General Specifications

GS 33K50H60-50E

ARM15A, ARM55□, ARS15B, ARS15M, ARS55M Relay Boards (for FIO)

CENTUM V/P

[Release 5]

■ GENERAL

This document describes the specifications of relay board used in FIO subsystem of CENTUM VP. Relay input/ output boards are connected in between digital input/output modules (for FIO) and field devices. Relay input boards receive contact signals or voltage input signals of field devices. Relay output boards receive output signals of the digital output module and amplify by the relay, and then output to field devices. These relay boards support dualredundant digital input/output modules (for FIO).

STANDARD SPECIFICATIONS

• Relay Boards

Models	Descriptions	Contact	Terminals	Signal Cables	Connectable Digital I/O Modules				
		Points		_	Modules	Terminal Blocks			
		32 point	M4 scrows	AKB331 (for 32-point)	ADV151	ATD5A			
ARIVITSA		32-point		AKB337 (for 64-point)	ADV161	-			
		22 point	M4 corouro	AKB331 (for 32-point)	ADV551	ATD5A			
ARIVIDDD		32-point	IVI4 SCIEWS	AKB337 (for 64-point)	ADV561	-			
		32 point	M4 scrows	AKB331 (for 32-point)	ADV551	ATD5A			
ARIVIDDVV	Mechanical Relay Board	32-point	IVI4 SCIEWS	AKB337 (for 64-point)	ADV561	-			
		32 point	M4 scrows	AKB331 (for 32-point)	ADV551	ATD5A			
ARIVISSI		32-point		AKB337 (for 64-point)	ADV561	-			
			M3.5 screws	AKB331 (for 32-point)	ADV551	ATD5A			
ARM55C		32-point	(M4 in power input part)	AKB337 (for 64-point)	ADV561	-			
ARS15B-5 (48 V DC)		32 point	M4 scrows	AKB331 (for 32-point)	ADV151	ATD5A			
ARS15B-6 (110 V DC)		32-point		AKB337 (for 64-point)	ADV161	-			
ARS15M-1 (100 V AC)			Pressure clamp	AKB331 (for 32-point)	ADV151	ATD5A			
ARS15M-2 (220 V AC) ARS15M-3 (10 - 30 V DC)	Solid State Relay Board	32-point	terminals	AKB337 (for 64-point)	ADV161	-			
ARS55M-1 (100 V AC)			Pressure clamp	AKB331 (for 32-point)	ADV551	ATD5A			
ARS55M-2 (220 V AC) ARS55M-3 (5 - 60 V DC)		32-point	terminals	AKB337 (for 64-point)	ADV561	-			



• Relay Boards Detail Specifications

Mechanical Relay Boards (Contact Input)

Model	ARM15A
Usage	Mechanical Relay Contact Input (Single / Dual-redundant)
Contact Points	32-point
Terminals for Field Device Connection	M4 screws
Modules	ADV151 (DI: 32-point) + ATD5A (Terminal block) ADV161 (DI: 64-point) (*1)
Signal Cables	AKB331 (for 32-point) AKB337 (for 64-point)
Contact Input Signal	ON signal: 150 Ω or less OFF signal: At least 200 k Ω
External Contact Rating (Minimum Load)	24 V DC, 13 mA (*3)
Power Supply Voltage and Current Consumption of Internal Circuit (require external power supply)	24 V DC Max. 0.32 A
Power Supply for Field Device (require external power supply)	Dual-line (supply power per 16-point) 24 V DC: Max. 0.3 A per one line
Insulation Resistance	At least 10 MΩ (500 V DC)
Withstanding Voltage	Between field device terminals and cases: 1.5 kV Between 24 V power terminals and cases: 500 V Between 24 V power terminals and field device terminals: 1.5 kV
Ambient Temperature and Humidity	0 to 50 °C, 10 to 90 %RH
Standards	EMC standards [CE Marking], [C-Tick Marking], [KC Marking] (*2)
Size	W: 482.6 mm x H: 132.5 mm (3U)
Weight	2.2 kg

Two sets of relay board (ARM15A) and two sets of signal cable (AKB337) are required for one ADV161. ARM15A is out of scope of the Safety Standards. It is voltage/current that ARM15A applies to the external contact power supply. *1:

