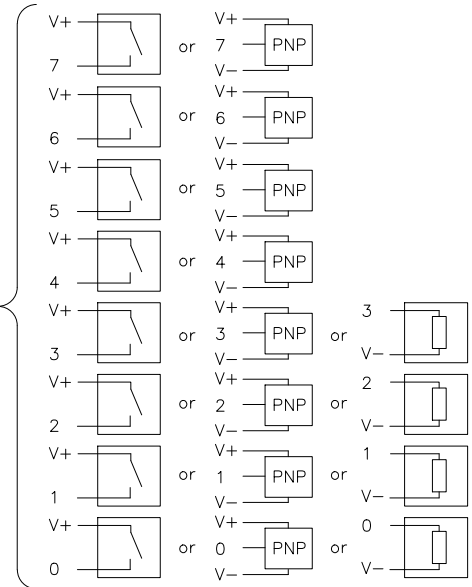
NON-HAZARDOUS LOCATION

Connected devices must have a maximum rated output voltage $\leq 26\text{VDC}$.



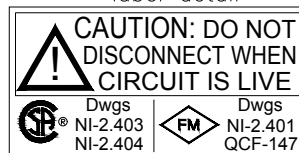
HAZARDOUS (CLASSIFIED) LOCATION

Class I, Division 2, Groups A,B,C,D

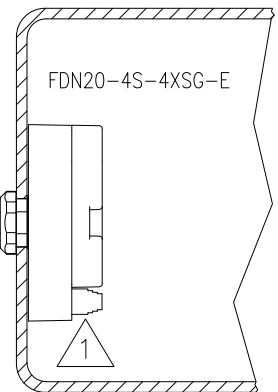


a = conductor color code
b = 3 digit ITC cable code
c = cable length in meters

label detail



lokfast Guard
LOCK-EURO-G



Notes:

1. FDN20-... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01). Wiring methods must be in accordance with Class I, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.
2. Stations with 'E' model code may be connected via the bulkhead receptacle using FM-approved cordsets and lokfast guards as shown above. The cordsets are FM approved for installation in Class I, Division 2 when installed per Turck control drawing QCF-00147, available at www.turck.com/fmcd. LOCK-EURO-G lokfast guards must be in place when the circuit is energized.
3. The field circuits are not limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations.

Drawing No.: NI-1.000				TURCK 3000 Campus Drive Plymouth, MN 55441 Phone: (763) 553-7300	
F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19		
E	Add FEN20 models, Sheet 5,6	TKM	4/13/17	Title: Control Drawing for FM Approved FDN20, FDP20, FAS20, FEN20 Bus Stations	
D	Add FAS20 models, Sheet 4	BVL	9/13/12		
C	Add FDP20-16 models, sheet 3, update lokfast label	BVL	3/23/07	Scale: NONE Sheet 1 of 6	
B	Add FDN20-16XSG, Sheet 2	BVL	2/2/06		
Rev	Description	Drft	Date		

