General Specifications

GRVSW
Network Switch for Vnet/IP

GS 30A10B10-01EN

■ OVERVIEW

Network Switches for Vnet/IP make inter-domain and inter-station communication of Vnet/IP possible. These network switches are configured for Vnet/IP by cooperation with a network switch vendor.

RS40 Family

MACH 104 Family

MAR1040 Family

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■ SPECIFICATION

All ports of Network Switches for Vnet/IP support gigabit interface. These network switches are configurable managed switch, but these are customized with the default configuration to be dedicatedly used in Vnet/IP networks. For any of a typical Vnet/IP network, these require no initial settings. There are three families of Network Switches for Vnet/IP depending of port's structures or how to mount.

● List of Specifications of Hardware for Vnet/IP

Item		RS 40 Family	MACH 104 Family		MAR 1040 Family		
		DC Input Redundant Power Model	AC Input Single Power Model	AC Input Redundant Power Model	AC Input Single Power Model	AC Input Redundant Power Model	DC Input Redundant Power Model
Number of Ports	RJ-45 port	9	24		16		
	SFP port	(4)	(4)		(16)		
Dimensions, Weight	Mounting	DIN Rail	19 inch rack		19 inch rack		
	Dimensions W x H x D (mm)	110 x 131 x 111	448 x 44 x 345		448 x 44 x 345		
	Weight	600 g	4.2 kg	4.4 kg	4.2 kg	4.4 kg	
Power requirement	Nominal Voltage	12 to 48 V DC	100 to 240 V AC (50 to 60 Hz)		100 to 240 V AC (50 to 60 Hz)		24 to 48 V DC
	Operating Voltage range	9.6 to 60 V DC	90 to 265 V AC (47 to 63 Hz)		90 to 265 V AC (47 to 63 Hz)		18 to 60 V DC
	Power Consumption	20 W (max.)	35 W (max.)		26 W (max.)		
	Current	–	0.4 to 0.2 A		–		–
Environment	Operating Temperature	-40 to 70 °C	0 to 50 °C		-40 to 70 °C		
	Storage Temperature	-40 to 85 °C	-20 to 85 °C		-40 to 85 °C		
	Humidity	10 to 95 % (Non-conditioning)	10 to 95 % (Non-conditioning)		5 to 95 % (Non-conditioning)		
	Air Pressure	Up to 2000 m (795 hPa or more)	Up to 2000 m (795 hPa or more)		Up to 2000 m (795 hPa or more)		
	Protection Class	IP20	IP30		IP30		
FAULT signal contact	Maximum Current	1 A	1 A		2 A		
	Maximum Voltage	60 V DC	60 V DC		30 V DC		

Note: Each SFP port is for dual purpose (RJ-45/SFP) combo port. When an SFP module is installed in a combo port, the port automatically serves as an SFP interface. (Combo port works as RJ-45 or SFP interface exclusively.)
The Recommend Switches work in the same configuration for RJ-45 or SFP interface.
Note: An AC power cable is not included. Please prepare AC power cable allowed to be used in the local region.
Note: The default configuration is customized to be dedicatedly used in Vnet/IP networks.
If the configuration is changed from the default, on site confirmation is required for the influence of the network configuration setting in advance.

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■ COMPLIED STANDARDS

The following standards are complied.

