01 / Identity and functional architecture

PHOENIX CONTACT

REL-IR-BL/L-24DC/4×21 1032527

Industrial Relay

Product role

Phoenix Contact REL-IR-BL/L-24DC/4×21 1032527 is a plug-in industrial relay with four changeover contacts, a 24 VDC coil and local status indication.

Function	Relay relationship
Control side	24 VDC polarized coil, 32 mA typical input
Switching side	Four AgNi changeover contact circuits
Local indication	Yellow LED plus mechanical position indication

Selection boundary

1032527 identifies the REL-IR-BL/L- 24DC/4X21 single relay. Coil, contact and insulation limits apply to the relay; the matching socket and installation enclosure are separate selection items.

02 / Electrical and measurement characteristics

Item	Verified design fact
Product type	Plug-in industrial relay
Article number	1032527
Contact arrangement	4 changeover contacts
Contact material	AgNi
Nominal coil voltage	24 VDC
Input voltage range	19.2–46.8 VDC at 20 °C
Coil operation	Monostable, polarized
Typical input current	32 mA at nominal voltage
Typical response / release	15 ms / 10 ms
Maximum switching voltage	250 VAC/DC

How to use these limits

Retain REL-IR-BL/L-24DC/4×21 and article 1032527 together. Compare the coil marking and contact arrangement with the installed relay and socket.

Functional context

REL-IR-BL/L-24DC/4×21 1032527 is a plug-in, monostable industrial relay with four AgNi changeover contacts. Its polarized coil has a 24 VDC nominal input and a 19.2–46.8 VDC input range specified at 20 °C. Typical input current at nominal voltage is 32 mA. Typical response and release times are 15 ms and 10 ms respectively. A yellow bidirectional LED indicates status, and a separate mechanical indicator shows the switching position.

03 / Integration and environmental limits

Item	Verified design fact
Minimum switching condition	12 V at 10 mA
Limiting continuous current	6 A
Maximum NO inrush	12 A for 20 ms
Resistive interrupting rating	144 W at 24 VDC; 1500 VA at 250 VAC
Relay protection / location	RT II / installation location ≥ IP54
Operating and storage temperature	-40 to +70 °C
Maximum altitude	2000 m
Insulation classification	Basic insulation; category III; pollution degree 2
Status indication	Yellow LED and mechanical position indicator
Mounting	Plug-in; any orientation

Installation relationship

Use the matching plug-in socket and an installation location rated at least IP54. Keep operating temperature within -40 to +70 °C and altitude at or below 2000 m.

Host and environmental context

The relay is classified RT II and requires an installation location protected to at least IP54. Operating and storage temperatures are -40 to +70 °C, with an altitude limit of 2000 m. The coil-to-contact insulation is basic insulation, with overvoltage category III and pollution degree 2; the relay is not suitable for separating SELV/PELV circuits from other circuits. Plug-in mounting supports any orientation and zero-spacing rows, subject to the selected socket and enclosure arrangement.

04 / Engineering decisions

Signal and circuit relationship

The contacts have a 6 A limiting continuous current and a maximum switching voltage of 250 VAC/DC. The minimum switching condition is 12 V at 10 mA, while the normally open contacts permit a maximum 12 A inrush for 20 ms. Resistive-load interrupting ratings include 144 W at 24 VDC and 1500 VA at 250 VAC; the DC capability changes with voltage and must be checked against the actual circuit. Maximum current and maximum voltage are separate limits and are not permission to switch every load at their product.

24 VDC coil
Polarized control input

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Relay mechanism
Monostable operation

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Four contacts
Changeover switching

Review	Technical consequence
Industrial contact switching	Switch four changeover circuits with the specified AgNi contacts. Evaluate the actual load type, current and voltage against the relevant contact ratings.
24 VDC control circuits	Operate the polarized monostable coil from a compatible 24 VDC control circuit. The 19.2–46.8 VDC range is specified at 20 °C and must retain that condition.

05 / Technical questions and reference basis

What coil voltage is required by REL-IR-BL/L-24DC/4×21 1032527?

Nominal coil voltage is 24 VDC. The specified input range is 19.2–46.8 VDC at 20 °C; operation is monostable and polarized.

What response times apply to REL-IR-BL/L-24DC/4×21 1032527?

Typical response time is 15 ms and typical release time is 10 ms. These are typical relay timings rather than guaranteed complete-system response times.

Reference basis

Phoenix Contact 1032527 product data sheet, data status 22 October 2026.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Phoenix Contact QUINT-PS/1AC/24DC/10 2866763

Phoenix Contact QUINT-PS-100-240AC/24DC/10 2938604

Phoenix Contact QUINT4-PS/1AC/12DC/15

Discuss your installed configuration

Send the full unit marking and connection details.

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