General Specifications

Terminal Blocks (for FIO)

CENTUM VP

GS 33J60H20-01EN

[Release 6]

■ GENERAL

This GS covers the hardware specifications of the Terminal Block that can be used for I/O Modules (FIO) of CENTUM VP.

For the Terminal Block that can be used for I/O Modules with Built-In Barrier, see "Terminal Block (for I/O Modules with Barrier (GS 33J60H40-01EN)".

■ STANDARD SPECIFICATIONS

Variation of Connection

I/O Modules can be connected to field devices with terminal block.

Three types of terminal blocks are available: Pressure Clamp Terminal, KS Cable Interface Adapter, MIL Connector Cover.

There is a pressure clamp terminal with surge absorber to preserve I/O modules from surge immunity. (Conforms to EMC standards EN 61000-6-2)


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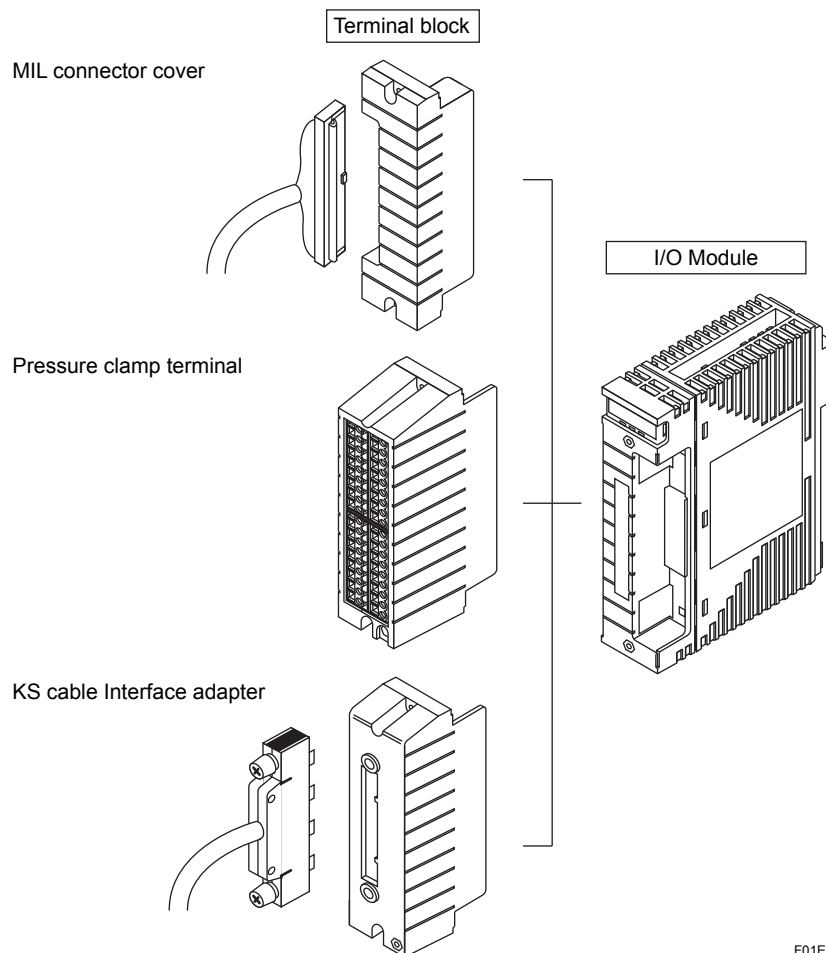
Terminal Block