*2: *3:

Mechanical Relay Boards (Contact Output)

Models	ARM55D	ARM55W ARM55T (with switch)	ARM55C				
Usage	Mechanical Relay Dry Contact Output ("a" contact (NO)) (Single / Dual-redundant)	Mechanical Relay Wet Contact Output (Single / Dual-redundant) AUTO/OFF/ON switch (only for ARM55T)	Mechanical Relay Dry Contack Output ("a" contact or "b" contact (NO or NC)) (Single / Dual-redun or dant) (*6)				
Contact Points	32-point	32-point	32-point				
Terminals for Field Device Connection	M4 screws	M4 screws	M3.5 screws (*5) (M4 in power input part)				
Modules	ADV551 (DO: 32-point) + ATD5A (Terminal block) ADV561 (DO: 64-point) (*1)	ADV551 (DO: 32-point) + ATD5A (Terminal block) ADV561 (DO: 64-point) (*1)	ADV551 (DO: 32-point) + ATD5A (Terminal block) ADV561 (DO: 64-point) (*1)				
Signal Cables	AKB331 (for 32-point) AKB337 (for 64-point)	AKB331 (for 32-point) AKB337 (for 64-point)	AKB331 (for 32-point) AKB337 (for 64-point)				
Maximum Load (*2)	250 V AC: 2 A per point 30 V DC: 2 A per point 125 V DC: 0.1 A per point (*3)	250 V AC: 0.6 A per point 30 V DC: 0.6 A per point 125 V DC: 0.1 A per point (*3)	30 V DC: 1.5 A per point				
Minimum Load	5 V, 10 mA	5 V, 10 mA	5 V, 10 mA				
Power Supply Voltage and Current Consumption of Internal Circuit (require external power supply)	24 V DC Max. 0.65 A	24 V DC Max. 0.65 A	24 V DC Max. 0.85 A				
Power Supply for Field Device (require external power supply)	-	Dual-line (supply power per 16- point) 250 V AC: Max. 9.6 A 30 V DC: Max. 9.6 A 125 V DC: Max. 1.6 A	-				
Insulation Resistance	At least 10 MΩ (500 V DC)	At least 10 MΩ (500 V DC)	At least 10 MΩ (500 V DC)				
Withstanding Voltage	Between field device terminals and cases: 2 kV Between 24 V power terminals and cases: 500 V Between 24 V power terminals and field device terminals: 2 kV	Between field device terminals and cases: 2 kV Between 24 V power terminals and cases: 500 V Between 24 V power terminals and field device terminals: 2 kV	Between field device terminals and cases: 2 kV Between 24 V power terminals and cases: 500 V Between 24 V power terminals and field device terminals: 2 kV				
Ambient Temperature and Humidity	0 to 50 °C, 10 to 90 %RH	0 to 50 °C, 10 to 90 %RH	0 to 50 °C, 10 to 90 %RH				
Standards	Safety Standard [CE Marking], [CSA] (*3) EMC standards [CE Marking], [C-Tick Marking], [KC Marking]	Safety Standard [CE Marking], [CSA] (*3) EMC standards [CE Marking], [C-Tick Marking], [KC Marking]	EMC standards [CE Marking], [C-Tick Marking], [KC Marking] (*4)				
Size	W: 482.6 mm x H: 132.5 mm (3U)	W: 482.6 mm x H: 177 mm (4U)	W: 482.6 mm x H: 132.5 mm (3U)				
Weight	2.2 kg	2.6 kg	2.2 kg				

Two sets of relay board (ARM55D, ARM55W, ARM55T, or ARM55C) and two sets of signal cable (AKB337) are required for one ADV561. *1:

For inductive loads, connect a spark killer (CR network for AC; diode for DC) in parallel with loads. For DC, 30 V or less is the requirement for the Safety Standard. ARM55C is out of scope of the Safety Standards. The applicable size of solderless lug is described below.

