 Declaration of Conformity	No. 283641	Rev AA	Page 1 of 11
	Cage Code: 3WAP1	Name: J. Drake	
3500 Series Monitoring System		Approved: T. Woods	

<u>Revision</u>	<u>Name</u>	<u>Approved</u>	<u>Description</u>
AA	S. Fisher	B. Bowlds	ECM: 500000396823

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EU Declaration of Conformity - EMC/LVD/ATEX/ROHS Declaration

We:

Bently Nevada LLC.
1631 Bently Parkway South
Minden, NV 89423 U.S.A.

Declare in sole responsibility that the equipment to which this declaration applies; complies with:

EMC Directive 2014/30/EU
LV Directive 2014/35/EU
ROHS Directive 2011/65/EU

and, where the applicable dash option has been ordered, also complies with:

ATEX Directive 2014/34/EU

when installed in accordance with the installation instructions in the Installation and Maintenance Manuals.

Equipment

Part No.	Module No.	Description
3500/04	136719-01	I.S. Earthing I/O Module
3500/05	138945-01	Standard Backplane
	144464-01	Mini-Rack Backplane
	138953-01	Bulkhead Backplane
	143728-01	Bulkhead Backplane MOD
3500/15	129486-01	High Voltage DC Power Supply Module
	133292-01	Low Voltage DC Power Supply Module
	133300-01	Low Voltage DC Power Input Module (LVDC PIM)
	129478-01	High Voltage DC Power Input Module (HVDC PIM)
	106M1079-01	Universal AC Power Supply Module
	106M1081-01	Universal AC Power Input Module (AC PIM)
	114M5329-01	REFRESH HVDC POWER SUPPLY MODULE
	114M5330-01	REFRESH LVDC power supply module
	114M5335-01	REFRESH LVDC PIM
	115M7750-01	REFRESH HVDC PIM
3500/22	288055-01	Standard Transient Data Interface Monitor Module with USB cable (non-TMR)
	288055-02	TMR Transient Data Interface Module with USB cable
	146031-01	10Base-T/100Base-TX I/O Module
	146031-02	100Base-FX (Fiber Optic) I/O Module
	146031-03	10Base-T/100Base-TX I/O Module (GLD RLY)
	146031-04	100Base-FX (Fiber Optic) I/O Module (GLD RLY)
	147364-01**	Buffered Signal Output Module
3500/25	149369-01	Enhanced Keyphasor Monitor Module
	125800-01	Keyphasor I/O Module (Internal Terminations)
	125800-02	Isolated Keyphasor I/O Module (Internal Terminations)
	126648-01	Keyphasor I/O Module (External Terminations)
	126648-02	Isolated Keyphasor I/O Module (External Terminations)
	135473-01	Keyphasor I/O Module (Internal Barriers and Internal Terminations)

Part No.	Module No.	Description
3500/32 3500/32M	149986-02	4-Channel Relay Control Monitor Module
	125720-01	4-Channel Relay I/O Module
	125720-02	4 Channel Relay I/O Module
	125720-03	Low Current Relay I/O Module
3500/33	149986-01	16 Channel Relay Control Monitor Module
	149992-01	16 Channel Relay I/O Module
	149992-02	16 Channel FailSafe Relay I/O Module
	149992-03	16 Channel Relay I/O Module (GLD RLY)
	149992-04	16 Channel FailSafe Relay I/O Module (GLD RLY)
3500/40 3500/40M	176449-01	Proximitor Monitor Module
	125680-01	Proximitor I/O Module with Internal Terminations
	126615-01	Proximitor I/O Module with External Terminations
	135489-04	Proximitor I/O Module with Internal Barriers and Internal Terminations
3500/42 3500/42M	176449-02	Proximitor/Seismic Monitor Module
	128229-01	Prox/Seismic I/O Module with Internal Terminations
	128240-01	Prox/Seismic I/O Module with External Terminations
	135489-01	I/O Module with Internal Barriers (Internal Terminations) (4 x Prox/Accel)
	135489-02	I/O Module with Internal Barriers (Internal Terminations) (2 x Prox/Accel + 2 x Velomitor)
	135489-03	I/O Module with Internal Barriers (Internal Terminations) (4 x Velomitor)
	138708-01	Shaft Absolute I/O Module with Internal Terminations
	138700-01	Shaft Absolute I/O Modules with External Terminations
	140471-01	Prox/Velom I/O Module with Internal Terminations
	140482-01	Prox/Velom I/O Module with External Terminations
	143729-01	Cylinder Pressure I/O with Internal Terminations
	143737-01	Cylinder Pressure I/O Module with External Terminations
	169715-01	Multimode Positive Input I/O Module with Internal Terminations
	140471-02	Dynamic Pressure I/O Module with Internal Terminations
	140482-02	Dynamic Pressure I/O Module with External Terminations

