

# General Specifications

## ProSafe-RS/ProSafe-RS Lite Standards Compliant Models

### GS 32P01B60-01EN

#### ■ GENERAL

The hardware components of the ProSafe-RS and ProSafe-RS Lite comply with the standards below.

##### Functional Safety Standards

IEC 61508, IEC 61511-1, IEC 62061

##### Programmable Controllers Standards

IEC 61131-2 (\*1) (\*2) (\*3)

##### Application Standards (\*1)

EN 54-2 (\*2), EN 298 (\*3) (\*4), EN 50156-1, NFPA85, NFPA86, NFPA72

##### Safety Standards (\*5)

##### EMC Conformity Standards (\*5)

##### Standards for Hazardous Location Equipment (\*5)

##### Marine Standards (\*5)

##### Environmental Standards (\*6)

EU Directive of "Restriction of the use of the certain hazardous substances in electrical and electronics equipment (RoHS)" (\*7).

"Administration on the Control of Pollution Caused by Electrical and Electronic Products" in the People's Republic of China (\*8).

"UAE Cabinet Decision No. 10 of 2017 (UAE RoHS)" in United Arab Emirates (\*9).

UK RoHS Regulation (\*10)

- \*1: Except for the case of using S2BN1D in combination with S2MMM843 or S2MDV843 of style S2 or later, a lightning arrester or the like is required to meet this surge immunity standard.
- \*2: 24 V DC and 48 V DC field power to DI and DO shall not be provided directly from a DC distribution network. The field power supply cable length must be 30 m or less.
- \*3: Where the system power uses 24 V DC (SPW484, S2PW504, L1PW484), use an external uninterruptible power supply (UPS).
- \*4: 24 V DC and 48 V DC field power to DI and DO shall not be provided directly from a DC distribution network. The field power supply cable length must be 10 m or less.
- \*5: Individual Standards numbers and acquisition conditions of Safety Standards, EMC Conformity Standards, Standards for Hazardous Location Equipment and Marine Standards are shown in Table "List of Acquisition Conditions for Conformity Standards" below.
- \*6: ProSafe-RS and ProSafe-RS Lite safety instrumented system is intended to be sold and used only as a part of equipment which is excluded from EU WEEE (Waste Electrical, and Electronic Equipment) Directive and UK WEEE Regulation, such as large-scale stationary industrial tools, a large-scale fixed installation and so on, and therefore, subjected to the exclusion from the scope of EU WEEE Directive and UK WEEE Regulation.
- \*7: ProSafe-RS and ProSafe-RS Lite models compliant with the CE Marking also comply with directive.
- \*8: The product information required by the law is available on the Yokogawa's web site:  
<http://www.yokogawa.com/dcs/CNRoHS/>
- \*9: ProSafe-RS/ProSafe-RS Lite models compliant with the CE Marking also comply with this law. For S2BN4D and S2BN5D, refer to the GS 32P06P10-01EN "Base Plates for Barrier (for N-IO)".
- \*10: ProSafe-RS and ProSafe-RS Lite models compliant with the UKCA Marking also comply with the regulation.

Table List of Acquisition Conditions for Conformity Standards (1/2)

Category	Standard		Acquisition conditions				
			Except for N-IO Node			N-IO Node (*16)	
			100-120 V AC	220-240 V AC	24 V DC	100-240 V AC	24 V DC
Safety Standards (*1) (*2)	CSA	CAN/CSA-C22.2 No. 61010-1	X	–	X	X	X
		CAN/CSA-C22.2 No.61010-2-201	X	–	X	X	X
		CAN/CSA-C22.2 No. 61010-2-030 (*10)	X	–	X	X	X
	CE Marking Low Voltage Directive (*5)	EN 61010-1	X	X	X	X	X
		EN IEC 61010-2-201	X	X	X	X	X
		EN IEC 61010-2-030 (*10)	X	X	X	X	X
	EN 60825-1 (*11)	X	X	X	X	X	
	EAC Marking	CU TR 004	X	X	X	X	X
	Morocco Compliance Marking (C <sub>F</sub> Marking) Low Voltage Directive (*5)	NM EN 61010 1	X	X	X	X	X
		NM EN 61010 2 201	X	X	X	X	X
		NM EN 61010 2 030 (*10)	X	X	X	X	X
		NM EN 60825 1 (*11)	X	X	X	X	X
	UKCA Marking (*5) Safety Regulation	EN 61010-1	X	X	X	X	X
		EN IEC 61010-2-201	X	X	X	X	X
		EN IEC 61010-2-030 (*10)	X	X	X	X	X
		EN 60825-1 (*11)	X	X	X	X	X
EMC Conformity Standards (*1) (*3) (*13)	CE Marking EMC Directive	EN 55011 Class A Group 1 (*12)	X	X	X	X	X
		EN 61000-6-2	X	X	X	X	X
		EN 61000-3-2 (*14)	–	X	–	X (*17)	–
		EN 61000-3-3 (*15)	–	X	–	X (*17)	–
	RCM	EN 55011 Class A Group 1 (*12)	X	X	X	X	X
	KC Marking	Korea Electromagnetic Conformity Standard	X	X	X	X	X
	EAC Marking	CU TR 020	X	X	X	X	X
	Functional Safety	IEC 61326-3-1	X	X	X	X	X (*18)
	Morocco Compliance Marking (C <sub>F</sub> Marking) EMC directive	NM EN 55011 Class A Group 1 (*12)	X	X	X	X	X
		NM EN 61000 6 2	X	X	X	X	X
		NM EN 61000 3 2 (*14)	–	X	–	X (*17)	–
		NM EN 61000 3 3 (*15)	–	X	–	X (*17)	–
	UKCA Marking EMC Regulation	EN 55011 Class A Group 1 (*12)	X	X	X	X	X
EN 61000-6-2		X	X	X	X	X	
EN 61000-3-2 (*14)		–	X	–	X (*17)	–	
EN 61000-3-3 (*15)		–	X	–	X (*17)	–	