*2: *3:

*4:

*5:

[Solderless Lug Dimensions]

[Solderless	s Lug Di	imensions	5]				[Solderless Lug] Insulation
Nominal cross sectional area (mm ²)	Screw used (mm)	Hole diameter (mm)	Lug outside diameter (mm)	Lug length (mm)	Insulation covering inside diameter (mm)	Dimen- sion "C" (mm)	Hole diameter
1.25	3.5	3.7 or more	6.8 or less	Approx. 21	3.6 or more	4.0 or more	C Lug length
2.0	3.5	3.7 or more	6.8 or less	Approx. 21	4.3 or more	4.0 or more	Lug outside diameter F14E.ai

*6: Select either "a" contact or "b" contact.

Solid State Relay Boards (Contact Input)

Models	ARS15B-5 (48 V DC), ARS15B-6 (110 V DC)
Usage	Solid State Relay Contact Input (Single / Dual-redundant)
Contact Points	32-point
Terminals for Field Device Connection	M4 screws
Modules	ADV151 (DI: 32-point) + ATD5A (Terminal block) ADV161 (DI: 64-point) (*1)
Signal Cables	AKB331 (for 32-point) AKB337 (for 64-point)
Contact Input Signal	ON signal: 200 Ω or less OFF signal: At least 200 k Ω
External Contact Rating	ARS15B-5 (48 V DC): At least 60 V DC, 20 mA ARS15B-6 (110 V DC): At least 140 V DC, 20 mA
Power Supply Voltage and Current Consumption of Internal Circuit (require external power supply)	24 V DC Max. 0.32 A
Power Supply for Field Device (require external power supply)	Dual-line (supply power per 32-point) ARS15B-5 (48 V DC): 48 V DC; Max. 0.5 A per one line ARS15B-6 (110 V DC): 110 V DC; Max. 0.4 A per one line
Insulation Resistance	At least 10 MΩ (500 V DC)
Withstanding Voltage	Between field device terminals and cases: 2 kV Between 24 V power terminals and cases: 500 V Between 24 V power terminals and field device terminals: 2 kV
Ambient Temperature and Humidity	0 to 50 °C, 10 to 90 %RH
Standards	ARS15B-5 (48 V DC) (*2) : EMC standards [CE Marking], [C-Tick Marking], [KC Marking] ARS15B-6 (110 V DC): Safety standard [CSA], EMC standards [C-Tick Marking], [KC Marking]
Size	W: 482.6 mm x H: 132.5 mm (3U)
Weight	2.5 kg

Two sets of relay board (ARS15B-5, or ARS15B-6) and two sets of signal cable (AKB337) are required for one ADV161. ARS15B-5 is out of scope of the Safety Standards. *1: *2:

Solid State Relay Boards (Voltage Input)

Models	ARS15M-1 (100 V AC), ARS15M-2 (220 V AC), ARS15M-3 (10 - 30 V DC)
Usage	Solid State Relay Voltage Input, Module type (Single / Dual-redundant)
Contact Points	32-point
Terminals for Field Device Connection	Pressure clamp terminals Cable specifications: see the table of terminal treatment for the pressure clamp terminal signal line and power line.
Modules	ADV151 (DI: 32-point) + ATD5A (Terminal block) ADV161 (DI: 64-point) (*1)
Signal Cables	AKB331 (for 32-point) AKB337 (for 64-point)
Contact Input Signal	ARS15M-1 (100 V AC) ON signal: 90 to 140 V AC OFF signal: 45 V AC or less ARS15M-2 (220 V AC) ON signal: 180 to 250 V AC OFF signal: 45 V AC or less ARS15M-3 (10 - 30 V DC) ON signal: 10 to 30 V DC OFF signal: 1 V DC or less
External Contact Rating	-
Power Supply Voltage and Current Consumption of Internal Circuit (require external power supply)	24 V DC Max. 1.0 A
Power Supply for Field Device	-
Insulation Resistance	At least 10 MΩ (500 V DC)
Withstanding Voltage	Between 24 V power terminals and field device terminals: 2 kV
Ambient Temperature and Humidity	0 to 50 °C, 10 to 90 %RH
Standards	ARS15M-1 (110 V AC): Safety standard [CSA], EMC standards [C-Tick Marking], [KC Marking] ARS15M-2 (220 V AC): Safety standard [CSA], EMC standards [C-Tick Marking], [KC Marking] ARS15M-3 (10 - 30 V DC): Safety standard [CE Marking], [CSA], EMC standards [CE Marking], [C-Tick Marking], [KC Marking]
Size	W: 436 mm x H: 125.4 mm
Weight	3.0 kg

*1: Two sets of relay board (ARS15M-1, ARS15M-2, or ARS15M-3) and two sets of signal cable (AKB337) are required for one ADV161.

