

Programmable logic relay system **PLC logic**





Extremely compact control and switching

DENGNEX

Push-in Technology Designed by PHOENIX CONTACT

> OUT EMR N/O

EMR

OUT EMR N/O

OUT OUT SSR SSR

PLC logic

OUT

E

G-V8C/PT-24DC/8M

29 05 135

24 DC

IN 230 AC

230

On the logic module market, the PLC logic relay system is the first to combine logic, interface, and field connection levels in a single solution. This means that you can switch and control I/O signals using a single compact system. You can combine the new PLC logic module with the corresponding plug-in relays as required. The modular structure opens up a wealth of applications.

Advantages at a glance

Carry out small automation tasks and benefit from the advantages of plug-in relays. You can implement your projects quickly with the aid of the LOGIC+ software.



Extremely compact control



Extremely compact switching

Switch your I/O signals on a design width of just 50 mm using the narrow 6.2 mm relay modules.

Easy project implementation

LOGIC+ is an intuitive software which allows you to rapidly implement your projects.

Flexible mounting and combination

of the different relay types and I/Os according to your switching requirements.

High system availability

thanks to plug-in switching elements.



Straightforward wiring with PLC logic

PLC logic combines the strengths of established relay technology with logic functions. In contrast to conventional logic modules, the modular design with a variety of relay modules enables channel-specific configuration. On the field side, sensors and actuators can be connected directly to the relay.

Your advantages:

- Fast, clear wiring
- Easy to install
- Cost and space saving
- Electrically isolated inputs and outputs

Reduce your wiring costs with PLC logic



Rapid connection for sensors and actuators

Benefit from sensor and actuator versions for direct connection of the supply and return conductor. You can also take advantage of the plug-in potential bridges to minimize your wiring requirements.

Save time and costs by using these versions as no additional potential terminal blocks are required.

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The system at a glance

You can flexibly extend the system thanks to the wide choice of different modules. In addition to the basic module, extension modules are also available for more complex tasks. Eight relay modules can be freely selected for each logic module. Up to 48 I/O signals can be acquired and switched with one basic module and two extension modules.

The components in detail



Basic module

PLC logic processes 16 I/O signals with just one basic module – that's with a design width of just 50 mm.



Extension modules

The basic module and the extension module are connected via integrated connectors – no tools required.



Memory block Save programs or easily copy them to other devices.



Relay modules Channel-specific con

Channel-specific configuration is possible thanks to the modular design with a wide variety of relay modules.





Fieldbus connection via gateway

An adaptable fieldbus gateway, available as an option, can be used to integrate PLC logic into a PROFIBUS DP network. This enables communication with a higher-level control system for remote control, diagnostics, and visualization purposes.

Intuitive programming using LOGIC+

LOGIC+ is an intuitive software which allows you to rapidly implement your projects.

Select the right components for your task. The easy handling helps when it comes to configuration and startup of the products. The programs created can be simulated offline on the PC and tested online during operation.





Easy programming – step by step

1. Configuration in the hardware editor

Each relay channel can be configured as an input or output with an electromechanical or a solid-state relay. Benefit from clear assignment of the inputs and outputs thanks to the graphical representation of the hardware connections.

2. Creating a program

Insert the inputs and outputs and the logic modules into the logic diagram via drag & drop. The software is intuitive and simplifies your work. You do not need any in-depth programming knowledge.

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3. Simulating the new configuration

Use the simulation function to easily check and simulate the programmed contents.

The screen display shows all the states currently possessed by your application. Possible conflicts are indicated.





Download now

Download the free LOGIC+ software and a number of complete programs for applications from our website.

Did you know? LOGIC+ is ideal for testing PLC logic in advance without hardware.

Logic modules

The logic modules have eight integrated digital inputs, two of which can be configured as analog inputs (0 - 10 V). A further eight channels can be configured with corresponding relay modules as digital inputs or outputs. The modules can be programmed with the intuitive LOGIC+ software.

		Connection/designation		Order No.
	Stand-alone module with 16 I/Os, cannot be extended, connection to PC via micro USB socket. Integrated realtime clock,	Push-in connection	PLC-V8C/PT-24DC/SAM	2905136
	accommodates external IFS-CONFSTICK-PLC memory block.	Screw connection	PLC-V8C/SC-24DC/SAM	2905082
	Basic module with 16 I/Os, can be extended up to a maximum of 48 I/Os. Connection to PC via micro USB socket. Integrated realtime	Push-in connection	PLC-V8C/PT-24DC/BM	2905135
	clock. Accommodates external IFS-CONFSTICK memory block. Optional connection to PROFIBUS-GATEWAY-IFS.	Screw connection	PLC-V8C/SC-24DC/BM	2903094
	Extension module with 16 I/Os, for extending the basic module. A maximum of two extension modules can be	Push-in connection	PLC-V8C/PT-24DC/EM	2905137
	connected to each basic module.	Screw connection	PLC-V8C/SC-24DC/EM	2903095