**Table List of Acquisition Conditions for Conformity Standards (2/2)**

Category	Standard		Acquisition conditions				
			Except for N-IO Node			N-IO Node (*16)	
			100-120 V AC	220-240 V AC	24 V DC	100-240 V AC	24 V DC
Standards for Hazardous Location Equipment (*4)	US (FM) Nonincendive (*6)	FM3600:2018 FM3611:2018 FM3810:2018 ANSI/UL 121201 Ed. 9 (2019) ANSI/UL 61010-1 Ed. 3 (2012) ANSI/UL 61010-2-030 Ed. 1 (2012) ANSI/UL 61010-2-201 Ed. 1 (2014)	X	X	X	X	X
	Canada (FM) Non-Incendive (*7)	C22.2 No. 213-17	X	-	X	X	X
		CAN/CSA-C22.2 No. 61010-1-12					
		CAN/CSA-IEC 61010-2-201:14					
		CAN/CSA-C22.2 No. 61010-2-030-12					
	ATEX Ex "ec" (*8) (*21)	EN IEC 60079-0:2018	-	-	X	-	X
		EN 60079-15:2010	-	-	X	-	X
		EN IEC 60079-7:2015 + A1:2018	-	-	X	-	X
		EN IEC 60079-15:2019	-	-	X	-	X
	IECEx Ex "ec" (*9)	IEC 60079-0 Ed. 7.0 (2017)	-	-	X	-	X
		IEC 60079-7 Ed. 5.1 (2017)					
		IEC 60079-15 Ed. 5.0 (2017)					
	Emirates Conformity Assessment Scheme (ECAS-Ex) Ex "ec" (*19)	IEC 60079-0 Ed. 7.0 (2017)	-	-	X	-	X
		IEC 60079-7 Ed. 5.1 (2017)					
		IEC 60079-15 Ed. 5.0 (2017)					
		UAE.S IEC 60079-0					
		UAE.S IEC 60079-7					
	UKEX Ex "ec" (*20) (*21)	EN IEC 60079-0:2018	-	-	X	-	X
		EN IEC 60079-7:2015 + A1:2018	-	-	X	-	X
		EN 60079-15:2010	-	-	X	-	X
EN IEC 60079-15:2019		-	-	X	-	X	
Marine Standards	ABS (American Bureau of Shipping)		X	X	X	X	X
	BV (Bureau Veritas)		X	X	X	X	X
	LR (Lloyd's Register)		X	X	X	X	X
	DNV		X	X	X	X	X

X: Compliant      -: Non-compliant

Note: For details on S2NN70D (System model: S2ZN70D), S2NN60D (System model: S2ZN60D), S2CB60, and A2CX100, refer to GS "N-IO field enclosure" (GS 32P06Q10-01EN).





\*1: For the rack mountable devices, DIN rail mountable devices, and wall mountable devices to meet the Safety Standards and EMC Standards, the devices must be installed in a lockable metal cabinet. The cabinet must conform to IEC/EN/CSA 61010-2-201 or provide degrees of protection IP3X or above and IK09 or above.

\*2: ProSafe-RS and ProSafe-RS Lite measurement input corresponds to the measurement category O (Other) based on IEC/EN 61010-2-030 and CAN/CSA-C 22.2 No. 61010-2-030. The measurement category I defined in IEC/EN 61010-1 and CAN/CSA-C 22.2 No. 61010-1 has been changed to O (Other). For details, see "ProSafe-RS Installation Guidance" (TI 32P01J10-01EN) and "ProSafe-RS Lite Installation Guidance" (TI 32P51J10-01EN).

\*3: 24 V DC and 48 V DC field power to DI and DO shall not be provided directly from a DC distribution network. The field power supply cable length must be 30 m or less.

\*4: For S2BN4D, S2BN5D, refer to the GS "Base Plates for Barrier (for N-IO)" (GS 32P06P10-01EN).

\*5: When a product is out of the scope of Low Voltage Directive (LVD), the conformity to LVD is not declared. However, the conformity to this standard is secured.