Models	ARS55M-1 (100 V AC) ARS55M-2 (220 V AC) ARS55M-3 (5 - 60										
Usage	Solid State Relay TRIAC Output,	Transistor output (Single / Dual-re-	dundant)								
Contact Points	32-point										
Terminals for Field Device Connection	Pressure clamp terminals Cable specifications: see the tabl and power line.	le of terminal treatment for the pres	sure clamp terminal signal line								
Modules	ADV551 (DO: 32-point) + ATD5A ADV561 (DO: 64-point) (*1)	(Terminal block)									
Signal Cables	AKB331 (for 32-point) AKB337 (for 64-point)										
Output Voltage/Current Range (*2)	24 to 140 V AC 30 mA to 2.5 A (Ambient temperature is under 20 °C) 30 mA to 2 A (at 20 to 35 °C) 30 mA to 1.5 A (at 35 to 40 °C) 30 mA to 1.3 A (at 40 to 50 °C) Inductive load must be 1.5 A or less, even when ambient temperature is under 35 °C.	24 to 250 V AC 30 mA to 2.5 A (Ambient temperature is under 20 °C) 30 mA to 2 A (at 20 to 35 °C) 30 mA to 1.5 A (at 35 to 40 °C) 30 mA to 1.3 A (at 40 to 50 °C) Inductive load must be 1.5 A or less, even when ambient temperature is under 35 °C.	5 to 60 V DC 20 mA to 2.5 A (Ambient temperature is under 20 °C) 20 mA to 2 A (at 20 to 35 °C) 20 mA to 1.3 A (at 35 to 50 °C) Inductive load must be 1.5 A or less.								
Power Supply Voltage and Current Consumption of Internal Circuit (require external power supply)	24 V DC Max. 0.9 A										
Power Supply for Field Device	-										
Insulation Resistance	At least 10 MΩ (500 V DC)										
Withstanding Voltage	Between 24 V power terminals a	nd field device terminals: 2 kV									
Ambient Temperature and Humidity	0 to 50 °C, 10 to 90 %RH										
Standards	Safety standard [CSA], EMC star	ndards [C-Tick Marking], [KC Marki	ing]								
Size	W: 436 mm x H: 125.4 mm										
Weight	3.0 kg										

Solid State Relay Boards (Voltage Output)

*1: Two sets of relay board (ARS55M-1, ARS55M-2, or ARS55M-3) and two sets of signal cable (AKB337) are required for one ADV561.

*2: For inductive loads, connect a spark killer (CR network for AC; diode for DC) in parallel with loads.

Table: Terminal Treatment for Pressure Clamp Terminal Signal Line

	Cable Thickness (mm ²)	Peel-off Length (mm)	Inserting Part of Sleeve (mm)
Without Sleeves	0.5 to 2 (AWG20 to 14)	8	_
With Sleeves	0.5 to 2 (AWG20 to 14)	8	8

Table: Terminal Treatment for Pressure Clamp Terminal Power Line

	Cable Thickness (mm²)	Peel-off Length (mm)	Inserting Part of Sleeve (mm)
Without Sleeves	0.5 to 2 (AWG20 to 14)	9	_
With Sleeves	0.5 to 1.5 (AWG20 to 16)	9	8

• Relay Input/Output Board Circuit Diagram

ARM15A



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ARM55C

ARS15B



ARS15M



• Terminals for Field Device Connection

ARM15A



TM1 (Left side)