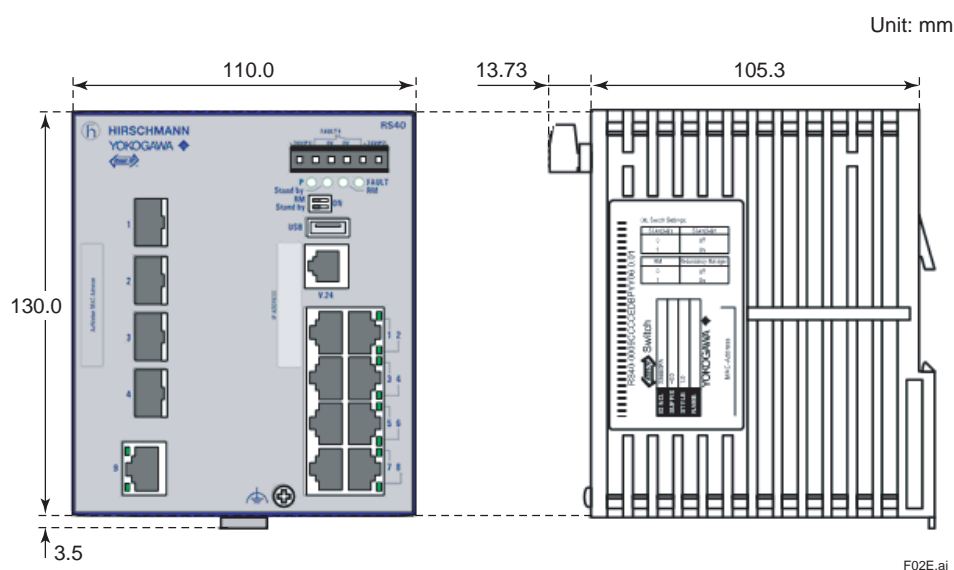|	RS40 Family	MACH104 Family	MAR1040 Family
Hazardous Location	UL121201 (Class 1 Div. 2) ATEX (2014/34/EU)	–	UL121201 (Class 1 Div. 2)
Shipbuilding	ABS DNV GL	–	DNV GL
Protective paint	ANSI/ISA S71.04 G3	–	ANSI/ISA S71.04 G3

Each Network Switch for Vnet/IP is compliant with the standards with those original model code applied by network switch vendor. The following table shows the detail of Yokogawa ordering model code and original model code by network switch vendor.
Refer to Catalog issued by network vendor for information about other standards.

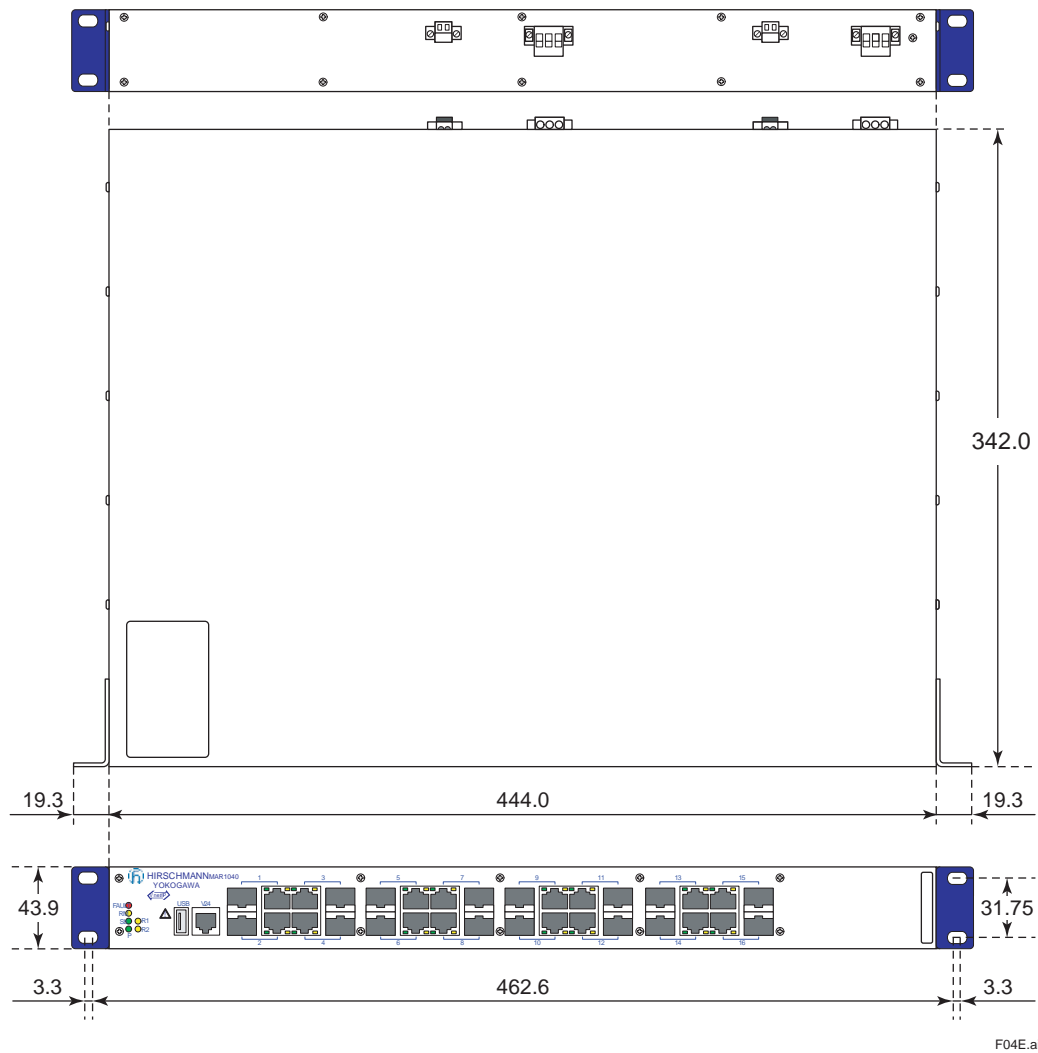|	Ordering model code (Model, Suffix code)	Original model code by network switch vendor
RS40 Family	GRVSW-660FA	RS40-0009CCCCEDBPYY
MACH104 Family	GRVSW-663FA	MACH104-20TX-F
	GRVSW-664FA	MACH104-20TX-FR
MAR1040 Family	GRVSW-665FA	MAR1040-4C4C4C4C9999EM9HPYY
	GRVSW-666FA	MAR1040-4C4C4C4C9999EMMHPYY
	GRVSW-667FA	MAR1040-4C4C4C4C9999ELLHPYY
	GRVSW-668FA	MAR1040-4C4C4C4C9999EM9HRY1
	GRVSW-669FA	MAR1040-4C4C4C4C9999EMMHRY1
	GRVSW-670FA	MAR1040-4C4C4C4C9999ELLHRY1
	GRVSW-671FA	MAR1040-4C4C4C4C9999EM9HRY2
	GRVSW-672FA	MAR1040-4C4C4C4C9999EMMHRY2
	GRVSW-673FA	MAR1040-4C4C4C4C9999ELLHRY2