- \*6: Explosion-proof specification for US (FM) NI:  
Class I, Division 2, Groups A, B, C and D Temperature code T4  
There are specific conditions of use to comply with US (FM) NI. For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*7: Explosion-proof specification for Canada (FM) NI:  
Class I, Division 2, Groups A, B, C and D Temperature code T4  
There are specific conditions of use to comply with Canada (FM) NI. For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*8: Explosion-proof specification for ATEX Ex "ec":  
 II 3G Ex ec nC II C T4 Gc X  
SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SBD2D, SBD3D, SBD4D, S1BB4D, L1NB10D, and L1SC70□ are compliant.  
 II 3G Ex ec IIC T4 Gc X  
The products other than SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SBD2D, SBD3D, SBD4D, S1BB4D, L1NB10D, and L1SC70□ are compliant.  
 "Type of Protection" of the below products is indicated together with modules installed in.  
SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SNT10D, L1SC70□, L1NB10D, and L1NT10D are compliant.  
"X" indicates specific condition of use. For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*9: Explosion-proof specification for IECEx Ex "ec":  
IECEX FMG 16.0019X  
Ex ec IIC T4 Gc  
The products other than SBD2D, SBD3D, SBD4D, and S1BB4D are compliant.  
IECEX FMG 16.0019X  
Ex ec nC IIC T4 Gc  
SBD2D, SBD3D, SBD4D, and S1BB4D are compliant.  
There are specific conditions of use to comply with IECEx Ex "ec". For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*10: SAI143, SAV144, SAT145, SAR145, S2MMM843, L1AI143, L1AV144, L1AT145, and L1AR145 are in the scope of this standard.
- \*11: Only SNT401, SNT411, SNT501, SNT511, S2EN501, L1NT401, L1NT411, L1NT501, and L1NT511 (Only optical ESB Bus) are compliant with safety of laser products.
- \*12: A Class A hardware device is designed for use in the industrial environment. Please use this device in the industrial environment only.
- \*13: Except for the case of using S2BN1D, S2NN70D, and S2NN60D in combination with S2MMM843 or S2MDV843 of style S2 or later, a lightning arrester or the like is required to meet this surge immunity standard.
- \*14: An external device such as a power unit with harmonic current neutralizer and an active harmonics conditioner must be connected to meet this harmonic current emission standard.
- \*15: The specified limits of voltage drop across wiring must be satisfied to meet this standard.
- \*16: N-IO Node consists of a node interface unit and N-IO I/O units.
- \*17: Only the 100-120 V AC power supply specification is not compliant. Only the 200-220 VAC power supply specification is compliant.
- \*18: Where the system power uses 24 V DC (S2PW504), use an external uninterruptible power supply (UPS).
- \*19: Explosion-proof specification for ECAS-Ex Ex "ec":  
Ex ec IIC T4 Gc  
The products other than SBD2D, SBD3D, SBD4D, and S1BB4D are compliant.  
Ex ec nC IIC T4 Gc  
SBD2D, SBD3D, SBD4D, and S1BB4D are compliant.  
There are specific conditions of use to comply with ECAS-Ex Ex "ec". For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*20: Explosion-proof specification for UKEX Ex "ec":  
 II 3G Ex ec nC II C T4 Gc X  
SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SBD2D, SBD3D, SBD4D, S1BB4D, L1NB10D, and L1SC70□ are compliant.  
 II 3G Ex ec IIC T4 Gc X  
The products other than SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SBD2D, SBD3D, SBD4D, S1BB4D, L1NB10D, and L1SC70□ are compliant.  
 "Type of Protection" of the below products is indicated together with modules installed in.  
SSC50□, SSC57□, SSC60□, S2SC70□, SNB10D, SNT10D, L1SC70□, L1NB10D, and L1NT10D are compliant.  
"X" indicates specific condition of use. For details, refer to the TI "Explosion Protection" (TI 32S01J30-01E).
- \*21: To follow the ATEX Directive or UKEX Regulation for use in potentially explosive atmospheres, at least one copy of explosion protection manual (IM 32Q01J30-31E) is required.  
This IM can be delivered by specifying option code "/ATDOC".  
When ordering, select an option code of "/ATDOC" for one of models with "/ATDOC" adopted for the project.

## ■ LIST OF CONFORMITY STANDARDS

Conformity standards of each product are shown in Table “List of Conformity Standard”.

Table List of Conformity Standards 1 (1/4)

Model	Safety Standards					EMC Conformity Standards					
	CSA	CE	EAC	C <sub>p</sub>	UKCA	CE	RCM	KC	EAC	C <sub>p</sub>	UKCA
S2SC70S	X	X	X	X	X	X	X	X	X	X	X
S2SC70D	X	X	X	X	X	X	X	X	X	X	X
S2EN402	X	X	X	X	X	X	X	X	X	X	X
S2EN404	X	X	X	X	X	X	X	X	X	X	X
S2NN30D	X	X (*1)	X	X (*1)	X (*1)	X (*1)	X	X	X	X (*1)	X (*1)
S2PW503	X	X	X	X	X	X	X	X	X	X	X
S2PW504	X	X	X	X	X	X	X	X	X	X	X
S2EN501	X	X	X	X	X	X	X	X	X	X	X
A2BM4	X	X	X	X	X	X	X	NA	X	X	X
S2KLF10	X	X	X	X	X	X	X	X	X	X	X
S2KPB10	X	X	X	X	X	X	X	X	X	X	X
S2ZN1D	NA	X (*2)	NA	X (*2)	X (*2)	X (*2)	NA	NA	NA	X (*2)	X (*2)
S2MMM843	X	X	X	X	X	X	X	X	X	X	X
S2MDV843	X	X	X	X	X	X	X	X	X	X	X
S2BN1D	X	X	X	X	X	X	X	NA	X	X	X
S2ZN4D	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)
S2BN4D	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)
S2ZN5D	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)
S2BN5D	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)	(*3)
S2ZN70D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2NN70D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2ZN60D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2NN60D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2CB60	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
A2CX100	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
VI702	NA	NA	NA	NA	NA	X	X	X	X	X	X
SSC60S	X	X	X	X	X	X	X	X	X	X	X
SSC60D	X	X	X	X	X	X	X	X	X	X	X
SSC50S-□□□□3 SSC50S-□□□□4	X	X	X	X	X	X	X	X	X	X	X
SSC50D-□□□□3 SSC50D-□□□□4	X	X	X	X	X	X	X	X	X	X	X
SSC57S-□□□□3 SSC57S-□□□□4	X	X	X	X	X	X	X	X	X	X	X
SSC57D-□□□□3 SSC57D-□□□□4	X	X	X	X	X	X	X	X	X	X	X
SNB10D	X	X	X	X	X	X	X	X	X	X	X
SNT10D	X	X	X	X	X	X	X	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

\*1: S2NN30D is compliant to the standard, which includes S2PW503, S2PW504, S2EN501, S2KLF10, and S2KPB10 as its components.

\*2: S2ZN1D is compliant to the standard including its components. For the components of S2ZN1D, refer to the GS “Base Plates (for N-IO)” (GS 32P06K20-01EN).

\*3: Refer to the GS “Base Plates for Barrier (for N-IO)” (GS 32P06P10-01EN).

