

Universal relay system – from coupling relays to a replacement for miniature contactors

You can implement all of your standard relay applications using the RIFLINE complete universal relay system. Whether you want to isolate, multiply, or amplify signals: The field of applications ranges from coupling and timer relays to a replacement for miniature contactors. The relay system with universal plug-in design supports quick, easy, and error-free handling.



Push-in Technology 
Designed by Phoenix Contact

Your advantages

- ✓ Complete product family that covers all standard relay applications
- ✓ Easy handling, thanks to state-of-the-art wiring and potential distribution concept
- ✓ Easily extended to create a timer relay by means of a plug-in function module
- ✓ Reliable system for high machine and system availability
- ✓ Available as a complete module or modular system

Easy handling



Wiring

Fast, easy, tool-free wiring with Push-in connection technology.

Potential distribution

Easy potential distribution with pluggable bridges from the CLIPLINE complete system accessories.

Extension

Easy extension with the plug-in, multifunctional timer module. You can select three time functions in a time range from 0.5 seconds to 100 minutes.

Multifunctional timer module

The multifunctional plug-in timer module for 24 V DC transforms the relay module into a timer relay. You can fit the RIF-1 to RIF-4 bases with this module.

Choose from the following time functions:

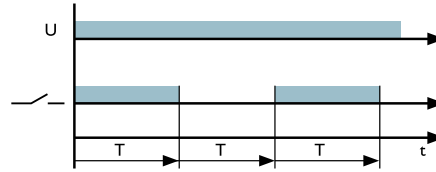
- Switch-on delay
- Passing make contact
- Pulse generator



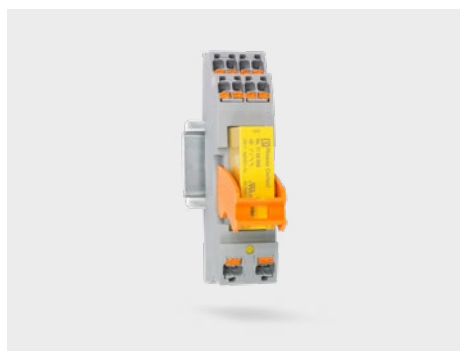
Switch-on delay



Passing make contact

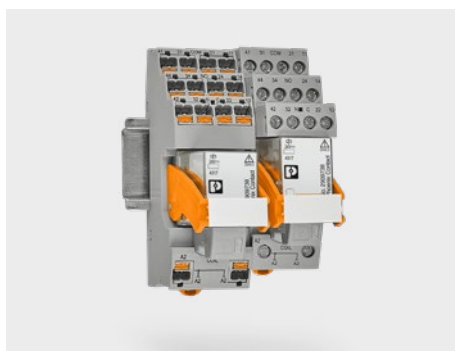


Pulse generator



Force-guided contacts

Multi-channel coupling relay modules with force-guided contacts in accordance with DIN EN 61810-3 type A.



Potentially explosive applications

Coupling relay modules with ATEX, IECEx, and Class 1 Division 2 approval for potentially explosive applications.



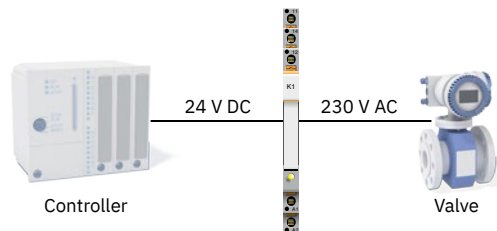
High inrush currents

Coupling relay modules for high inrush currents up to 800 A_{peak}.


RIFLINE complete relay modules

RIF-0


The 6.2 mm narrow RIF-0 base series is suitable for a 1-changeover contact relay. Switching currents up to 6 A are implemented here. RIF-0 is therefore a good choice for all coupling applications.




