MITSUBISHI ELECTRIC ENGINEERING

Spring Clamp Terminal Block Conversion Adapter

Model: FA1-TE40PA

New Product Release No. 20-06E

Quick and easy wiring, offering innovative solution



MITSUBISHI ELECTRIC ENGINEERING COMPANY LIMITED

Front connection type now available in addition to the existing relay terminal block, which is used together with a digital signal converter

Features of spring clamp terminal specification

Easy wiring



Wiring time can be significantly reduced by push-in connection. * Calculated by comparing the time taken by non-experts with two years of experience (Data sourced from Japan Switchboard & control system Industries Association)

Stable connection



Screws are vibration resistant. Uniform quality is guaranteed for wiring since no special skills are required.

Less maintenance



Screw tightening during maintenance is not required, reducing work load of workers. Rewiring work is also facilitated by push-in connection.

Easy push-in connection available in limited space

Front connection does not require any separate terminal block, enabling installation in a small cabinet or inside a system.



Quick and easy wiring and reliable quality

Uniform connection quality is guaranteed since no soldering skills are required.



Easy to add signals with various wire sizes supported

Signal wires can be rewired easily for extension or repair of systems. The spring clamp type supports large wire sizes.



Streamline startup and maintenance

A tester port is provided for continuity check, enabling reduction in time required for startup and maintenance. (The test plug is the reference product.)



■ Connection diagram

np ock	40-pin connecto
	B20
	B19
	B18
	B17
	B16
	B15
	B14
	B13
	B12
	B11
	B10
	B9
	B8
	B7
	B6
	B5
	B4
	B3
	B2
	B1

A20 A20 A19 A19 A18 A18 A17 A17 A16 A16 A15 A15 A14 A14 A13 A13 A12 A12 A12 A12 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A20 A2 A1 A1	oring clamp minal block	40-pin connector
A18 A18 A17 A17 A16 A16 A15 A15 A14 A14 A13 A13 A12 A12 A11 A11 A10 A10 A12 A12 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A5 A3 A3 A2 A2	A20	A20
A17 A17 A16 A16 A15 A15 A14 A14 A13 A13 A12 A12 A11 A11 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A19	A19
A16 A16 A15 A15 A14 A14 A13 A13 A12 A12 A11 A11 A10 A10 A9 A9 A8 A6 A5 A5 A4 A4 A3 A3	A18	
A15 A15 A14 A14 A13 A13 A12 A12 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A5 A3 A3 A2 A2	A17	A17
A14 A14 A13 A13 A12 A12 A12 A12 A11 A11 A10 A10 A9 A9 A6 A6 A5 A5 A4 A4 A3 A3	A16	A16
A13 A13 A12 A12 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A15	A15
A12 A12 A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A14	A14
A11 A11 A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A13	
A10 A10 A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A12	A12
A9 A9 A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A11	A11
A8 A8 A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A10	A10
A7 A7 A6 A6 A5 A5 A4 A4 A3 A3 A2 A2		A9
A6 A6 A5 A5 A4 A4 A3 A3 A2 A2	A8	A8
A5 A5 A4 A4 A3 A3 A2 A2		
A4 A4 A3 A3 A2 A2	A6	A6
A3 A3 A2 A2		
A2 A2	A4	A4
A1A1	A2	
	A1	A1

Sp ter



Dimensions



Schematic diagram of connection to MELSEC iQ-R series module (Unit: mm)

Applicable modules of Mitsubishi Electric MELSEC series programmable controllers

MELSEC series	Input r	nodule	Output	nodule	High-speed c	ounter module	Positioni	ng module
	RX41C4	RX61C6HS	BY41NT2P	RY41NT2H	RD62P2			
MELSEC iQ-B series	RX41C6HS		RY41PT1P	RY41PT2H	RD62P2E		RD75P2	
	87410082	KX/104	RTAIPTIP	RT4IPI2H	RD62D2			
	QX41	QX71	0)(410	0)/71	QD62	QD63P6	QD75P1/QD75P1N	QD75D1/QD75D1N
MELSEC-Q series	QX41-S1		QY41P QY71 QY41H	QT/I	QD62E	QD64D2	QD75P2/QD75P2N	QD75D2/QD75D2N
	QX41-S2			QD62D			QD70P4	
MELSEC-L series	1.844.04		LY41NT1P		LD62		LD75P1	LD75D1
MELSEC-L series	LX41C4	LY41PT1P		LD62D		LD75P2	LD75D2	

Specifications

	Item	Specification				
Operating ar	mbient temperature	0 to 55°C (when the extended temperature range base unit is not used) 0 to 60°C (when the extended temperature range base unit is used)				
Operating ambient humidity		5 to 95%RH, non-condensing				
	Without ferrule (stranded/solid wire)	0.2 to 1.5 mm ² (24 to 16 AWG)				
		Applicable wire size (mm²/AWG)	Applicable ferrule	Crimping tool	Manufacturer	
	9 With ferrule (stranded wire)	0.25 / 24	AI 0,25-8 YE	CRIMPFOX 6	PHOENIX CONTACT GmbH & Co. KG	
Arrellessble		0.3, 0.34 / 22	AI 0,34-8 TQ			
Applicable wire		0.5 / 20	AI 0,5-8 WH			
		0.75 / 18	AI 0,75-8 GY			
		0.08 to 0.34 / 28 to 22	216-302	206-220		
		0.34 / 24, 22	216-302		WAGO Kontakttechnik GmbH & Co. KG	
		0.5 / 22, 20	216-201	206-1204		
		0.75 / 20, 18	216-202	-		
External dimensions		27.4 (W) × 102 (H) × 28 (D) mm				
Weight		Approx. 100 g				

Reference product

Item	Specification				
Name	Test plug				
Model	MPS-MT 1-S				
Manufacturer	PHOENIX CONTACT GmbH & Co. KG				
Shape	7				
Test pin	Dia. 1.0 mm				
Socket*	Dia. 2.0 mm				
Cable length	150 mm				

* Socket to insert the test lead of the tester

Product line

Name	Model	Remarks
Spring clamp terminal block	FA1-TE40PA	Adapter, mounting bracket,
conversion adapter		mounting screws

Product list

Name	Model	Remarks
Spring clamp type relay terminal	FA1-TE1S32XY	32 points, horizontal type
block for programmable controllers	FA1-TESV32XY	32 points, vertical type
	FA-CBL05FMV	For sink/source interface
Connection cable*	FA-CBL05FMVE	For negative common input

* These are a few examples of connection cables. Various cables such as ones with different lengths, sink/source type cables, and branch cables are also available.

Cable models depend on the applicable programmable controllers or cable lengths. For details, check our website or selection tool.

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For safe use

 To use the products given in this publication properly, always read the relevant manuals before beginning operation.

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- The products have been manufactured under strict quality control. However, when installing the products where major
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