\*4: Refer to the GS “N-IO field enclosure” (GS 32P06Q10-01EN).

Table List of Conformity Standards 1 (2/4)

Model	Safety Standards					EMC Conformity Standards					
	CSA	CE	EAC	C <sub>p</sub>	UKCA	CE	RCM	KC	EAC	C <sub>p</sub>	UKCA
SAI143	X	X	X	X	X	X	X	X	X	X	X
SAV144	X	X	X	X	X	X	X	X	X	X	X
SAT145	X	X	X	X	X	X	X	X	X	X	X
SAR145	X	X	X	X	X	X	X	X	X	X	X
SAI533	X	X	X	X	X	X	X	X	X	X	X
SDV144	X	X	X	X	X	X	X	X	X	X	X
SCB100	X	X	X	X	X	X	X	X	X	X	X
SCB110	X	X	X	X	X	X	X	X	X	X	X
SDV521	X	X	X	X	X	X	X	X	X	X	X
SDV526	X	X	X	X	X	X	X	X	X	X	X
SDV531	X	X	X	X	X	X	X	X	X	X	X
SDV53A	X	X	X	X	X	X	X	X	X	X	X
SDV541	X	X	X	X	X	X	X	X	X	X	X
ALR111	X	X	X	X	X	X	X	X	X	X	X
ALR121	X	X	X	X	X	X	X	X	X	X	X
ALE111	X	X	X	X	X	X	X	X	X	X	X
S2LP131	X	X	X	X	X	X	X	X	X	X	X
SEC402	X	X	X	X	X	X	X	X	X	X	X
SEC401	X	X	X	X	X	X	X	X	X	X	X
SNT401	X	X	X	X	X	X	X	X	X	X	X
SNT501	X	X	X	X	X	X	X	X	X	X	X
SNT411	X	X	X	X	X	X	X	X	X	X	X
SNT511	X	X	X	X	X	X	X	X	X	X	X
SEA4D	X	X	X	X	X	X	X	X	X	X	X
SED2D	X	X	X	X	X	X	X	X	X	X	X
SED3D	X	X	X	X	X	X	X	X	X	X	X
SED4D	X	X	X	X	X	X	X	X	X	X	X
SWD2D	X	X	X	X	X	X	X	X	X	X	X
SBT4D	X	X	X	X	X	X	X	X	X	X	X
SBR4D	X	X	X	X	X	X	X	X	X	X	X
SBA4D	X	X	X	X	X	X	X	X	X	X	X
S1BB4D	X	X	X	X	X	X	X	NA	X	X	X
SBD2D	X	X	X	X	X	X	X	X	X	X	X
SBD3D	X	X	X	X	X	X	X	X	X	X	X
SBD4D	X	X	X	X	X	X	X	X	X	X	X
SRM53D	X	X	X	X	X	X	X	X	X	X	X
SRM54D	X	X	X	X	X	X	X	X	X	X	X
SBM54D	X	X	—	X	X	X	X	X	—	X	X
STA4S	X	X	X	X	X	X	X	NA	X	X	X
STA4D	X	X	X	X	X	X	X	NA	X	X	X
STB4S	X	X	X	X	X	X	X	NA	X	X	X

X: Compliant

—: Non-compliant

NA: Not Applicable

Table List of Conformity Standards 1 (3/4)

Model	Safety Standards					EMC Conformity Standards					
	CSA	CE	EAC	C <sub>p</sub>	UKCA	CE	RCM	KC	EAC	C <sub>p</sub>	UKCA
STB4D	X	X	X	X	X	X	X	NA	X	X	X
YCB301	X	X	X	X	X	X	X	NA	X	X	X
KS1	X	X	X	X	X	X	X	NA	X	X	X
AKB331	X	X	X	X	X	X	X	NA	X	X	X
AKB651	X	X	X	X	X	X	X	NA	X	X	X
AKB652	X	X	X	X	X	X	X	NA	X	X	X
AKB611	X	X	X	X	X	X	X	NA	X	X	X
AKB131	X	X	X	X	X	X	X	NA	X	X	X
AKB132	X	X	X	X	X	X	X	NA	X	X	X
AKB135	X	X	X	X	X	X	X	NA	X	X	X
AKB136	X	X	X	X	X	X	X	NA	X	X	X
AKB161	X	X	X	X	X	X	X	NA	X	X	X
AKB162	X	X	X	X	X	X	X	NA	X	X	X
S2CP471	X	X	X	X	X	X	X	X	X	X	X
SCP461	X	X	X	X	X	X	X	X	X	X	X
SCP451-□3	X	X	X	X	X	X	X	X	X	X	X
SSB401	X	X	X	X	X	X	X	X	X	X	X
SPW481	X	X	X	X	X	X	X	X	X	X	X
SPW482	-	X	X	X	X	X	X	X	X	X	X
SPW484	X	X	X	X	X	X	X	X	X	X	X
AIP602	X	X	X	X	X	X	X	X	X	X	X
SYEPD5D	X	X	X	X	X	X	X	X	X	X	X
SYEPD4D	X	X	X	X	X	X	X	X	X	X	X
SYEPD4B	X	X	X	X	X	X	X	X	X	X	X
SYEPA5D	X	X	X	X	X	X	X	X	X	X	X
SYEPA4D	X	X	X	X	X	X	X	X	X	X	X
SYK301	X	X	X	X	X	X	X	NA	X	X	X
SYK501W	X	X	X	X	X	X	X	NA	X	X	X
SYK501	X	X	X	X	X	X	X	NA	X	X	X
SYK101W	X	X	X	X	X	X	X	NA	X	X	X
SYK101	X	X	X	X	X	X	X	NA	X	X	X
SYK502	X	X	X	X	X	X	X	NA	X	X	X
SYPP10	X	X	X	X	X	X	X	NA	X	X	X
S1XEU4D	X	X	-	X	X	X	X	NA	-	X	X
S1XK301	X	X	-	X	X	X	X	NA	-	X	X
S1XK601	X	X	-	X	X	X	X	NA	-	X	X
L1SC70S	X	X	X	X	X	X	X	X	X	X	X
L1SC70D	X	X	X	X	X	X	X	X	X	X	X
L1NB10D	X	X	X	X	X	X	X	X	X	X	X
L1NT10D	X	X	X	X	X	X	X	X	X	X	X
L1AI143	X	X	X	X	X	X	X	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

