

# Easy handling – RIFLINE complete relay system

You can carry out all standard relay applications using the RIFLINE complete industrial relay system. It doesn't matter whether you want to isolate, multiply or amplify signals.

The relay system, with a consistent plug-in design, ensures high machine and system availability. The area of application ranges from coupling and timer relays through to the small power contactor replacement.



# Easy handling in detail



Easy wiring thanks to push-in connection technology. This ensures quick wiring without the need for any tools.

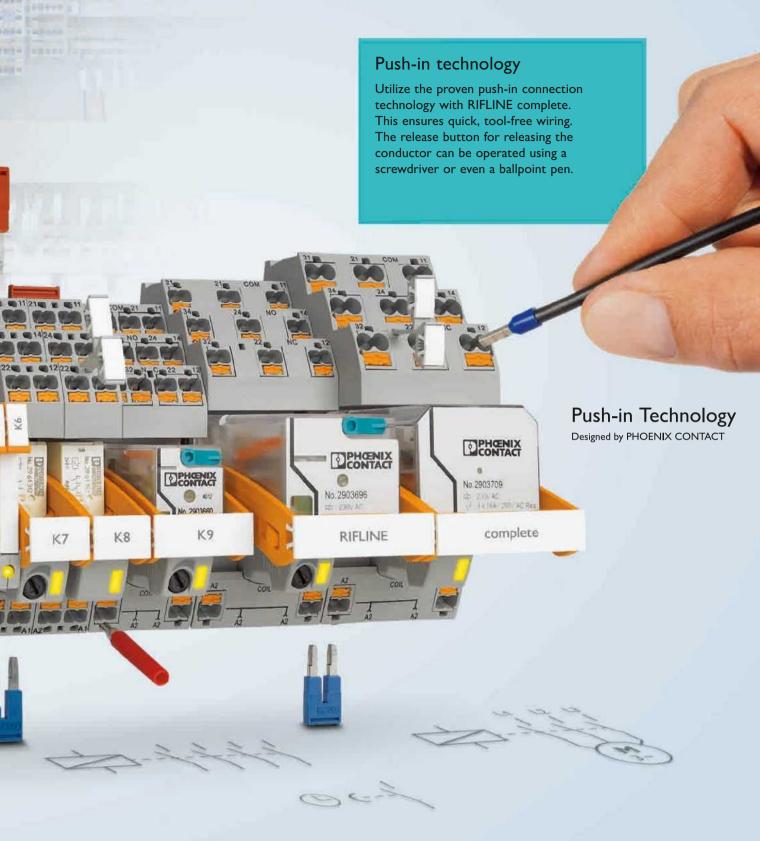


**Easy potential distribution** with jumpers from the CLIPLINE complete system accessories.



Easy to extend
using the plug-in multifunctional
timer module.
Three time functions can be

Three time functions can be selected in a time range from 0.5 seconds to 100 minutes.



#### High availability thanks to plug-in relays and function modules

Relays can be easily exchanged in the event of a service call. This, in turn, ensures a high machine and system availability.

#### Complete relay family

Switch currents up to 16 A. From the coupling relay to the small power contactor replacement, the product range offers the right relay for every application.

# Applications at a glance

Thanks to the diverse range of RIFLINE complete products, a wide variety of applications can be implemented using the system. The relay can be extended as desired using function modules.

#### Multifunctional timer module

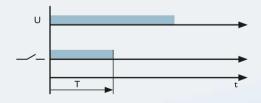
The multifunctional plug-in timer module for 24 V transforms the relay module into a timer relay. The RIF-1 to RIF-4 bases can be fitted with this module.

Three time functions can be selected in a time range from 0.5 seconds to 100 minutes.

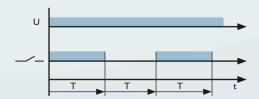
#### Switch-on delay



#### Passing make contact



#### Flasher unit



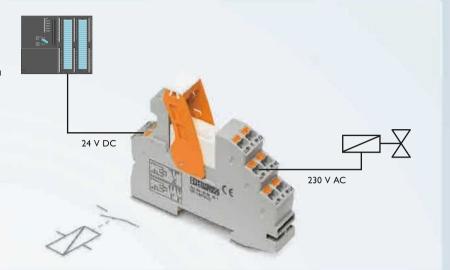
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#### From the coupling relay to the small power contactor replacement

#### Coupling relays between the controller and the field

The RIF-0 and RIF-1 relay modules are used in particular to reliably couple signals between the controller and the field.

