

RIF-2-RSC-LDP-24DC/4X21/EX - Relay Module



2909845

<https://www.phoenixcontact.com/us/products/2909845>

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Pre-assembled relay module consisting of: relay base, function plug-in module, power contact relay, and retaining bracket, approval in accordance with ATEX/IECEX (Zone 2) and Ex Zone Class I, Div. 2, Screw connection, 4 changeover contacts, Freewheeling diode, Input voltage: 24 V DC

Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

Commercial data

Item number	2909845
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C465
Product key	CK651A
Catalog page	Page 344 (C-5-2019)
GTIN	4055626395487
Weight per piece (including packing)	117.68 g
Weight per piece (excluding packing)	117.68 g
Customs tariff number	85364190
Country of origin	CN

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Class I, Division 2 potentially explosive areas
Operating mode	100% operating factor
Mechanical service life	approx. 2×10^7 cycles

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III II (Zone 2)
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	1.01 W
Test voltage (Winding/contact)	2.5 kV _{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2 kV _{rms} (50 Hz, 1 min., changeover contact/changeover contact)
Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	19.2 V DC ... 30 V DC (20 °C)
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	42 mA
Typical response time	13 ms
Typical release time	14 ms
Coil voltage	24 V DC
Protective circuit	Freewheeling diode
Operating voltage display	Yellow LED

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Output data

Switching

Contact switching type	4 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (24 mA)
Limiting continuous current	6 A (see diagram)
Maximum inrush current	16 A (20 ms, N/O contacts)
Min. switching current	5 mA (24 V)
Interrupting rating (ohmic load) max.	144 W (24 V DC)
	124 W (48 V DC)
	108 W (60 V DC)
	52 W (110 V DC)
	48 W (220 V DC)
	1500 VA (250 V AC)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 1 A/240 V (N/O contact)
	DC13, 2 A/24 V (N/O contact)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section rigid	0.5 mm ² ... 4 mm ²
Conductor cross-section rigid (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 4 mm ²
	0.5 mm ² ... 4 mm ² (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Tightening torque	0.5 Nm ... 0.6 Nm

Dimensions

Width	27 mm
Height	89 mm
Depth	75 mm

Material specifications

Flammability rating according to UL 94	V2 (Housing)
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Environmental and real-life conditions

Ambient conditions

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Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT III (Relay)
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

ATEX

Identification	Ⓜ II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU17ATEXB014X

UKCA Ex (UKEX)

Identification	Ⓜ II 3G Ex ec nC IIC T4 Gc
Certificate	PxclF21UKEX2909741X

IECEX

Identification	Ex ec nC IIC T4 Gc
Certificate	IECEX IBE 17.0032X

UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D T4
	Class I, Zone 2, Group IIC

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Standards/regulations	IEC 60947-5-1
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Ex zone

Standards/regulations	EN/IEC 60079-0
	EN/IEC 60079-7
	EN/IEC 60079-15

Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

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Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2909845>



EAC

Approval ID: TR_TS_D_00573_c



EAC

Approval ID: RU*C-DE.*08.B.00010



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



IECEx

Approval ID: IECEx IBE 17.0032X



cUL Listed

Approval ID: File E 196811



UL Listed

Approval ID: File E 196811



ATEX

Approval ID: IBExU 17 ATEX B014 X

cULus Listed

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 8.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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