

DIN Rail Mounted Compact 200 Series I/O Equipment, Agency Certifications



Compact 200 Series I/O enclosure-based equipment is safety certified by authorized agencies as specified herein.

FEATURES

Compact 200 Series I/O enclosure-based equipment has the following safety certifications:

- ▶ Underwriters Laboratories (UL®) listing for US (NRTL) and Canadian (UL-C) requirements for both ordinary and hazardous locations
- ▶ CENELEC (DEMKO) certification for use in potentially explosive atmospheres
- ▶ European Union (EU) Low Voltage and EMC directives ("CE" logo marked on product)
- ▶ Where applicable, comply with the Explosive Atmospheres (ATEX) directive (94/9/EC).

OVERVIEW

Compact 200 Series I/O enclosure-based Fieldbus Modules (FBMs) with their associated equipment/agency certifications, are listed on the following pages:

- ▶ Certifications for Compact 200 Series Baseplates
- ▶ Certifications for Power Supply
- ▶ Certifications for Fieldbus Modules (FBMs)
- ▶ Certifications for Termination Assemblies (TAs).

Certifications for the Field Control Processors (FCP), Fieldbus Communications Modules (FCMs) and other standard 200 Series equipment used with the Compact 200 Series I/O equipment are provided in *DIN Rail Mounted Equipment, Agency Certifications* (PSS 31H-2W2 B3).

CERTIFICATIONS FOR COMPACT 200 SERIES 16-SLOT HORIZONTAL BASEPLATES

Table 1 identifies the certifications for the Compact 200 Series 16-Slot Horizontal Baseplates (refer to PSS 31H-2C200 B4).

Table 1. Certifications for Compact 200 Series 16-Slot Horizontal Baseplates

Module	Description
Compact 16-Slot Baseplates	Component for containing Compact 200 Series Fieldbus Modules.
Underwriters Laboratories (US and Canadian Certification)	
UL/UL-C listed as suitable for use in Class I; Groups A-D; Division 2 temperature code T4 enclosure-based systems. Conditions of use are as specified in the <i>DIN Rail Mounted Subsystem User's Guide</i> (B0400FA).	
CENELEC (DEMKO)	
CENELEC certified Ex nA IIC T4 for use in CENELEC certified Zone 2 enclosure-based systems. Conditions of use are as specified in <i>DIN Rail Mounted Subsystem User's Guide</i> (B0400FA). Comply with ATEX directive for II 3 G use.	

CERTIFICATIONS FOR POWER SUPPLY FOR COMPACT 200 SERIES I/O EQUIPMENT

The Compact Power Supply - FPS480-24 - is ATEX qualified, and agency certified for use in Class 1, Division 2 and Zone 2 applications (refer to PSS 31H-2C480 B4).

The FPS480-24 is UL® and UL-C certified to UL60950-1 and UL508 and has IEC/EN 60950 certifications. It is suitable for use in Class I; Groups A-D; Division 2 (CENELEC Zone 2) hazardous locations with a temperature code of T3.

CERTIFICATIONS FOR COMPACT 200 SERIES FIELDBUS MODULES (FBMS)

Table 2 lists the Compact 200 Series FBMs and their certifications.

Table 2. Certifications for Compact 200 Series FBMs

Module	Description
FBM207b	Compact Channel Isolated, 24 V Contact Sense Input Interface Module
FBM214b	Compact Channel-Isolated, 4 to 20 mA, HART® Input Interface Module
FBM215	Compact Channel-Isolated 4 to 20 mA, HART Output Interface Module
FBM216b	Compact Redundant Channel-Isolated, 4 to 20 mA, HART Input Interface Module
FBM218	Compact Redundant Channel-Isolated, 4 to 20 mA, HART Output Interface Module
FBM242	Compact Channel Isolated, Externally Sourced, Discrete Output Interface Module
Fieldbus Modules	
There are no direct customer field circuit connections to these Compact 200 Series Fieldbus modules. All customer connections are made to the associated termination assemblies. Safety certification information only applies when these modules are used with specified certified termination assemblies as described in Table 3.	
Underwriters Laboratories (US and Canadian Certification)	
UL/UL-C listed as suitable for use in Class I; Groups A-D; Division 2, temperature code T4 enclosure-based systems. Conditions of use are as specified in <i>DIN Rail Mounted Subsystem User's Guide</i> (B0400FA).	
CENELEC (DEMKO)	
CENELEC certified Ex nA IIC T4 for use in CENELEC certified Zone 2 enclosure-based systems. Conditions of use are as specified in <i>DIN Rail Mounted Subsystem User's Guide</i> (B0400FA). Comply with ATEX directive for II 3 G use.	