RIF-0 electromechanical relay modules with power contact

	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	12 V DC	1 N/O contact	10 mA (12 V)	6 A	10 A (4 s)	250 V AC/DC	2903362
		1 changeover contact					2903371
	24 V DC	1 N/O contact			10 A (4 s)		2903361
		1 changeover contact					2903370


RIF-0 electromechanical relay modules with power contact and manual activation

	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	1 changeover contact	10 mA (12 V)	6 A		250 V AC/DC	NEW 1550107

RIF-0 electromechanical relay modules with gold contact

	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	12 V DC	1 N/O contact	1 mA (12 V)	50 mA	50 mA	30 V AC 36 V DC	2903360
		1 changeover contact					2903369
	24 V DC	1 N/O contact					2903359
		1 changeover contact					2903368

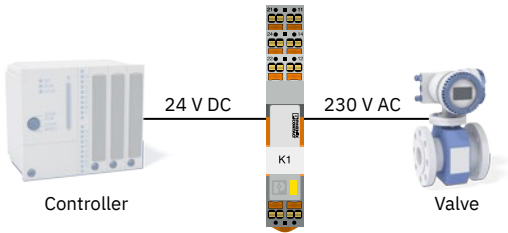
RIF-0 solid-state relay modules

	Rated actuating voltage	Transmission frequency	Limiting continuous current	Switching voltage	Push-in connection
	24 V DC	300 Hz	100 mA	3 V DC ... 48 V DC	2905294
			3 A	3 V DC ... 33 V DC	2905293
		10 Hz	750 mA	24 V AC ... 253 V AC	2905295


RIFLINE complete relay modules

RIF-1

The 16 mm narrow RIF-1 base series is suitable for a 2-changeover contact relay. Currents up to 13 A can be switched here. The ideal relay for power switching and signal duplication.




RIF-1 electromechanical relay modules with power contact

	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	12 V DC	1 changeover contact	10 mA (12 V)	11 A	50 A (20 ms, N/O contact)	250 V AC/DC	2906224
		2 changeover contacts	10 mA (5 V)	8 A	25 A (20 ms, N/O contact)		2906223
	24 V DC	1 changeover contact	10 mA (12 V)	11 A	50 A (20 ms, N/O contact)		2903342
		2 changeover contacts	10 mA (5 V)	8 A	25 A (20 ms, N/O contact)		2903334
	24 V AC	1 changeover contact	10 mA (12 V)	10 A			2903341
		2 changeover contacts	10 mA (5 V)	8 A	12 A (20 ms, N/O contact)		2903333
	120 V AC	1 changeover contact	10 mA (12 V)	10 A	25 A (20 ms, N/O contact)		2903340
		2 changeover contacts	10 mA (5 V)	8 A	12 A (20 ms, N/O contact)		2903332
	230 V AC	1 changeover contact	10 mA (12 V)	10 A	25 A (20 ms, N/O contact)		2903339
		2 changeover contacts	10 mA (5 V)	8 A	12 A (20 ms, N/O contact)		2903331

RIF-1 electromechanical relay modules with gold contact

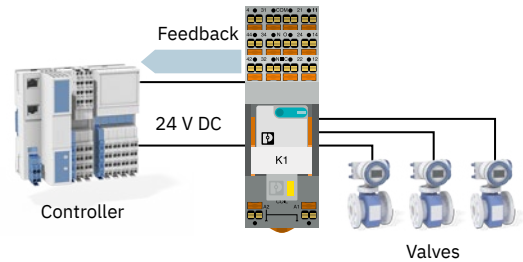
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	2 changeover contacts	1 mA (24 V)	50 mA	50 mA	30 V AC 36 V DC	2903330
	24 V AC						2903329
	120 V AC						2903328
	230 V AC						2903327


RIFLINE complete relay modules


RIF-1 electromechanical relay modules with power contact and manual activation							
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	1 changeover contact	10 mA (12 V)	11 A	24 A (20 ms, N/O contact)	250 V AC/DC	2905289
		2 changeover contacts		8 A	12 A (20 ms, N/O contact)		2905291
	120 V AC	1 changeover contact			32 A (20 ms, N/O contact)		2909776
		2 changeover contacts		5 A	16 A (20 ms, N/O contact)		2909775
	230 V AC	1 changeover contact		8 A	32 A (20 ms, N/O contact)		2905290
		2 changeover contacts		5 A	16 A (20 ms, N/O contact)		2905292

RIF-2

The 31 mm wide RIF-2 base series is designed for industrial relays with up to four contacts. Currents up to 12 A are no problem. This is the ideal solution for signal multiplication.