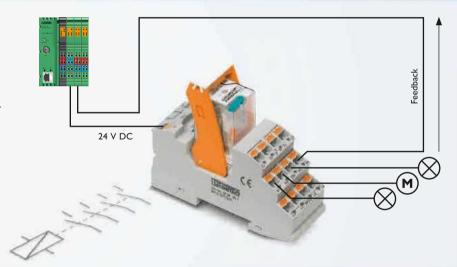
As such, power is amplified, voltages are adjusted or signals are electrically isolated.



#### Relays for signal multiplication

The RIF-2 relay modules are particularly suitable for applications in which a high number of contacts is required.

A feedback signal to the controller can be switched in parallel with different loads.

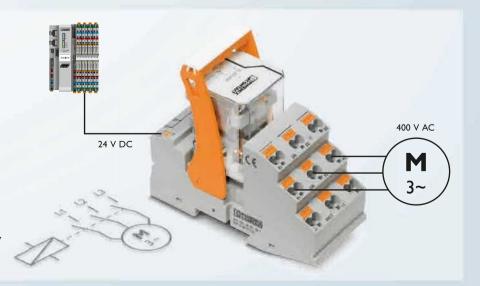


#### From the power relay to the small power contactor replacement

The RIF-4 relay modules can be used in small power contactor applications thanks to their high switching capacity.

#### The benefits in comparison with contactors are:

- · Easy maintenance thanks to plug-in capability
- · Operating indicator via status LED
- Inexpensive
- · Quick installation thanks to bridgeability and push-in connection



# Modular relay system – for maximum flexibility and cost efficiency

You can decide for yourself whether you want to assemble RIFLINE complete individually – or order it ready assembled as a complete module. All components in the modular system

can be ordered individually depending on the application. This also includes relays that are available for a variety of voltages and applications.



### RIFLINE complete - modular system

- 1. Relay base
- 2. Retaining bracket
- 3. Relay
- 4. Protective circuit
- **5. Timer module** (RIF-T3-24UC, Order No. 2902647) for RIF-1 to RIF-4 modules with 24 V input voltage

#### Standardized accessories

RIFLINE complete uses the standardized accessories of the CLIPLINE complete modular terminal block system:

- A: Bridging material
- **B: Marking accessories** such as zack marker strips and marker carriers
- C: Test plugs

## Configuration made easy with CLIP PROJECT

Configure the terminal strips and components for your control cabinet from Phoenix Contact easily using CLIP PROJECT – and prepare the corresponding markings at the same time. The planning software also supports you in selecting the correct accessories right through to ordering. With CLIP PROJECT, you can benefit from a consistent process chain. This is achieved by way of the interaction with CAE systems.