■ EXTERNAL DIMENSIONS

● RS40 Family

Unit: mm

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3

● **MACH104 Family**

Unit: mm

342.0

19.3

444.0

19.3

43.9

31.75

3.3

462.6

3.3

F03E.ai

● **MAR1040 Family**

Unit: mm

43.9

31.75

19.3   444.0   19.3

342.0

3.3   462.6   3.3

F04E.ai

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■ MODEL AND SUFFIX CODES

Network Switch for Vnet/IP

		Description
Model	GRVSW	Network Switch for Vnet/IP
Suffix Codes	-660FA	Layer 2 Switch: RS40 Family, DC Redundant power supply
	-663FA	Layer 2 Switch: MACH104 Family, AC Single power supply
	-664FA	Layer 2 Switch: MACH104 Family, AC Redundant power supply
	-665FA	Layer 2 Switch: MAR1040 Family, AC Single power supply
	-666FA	Layer 2 Switch: MAR1040 Family, AC Redundant power supply
	-667FA	Layer 2 Switch: MAR1040Family, DC Redundant power supply
	-668FA	Layer 3 Switch for bus 1: MAR1040 Family, AC Single power supply
	-669FA	Layer 3 Switch for bus 1: MAR1040 Family, AC Redundant power supply
	-670FA	Layer 3 Switch for bus 1: MAR1040 Family, DC Redundant power supply
	-671FA	Layer 3 Switch for bus 2: MAR1040 Family, AC Single power supply
	-672FA	Layer 3 Switch for bus 2: MAR1040 Family, AC Redundant power supply
	-673FA	Layer 3 Switch for bus 2: MAR1040 Family, DC Redundant power supply

■ ORDERING INFORMATION

Specify Model code and Suffix code when ordering.

■ TRADEMARK ACKNOWLEDGMENT

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