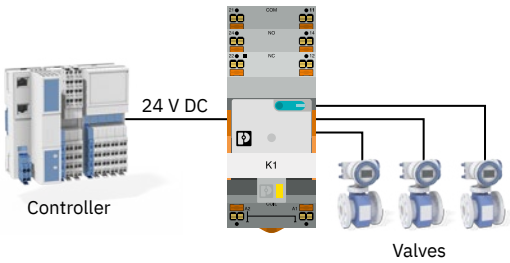
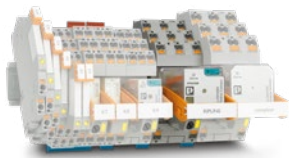
RIF-2 electromechanical relay modules with power contact							
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	2 changeover contacts	5 mA (24 V)	10 A	30 A (20 ms, N/O contact)	250 V AC/DC	2903315
		4 changeover contacts		6 A	16 A (20 ms, N/O contact)		2903308
	24 V AC	2 changeover contacts		8.5 A	30 A (20 ms, N/O contact)		2903313
		4 changeover contacts		5 A	16 A (20 ms, N/O contact)		2903306
	120 V AC	2 changeover contacts		8.5 A	30 A (20 ms, N/O contact)		2903311
		4 changeover contacts		5 A	16 A (20 ms, N/O contact)		2903305
	230 V AC	2 changeover contacts		8.5 A	30 A (20 ms, N/O contact)		2903310
		4 changeover contacts		5 A	16 A (20 ms, N/O contact)		2903304

RIF-2 electromechanical relay modules with power contact and reinforced retaining bracket							
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	2 changeover contacts	5 mA (24 V)	10 A	30 A (20 ms, N/O contact)	250 V AC/DC	NEW 1577412


RIFLINE complete relay modules

RIF-3

The 40 mm wide RIF-3 base series is designed for octal relays with up to three contacts. Switching currents up to 10 A are implemented here.

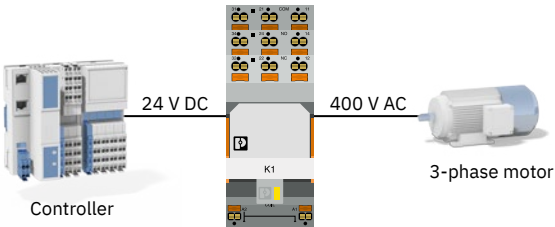


RIF-3 electromechanical relay modules with power contact


RIF-3 electromechanical relay modules with power contact							
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	3 changeover contacts	10 mA (24 V)	8.5 A	30 A (20 ms, N/O contact)	250 V AC/DC	2903294
	120 V AC			6 A			2903293
	230 V AC						2903292

RIF-4

The 43 mm wide RIF-4 base series is designed for power relays with up to three contacts. It can be used to switch currents up to 16 A.



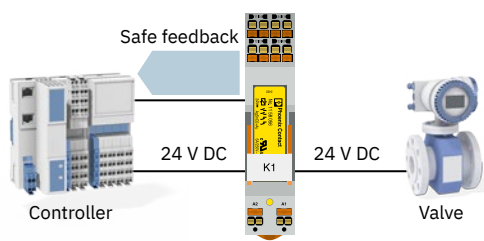
RIF-4 electromechanical relay modules with power contact

RIF-4 electromechanical relay modules with power contact							
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	3 changeover contacts	10 mA (24 V)	10 A	50 A (20 ms, N/O contact)	440 V AC 250 V DC	2903278
	120 V AC			8 A			2903277
	230 V AC						2903276

RIFLINE complete relay modules for special applications

Force-guided contacts

The coupling relay modules with up to four force-guided contacts in accordance with DIN EN 61810-3 are suitable for switching currents up to 6 A. Realize the standardized applications with safe feedback.