FDN20-16.. Busstop Stations in Class I, Division 2

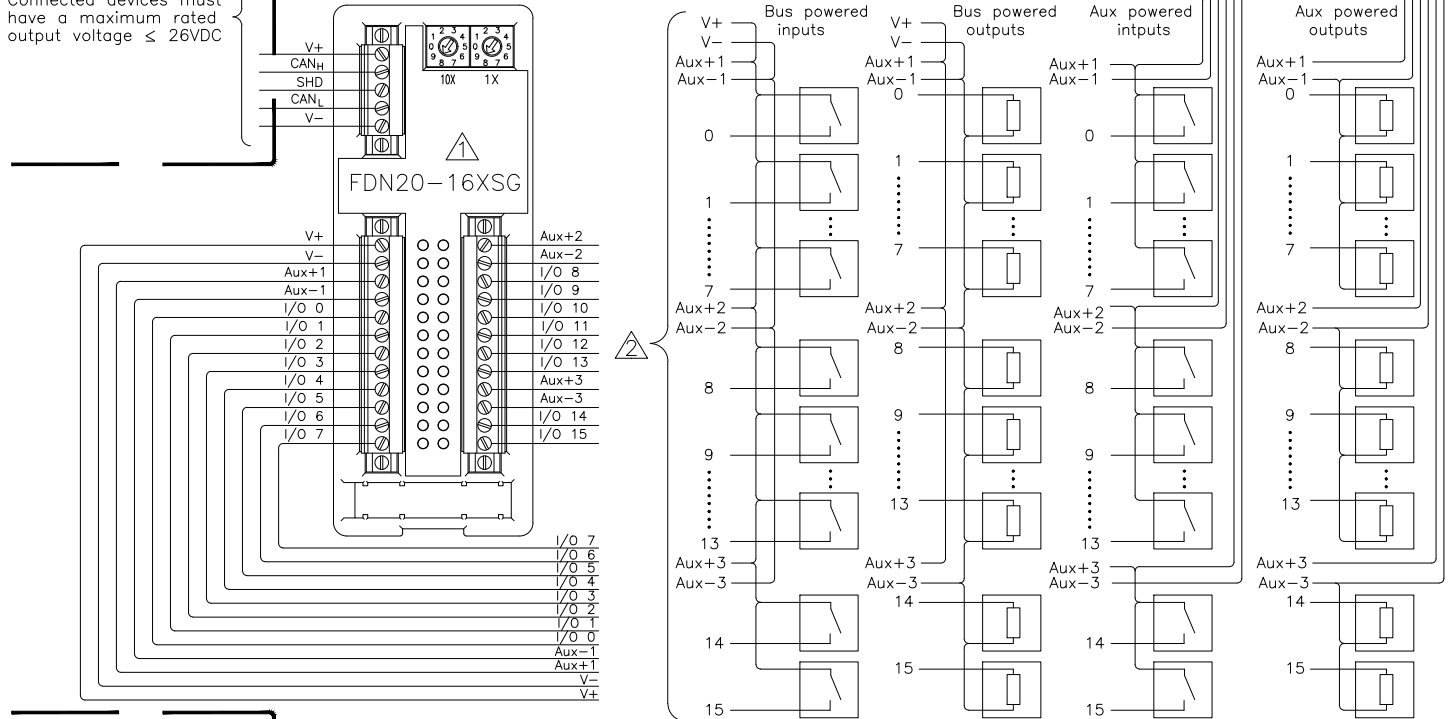
NON-HAZARDOUS
LOCATION

HAZARDOUS (CLASSIFIED) LOCATION

Class I, Division 2, Groups A,B,C,D

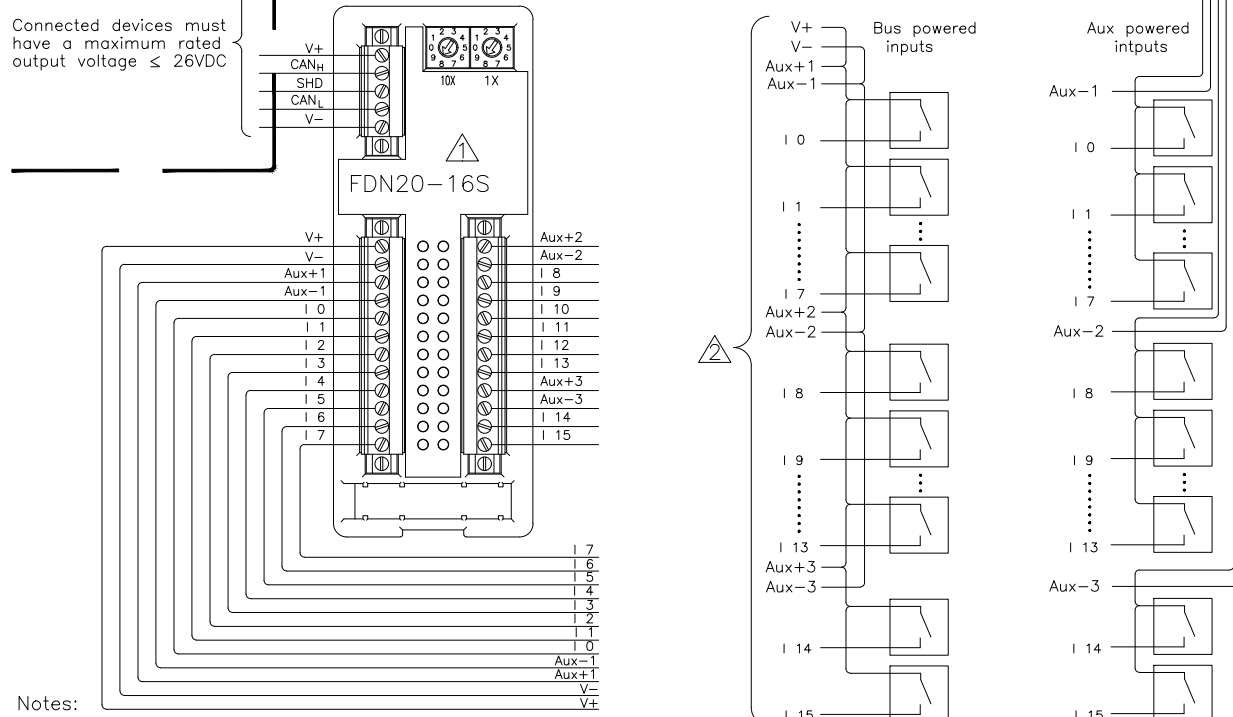


Connected devices must
have a maximum rated
output voltage $\leq 26\text{VDC}$



NON-HAZARDOUS
LOCATION

Connected devices must
have a maximum rated
output voltage $\leq 26\text{VDC}$



Notes:

⚠ FDN20-... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01). Wiring methods must be in accordance with Class I, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.

⚠ The field circuits are not limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations. Field circuits configured as inputs can draw a total of 700 mA from V+/V-. Field circuits configured as outputs may consume 0.5 A each at $T_a=70^\circ\text{C}$ or 0.75 A each at $T_a=40^\circ\text{C}$ up to a total of 8 A. The Temperature Class is T3C.

F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19	Drawing No.: NI-1.000
Rev	Description	Drft	Date	Scale: NONE
				Sheet 2 of 6