Relay modules

Solid-state relay output		Connection/designation	Order No.	
	100 mA, 3 V DC 48 V DC	Push-in connection	PLC-OPT-24DC/48DC/100	2900352
		Screw connection	PLC-OSC-24DC/48DC/100	2966728
	3 A, 3 V DC 33 V DC	Push-in connection	PLC-OPT-24DC/24DC/2	2900364
		Screw connection	PLC-OSC-24DC/24DC/2	2966634
	750 mA, 24 V AC 253 V AC	Push-in connection	PLC-OPT-24DC/230AC/1	2900369
		Screw connection	PLC-OSC-24DC/230AC/1	2967840
	3 A, 3 V DC 33 V DC, actuator type	Push-in connection	PLC-OPT-24DC/24DC/2/ACT	2900376
		Screw connection	PLC-OSC-24DC/24DC/2/ACT	2966676
	750 mA, 24 V AC 253 V AC, actuator type	Push-in connection		
		Screw connection	PLC-OSC-24DC/230AC/1/ACT	2967947
	1 A, 12 V DC 300 V DC	Push-in connection	PLC-OPT-24DC/300DC/1	2900383
		Screw connection	PLC-OSC-24DC/300DC/1	2980678
	10 A, 3 V DC 33 V DC	Push-in connection	PLC-OPT-24DC/24 DC/10/R	2900398
		Screw connection	PLC-OSC-24DC/24DC/10/R	2982702
	500 mA, 3 V DC 48 V DC,	Push-in connection	PLC-OPT-24DC/48DC/500/W	2900378
	electronic PDT	Screw connection	PLC-OSC-24DC/48DC/500/W	2980636
	TTL, 50 mA, 5 V DC	Push-in connection	PLC-OPT-24DC/TTL	2900363
		Screw connection	PLC-OSC-24DC/TTL	2982728

Relay output		Connection/designa	Order No.	
a la	1 PDT,	Push-in connection	PLC-RPT-24DC/21	2900299
	6 A, 250 V AC/DC	Screw connection	PLC-RSC-24DC/21	2966171
	1 PDT,	Push-in connection	PLC-RPT-24DC/21AU	2900306
	50 mA, 36 V DC, gold contact	Screw connection	PLC-RSC-24DC/21AU	2966265
	1 N/O contact, 6 A, 250 V AC/DC, actuator type	Push-in connection	PLC-RPT-24DC/1/ACT	2900312
		Screw connection	PLC-RSC-24DC/1/ACT	2966210
	1 N/O contact with switch,	Push-in connection	PLC-RPT-24UC/1/S/H	2900328
	6 A, 250 V AC/DC	Screw connection	PLC-RSC-24UC/1/S/H	2982236
Polov input		Connection/designa	Connection/designation	
neity input	Input voltage 24 V DC	Push in connection		2900313
	input voltage 21 v DC	Screw connection		2966317
0	Input voltage 120 V AC/DC	Bush in connection		2900314
CH == ==	input foldage 120 V / G/D C	Screw connection	PLC-RSC-120UC/1AU/SEN	2966320
Chargen of	Input voltage 230 V AC/DC	Push-in connection		2900315
(Command on the		Screw connection	PLC-RSC-230UC/1AU/SEN	2966333
	Indut voltage 5 V DC	Push-in connection		
	(basic terminal block without relay)	Screw connection	PLC-BSC-5DC/1/SEN	2980267
	Relay for 5 V DC basic terminal block	Push-in connection		
		Screw connection	REL-MR-4,5DC/21AU	2961370
Solid-state relay inp	ut	Connection/designa	tion	Order No.
and the second se	Input voltage 24 V DC	Push-in connection	PLC-OPT-24DC/48DC/100/V8C/SEN	2904693
		Screw connection	PLC-OSC-24DC/48DC/100/V8C/SEN	2904690
2 - 2	Input voltage 120 V AC/DC	Push-in connection	PLC-OPT-120UC/48DC/100/V8C/SEN	2904694
		Screw connection	PLC-OSC-120UC/48DC/100/V8C/SEN	2904691
The second secon	Input voltage 230 V AC/DC	Push-in connection	PLC-OPT-230UC/48DC/100/V8C/SEN	2904695
		Screw connection	PLC-OSC-230UC/48DC/100/V8C/SEN	2904692
Dummy or reserve		Connection/designation		Order No.
-	Basic terminal blocks output	Push-in connection	PLC-BPT-24DC/21	2900445
		Screw connection	PLC-BSC-24DC/21	2966016
	Basic terminal blocks input	Push-in connection	PLC-BPT-24DC/1/SEN	2900262
		Screw connection	PLC-BSC-24DC/1/SEN	2966061

Accessories

		Designation	Order No.			Designation	Order No.
	Memory block	IFS-CONFSTICK	2986122	19	T-BUS connecting cable	PLC-V8C/CAB/ TBUS/0,3M	2905263
19	Programming cable	CAB-USB A/MICRO USB B/2,0M	2701626	1	Gateway	EM-PB-GATEWAY-IFS	2297620
- -	Starter kit Contents: basic module, relay modules, cable, quick start poster, USB stick with LOGIC+ software				PLC-LOGIC- STARTERKIT1	2905504	

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