Signal name	LL (+)	IN1A	IN2	2A IN	3A I	N4A	IN5A	IN6	A IN	7A II	18A II	1 A9	N10A	IN11	A IN1	2A IN	I3A	IN14A	IN1	5A IN10	6A N.C	;.
Terminal	FLD(+)	1A	2/	A 3	A	4A	5A	6A	. 7.	A 8	BA	9A	10A	11/	A 12	A 1	3A	14A	15	A 16	A N	2
No.	FLI	D(-)	1B	2B	3B	4	B 5	БB	6B	7B	8B	9E	3 1	0B	11B	12B	13	BB 1	4B	15B	16B	NC
Signal name	LN	(-) I	N1B	IN2B	IN3E	3 IN	4B IN	I5B	IN6B	IN7B	IN8E	IN9	B IN	10B	IN11B	IN12E	3 IN1	3B IN	114B	IN15B	IN16B	N.C.
TM1 (Right s	FM1 (Right side)																					
Signal name	RL (+)				9A IN	NZUA	INZIA			JA IN	24A IN	25A I	INZ0A			OA IN	29A	INSUF			ZA 24	v
Terminal	FLD(+)	17A	. 18	A 19	9A 2	20A	21A	22/	A 23	3A 2	4A 2	25A	26A	27/	4 28	A 2	9A	30A	31	A 32	A +	
No.	FLI	D(-)	17B	18B	19B	3 20)B 2	1B	22B	23B	24B	25	В 2	6B	27B	28B	29	B 3	0B	31B	32B	-
Signal name	RN	I (-) IN	117B	IN18B	IN19	B IN2	20B IN	121B I	N22B	IN23E	IN24	B IN2	5B IN	26B I	N27B	IN28B	IN2	29B IN	130B	IN31B	IN32B	0 V
																						F08E.ai

Note: The terminal N.C. in the figure is an unused terminal; wiring is not required. When connecting signals to adjacent terminals, make sure the insulation-covering parts of solderless lug do not overlap each other.

ARM55D



TM1 (Left side)

Signal name	OUT 1A	OL 2/	IT OI A 3	JT C A 4	UT (4A	DUT 5A	OUT 6A	OUT 7A	OU ⁻ 8A	ГО g	UT A	OUT 10A	OL 11	JT O A 1	UT 2A	OUT 13A	OL 14	JT IA	OUT 15A	0U1 16A	N.	C. N	.C.
Terminal	1A	24	A 3.	A 4	A	5A	6A	7A	8A	e e	A	10A	11/	A 12	2A	13A	14	A	15A	16A	N	CN	IC
No.	1	В	2B	3B	4B	5	З 6	В 7	В	8B	9E	3 1	0B	11B	12	B 1	3B	14	3 15	B '	16B	NC	NC
Signal name	0 1	UT B	OUT 2B	OUT 3B	OUT 4B	- OL 5E	IT OL 3 61	JT OL 3 71	JT (3	OUT 8B	ОU ⁻ 9В	то 1	UT 0B	OUT 11B	OL 12	JT C B 1	UT 3B	OU 14	T OL 3 15	JT (iB	DUT 16B	N.C.	N.C.
TM1 (Right s	TM1 (Right side)																						
Signal name	OUT 17A	OL 18	JT OI A 19	JT C 9A 2	0 TUC 20A	DUT 21A	OUT 22A	OUT 23A	0U ⁻ 24A	T O	UT 5A	OUT 26A	OL 27	JT O A 2	UT 8A	OUT 29A	OL 30	JT)A	OUT 31A	0U1 32A	N.	C. 24	١V
Terminal	17A	18	A 19	A 2	0A 2	21A	22A	23A	24 <i>F</i>	A 2	5A	26A	27	A 28	BA	29A	30	A	31A	32A	N	C ·	+
No.	1	7B	18B	19B	20B	8 21	B 22	2B 23	BB	24B	25	В 2	6B	27B	28	B 2	9B	30	3 31	в	32B	NC	-
Signal name	0 1	UT 7B	OUT 18B	OUT 19B	OUT 20B	OL 21	IT OL B 22	JT OL B 23	JT (B	OUT 24B	OU ⁻ 25E	T O 3 2	UT 6B	OUT 27B	OL 28	JT C B 2	UT 9B	OU 308	T OL 3 31	JТ (В (DUT 32B	N.C.	0 V

Note: The terminal N.C. in the figure is an unused terminal; wiring is not required. When connecting signals to adjacent terminals, make sure the insulation-covering parts of solderless lug do not overlap each other.