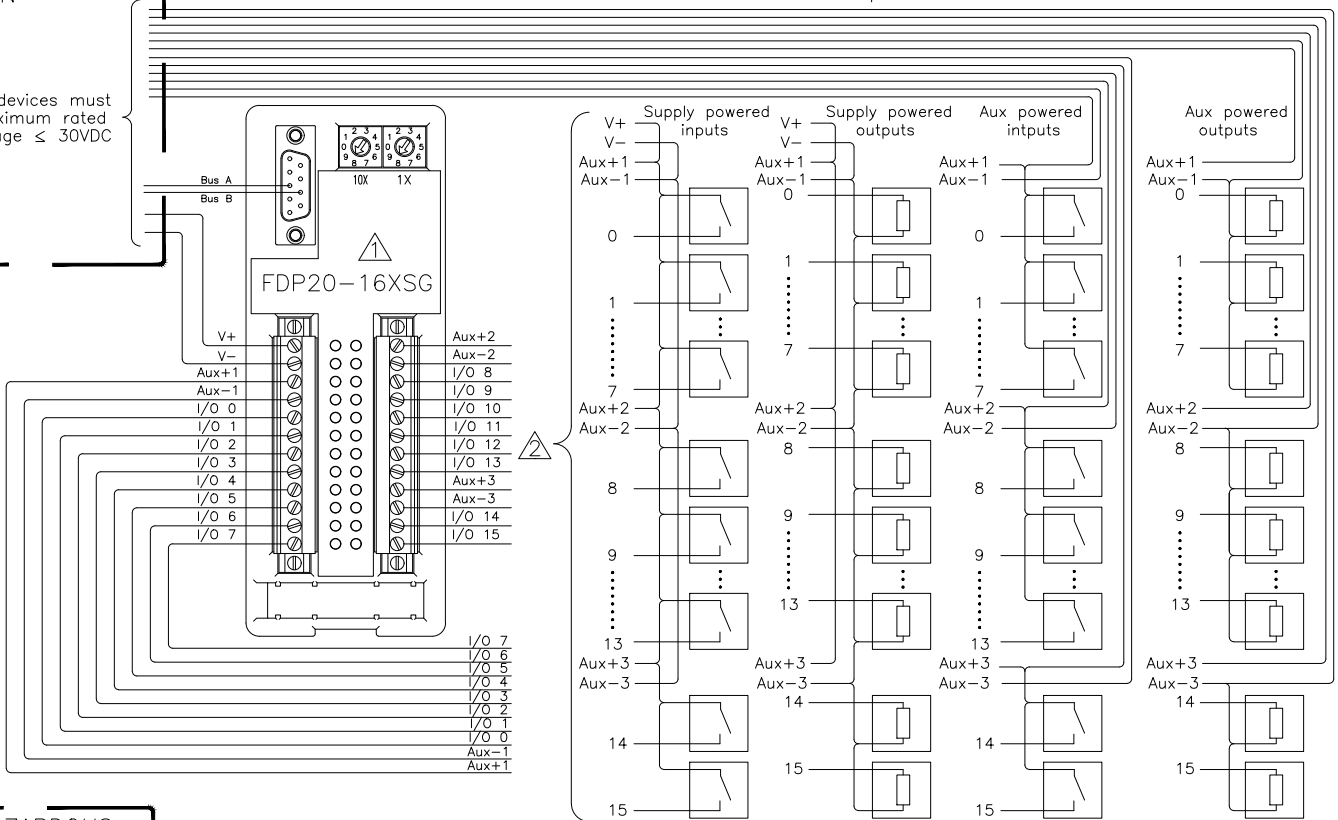
FDP20 Busstop Stations in Class I, Division 2