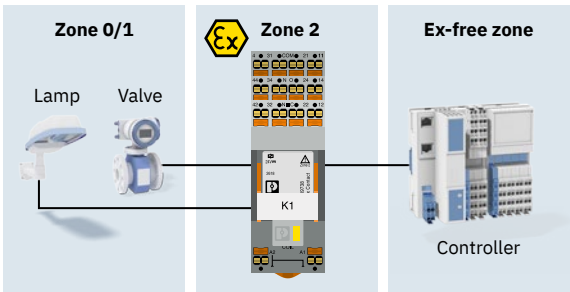


RIFLINE complete electromechanical relay modules with force-guided contacts


	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	2 changeover contacts, force-guided	5 mA (10 V)	6 A	35 A (20 ms)	250 V AC/DC	2908215
		3 N/O contacts, 1 N/C contact				250 V AC 300 V DC	1148703
		2 N/O contacts, 2 N/C contact					1148699

Potentially explosive applications

The coupling relay modules of the RIF-2 base series with ATEX, IECEx, and Class 1 Division 2 approval are suitable for use in Zone 2 potentially explosive applications.



Single relay with force-guided contacts

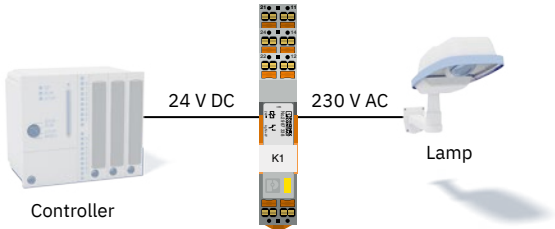
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Item number
	24 V DC	2 changeover contacts, force-guided	10 mA (5 V)	6 A	6 A	250 V AC/DC	2908777
		2 N/O contacts, 2 N/C contacts, force-guided	5 mA (10 V)		35 A (20 ms)	250 V AC 300 V DC	1158056
		3 N/O contacts, 1 N/C contact, force-guided					1157954

RIFLINE complete relay modules for special applications


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High inrush currents


The coupling relay modules of the RIF-1 base series, with inrush-proof switching contacts and a wolfram lead contact, are suitable for switching very high inrush currents up to 800 A.



RIFLINE complete electromechanical relay modules with 4-changeover contact power contact for potentially explosive areas

	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	24 V DC	4 changeover contacts	5 mA (24 V)	6 A	16 A (20 ms, N/O contact)	250 V AC/DC	2909741
	120 V AC			5 A			2909740
	230 V AC						2909739

RIFLINE complete electromechanical relay modules for high inrush currents

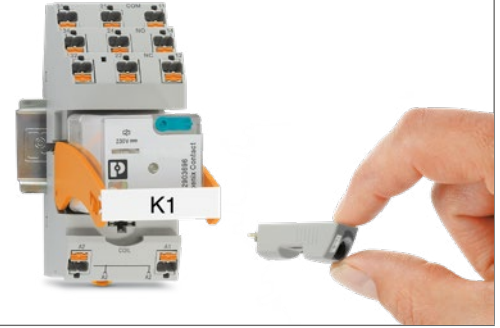
	Nominal input voltage	Contact switching type	Minimum switching current	Limiting continuous current	Maximum inrush current	Maximum switching voltage	Push-in connection
	12 V DC	1 N/O contact	100 mA (12 V DC)	6 A	80 A (20 ms) 130 A (peak, at capacitive load, 230 V AC, 24 µF)	250 V AC/DC	1078802
	24 V DC						2909884
							165 A (20 ms) 800 A (200 µs)

Electromechanical and solid-state relay modules





Accessories

Accessories

Here you will find our many plug-in module variants and relay retaining brackets for all relay bases and various requirements.