Model Name	Application	Connecting Point	Connecting Module Name	Connecting Cable	Weight	Specifications
-	**Pressure clamp terminal**					
ATA4S	Analog (Single)	16-Point	AAI141, AAV141, AAV144, AAI841, AAB841, AAV544, AAI143, AAI543	–	Approx. 0.20 kg	Can select either with surge absorber or without absorber.
ATA4D	Analog (Dual-Redundant)			–	Approx. 0.30 kg	
ATI3S	Isolated Analog Module (Single)	8-Point	AAI135, AAI835, AAP135	–	Approx. 0.20 kg	
ATI3D	Isolated Analog Module (Dual-Redundant)			–	Approx. 0.30 kg	
ATB5S	Digital input (Single)	32-Point	ADV151	–	Approx. 0.20 kg	
ATB5D	Digital input (Dual-Redundant)			–	Approx. 0.40 kg	
ATD5S	Digital output (Single)	32-Point	ADV551	–	Approx. 0.20 kg	
ATD5D	Digital output (Dual-Redundant)			–	Approx. 0.40 kg	
ATF9S	Foundation Fieldbus	4-Port	ALF111	–	0.10 kg or less	Without surge absorber
-	**KS interface adopter**					
ATK4A	Analog	16-Point or 8-Point	AAI141, AAV141, AAV144, AAI841, AAB841, AAV544, AAI143, AAI543, AAI135, AAI835, AAP135, AAB141	KS1 KS2 (*1)	0.10 kg or less	Connecting with AEA4D Connecting with MUB,TE16
ATM4A	Compatible MAC2	16-Point	AAB841, AAB842	KS1	0.10 kg or less	Connecting with MCM,MHM
ATV4A	Compatible VM2	16-Point	AAB841, AAB842	KS2	0.10 kg or less	Connecting with MUB,TE16
ATI3A	Analog Input	8-Point	AAI135, AAP135	KS1	0.10 kg or less	Connecting with AEA3D
ATB3A	Analog input/output	8-Point	AAI835	KS1	0.10 kg or less	Connecting with AEA3D
ATD5A	Digital input/output	32-Point	ADV151, ADV551	AKB331	0.10 kg or less	Connecting with AEA5D

*1:   Please refer to FIO System Overview (GS 33J60A10-01EN) for the combination of connecting cable and terminal board.

■ EXTERNAL DIMENSIONS

ATA4S, ATD5S, ATI3S, ATB5S

Unit: mm

32.6   60.5

114
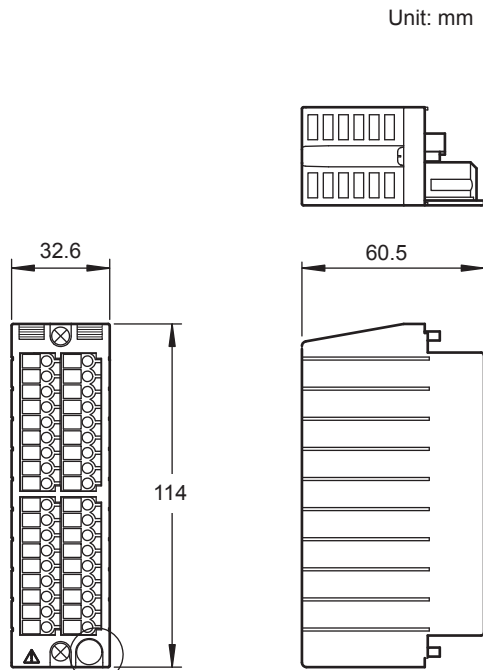
In the case of ATA4S and ATI3S.

-0□ :   -1□ :

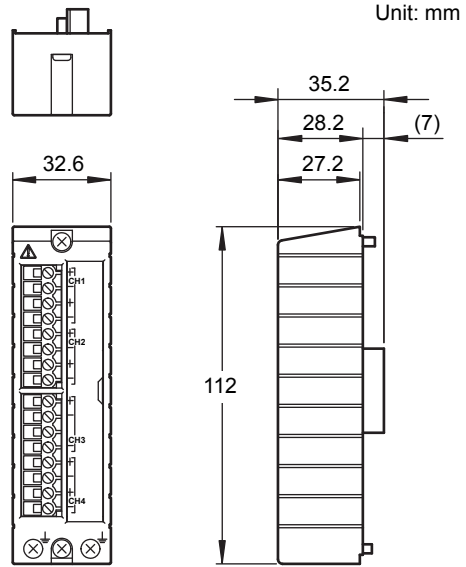In the case of ATD5S and ATB5S.