Table List of Conformity Standards 1 (4/4)

Model	Safety Standards					EMC Conformity Standards					
	CSA	CE	EAC	C <sub>p</sub>	UKCA	CE	RCM	KC	EAC	C <sub>p</sub>	UKCA
L1AV144	X	X	X	X	X	X	X	X	X	X	X
L1AT145	X	X	X	X	X	X	X	X	X	X	X
L1AR145	X	X	X	X	X	X	X	X	X	X	X
L1AI533	X	X	X	X	X	X	X	X	X	X	X
L1DV144	X	X	X	X	X	X	X	X	X	X	X
L1DV521	X	X	X	X	X	X	X	X	X	X	X
L1DV526	X	X	X	X	X	X	X	X	X	X	X
L1DV531	X	X	X	X	X	X	X	X	X	X	X
L1DV53A	X	X	X	X	X	X	X	X	X	X	X
L1DV541	X	X	X	X	X	X	X	X	X	X	X
L1EC402	X	X	X	X	X	X	X	X	X	X	X
L1EC401	X	X	X	X	X	X	X	X	X	X	X
L1NT401	X	X	X	X	X	X	X	X	X	X	X
L1NT501	X	X	X	X	X	X	X	X	X	X	X
L1NT411	X	X	X	X	X	X	X	X	X	X	X
L1NT511	X	X	X	X	X	X	X	X	X	X	X
L1TA4S	X	X	X	X	X	X	X	NA	X	X	X
L1TA4D	X	X	X	X	X	X	X	NA	X	X	X
L1TB4S	X	X	X	X	X	X	X	NA	X	X	X
L1TB4D	X	X	X	X	X	X	X	NA	X	X	X
L1CP471	X	X	X	X	X	X	X	X	X	X	X
L1SB401	X	X	X	X	X	X	X	X	X	X	X
L1PW481	X	X	X	X	X	X	X	X	X	X	X
L1PW482	-	X	X	X	X	X	X	X	X	X	X
L1PW484	X	X	X	X	X	X	X	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

Table List of Conformity Standards 2 (1/4)

Model	Standard for Hazardous Location Equipment (*1)					
	US (FM) Nonincendive	Canada (FM) Non-Incendive	ATEX Ex "ec" (*8)	IECEx Ex "ec" (*8)	ECAS-Ex Ex "ec" (*8)	UKEX Ex "ec" (*8)
S2SC70S	X	–	X	X	X	X
S2SC70D	X	–	X	X	X	X
S2EN402	X	–	X	X	X	X
S2EN404	X	–	X	X	X	X
S2NN30D	X	X	X (*2)	X	X	X (*2)
S2PW503	X	X	–	–	–	–
S2PW504	X	X	X	X	X	X
S2EN501	X	X	X	X	X	X
A2BM4	X	X	X	X	X	X
S2KLF10	X	X	X	X	X	X
S2KPB10	X	X	X	X	X	X
S2ZN1D	NA	NA	X (*3)	NA	NA	X (*3)
S2MMM843	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)
S2MDV843	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)
S2BN1D	X	X	X	X	X	X
S2ZN4D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2BN4D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2ZN5D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2BN5D	(*4)	(*4)	(*4)	(*4)	(*4)	(*4)
S2ZN70D	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
S2NN70D	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
S2ZN60D	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
S2NN60D	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
S2CB60	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
A2CX100	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
VI702	–	–	–	–	–	–
SSC60S	X	–	X	–	–	X
SSC60D	X	–	X	–	–	X
SSC50S-□□□□3 SSC50S-□□□□4	X	–	X	X	X	X
SSC50D-□□□□3 SSC50D-□□□□4	X	–	X	X	X	X
SSC57S-□□□□3 SSC57S-□□□□4	X	–	X	X	X	X
SSC57D-□□□□3 SSC57D-□□□□4	X	–	X	X	X	X
SNB10D	X	X	X	X	X	X

X: Compliant      –: Non-compliant      NA: Not Applicable

\*1: For selecting the right products for explosion protection, please refer to TI 32S01J30-01E without fail.

\*2: S2NN30D is compliant to the standard, which includes S2PW504, and S2EN501 as its components.

\*3: S2ZN1D is compliant to the standard including its components. For the components of S2ZN1D, refer to the GS "Base Plates (for N-IO)" (GS 32P06K20-01EN).

\*4: Refer to the GS "Base Plates for Barrier (for N-IO)" (GS 32P06P10-01EN).

\*5: Refer to the GS "N-IO field enclosure" (GS 32P06Q10-01EN).

\*6: S2MMM843, S2MDV843, SDV144, or L1DV144 is compliant to the standard, which includes SCB100 and SCB110 as its accessory.