Further information and download options can be found at: **phoenixcontact.com** 



## Complete relay modules -RIFLINE complete order overview

			Output contacts					
		Input voltage	7	1	Max. switching current 1)	Switching voltage	Туре	Order No.
RIF-0	6.2 mm	12 V DC	1	_	6 A	250 V AC/DC	RIF-0-RPT-12DC/21	2903371
		12 V DC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-0-RPT-12DC/21AU	2903369
		12 V DC	_	1	6 A	250 V AC/DC	RIF-0-RPT-12DC/1	2903362
		12 V DC	_	1	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-0-RPT-12DC/1AU	2903360
		24 V DC	1	_	6 A	250 V AC/DC	RIF-0-RPT-24DC/21	2903370
		24 V DC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-0-RPT-24DC/21AU	2903368
		24 V DC	_	1	6 A	250 V AC/DC	RIF-0-RPT-24DC/1	2903361
		24 V DC	-	1	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-0-RPT-24DC/1AU	2903359
		24 V DC	1		11 A (13 A) <sup>3)</sup>	250 V AC/DC	RIF-1-RPT-LDP-24 DC/1x21	2903342
RIF-1	16 mm	24 V DC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LDP-24DC/1x21AU	2903338
		24 V DC	2	_	8 A	250 V AC/DC	RIF-1-RPT-LDP-24DC/1x21A0	2903334
		24 V DC	2	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LDP-24DC/2x21AU	2903330
		24 V AC	1	_	10 A (12 A) <sup>3)</sup>	250 V AC/DC	RIF-1-RPT-LV-24AC/1×21	2903341
		24 V AC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-24AC/1x21AU	2903337
		24 V AC	2	_	8 A	250 V AC/DC	RIF-1-RPT-LV-24AC/2x21	2903333
		24 V AC	2	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-24AC/2x21AU	2903329
		120 V AC	1	_	10 A (12 A) <sup>3)</sup>	250 V AC/DC	RIF-1-RPT-LV-120AC/1×21	2903340
		120 V AC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-120AC/1x21AU	2903336
		120 V AC	2	_	8 A	250 V AC/DC	RIF-1-RPT-LV-120AC/2x21	2903332
		120 V AC	2	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-120AC/2x21AU	2903328
		230 V AC	1	_	10 A (12 A) <sup>3)</sup>	250 V AC/DC	RIF-1-RPT-LV-230AC/1×21	2903339
		230 V AC	1	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-230AC/1x21AU	2903335
		230 V AC	2	_	8 A	250 V AC/DC	RIF-1-RPT-LV-230AC/2×21	2903331
		230 V AC	2	_	50 mA <sup>2)</sup>	30 V AC/36 V DC	RIF-1-RPT-LV-230AC/2x21AU	2903327
		241456			40.4	2507/40/00	DIE O DETLEDE O AD CAD OA	2002245
2	31 mm	24 V DC	2	-	10 A	250 V AC/DC	RIF-2-RPT-LDP-24DC/2x21	2903315
		24 V DC	4	_	6 A	250 V AC/DC	RIF-2-RPT-LDP-24DC/4x21	2903308
		24 V AC	2	_	8.5 A	250 V AC/DC	RIF-2-RPT-LV-24AC/2×21	2903313
RIF-2		24 V AC	4	_	5 A	250 V AC/DC	RIF-2-RPT-LV-24AC/4x21	2903306
~		120 V AC	2	-	8.5 A	250 V AC/DC	RIF-2-RPT-LV-120AC/2x21	2903311
		120 V AC	4	_	5 A	250 V AC/DC	RIF-2-RPT-LV-120AC/4x21	2903305
		230 V AC	2	_	8.5 A	250 V AC/DC	RIF-2-RPT-LV-230AC/2x21	2903310
		230 V AC	4	_	5 A	250 V AC/DC	RIF-2-RPT-LV-230AC/4x21	2903304
RIF-3		24 V DC	2	-	10 A	250 V AC/DC	RIF-3-RPT-LDP-24DC/2x21	2903297
		24 V DC	3	-	8.5 A	250 V AC/DC	RIF-3-RPT-LDP-24DC/3×21	2903294
		120 V AC	2	-	7 A	250 V AC/DC	RIF-3-RPT-LV-120AC/2×21	2903296
		120 V AC	3	_	6 A	250 V AC/DC	RIF-3-RPT-LV-120AC/3×21	2903293
		230 V AC	2	-	7 A	250 V AC/DC	RIF-3-RPT-LV-230AC/2×21	2903295
	40 mm	230 V AC	3	_	6 A	250 V AC/DC	RIF-3-RPT-LV-230AC/3x21	2903292
RIF-4		24 V DC	2	_	11 A	440 V AC/250 V DC	RIF-4-RPT-LDP-24DC/2x21	2903281
		24 V DC	3	_	10 A	440 V AC/250 V DC	RIF-4-RPT-LDP-24DC/3×21	2903278
		24 V DC	_	3	10 A	440 V AC/250 V DC	RIF-4-RPT-LDP-24DC/3x1	2903275
		120 V AC	2	_	9 A	440 V AC/250 V DC	RIF-4-RPT-LV-120AC/2×21	2903280
		120 V AC	3	_	8 A	440 V AC/250 V DC	RIF-4-RPT-LV-120AC/3×21	2903277
		120 V AC	-	3	8 A	440 V AC/250 V DC	RIF-4-RPT-LV-120AC/3x1	2903274
	43 mm	230 V AC	2	_	9 A	440 V AC/250 V DC	RIF-4-RPT-LV-230AC/2×21	2903279
		230 V AC	3	-	8 A	440 V AC/250 V DC	RIF-4-RPT-LV-230AC/3x21	2903276
		230 V AC	-	3	8 A	440 V AC/250 V DC	RIF-4-RPT-LV-230AC/3x1	2903273

 $<sup>^{1)}</sup>$  Type dependent – please observe contact derating  $^{2)}$  Due to multi-layer contact

<sup>3)</sup> For use of the jumper between 11 and 21

#### Product range

- · Cables and wires
- Connectors
- Controllers
- Electronics housing
- Electronic switchgear and motor control
- Fieldbus components and systems
- Functional safety
- HMIs and industrial PCs
- I/O systems

- Industrial communication technology
- Industrial Ethernet
- · Installation and mounting material
- Lighting and signaling
- Marking and labeling
- Measurement and control technology
- Modular terminal blocks
- Monitoring
- PCB terminal blocks and PCB connectors

- Power supply units and UPS
- Protective devices
- Relay modules
- Sensor/actuator cabling
- Software
- Surge protection and interference filters
- System cabling for controllers
- Tools
- Wireless data communication

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