Both -0□ and -1□ are

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Nominal Tolerances :
When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is ± 0.8 mm, while its combination of nominal tolerance is ± 1.5 mm.
When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

ATF9S

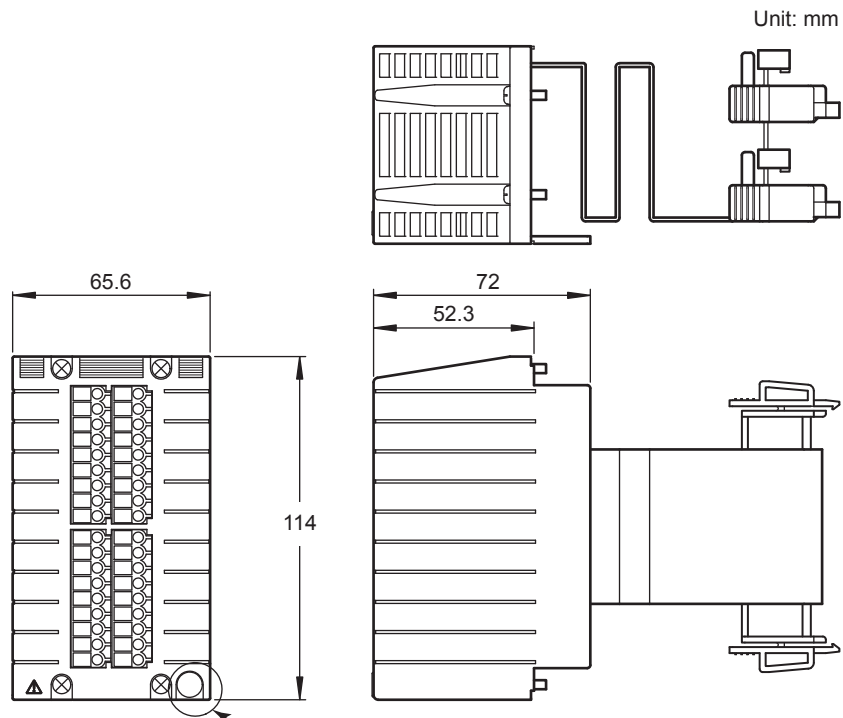Unit: mm

35.2
28.2   (7)
27.2

32.6

112

CH1
CH2
CH3
CH4

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Nominal Tolerances :
When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is ± 0.8 mm, while its combination of nominal tolerance is ± 1.5 mm.
When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

ATA4D, ATD5D, ATB5D, ATI3D

Unit: mm

65.6

72

52.3

114

In the case of ATA4D and ATI3D.

-0□ :   -1□ :

In the case of ATD5D and ATB5D.

Both -0□ and -1□ are

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Nominal Tolerances :
   When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is ± 0.8 mm, while its combination of nominal tolerance is ± 1.5 mm.
   When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

ATK4A, ATM4A, ATV4A, ATI3A, ATB3A

Unit: mm

(38.8)

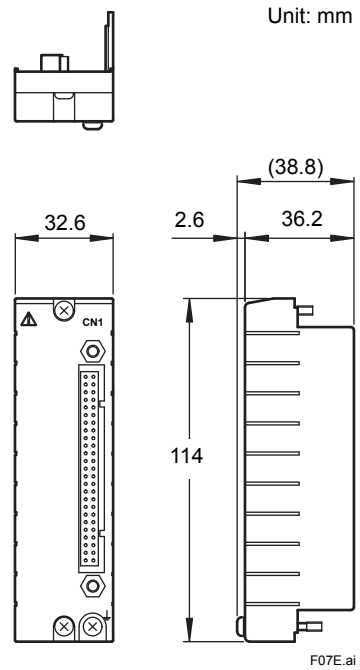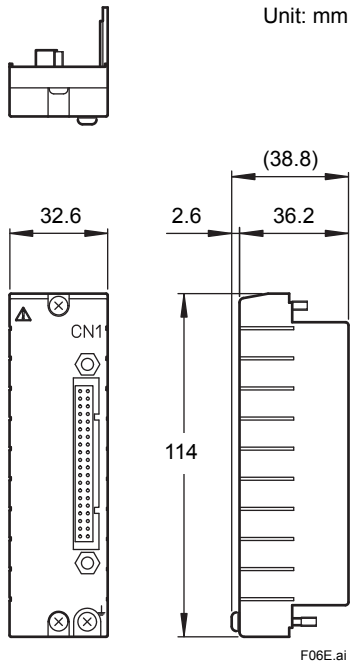32.6   2.6   36.2