Part No.	Module No.	Description
3500/44 3500/44M	176449-03	Aeroderivative Monitor Module
	126559-01	Aero GT I/O Module Internal Terminations
	126623-01	Aero GT I/O Module External Terminations
	140471-01*	Prox/Velom I/O Module with Internal Terminations
	140482-01*	Prox/Velom I/O Module with External Terminations
	169459-01	Multimode Prox/Velom I/O Module with Internal Terminations
	169459-02	Multimode Prox/Velom I/O Module with External Terminations
	143729-01*	Cylinder Pressure I/O with Internal Terminations
	143737-01*	Cylinder Pressure I/O Module with External Terminations
	135489-01*	I/O Module with Internal Barriers (Internal Terminations) (4 x Prox/Accel)
	135489-03*	I/O Module with Internal Barriers (Internal Terminations) (4 x Velomitor)
3500/45	176449-04	Position Monitor Module
	135137-01	Position I/O Module with Internal Terminations for use with Proximitys, RPTs or DC LVDTs
	135145-01	Position I/O Module with External Terminations for use with Proximitys, RPTs or DC LVDTs
	139554-01	AC LVDT Position I/O Module with Internal Terminations for use with AC LVDTs
	139567-01	AC LVDT Position I/O Module with External Terminations for use with AC LVDTs
	143729-01*	Cylinder Pressure I/O with Internal Terminations

Part No.	Module No.	Description
3500/46 3500/46M	176449-06	Hydro Monitor Module
	140471-01*	Prox/Velom I/O Module with Internal Terminations
	140482-01*	Prox/Velom I/O Module with External Terminations
	169459-01*	Multimode Prox/Velom I/O Module with Internal Terminations
	169459-02*	Multimode Prox/Velom I/O Module with External Terminations
	169715-01*	Multimode Positive Input I/O Module with Internal Terminations
	169715-02	Multimode Positive Input I/O Module with External Terminations
	143729-01*	Cylinder Pressure I/O with Internal Terminations
	143737-01*	Cylinder Pressure I/O Module with External Terminations
	140471-02*	Dynamic Pressure I/O Module with Internal Terminations
	140482-02*	Dynamic Pressure I/O Module with External Terminations
3500/50 3500/50M	288062-02	Tachometer Monitor Module
	133442-01	Tach I/O Module with Internal Terminations
	136703-01	Discrete Internal Barrier I/O Module with Internal Terminations
	133434-01	Tach I/O Module with External Terminations
	285212-01	Portable Core Module Card
	286566-02	Tachometer Carrier
3500/60	163179-01	Temperature Monitor Module
	133819-01	RTD/TC Non-Isolated I/O Module Internal Terminations
	133827-01	RTD/TC Non-Isolated I/O Module External Terminations
	133835-01	TC Isolated I/O Module Internal Terminations
	133843-01	TC Isolated I/O Module External Terminations
	136711-01	RTD/TC I/O Module with Internal Barriers& Internal Terminations (Not-Isolated)
3500/61	163179-02	Temperature Monitor Module
	133819-02	RTD/TC Non-Isolated I/O Module Internal Terminations
	133827-02	RTD/TC Non-Isolated I/O Module External Terminations
	133835-02	TC Isolated I/O Module Internal Terminations
	133843-02	TC Isolated I/O Module External Terminations
	136711-02	RTD/TC I/O Module with Internal Barrier and Internal Termination (Not-Isolated)