\*8: The products which use sealed devices have also comply with Type "nC". For detail, refer to Explosion Protection (TI 32S01J30-01E)

Table List of Conformity Standards 2 (2/4)

Model	Standard for Hazardous Location Equipment (*1)					
	US (FM) Nonincendive	Canada (FM) Non-Incendive	ATEX Ex “ec” (*8)	IECEx Ex “ec” (*8)	ECAS-Ex Ex “ec” (*8)	UKEX Ex “ec” (*8)
SNT10D	X	X	X	X	X	X
SAI143	X	X	X	X	X	X
SAV144	X	X	X	X	X	X
SAT145	X	X	X	X	X	X
SAR145	X	X	X	X	X	X
SAI533	X	X	X	X	X	X
SDV144	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)
SCB100	X (*7)	X (*7)	X (*7)	X (*7)	X (*7)	X (*7)
SCB110	X (*7)	X (*7)	X (*7)	X (*7)	X (*7)	X (*7)
SDV521	X	X	X	X	X	X
SDV526	–	–	–	–	–	–
SDV531	X	X	X	X	X	X
SDV53A	X	X	X	X	X	X
SDV541	X	X	X	X	X	X
ALR111	X	–	X	X	X	X
ALR121	X	–	X	X	X	X
ALE111	X	–	X	X	X	X
S2LP131	X	X	X	X	X	X
SEC402	X	–	X	X	X	X
SEC401	X	–	X	X	X	X
SNT401	X	X	X	X	X	X
SNT501	X	X	X	X	X	X
SNT411	X	X	X	X	X	X
SNT511	X	X	X	X	X	X
SEA4D	X	X	X	X	X	X
SED2D	X	X	X	X	X	X
SED3D	X	X	X	X	X	X
SED4D	X	X	X	X	X	X
SWD2D	–	–	–	–	–	–
SBT4D	X	X	X	X	X	X
SBR4D	X	X	X	X	X	X
SBA4D	X	X	X	X	X	X
S1BB4D	X	X	X	X	X	X
SBD2D	X	X	X	X	X	X
SBD3D	X	X	X	X	X	X
SBD4D	X	X	X	X	X	X
SRM53D	–	–	–	–	–	–
SRM54D	–	–	–	–	–	–

X: Compliant      –: Non-compliant      NA: Not Applicable

\*1: For selecting the right products for explosion protection, please refer to TI 32S01J30-01E without fail.

\*6: S2MMM843, S2MDV843, SDV144, or L1DV144 is compliant to the standard, which includes SCB100 and SCB110 as its accessory.

\*7: SCB100 and SCB110 are compliant to the standard as accessories of S2MMM843, S2MDV843, SDV144, or L1DV144..

\*8: The products which use sealed devices have also comply with Type “nC”. For detail , refer to Explosion Protection (TI 32S01J30-01E)

Table List of Conformity Standards 2 (3/4)

Model	Standard for Hazardous Location Equipment (*1)					
	US (FM) Nonincendive	Canada (FM) Non-Incendive	ATEX Ex "ec" (*8)	IECEX Ex "ec" (*8)	ECAS-Ex Ex "ec" (*8)	UKEX Ex "ec" (*8)
SBM54D	-	-	-	-	-	-
STA4S	X	X	X	X	X	X
STA4D	X	X	X	X	X	X
STB4S	X	X	X	X	X	X
STB4D	X	X	X	X	X	X
YCB301	X	X	X	X	X	X
KS1	X	X	X	X	X	X
AKB331	X	X	X	X	X	X
AKB651	X	X	X	X	X	X
AKB652	-	-	-	-	-	-
AKB611	X	X	X	X	X	X
AKB131	X	-	X	X	X	X
AKB132	X	-	X	X	X	X
AKB135	X	-	X	X	X	X
AKB136	X	-	X	X	X	X
AKB161	X	-	X	X	X	X
AKB162	X	-	X	X	X	X
S2CP471	X	-	X	X	X	X
SCP461	X	-	X	X	X	X
SCP451-E3	X	-	X	X	X	X
SSB401	X	X	X	X	X	X
SPW481	X	X	-	-	-	-
SPW482	X	-	-	-	-	-
SPW484	X	X	X	X	X	X
AIP602	X	-	X	X	X	X
SYEPD5D	-	-	-	-	-	-
SYEPD4D	-	-	-	-	-	-
SYEPD4B	-	-	-	-	-	-
SYEPA5D	-	-	-	-	-	-
SYEPA4D	-	-	-	-	-	-
SYK301	-	-	-	-	-	-
SYK501W	-	-	-	-	-	-
SYK501	-	-	-	-	-	-
SYK101W	-	-	-	-	-	-
SYK101	-	-	-	-	-	-
SYK502	-	-	-	-	-	-
SYPP10	-	-	-	-	-	-
S1XEU4D	-	-	-	-	-	-
S1XK301	-	-	-	-	-	-
S1XK601	-	-	-	-	-	-
L1SC70S	X	-	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

\*1: For selecting the right products for explosion protection, please refer to TI 32S01J30-01E without fail.

\*8: The products which use sealed devices have also comply with Type "nC". For detail, refer to Explosion Protection (TI 32S01J30-01E)

Table List of Conformity Standards 2 (4/4)

Model	Standard for Hazardous Location Equipment (*1)					
	US (FM) Nonincendive	Canada (FM) Non-Incendive	ATEX Ex “ec” (*8)	IECEX Ex “ec” (*8)	ECAS-Ex Ex “ec” (*8)	UKEX Ex “ec” (*8)
L1SC70D	X	–	X	X	X	X
L1NB10D	X	X	X	X	X	X
L1NT10D	X	X	X	X	X	X
L1AI143	X	X	X	X	X	X
L1AV144	X	X	X	X	X	X
L1AT145	X	X	X	X	X	X
L1AR145	X	X	X	X	X	X
L1AI533	X	X	X	X	X	X
L1DV144	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)	X (*6)
L1DV521	X	X	X	X	X	X
L1DV526	–	–	–	–	–	–
L1DV531	X	X	X	X	X	X
L1DV53A	X	X	X	X	X	X
L1DV541	X	X	X	X	X	X
L1EC402	X	–	X	X	X	X
L1EC401	X	–	X	X	X	X
L1NT401	X	X	X	X	X	X
L1NT501	X	X	X	X	X	X
L1NT411	X	X	X	X	X	X
L1NT511	X	X	X	X	X	X
L1TA4S	X	X	X	X	X	X
L1TA4D	X	X	X	X	X	X
L1TB4S	X	X	X	X	X	X
L1TB4D	X	X	X	X	X	X
L1CP471	X	–	X	X	X	X
L1SB401	X	X	X	X	X	X
L1PW481	X	X	–	–	–	–
L1PW482	X	–	–	–	–	–
L1PW484	X	X	X	X	X	X

X: Compliant      –: Non-compliant      NA: Not Applicable

\*1: For selecting the right products for explosion protection, please refer to the TI “Explosion Protection” (TI 32S01J30-01E) without fail.