NON-HAZARDOUS
LOCATION

HAZARDOUS (CLASSIFIED) LOCATION
Class I, Division 2, Groups A,B,C,D

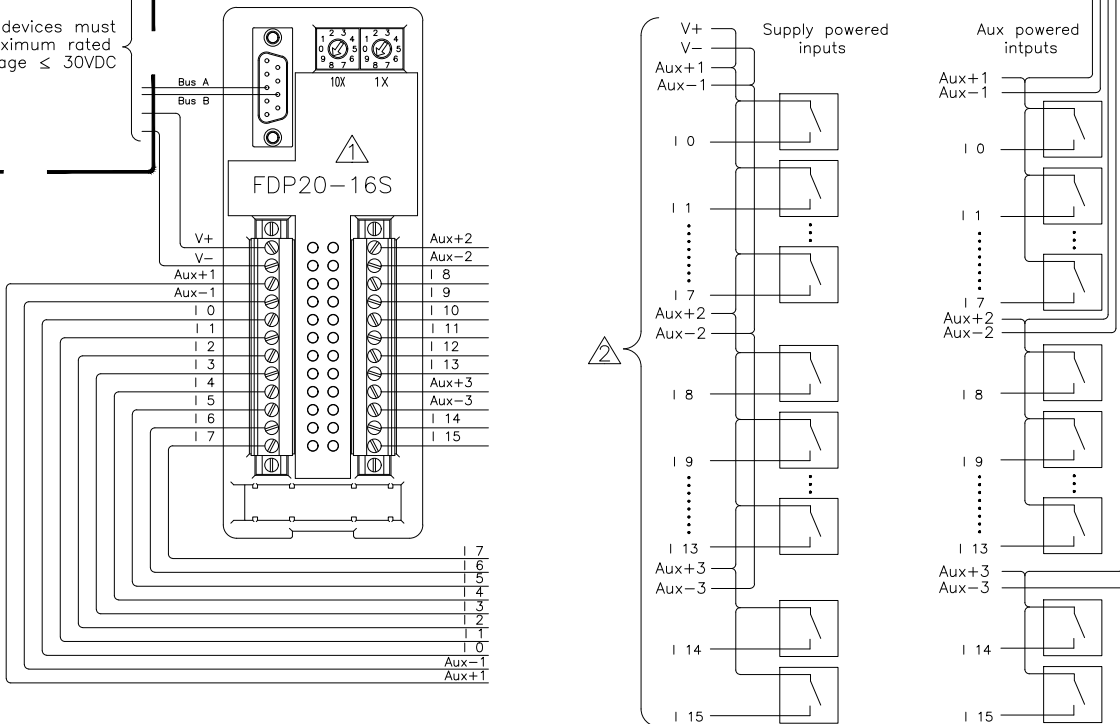


Connected devices must
have a maximum rated
output voltage $\leq 30\text{VDC}$



NON-HAZARDOUS
LOCATION

Connected devices must
have a maximum rated
output voltage $\leq 30\text{VDC}$



Notes:

1. FDP20-16... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01). Wiring methods must be in accordance with Class I, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.
2. The field circuits are not limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations. Field circuits configured as outputs may consume 0.5mA each. The Temperature Class is T4.

F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19	Drawing No.: NI-1.000
Rev	Description	Drft	Date	Scale: NONE
				Sheet 3 of 6