Plug-in modules

	Description	Type	Item no.
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with bridge rectifier, input voltage: 12 V AC ... 230 V AC	RIF-BR-12-230 AC	2907060
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, input voltage: 12 V DC ... 24 V DC $\pm 20\%$, polarity: A1-, A2+	RIF-LDM-12-24 DC	2907057
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 110 V DC $\pm 20\%$	RIF-LDP-110 DC	2900941
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 V DC ... 24 V DC $\pm 30\%$	RIF-LDP-12-24 DC	2900939
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 48 V DC ... 60 V DC $\pm 20\%$	RIF-LDP-48-60 DC	2900940
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 V AC ... 230 V AC / 110 V DC $\pm 20\%$	RIF-LV-120-230 AC/110 DC	2900944
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 12 V AC ... 24 V AC / DC $\pm 20\%$	RIF-LV-12-24 UC	2900942
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 48 V AC ... 60 V AC / DC $\pm 20\%$	RIF-LV-48-60 UC	2900943
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with RC element, input voltage: 120 V AC ... 230 V AC / DC $\pm 20\%$	RIF-RC-120-230 UC	2900951
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with RC element, input voltage: 12 V AC ... 24 V AC / DC $\pm 20\%$	RIF-RC-12-24 UC	2900949
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with RC element, input voltage: 48 V AC ... 60 V AC / DC $\pm 20\%$	RIF-RC-48-60 UC	2900950
	Plug-in module for extending a relay module to create a timer relay, 3 time functions, 4 time ranges, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, input voltage: 12 V DC ... 24 V DC	RIF-T3-24UC	2902647
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 120 V AC ... 230 V AC / DC $\pm 20\%$	RIF-V-120-230 UC	2900948
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 12 V AC ... 24 V AC / DC $\pm 20\%$	RIF-V-12-24 UC	2900945
	Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 48 V AC ... 60 V AC / DC $\pm 20\%$	RIF-V-48-60 UC	2900947

Accessories




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Electromechanical and solid-state relay modules

Ejector lever			
	Description	Type	Item no.
	Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 16 mm high miniature power relays and solid-state relays	RIF-RH-1	2900953
	Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 25 mm high miniature power relays and solid-state relays	RIF-RH-1-H	2904468
	Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-2 relay base, for industrial relays	RIF-RH-2	2900954
	Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relays	RIF-RH-3	2900955
	Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relays	RIF-RH-4	2900956
	Relay retaining bracket, wire model, suitable for RIF-1 relay base, for 16 mm high miniature power and solid-state relays	RIF-RHM-1	2905986
	Relay retaining bracket, wire model, suitable for RIF-1 relay base, for 25 mm high miniature power relays	RIF-RHM-1-H	2905985
	Relay retaining bracket, wire model, suitable for RIF-2 relay base	RIF-RHM-2	2905984
	Relay retaining bracket, wire model, suitable for RIF-4 relay base	RIF-RHM-4	2905983
	Reinforced relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-2 relay base, for industrial relays	RIF-RHS-2	2908043

Bridges			
	Description	Type	Item no.
	Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: red	FBS 2-6	3030336
	Plug-in bridge, pitch: 6.2 mm, number of positions: 5, color: red	FBS 5-6	3030349
	Plug-in bridge, pitch: 6.2 mm, number of positions: 10, color: red	FBS 10-6	3030271
	Plug-in bridge, pitch: 6.2 mm, number of positions: 20, color: red	FBS 20-6	3030365
	Plug-in bridge, pitch: 6.2 mm, number of positions: 50, color: red	FBS 50-6	3032224
	Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: blue	FBS 2-6 BU	3036932
	Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: gray	FBS 2-6 GY	3032237
	Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: red	FBS 2-8	3030284
	Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: blue	FBS 2-8 BU	3032567
	Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: gray	FBS 2-8 GY	3032621