\*6: S2MMM843, S2MDV843, SDV144, or L1DV144 is compliant to the standard, which includes SCB100 and SCB110 as its accessory.

\*8: The products which use sealed devices have also comply with Type “nC”. For detail , refer to the TI “Explosion Protection” (TI 32S01J30-01E)

Table List of Conformity Standards 3 (1/5)

Model	Marine Standards			
	ABS (American Bureau of Shipping)	BV (Bureau Veritas)	LR (Lloyd's Register)	DNV
S2SC70S (*1)	X	X	X	X
S2SC70D (*1)	X	X	X	X
S2EN402	X	X	X	X
S2EN404	X	X	X	X
S2NN30D (*2) (*3)	X	X	X	X
S2PW503	X	X	X	X
S2PW504	X	X	X	X
S2EN501	X	X	X	X
A2BM4	X	X	X	X
S2KLF10	X	X	X	NA (*18)
S2KPB10	X	X	X	NA (*18)
S2MMM843	X	X	X	X
S2MDV843	X	X	X	X
S2DCV02	X	X	X	X
S2BN1D (*4)	X	X	X	X
S2ZN4D	(*5)	(*5)	(*5)	(*5)
S2BN4D	(*5)	(*5)	(*5)	(*5)
S2ZN5D	(*5)	(*5)	(*5)	(*5)
S2BN5D	(*5)	(*5)	(*5)	(*5)
S2ZN70D	(*6)	(*6)	(*6)	(*6)
S2NN70D	(*6)	(*6)	(*6)	(*6)
S2ZN60D	(*6)	(*6)	(*6)	(*6)
S2NN60D	(*6)	(*6)	(*6)	(*6)
S2CB60	(*6)	(*6)	(*6)	(*6)
A2CX100	(*6)	(*6)	(*6)	(*6)
VI702	X	X	X	X
SSC60S (*7)	X	X	X	X
SSC60D (*7)	X	X	X	X
SSC50S-□□□□3 (*8) SSC50S-□□□□4 (*8)	X	X	X	X
SSC50D-□□□□3 (*8) SSC50D-□□□□4 (*8)	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

- \*1: S2SC70D-F and S2SC70S-F comply with Marine Standards. S2SC70D-F and S2SC70S-F are compliant to the standard, which includes SPW481, SPW482, SPW484, SCP461 and S2CP471 as its components. S2SC70D-S and S2SC70S-S do not comply with Marine Standards.
- \*2: S2NN30D is compliant to the standard, which includes S2PW503, S2PW504, S2EN501, S2KLF10, and S2KPB10 as its components.
- \*3: S2NN30D-□□□□□□□□□□ does not comply with Marine Standards.
- \*4: S2BN1D-0□□□□□ do not comply with Marine Standards.
- \*5: Refer to the GS "Base Plates for Barrier (for N-IO)" (GS 32P06P10-01EN).
- \*6: Refer to the TI "Installation Guidance for N-IO field enclosure" (TI 30A30A10-01EN).
- \*7: SSC60D-F and SSC60S-F comply with Marine Standards. SSC60D-F and SSC60S-F are compliant to the standard, which includes SPW481, SPW482, SPW484, SCP461 and S2CP471 as its components. SSC60D-S and SSC60S-S do not comply with Marine Standards.
- \*8: SSC50D-F and SSC50S-F comply with Marine Standards. SSC50D-F and SSC50S-F are compliant to the standard, which includes SPW481, SPW482, SPW484, and SCP451-□3 as its components. SSC50D-S and SSC50S-S do not comply with Marine Standards.
- \*18: Although this cable components does not comply with DNV certification as a cable component, it can be used to build the system for DNV certification.

Table List of Conformity Standards 3 (2/5)

Model	Marine Standards			
	ABS (American Bureau of Shipping)	BV (Bureau Veritas)	LR (Lloyd's Register)	DNV
SSC57S-□□□□3 (*9) SSC57S-□□□□4 (*9)	X	X	X	X
SSC57D-□□□□3 (*9) SSC57D-□□□□4 (*9)	X	X	X	X
SNB10D (*10)	X	X	X	X
SNT10D (*11)	X	X	X	X
SAI143 (*12)	X	X	X	X
SAV144	X	X	X	X
SAT145	X	X	X	X
SAR145	X	X	X	X
SAI533	X	X	X	X
SDV144 (*12)	X	X	X	X
SCB100	X	X	X	X
SCB110	X	X	X	X
SDV521 (*12)	X	X	X	X
SDV526	–	–	–	–
SDV531 (*12) (*13)	X	X	X	X
SDV53A	X	X	X	X
SDV541 (*12)	X	X	X	X
SDCV01	X	X	X	X
ALR111	X	X	X	X
ALR121	X	X	X	X
ALE111	X	X	X	X
S2LP131	X	X	X	X
SEC402	X	X	X	X
SEC401	X	X	X	X
SNT401	X	X	X	X
SNT501	X	X	X	X
SNT411	X	X	X	X
SNT511	X	X	X	X
SEA4D	X	X	X	X
SED2D	X	X	X	X
SED3D	X	X	X	X
SED4D	X	X	X	X
SWD2D	–	–	–	–
SBT4D	X	X	X	X
SBR4D	X	X	X	X

X: Compliant      –: Non-compliant      NA: Not Applicable

\*9: SSC57D-F and SSC57S-F comply with Marine Standards. SSC57D-F and SSC57S-F are compliant to the standard, which includes SPW481, SPW482, SPW484, and SCP451-□3 as its components. SSC57D-S and SSC57S-S do not comply with Marine Standards.