FAS20 and FEN20 Busstop Stations in Class I, Division 2



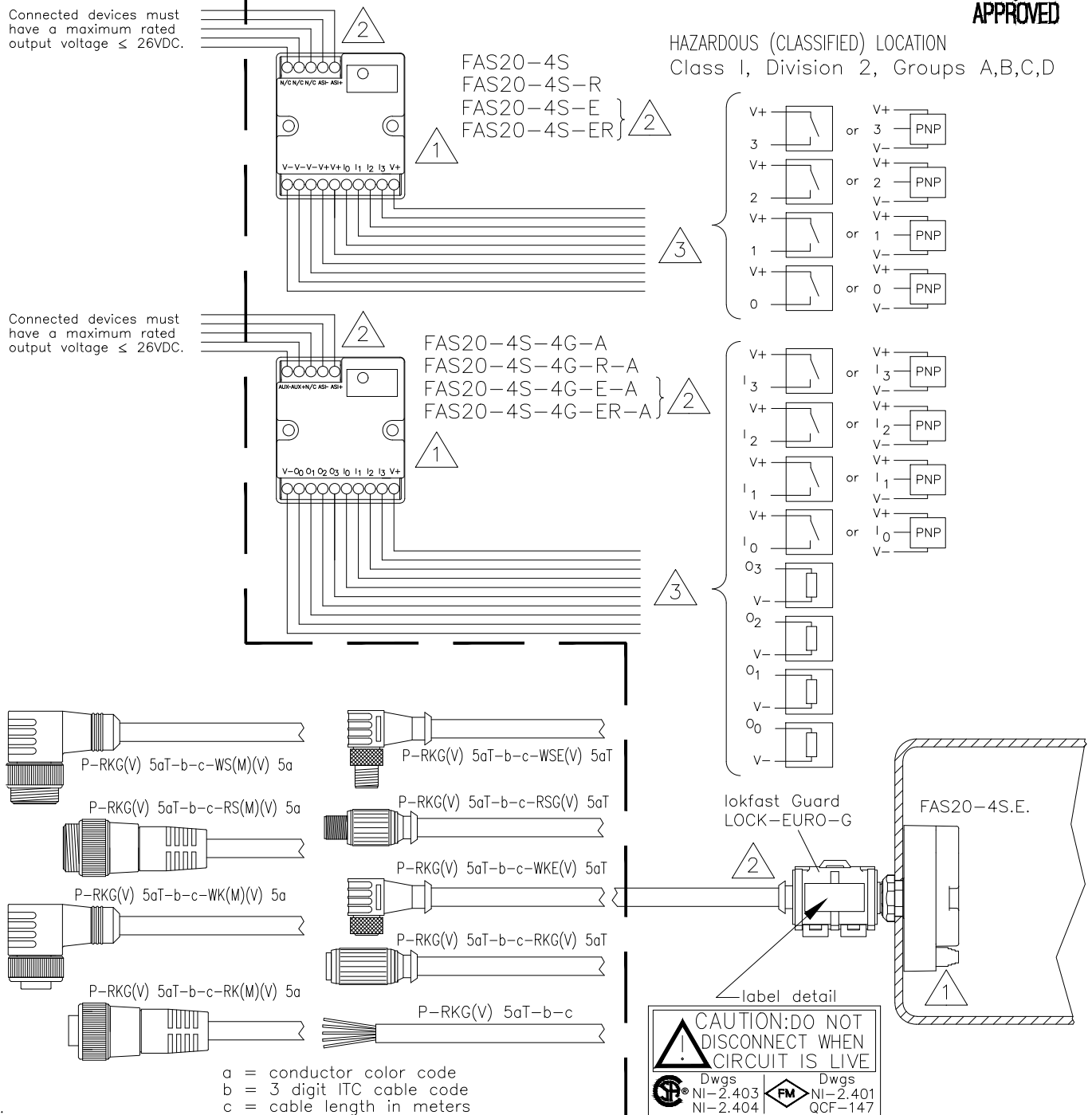
NON-HAZARDOUS LOCATION

Connected devices must have a maximum rated output voltage $\leq 26\text{VDC}$.

Connected devices must have a maximum rated output voltage $\leq 26\text{VDC}$.

HAZARDOUS (CLASSIFIED) LOCATION

Class I, Division 2, Groups A,B,C,D



Notes:

1. FAS20-... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01) Wiring methods in US installations must be in accordance with applicable Class I, Class II, or Class III, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.10(B) and this control drawing. Wiring methods in Canadian installations must be in accordance with the Canadian Electrical Code (CEC) and this control drawing.
2. Stations with 'E' model code may be connected via the bulkhead receptacle using approved cordsets and lokfast guards as shown above. For US installations, cordsets must be FM approved for installation in Class I, Division 2 when installed per Turck control drawing QCF-00147, For Canadian installations, the cordsets must be approved to Canadian standards and installed per Turck control drawing NI-2.404. The lokfast guards must be in place when the circuit is energized.
3. The field circuits are not energy limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations. The temperature code is T3C.

F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19	Drawing No.: NI-1.000
Rev	Description	Drft	Date	Scale: NONE
				Sheet 4 of 6