Part No.	Module No.	Description
3500/62	163179-03	Process Variable Monitor Module
	136491-01	-10 Vdc to +10 Vdc I/O Module with Internal Terminations
	136499-01	-10 Vdc to +10 Vdc I/O Module with External Terminations
	136294-01	Isolated +4 to +20 mA I/O Module with Internal Terminations
	136483-01	Isolated +4 to +20 mA I/O Module with External Terminations
	137110-01	4 to 20 mA Barrier I/O Module with Internal Terminations
3500/64 3500/64M	176449-05	Dynamic Pressure Monitor Module
	140471-02*	Dynamic Pressure I/O Module with Internal Terminations
	140482-02*	Dynamic Pressure I/O Module with External Terminations
	143729-01*	Cylinder Pressure I/O with Internal Terminations
	141670-01*	3500/44 Internal Barrier I/O Module
3500/65	145988-02	16 Channel Temperature Monitor Module
	172103-01	RTD/Isolated Tip TC I/O Module, Internal Terminations
	172109-01	RTD/ Isolated Tip TC I/O Module, External Terminations
3500/70 3500/70M	176449-09	Impulse/Velocity Monitor Module
	135489-01*	I/O Module with Internal Barriers (Internal Terminations) (4 x Prox/Accel)
	135489-02*	I/O Module with Internal Barriers (Internal Terminations) (2 x Prox/Accel + 2 x Velomitor)
	135489-03*	I/O Module with Internal Barriers (Internal Terminations) (4 x Velomitor)
	140471-01*	Prox/Velom I/O Module with Internal Terminations
	140482-01*	Prox/Velom I/O Module with External Terminations
	143729-01*	Cylinder Pressure I/O with Internal Terminations
	143737-01*	Cylinder Pressure I/O Module with External Terminations
3500/72 3500/72M	176449-08	Rod Position Monitor Module
	140471-01*	Prox/Velom I/O Module with Internal Terminations
	140482-01*	Prox/Velom I/O Module with External Terminations
	135489-01*	I/O Module with Internal Barriers (Internal Terminations) (4 x Prox/Accel)
	143729-01*	Cylinder Pressure I/O with Internal Terminations
	143737-01*	Cylinder Pressure I/O Module with External Terminations

Part No.	Module No.	Description
3500/77 3500/77M	176449-07	Cylinder Pressure Monitor Module
	143729-01*	Cylinder Pressure I/O Module with Internal Terminations
	143737-01*	Cylinder Pressure I/O Module with External Terminations
3500/91 3500/91M	161204-01	EGD Communication Gateway Module
	161216-01	Ethernet 10BASE-T/100BASE-TX I/O Module
	161216-02	Ethernet 100BASE-T/100BASE-TX I/O Module
	190809-01	EGD Communication Gateway Module
	190809-02	Ethernet 10BASE-T/100BASE-TX I/O Module
3500/92	136180-01	Communication Gateway Monitor Module
	125736-01	ModbusRS232/RS422 I/O Module
	133323-01	ModbusRS485 I/O Module
	136188-01	Ethernet/RS232 Modbus I/O Module
	136188-02	Ethernet/RS485 Modbus I/O Module
3500/94 3500/94M	184826-01	Display Monitor Module
	190214-01	Display I/O Module w/ Rear Connection & Router Box Support
	190214-02	Display I/O Module w/ Ext. Power Input & Face Mount Support
	149356-01	VGA Display Router Box
	120M8155-01	ANA-D3510-100-A1 Touch Panel LCD Display
Internal Barriers	135470-01	Generic Barrier Module
	135471-01	Velomitor Barrier Module
	137101-01	Process Variable Barrier Module
	135472-01	Temperature Barrier Module

- Several I/O modules in the table above have been repeated as they are used with multiple monitor modules. All subsequent iterations have been assigned a '*' at the end of Module No.
- Modules identified with "***" are not ATEX approved.

Environmental and Use Conditions: Industrial Applications

EMC

Standards	Accredited Test Lab	Test Reports	Technical File
EN 61000-6-2:2005 EN 61000-6-4:2007 +A1:2011	CKC Laboratories 5046 Sierra Pines Drive Mariposa, CA, USA 95338	98381-10 98381-12 98381-17A	285197 285198
EN 61326-1:2013 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 61326-3-1:2008	ITC Engineering Services, Inc. 9959 Calaveras Road Sunol, CA USA 94586-0543	20161205-01 20170113-01 20170424-01 20171009-01	
Note: Compliance to EN 61326-3-1:2008 is only applicable for SIL certified modules.			

