

DATA SHEET

VBS01-SFP

ABB Ability™ Symphony® Plus Hardware Selector



The VBS01-SFP the IO module mounting base is designed for 16-CH standard sized, Singular (Non-Redundnat) analog input, digital input and digital ouput modules.

The VBS01-SFP base is specifically designed to eliminate the need for 3rd party external marshaling hardware.

Each channel of the VBS01-SFP base is individually fused, has a fuse status LED, field power is configurable (system vs. external power) and can be quickly disconnected from field wiring using FPS (Field Power Selector) plugs.

Features and benefits

- 16 configurable IO channels where the following is provided for each CH:
- Field power selection via (EPD-_V, FPH-_V, FPN-_V) FPS plugs. Where LV =< 60V and HV = > 60V.
- Individual fuse and fuse status LED per CH.
- Individual CH field power keying (EPD/FPH/FPN & LV/HV) to prevent incorrect field power from being applied.
- Quick disconnect of field wiring by removing the FPS plug.
- All SD I/O modules & bases of all types (Singular or Redundant) AND (Compact or Full-size), are 100% fully compatible with each other. Thus, Singular & Redundant, Compact or Full-size I/O modules can be mounted within a single, common HN800 I/O bus.

General info		
Article number	8VZZ002700H1	
Life cycle status	ACTIVE	
Line redundancy	Redundant HN800 I/O Bus	
Channels	16	
Hot swap	No	
Supported IO modules	AI01, AI02, AI05, AI06, AO01, AO02, AO05, AD11, DI01, DI02, DI03, DI04, DO01, DO02, DO05	
Singular or redundant	Singular	
Form factor	Full-size (218 mm Tall x 103 mm Wide)	
Mounting	Vertical Column	
HN800 bus length	305 mm	
MTBF (per MIL-HDBK-217-FN2)	1,866,544 Hrs	
MTTR (Hours)	8 Hrs	

Detailed data		
Overvoltage category	Category 1 for power. Tested according to IEC/EN 61010-1	
Process signal connections	16-CH AIO or DIO	
Field power connection	Compact	
Field power fusing	250mA per CH	
Signal connection	2x pluggable 16-pt Terminal Blocks	
Max current	250mA	
Acceptable field signal wire sizes	#22 -14 AWG stranded or solid, #12 AWG stranded	
Galvanic isolation test voltage	1500 V for up to 1 minute	

Environment and certification		
Temperature, Operating	-40 to +70 °C Tested according to IEC/EN 60068-2-1, IEC/EN 60068-2-2	
Temperature, Storage	-40 to +85 °C Tested according to MIL-STD-810G	
Relative humidity	20% to 95% @ 40°C non-condensing. Tested according to IEC/EN 60068-2-78, IEC/EN 61298-3	
Vibration (operational sinusoidal)	5 to 60 Hz 0.137 mm (0.0054 in.), 60 to 150 Hz 1.0 G. Tested according to IEC/EN 60068-2-6	
Vibration (transportation)	10 to 500 Hz. Tested according to MIL-STD-810G	
Shock (storage)	15 G, 11 msec. Tested according to IEC/EN 60068-2-27	
Drop	100 mm. Tested according to IEC/EN 60068-2-31	
Protection class	IP20 according to EN 60529	
Altitude (operational)	Sea level to 3,048 meters (10,000 ft.) Tested according to MIL-STD-810G	
Altitude (storage)	Sea level to 12,192 meters (40,000 ft.) Tested according to MIL-STD-810G	
Air quality	ISA S71.04 G1, ISA S71.04 G3 compliant versions VBS01-SFPA are also available	
ESD immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-2, Severity level 3	
Surge immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-5, Severity level 3	
Electrical fast transient immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-4, Severity level 3	
Radiated RFI immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-3, Severity level 3	
Conducted Immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-6, Severity level 3	
Magnetic field immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-8, Severity level 4	
Radiated emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment	
Conducted emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment	
Voltage dips and interruption immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-11	
CSA non-hazardous locations	Certified for use as process control equipment in an ordinary (non-hazardous) location	
CSA hazardous, nonincendive locations	Class I, Division 2, Groups A, B, C, D	
CE Mark	CE Mark EMC directive 2004/108/EC & Low Voltage Directive 2006/95/EC	
RoHS compliance	RoHS Directive 2015/863	
WEEE compliance	DIRECTIVE/2012/19/EU	

Dimensions		
Width	103 mm	
Depth	110.1 mm	
<u> </u>	218 mm	
Weight	544 g	



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