FAS20 and FEN20 Busstop Stations in Class I, Division 2

NON-HAZARDOUS LOCATION

HAZARDOUS (CLASSIFIED) LOCATION
Class I, Division 2, Groups A,B,C,D

$T_4 \quad T_a = 70^\circ \text{C}$

Class I, Zone 2, IIC, T4, Group C

FEN20-EN1

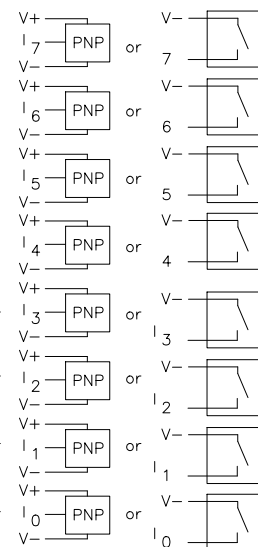
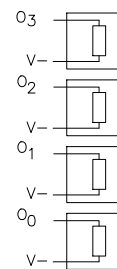
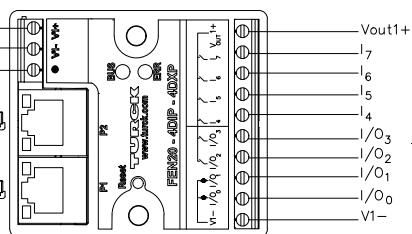
FEN20-4DIP-4DXP

FEN20-4DIP-4DXP-DIN



Connected devices must have a rated output voltage $\leq 12\text{VDC}$ and $\leq 30\text{VDC}$.

10/100 Ethernet

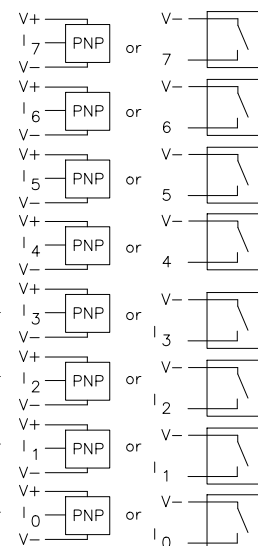
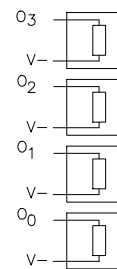
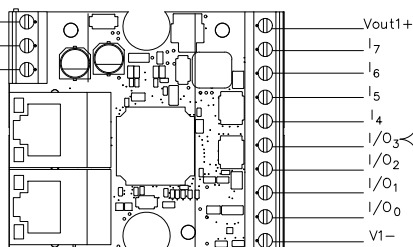


2

FEN20-4DIP-4DXP-PCB

Connected devices must have a rated output voltage $\leq 12\text{VDC}$ and $\leq 30\text{VDC}$.

10/100 Ethernet



2

Notes:

1. FEN20-... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01). Wiring methods must be in accordance with Class I, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.
2. The field circuits are not limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations and Class I, Zone 2, IIC, Group C. Field circuits configured as outputs may consume 1.0A each. The Temperature Class is T4.

F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19	Drawing No.: NI-1.000	
Rev	Description	Drft	Date	Scale: NONE	Sheet 5 of 6