LVD



Standards	Accredited Test Lab	Test Report	Technical File
EN 61010-1:2010	CSA Group 2805 Barranca Parkway Irvine, CA 92606-5114	2742274	285197 285198

ATEX

(Where the applicable dash option has been ordered)

Equipment	Standards	Notified Body	Test Report	Certificate No.
3500 Modules, excluding 120M8155-01	EN 60079-0: 2012/A11: 2013 EN 60079-11: 2012 EN 60079-15: 2010 EN 60079-7: 2015 EN 60079-7:2015+A1:2018	UK: Sira Certification Unit 6, Hawarden Industrial Park, Hawarden, Deeside CH5 3US, United Kingdom Registration Number: 0518 EU: CSA Group Netherlands B.V. Utrechtseweg 310, 6812 AR, Arnhem, Netherlands Registration Number: 2813	R70180771A	Sira 15 ATEX4198X
120M8155-01	EN 60079-0 : 2012/A11: 2013 EN 60079-11: 2012 EN 60079-15: 2010 EN 60079-7:2015+A1:2018	UK: Intertek Testing & Certification Limited Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB, United Kingdom Registration Number: 0359 EU: Intertek Italia S.p.A. Via Miglioli 2/A - 20063 Cernusco sul Naviglio Milano - Italy Registration Number: 2575	102729140CRT-001a-d	ITS16ATEX401429X

Markings and Temperature Constraints

Equipment	Marking	Temperature Ratings	
3500 Modules, excluding 120M8155-01	 II 3(1) G, II 3 G	T4 @ Ta = -20°C to 65°C	
	Ex nA nC ic [ia Ga] IIC T4 Gc		With Internal Barriers
	Ex nA nC ic IIC T4 Gc		Without Internal Barriers
	Ex ec nC ic [ia Ga] IIC T4 Gc		With Internal Barriers
	Ex ec nC ic IIC T4 Gc		Without Internal Barriers
120M8155-01	 II 3 G Ex ic nA IIC T4 Gc; IP54	T4 @ Ta = -20°C to 65°C	

Electrical Data Relay Contact Rating (when installed in hazardous areas):

3500/32 Relay Rated:	30 V, 2 A
All Other Relays Rated:	30 V, 5 A

Entity Parameters

Zone 0/1 Entity Parameters (Internal Barriers only)

Internal Barriers	Barrier Part Number	Circuit	U_O (V)	R_{min} (Ω)	I_O (mA)
Proximitor & Accelerometer	135470-01	Power	26.25	237.6	110.48
		Signal	13.65	4985	2.74
Velomitor	135471-01	B	26.25	297	88.39
Process Variable	137101-01	Power	26.78	297	90.17
		Signal	9.56	50.58	189.01
Temperature	135472-01	B	5.36	133.25	40.23
		C	6.51	133.25	48.86

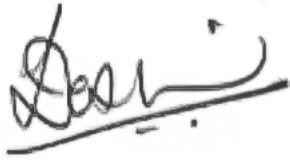
Combined Entity Parameters for Gas Group IIC, Internal Barriers

Internal Barriers	Barrier Part Number	U_O (V)	I_O (mA)	P_O (mW)	C_O (μ F)	L_O (mH)
Proximitor & Accelerometer	135470-01	27.45	113.24	726.96	0.086	2.77
Velomitor	135471-01	26.25	88.39	580.02	0.097	4.55
Process Variable	137101-01	27.98	279.34	842.89	0.083	0.455
Temperature	135472-01	7.71	89.17	132.41	9.3	4.55

ATEX Special Conditions of Safe Use

3500 Modules, excluding 120M8155-01	<ul style="list-style-type: none"> The Model 3500 (both the rack itself and any included displays) must be housed in a suitable enclosure that provides a degree of protection of at least IP54 and meets the relevant enclosure requirements of EN 60079-0. For units with internal barriers: Because the barrier circuits are referenced to earth, they do not meet the dielectric strength requirement specified in EN 60079-15: 2010. This shall be considered during final installation. For internal barriers: Installation is to be in accordance with control drawing 138547. Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to equipment. The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.
120M8155-01	<ul style="list-style-type: none"> The final display installation must meet IP54 rated enclosure per IEC 60079-0.

Signatory



3/5/2021

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