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ARM55W, ARM55T



TM1 (Left side)

Signal name	LL (+)	OUT 1A	Г ОU 2А	т ОL \ 3.	JT OL A 4	JT A	OUT 5A	OUT 6A	0U ⁻ 7A	то 8	UT A	OUT 9A	OU 10	IT OL A 11	JT A	OUT 12A	OU ⁻ 13A	OU 14	IT OI A 18	UT O 5A 1	UT N. 6A N.	C.
Terminal	L(+)	1A	2/	A 3	A 4	A	5A	6A	7/	4 8	3A	9A	10	A 11	A	12A	13/	A 14	A 1	5A 1	6A N	1C
No.	N	(-)	1B	2B	3B	4	3 5	B	6B	7B	8	3 9	9B	10B	11	3 12	2B	13B	14B	15B	16B	NC
Signal name	LI (-	N -)	OUT 1B	OUT 2B	OUT 3B	0l 4	JT O B 5	UT O B (UT 3B	OUT 7B	OL 88	JT 0 3 9	UT 9B	OUT 10B	OU 11	JT O B 12	UT 2B	OUT 13B	OUT 14B	OUT 15B	OUT 16B	N.C.
TM1 (Right s	side)																					
Signal name	RL (+)	OU ⁻ 17 <i>A</i>	T OL 18	IT OI A 19	JT O 9A 20	UT DA	OUT 21A	OUT 22A	OU 23/	ТО А 2	UT 4A	OUT 25A	OL 26	JT O A 27	UT 7A	OUT 28A	OU 29/	T OL A 30	JT O A 3	UT C 1A 3	UT 24	4 V
Terminal	L(+)	17/	A 18	A 19	9A 20	ΟA	21A	22A	23	A 2	4A	25A	26	A 27	7A	28A	29/	A 30	A 3	1A 3	52A	+
No.	N	(-)	17B	18B	19B	20	B 2	1B 2	2B	23B	24	B 2	5B	26B	27	B 28	BB	29B	30B	31B	32B	-
Signal name	R (RN -)	OUT 17B	OUT 18B	OUT 19B	OL 20	JT OI B 2 ⁷	JT O 1B 2	UT 2B	OUT 23B	OU 24	IT O	UT 5B	OUT 26B	OU 271	T OL B 28	JT 3B	OUT 29B	OUT 30B	OUT 31B	OUT 32B	0 V

Note: The terminal N.C. in the figure is an unused terminal; wiring is not required.

When connecting signals to adjacent terminals, make sure the insulation-covering parts of solderless lug do not overlap each other.

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ARM55C



TM1 (Left side)

Signal name	OUT 1A	OUT 2A	OUT 3A	OUT 4A	OUT 5A	OUT 6A	OUT 7A	OUT 8A	OUT 9A	OUT 10A	OUT 11A	OUT 12A	OUT 13A	OUT 14A	OUT 15A	OUT 16A			
	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A	16A			
Terminal	1	B 2	В 3	B 4	B 5	5B 6	B 7	B 8	B 9	B 1	0B 11	1B 12	2B 13	3B 14	4B 1	5B 16	в		
110.	1C	2C	3C	4C	5C	6C	7C	8C	9C	10C	11C	12C	13C	14C	15C	16C			
Signal name	OUT 1C	OUT 2C	OUT 3C	OUT 4C	OUT 5C	OUT 6C	OUT 7C	OUT 8C	OUT 9C	OUT 10C	OUT 11C	OUT 12C	OUT 13C	OUT 14C	OUT 15C	OUT 16C			
Signal name	OUT 1B	OUT 2B	OUT 3B	OUT 4B	OUT 5B	OUT 6B	OUT 7B	OUT 8B	OUT 9B	OUT 10B	OUT 11B	OUT 12B	OUT 13B	OUT 14B	OUT 15B	OUT 16B			
TM1 (Right	side)																		
Signal name	OUT 17A	OUT 18A	OUT 19A	OUT 20A	OUT 21A	OUT 22A	OUT 23A	OUT 24A	OUT 25A	OUT 26A	OUT 27A	OUT 28A	OUT 29A	OUT 30A	OUT 31A	OUT 32A			
	17A	18A	19A	20A	21A	22A	23A	24A	25A	26A	27A	28A	29A	30A	31A	32A		TM2	
Terminal	17	7B 18	3B 19	9B 20)B 2	1B 22	2B 23	3B 24	4B 28	5B 20	6B 27	7B 28	3B 29	9B 30)B 3 [.]	1B 32	2B	+ 2	24 V DC
110.	17C	18C	19C	20C	21C	22C	23C	24C	25C	26C	27C	28C	29C	30C	31C	32C		- () V
Signal name	OUT 17C	OUT 18C	OUT 19C	OUT 20C	OUT 21C	OUT 22C	OUT 23C	OUT 24C	OUT 25C	OUT 26C	OUT 27C	OUT 28C	OUT 29C	OUT 30C	OUT 31C	OUT 32C			
Signal name	OUT 17B	OUT 18B	OUT 19B	OUT 20B	OUT 21B	OUT 22B	OUT 23B	OUT 24B	OUT 25B	OUT 26B	OUT 27B	OUT 28B	OUT 29B	OUT 30B	OUT 31B	OUT 32B	×		F11E.ai