CERTIFICATIONS FOR TERMINATION ASSEMBLIES

Table 3 lists the type of certifications for the termination assemblies and the table footnotes on page 5 identify the certification types.

Table 3. Certifications for Termination Assemblies

Signal Inputs		Signal Outputs		TA Part Number	Compact FBM Type	Certification Types
Type	#	Type	#			
0 to 20 mA Inputs/Outputs						
4 to 20 mA, HART	8		0	P0924JH	FBM214b	1, 2
	0	4 to 20 mA, HART	8	P0917XV P0926EK P0926SP	FBM215	1, 2
4 to 20 mA, HART	8		0	P0924JH	FBM216b	1, 2
	0	4 to 20 mA, HART	8	P0917XV P0916EK	FBM218	1, 2
Contact Inputs/Switch Outputs						
24 V dc Contact	16		0	P0916JS P0916PP P0916XT	FBM207b	1, 2
15 to 60 V dc Switch Outputs						
	0	15 to 60 V dc at 2 A Switch (external source)	16	P0916JY P0916RJ P0917XX	FBM242	1, 2
	0	15 to 60 V dc at 2 A Switch (external source)	16	P0917HX P0923LH	FBM242	1, 4

Table 3. Certifications for Termination Assemblies (Continued)

Signal Inputs		Signal Outputs		TA Part Number	Compact FBM Type	Certification Types
Type	#	Type	#			
30 V dc/240 V ac Switch Outputs						
	0	30 V dc at 5 A, or 240 V ac at 5 A Switch (external source)	16	P0916NG P0916RK P0916YY P0923LL	FBM242	5
	0	30 V dc at 5 A, or 240 V ac at 5 A Switch (external source) with power distribution	16	P0916JZ P0916RL P0916YZ	FBM242	5
	0	120 V ac/125 V dc at 2 A, solid-state switch Fused Outputs (external source)	16	P0926BE	FBM242	5
	0	120 V ac/125 V dc at 2 A SPDT (Form C) relay - Fused Outputs (external source)	16	P0926DV	FBM242	5

Type 1
TAs are UL/UL-C listed as suitable for use in Class I; Groups A-D; Division 2 temperature code T4 hazardous locations. They are CENELEC (DEMKO) certified Ex nA IIC T4 for use in Zone 2 potentially explosive atmospheres.
Type 2
TAs are UL/UL-C listed as associated apparatus for supplying non-incendive field circuits Class I; Groups A-D; Division 2 hazardous locations when connected to specified DIN rail mounted FBMs and field circuits meeting entity parameter constraints specified in <i>DIN Rail Mounted Subsystem User's Guide</i> (B0400FA). They are also CENELEC (DEMKO) certified as associated apparatus for supplying field circuits for Group IIC, Zone 2 potentially explosive atmospheres. Field circuits are also Class 2 limited energy (60 V dc, 30 V ac, 100 VA or less) if customer-supplied equipment meets Class 2 limits.
Type 3
Same as Type 2 above except that only input circuits are non-incendive/Class 2.

Type 4
All field circuits are Class 2 limited energy (60 V dc, 30 V ac, 100 VA or less) if customer-supplied equipment meets Class 2 limits.
Type 5
The TA and its field circuitry are for use in only ordinary (non-hazardous) locations.

NOTE

All TAs are UL/UL-C listed to comply with applicable ordinary location safety standards for fire and shock hazards. Hazardous location types comply with ATEX directive for II 3 G use. They also comply with the requirements of the European Low Voltage Directive. All listings/certifications require installation and use within the constraints specified in *DIN Rail Mounted Subsystem User's Guide* (B0400FA) and the conditions stated in UL and DEMKO reports.