CN1

114

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Nominal Tolerances :
When the reference dimension is over 0.5 mm
and equal or less than 120 mm, its nominal
tolerance is ± 0.8 mm, while its combination of
nominal tolerance is ± 1.5 mm.
When the reference dimension is over 120 mm,
its nominal tolerance is in accordance with JEM
1459.

ATD5A

Unit: mm

(38.8)

32.6   2.6   36.2

CN1

114

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Nominal Tolerances :
When the reference dimension is over 0.5 mm
and equal or less than 120 mm, its nominal
tolerance is ± 0.8 mm, while its combination of
nominal tolerance is ± 1.5 mm.
When the reference dimension is over 120 mm,
its nominal tolerance is in accordance with JEM
1459.

■ MODELS AND SUFFIX CODES

Pressure Clamp Terminal Block

		Description
Models	ATA4S	Pressure Clamp Terminal Block for Analog (16-channel, with ISA Standard G3 option)
	ATB5S	Pressure Clamp Terminal Block for Digital Input (32-channel, with ISA Standard G3 option)
	ATD5S	Pressure Clamp Terminal Block for Digital Output (32-channel, with ISA Standard G3 option)
	ATI3S	Pressure Clamp Terminal Block for Isolated Analog Module and Pulse Module (for AAI135, AAP135: 8-channel, AAI835: 4-channel input, 4-channel output, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	-1	With surge absorber
	0	Always 0

		Description
Model	ATF9S	Pressure Clamp Terminal Block for Fieldbus (with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

Dual-Redundant Pressure Clamp Terminal Block

		Description
Models	ATA4D	Dual-Redundant Pressure Clamp Terminal Block for Analog (16-channel, with ISA Standard G3 option)
	ATB5D	Dual-Redundant Pressure Clamp Terminal Block for Digital Input (32-channel, with ISA Standard G3 option)
	ATD5D	Dual-Redundant Pressure Clamp Terminal Block for Digital Output (32-channel, with ISA Standard G3 option)
	ATI3D	Dual-Redundant Pressure Clamp Terminal Block for Isolated Analog and Pulse (for AAI135, AAP135: 8-channel, AAI835: Input4-channel, Output4-channel, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	-1	With surge absorber
	0	Always 0

KS Cable Interface Adapter

		Description
Model	ATK4A	KS Cable Interface Adapter (for Analog 16-channel, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

		Description
Model	ATI3A	KS Cable Interface Adapter (for Analog 8-channel, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

		Description
Model	ATB3A	KS Cable Interface Adapter (for Analog 4-channel input/4-channel output, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

		Description
Model	ATD5A	KS Cable Interface Adapter (for Digital 32-channel, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

		Description
Model	ATM4A	KS Cable Interface Adapter (for Compatible MAC2, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

		Description
Model	ATV4A	KS Cable Interface Adapter (for Compatible VM2, with ISA Standard G3 option)
Suffix Codes	-0	Without surge absorber
	0	Always 0

■ APPLICABLE STANDARDS

Refer to the GS "Integrated Production Control System CENTUM VP System Overview (GS 33J01A10-01EN)."

■ ORDERING INFORMATION

Specify models and suffix codes when ordering.

■ TRADEMARK

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