Note: When connecting signals to adjacent terminals, make sure the insulation-covering parts of solderless lug do not overlap each other.

ARS15B

Connect to both connectors in case of dual-redundant configuration.
TM1

TM1 (Left side)

ARS15M, ARS55M

Signal name	L (+)	IN1A	IN2A	A IN3	A IN	4A IN	5A	IN6A	IN7A	IN	BA II	N9A	IN10A	IN11/	A IN12	2A IN	13A	IN14	A IN1	5A IN1	6A	
Torminal No	FLD(+) 1A	2A	3A	4	A 5	БА	6A	7A	84	4	9A	10A	11A	12	A 1	3A	14/	A 15	A 16	ЗA	
ierminal No.	FL	D(-)	1B	2B	3B	4B	56	3 6	B 7	Β	8B	9	B 1	0B	11B	12B	13	BB	14B	15B	16	в
Signal name	N	(-) I	N1B I	N2B	IN3B	IN4B	IN5	5B IN	6B IN	7B	IN8B	IN	9B IN	10B I	N11B	IN12	3 IN1	13B I	N14B	IN15B	IN16	6B
TM1 (Right si	de)																					

Signal name	IN1	7A	IN18A	IN19	a in2	0A IN	121A	IN22	A IN2	23A	IN24	A IN	25A	IN26	SA IN	27A	IN28A	IN29) A IN	130A	IN31A	N3	2A	24 V	
Terminal No.	17	Ά	18A	19A	20)A [2	21A	22/	4 2	3A	24/	A 2	25A	26	A 2	7A	28A	29	A 3	30A	31A	32	2A	+]
Terminal No.		17	Β 18	3B	19B	20B	8 2	1B	22B	23	в	24B	25	БB	26B	27	В 2	8B	29B	30)B 3	1B	32	в	-
Signal name		IN1	7B IN	18B I	N19B	IN20	BIN	21B	IN22E	IN2	3B	IN24	B IN2	25B	N26B	IN2	7B IN	28B	IN29	B IN3	30B IN	131B	IN3	2B 0	V

Note: When connecting signals to adjacent terminals, make sure the insulation-covering parts of solderless lug do not overlap each other.

Connect to both connectors in case of dual-redundant configuration. TM2 24 V DC power 24 V DC Ø + supply for ⊗ 0 V internal circuit TM1 TM1 Signal name (ARS15M) IN1 IN2 IN3 IN4 IN5 IN6 IN7 IN8 IN9 IN10 IN11 IN12 IN13 IN14 IN15 IN16 (ARS55M) OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8 OUT9 OUT10 OUT11 OUT12 OUT13 OUT14 OUT15 OUT16 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 1 Terminal No. ABABABAB ABABABABAB A B A B A B A B A B A B A B A B A B

Signal name (ARS15M) IN17 IN18 IN19 IN20 IN21 IN22 IN23 IN24 IN25 IN26 IN27 IN28 IN29 IN30 IN31 IN32 (ARS55M) OUT17 OUT18 OUT19 OUT20 OUT21 OUT22 OUT23 OUT24 OUT25 OUT26 OUT27 OUT28 OUT29 OUT30 OUT31 OUT32 22 23 24 25 26 27 32 17 18 19 20 21 28 29 30 31 Terminal No. F13E.ai

Note: For ARS55M-3 and ARS15M-3, terminal number "A" is for "+", "B" is for "-."