\*10: SNB10D is compliant to the standard, which includes SPW481, SPW482, SPW484, and SSB401 as its components.

\*11: SNT10D is compliant to the standard, which includes SPW481, SPW482, and SPW484 as its components.

\*12: SA143-H□C, SDV144-S□C, SDV521-S□C, SDV531-L□C, and SDV541-S□C do not comply with Marine Standards.

\*13: SDV531-L style code S3 or later complies with Marine Standards.

Table List of Conformity Standards 3 (3/5)

Model	Marine Standards			
	ABS (American Bureau of Shipping)	BV (Bureau Veritas)	LR (Lloyd's Register)	DNV
SBA4D	X	X	X	X
S1BB4D	X	X	X	X
SBD2D	X	X	X	X
SBD3D	X	X	X	X
SBD4D	X	X	X	X
SRM53D	X	X	X	X
SRM54D	X	X	X	X
SBM54D	X	X	X	X
STA4S	-	-	-	-
STA4D	-	-	-	-
STB4S	-	-	-	-
STB4D	-	-	-	-
YCB301	X	X	X	NA (*18)
KS1	X	X	X	NA (*18)
AKB331	X	X	X	NA (*18)
AKB651	X	X	X	NA (*18)
AKB652	-	-	-	-
AKB611	X	X	X	NA (*18)
AKB131	-	-	-	-
AKB132	-	-	-	-
AKB135	-	-	-	-
AKB136	X	X	X	NA (*18)
AKB161	X	X	X	NA (*18)
AKB162	-	-	-	-
S2CP471	X	X	X	X
SCP461	X	X	X	X
SCP451-□3	X	X	X	X
SSB401	X	X	X	X
SPW481	X	X	X	X
SPW482	X	X	X	X
SPW484	X	X	X	X
AIP602	-	-	-	-
SYEPD5D	-	-	-	-
SYEPD4D	-	-	-	-
SYEPD4B	-	-	-	-
SYEPA5D	-	-	-	-
SYEPA4D	-	-	-	-
SYK301	-	-	-	-
SYK501W	-	-	-	-
SYK501	-	-	-	-

X: Compliant      -: Non-compliant      NA: Not Applicable

\*18: Although this cable components does not comply with DNV certification as a cable component, it can be used to build the system for DNV certification.

Table List of Conformity Standards 3 (4/5)

Model	Marine Standards			
	ABS (American Bureau of Shipping)	BV (Bureau Veritas)	LR (Lloyd's Register)	DNV
SYK101W	-	-	-	-
SYK101	-	-	-	-
SYK502	-	-	-	-
SYPP10	-	-	-	-
S1XEU4D	-	-	-	-
S1XK301	-	-	-	-
S1XK601	-	-	-	-
L1SC70S (*14)	X	X	X	X
L1SC70D (*14)	X	X	X	X
L1NB10D (*15)	X	X	X	X
L1NT10D (*16)	X	X	X	X
L1AI143 (*17)	X	X	X	X
L1AV144	X	X	X	X
L1AT145	X	X	X	X
L1AR145	X	X	X	X
L1AI533	X	X	X	X
L1DV144 (*17)	X	X	X	X
L1DV521 (*17)	X	X	X	X
L1DV526	-	-	-	-
L1DV531 (*17)	X	X	X	X
L1DV53A	X	X	X	X
L1DV541 (*17)	X	X	X	X
L1DCV01	X	X	X	X
L1EC402	X	X	X	X
L1EC401	X	X	X	X
L1NT401	X	X	X	X
L1NT501	X	X	X	X
L1NT411	X	X	X	X
L1NT511	X	X	X	X
L1TA4S	-	-	-	-
L1TA4D	-	-	-	-
L1TB4S	-	-	-	-
L1TB4D	-	-	-	-
L1CP471	X	X	X	X
L1SB401	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

\*14: L1SC70D-F and L1SC70S-F comply with Marine Standards. L1SC70D-F and L1SC70S-F are compliant to the standard, which includes L1PW481, L1PW482, L1PW484, and L1CP471 as its components. L1SC70D-S and L1SC70S-S do not comply with Marine Standards.

\*15: L1NB10D is compliant to the standard, which includes L1PW481, L1PW482, L1PW484, and L1SB401 as its components.

\*16: L1NT10D is compliant to the standard, which includes L1PW481, L1PW482, and L1PW484 as its components.

\*17: L1A143-H□C, L1DV144-S□C, L1DV521-S□C, L1DV531-L□C, and L1DV541-S□C do not comply with Marine Standards.

Table List of Conformity Standards 3 (5/5)

Model	Marine Standards			
	ABS (American Bureau of Shipping)	BV (Bureau Veritas)	LR (Lloyd's Register)	DNV
L1PW481	X	X	X	X
L1PW482	X	X	X	X
L1PW484	X	X	X	X

X: Compliant      -: Non-compliant      NA: Not Applicable

**■ TRADEMARK ACKNOWLEDGMENT**

The names of corporations, organizations, products and logos herein are either registered trademarks or trademarks of Yokogawa Electric Corporation and their respective holders.