



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA24215M

This is to certify that the undernoted products have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	Phoenix Contact GmbH & Co. KG
Place of Manufacturing:	Flachsmarktstr. 8, 32825 Blomberg, Germany
Product description:	Industrial Ethernet Switches
Model:	FL Switch 2200/2300 Series
Approval No.:	19A031
Valid until:	16 July 2029

The details are described in the attached sheets.

Issued at Tokyo on 3 June 2024.

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S. Oishi
General Manager
Machinery Department



Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Product description and reference drawings:

FL-Switch 2200/2300 Series, Power supply 24V DC

Model	Product description	Reference Drawings
FL SWITCH 2205	five 10/100 Mbps RJ45 ports	2702326, 9070600_06-cir
FL SWITCH 2208	eight 10/100 Mbps RJ45 ports	2702327, 9070600_06-cir
FL SWITCH 2207-FX	seven 10/100 Mbps RJ45 ports, one FO port in SC format for multimode	2702328, 9070645_05-cir
FL SWITCH 2207-FX SM	seven 10/100 Mbps RJ45 ports, one FO port in SC format for single mode	2702329, 9077182_02-cir
FL SWITCH 2206-2FX	six 10/100 Mbps RJ45 ports, two FO ports in SC format for multimode	2702330, 9070728_02-cir
FL SWITCH 2206-2FX SM	six 10/100 Mbps RJ45 ports, two FO ports in SC format for single mode	2702331, 9077179_00-cir
FL SWITCH 2206-2FX ST	six 10/100 Mbps RJ45 ports, two FO ports in ST format for multimode	2702332, 9076467_03-cir
FL SWITCH 2206-2FX SM ST	six 10/100 Mbps RJ45 ports, two FO ports in ST format for single mode	2702333, 9076468_03-cir
FL NAT 2208	eight 10/100 Mbps RJ45 ports	2702882, 9070600_06-cir
FL SWITCH 2204-2TC-2SFX	four 10/100 Mbps RJ45 ports, two Fast Ethernet combo ports, and two SFX ports	2702334, 9072862_06-cir
FL SWITCH 2206-2SFX	six 10/100 Mbps RJ45 ports, two Fast Ethernet SFX ports	2702969, 9074479_06-cir
FL SWITCH 2206-2SFX PN	six 10/100 Mbps RJ45 ports, two Fast Ethernet SFX ports, PROFINET mode	1044028, 9074479_06-cir
FL SWITCH 2208 PN	eight 10/100 Mbps RJ45 ports, PROFINET mode	1044024, 9072225_06-cir
FL SWITCH 2308	eight 10/100/1000 Mbps RJ45 ports	2702652, 9072225_06-cir
FL SWITCH 2308 PN	eight 10/100/1000 Mbps RJ45 ports , PROFINET mode	1009220, 9072225_06-cir
FL SWITCH 2304-2GC-2SFP	four 10/100/1000 Mbps RJ45 ports, two Gigabit combo ports, and two SFP ports	2702653, 9072862_06-cir
FL SWITCH 2306-2SFP	six 10/100/1000 Mbps RJ45 ports and two SFP ports	2702970, 9074479_06-cir
FL SWITCH 2306-2SFP PN	six 10/100/1000 Mbps RJ45 ports and two SFP ports, PROFINET mode	1009222, 9074479_06-cir
FL NAT 2304-2GC-2SFP	four 10/100/1000 Mbps RJ45 ports, two GigaBit Ethernet combo ports, and two SFP ports	2702981, 9072862_06-cir
FL SWITCH 2216	sixteen 10/100 Mbps RJ45 ports	2702904, 1002731_05-cir
FL SWITCH 2216 PN	sixteen 10/100 Mbps RJ45 ports, PROFINET mode	1044029, 1002731_05-cir
FL SWITCH 2214-2FX	fourteen 10/100 Mbps RJ45 ports, two FO ports in SC format for multimode	2702905, 1003023_02-cir
FL SWITCH 2214-2FX SM	fourteen 10/100 Mbps RJ45 ports, two FO ports in SC format for singlemode	2702906, 9077179_00-cir
FL SWITCH 2214-2SFX	fourteen 10/100 Mbps RJ45 ports, two Fast Ethernet SFX ports	1006188, 1002731_05-cir
FL SWITCH 2214-2SFX PN	fourteen 10/100 Mbps RJ45 ports, two Fast Ethernet SFX ports, PROFINET mode	1044030, 1039402_02-cir
FL SWITCH 2212-2TC-2SFX	twelve 10/100 Mbps RJ45 ports, two Fast Ethernet combo ports, and two SFX ports	2702907, 1002731_05-cir
FL SWITCH 2316	sixteen 10/100/1000 Mbps RJ45 ports	2702909, 1002794_03-cir
FL SWITCH 2316 PN	sixteen 10/100/1000 Mbps RJ45 ports, PROFINET mode	1031673, 1002794_03-cir

- To be continued -

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Attached sheet -2/3 to the Certificate No. TA24215M

Model	Product description	Reference Drawings
FL SWITCH 2314-2SFP	fourteen 10/100/1000 Mbps RJ45 ports and two SFP ports	1006191, 1002731_05-cir
FL SWITCH 2314-2SFP PN	fourteen 10/100/1000 Mbps RJ45 ports and two SFP ports, PROFINET mode	1031683, 1002731_05-cir
FL SWITCH 2312-2GC-2SFP	twelve 10/100/1000 Mbps RJ45 ports, two Gigabit combo ports, and two SFP ports	2702910, 1003003_02-cir

Small form-factor pluggable (SFP)

Model	Reference Drawings
FL SFP SX2	2702397
FL SFP FE WDM20-A	2702437
FL SFP FE WDM20-B	2702438
FL SFP FE WDM20-SET	2702439
FL SFP WDM10-A	2702440
FL SFP WDM10-B	2702441
FL SFP WDM10-SET	2702442
FL SFP FX	2891081
FL SFP FX SM	2891082
FL SFP SX	2891754
FL SFP LX	2891767
FL SFP LH	2989912

3. Documentation and Test Reports:

E161521E1_2nd Version dated 2 February 2017,
E181461E1 dated 7 December 2018,
E181461E1_2nd Version dated 11 February 2019,
TAA00000YV_Overview_Documents_Rev.01,
E201452E1, 2nd version dated 24 March 2021

- To be continued -

Attached sheet -3/3 to the Certificate No. TA24215M

Test items & approval condition:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g)		X
Inclination test		--
Cold test (Temperature -25°C/-15°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

The product is not allowed to be installed on open decks.

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