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F12E.ai

EXTERNAL DIMENSIONS

• ARM15A

Other than /BR3

Unit: mm



Rack Mounting Dimension (482.6) 450 min 38.1±0.2 (133.4) Device mounting area 57.2±0.2 38.1±0.2 38.1±0.2 Weight: approx. 2.0 kg

F15E.ai



Mount bracket first, and then board

Weight: approx. 2.2 kg

Wall Mounting Dimension



F16E.ai

• ARM55D

Other than /BR3



Weight: approx. 2.0 kg



F17E.ai

Unit: mm

For /BR3



Mount bracket first, and then board

Weight: approx. 2.2 kg

Wall Mounting Dimension



F18E.ai

• ARM55W

Other than /BR4



Rack Mounting Dimension



Weight: approx. 2.3 kg

F19E.ai

Unit: mm

20

For /BR4



Mount bracket first, and then board

Weight: approx. 2.6 kg



F20E.ai

21

• ARM55T

Other than /BR4



Weight : approx. 2.3 kg (5.07 lb)

Rack mounting dimention



F27E.ai

For /BR4



Wall mounting dimention



Weight : approx. 2.6 kg (5.73 lb)

F28E.ai

• ARM55C

Other than /BR3



Weight: approx. 2.0 kg



F21E.ai

24

For /BR3



Mount bracket first, and then board

Weight: approx. 2.2 kg

Wall Mounting Dimension



F22E.ai

Unit: mm

• ARS15B

Other than /BR3



Weight: approx. 2.3 kg





F23E.ai

For /BR3



Mount bracket first, and then board

Weight: approx. 2.5 kg

Wall Mounting Dimension



F24.ai

27

Unit: mm

• ARS15M, ARS55M



*1: Applicable DIN Rail; TH35-15, EN 50022 *2: Applicable DIN Rail; G32, EN 50035 *3: Applicable DIN Rail; TH35-7.5, EN 50022

F25E.ai

■ MODELS AND SUFFIX CODES

• Mechanical Relay Board

		Description
Model	ARM15A	32 Dry Contact Inputs (M4 Terminals)
	-0	Always 0
Suffix Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR3	Wall Mount Bracket

		Description
Model	ARM55D	32 Dry Contact Outputs (M4 Terminals)
	-0	Always 0
Suffix Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR3	Wall Mount Bracket

		Description
Model	ARM55W	32 Wet Contact Outputs (M4 Terminals)
	-0	Always 0
Suffix Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR4	Wall Mount Bracket

		Description
Model	ARM55T	32 Wet Contact Outputs with Switch (M4 Terminals)
	-0	Always 0
Suffix Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR4	Wall Mount Bracket

		Description
Model	ARM55C	32 Dry Contact Outputs (M3.5 Terminals)
	-0	Always 0
Suffix Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR3	Wall Mount Bracket

• Solid State Relay Board

		Description
Model	ARS15B	32 Solid State Inputs (SSR Built-In Type, M4 Terminals)
	-5	For 48 V DC input
Suffix Codoo	-6	110 V DC input
Sum Codes	0	19-inch Rack Mountable
	0	Basic Type
Option Code	/BR3	Wall Mount Bracket

		Description
Model	ARS15M	32 Solid State Inputs (SSR Plug-In Type, Pressure Clamp Terminals)
	-1	For 100 V AC input module (32-point type)
	-2	For 220 V AC input module (32-point type)
Suffix Codes	-3	For 10 - 30 V DC input module (32-point type)
	1	DIN Rail Mountable
	0	Basic Type

		Description
Model	ARS55M	32 Solid State Outputs (SSR Plug-In Type, Pressure Clamp Terminals)
	-1	For 100 V AC output module (32-point type)
Suffix Codes	-2	For 220 V AC output module (32-point type)
	-3	For 5-60 V DC output module (32-point type)
	1	DIN Rail Mountable
	0	Basic Type

ORDERING INFORMATION

Specify the model and suffix codes.

TRADEMARKS

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