FAS20 and FEN20 Busstop Stations in Class I, Division 2

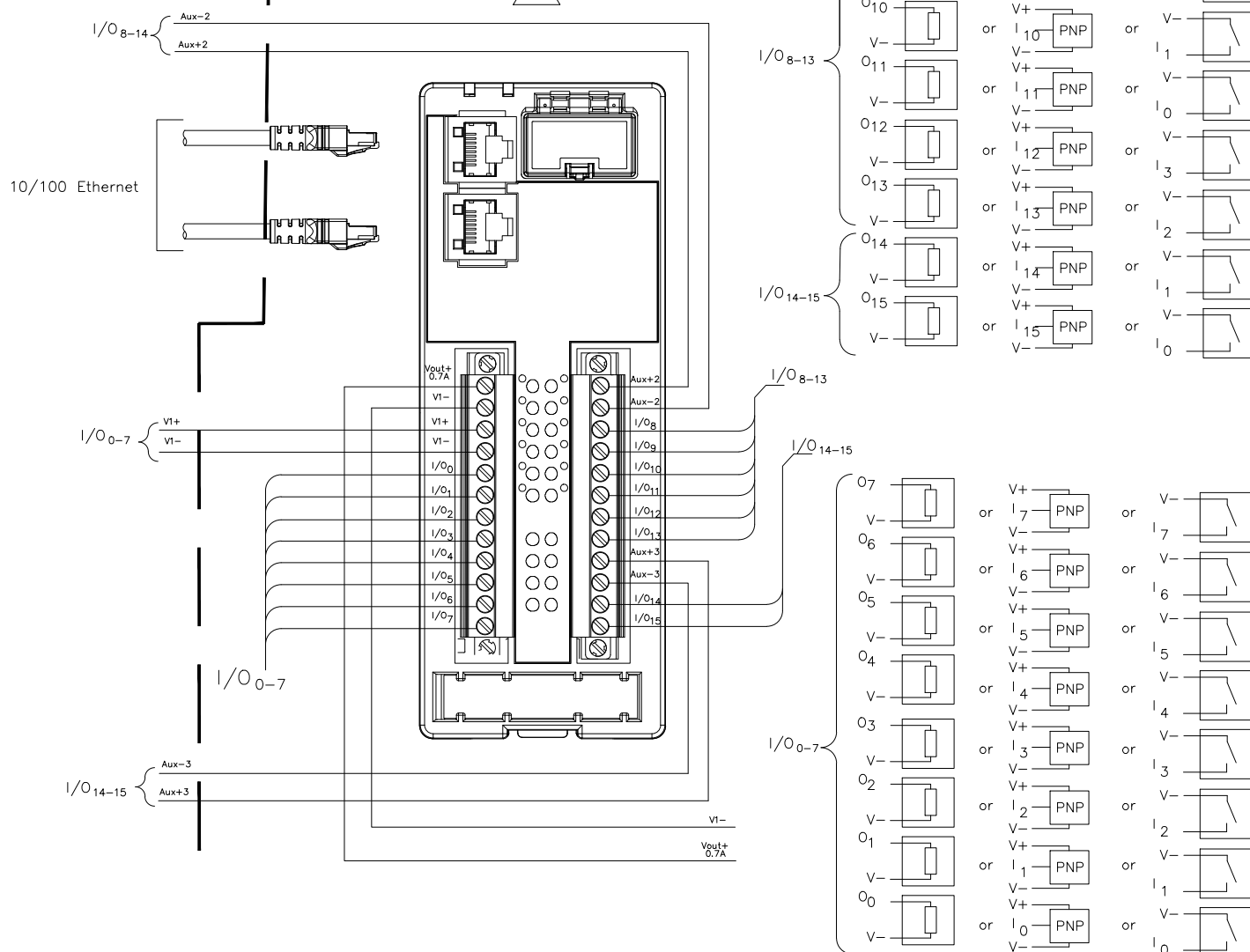
NON-HAZARDOUS LOCATION

HAZARDOUS (CLASSIFIED) LOCATION
Class I, Division 2, Groups A,B,C,D
T3C $T_a = 70^\circ\text{C}$ or T4 $T_a = 40^\circ\text{C}$
Class I, Zone 2, IIC, T3C $T_a = 70^\circ\text{C}$ or T4 $T_a = 40^\circ\text{C}$, Group C



Connected devices must have a rated output voltage $\leq 12\text{VDC}$ and $\leq 30\text{VDC}$.

FEN20-16DXP



Notes:

- ① FEN20-... I/O stations must be installed in a suitable equipment enclosure in accordance with ANSI/ISA-61010-1 (82.02.01). Wiring methods must be in accordance with Class I, Division 2 wiring practices per the National Electrical Code (NEC), ANSI/NFPA 70, Article 501.
- ② The field circuits are not limited energy. Field devices must therefore be approved for installation in Class I, Division 2 hazardous locations and Class I, Zone 2, IIC, Group C. Field circuits configured as outputs may consume 0.5 A each at $T_a = 70^\circ\text{C}$ with Temperature Class T3C or 1.0 A each at 40°C with Temperature Class T4 up to 8.0 A.

F	Added FEN20-EN1 model to Sheet 5	TKM	4/19/19	Drawing No.: NI-1.000	
Rev	Description	Drft	Date	Scale: NONE	Sheet 6 of 6