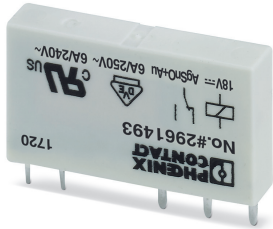


Single relay - REL-MR- 18DC/21AU - 2961493

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Plug-in miniature power relay, with multi-layer gold contact, 1 changeover contact, input voltage 18 V DC

Your advantages

- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ High degree of protection up to RT III depending on type (wash-proof)
- ✓ Power contacts up to 6 A



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 936525
GTIN	4017918936525
Weight per Piece (excluding packing)	6.000 g
Custom tariff number	85364900
Country of origin	Czech Republic

Technical data

Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
---------------------------------	------------------

Single relay - REL-MR- 18DC/21AU - 2961493

Technical data

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	RT III

Coil side

Nominal input voltage U_N	18 V DC
Typical input current at U_N	9 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	1906 Ω \pm 10 % (at 20 °C)
Power dissipation for nominal condition	0.16 W

Contact side

Contact type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity	3 A (at 24 V, AC15)

Contact side (with destroyed gold layer)

Contact material	AgSnO
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)

Single relay - REL-MR- 18DC/21AU - 2961493

Technical data

Contact side (with destroyed gold layer)

	0.1 A (at 220 V, DC13)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

General

Operating mode	100% operating factor
Mechanical service life	2x 10 ⁷ cycles

Connection data

Connection method	Solder connection
-------------------	-------------------

Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Pollution degree	3
Overvoltage category	III

Conformance/approvals

Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

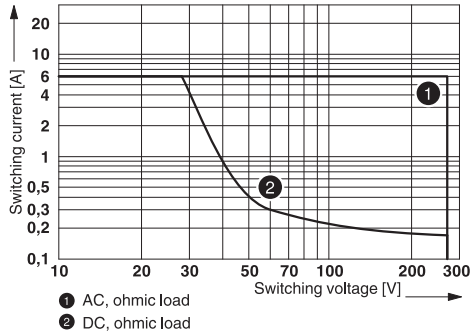
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

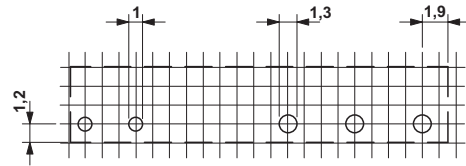
Drawings

Single relay - REL-MR- 18DC/21AU - 2961493

Diagram



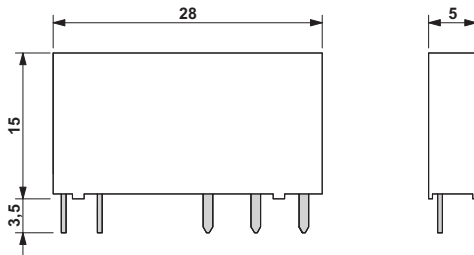
Drilling diagram



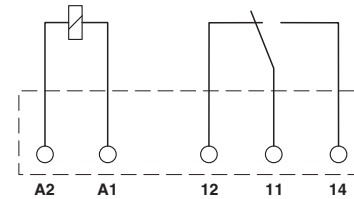
a = pitch division 1.25 mm and 1.27 mm

Interrupting rating

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 11.0	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

Single relay - REL-MR- 18DC/21AU - 2961493

Classifications

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

Approvals


Approvals


Approvals

EAC / EAC / UL Recognized / UL Recognized / cUL Recognized / cUL Recognized / VDE Zeichengenehmigung / VDE Zeichengenehmigung


Ex Approvals

Approval details

EAC		TR_TS_D_00573_c
-----	---	-----------------

EAC		RU*C- DE.*08.B.00010
-----	---	-------------------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
---------------	---	---	---------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
---------------	---	---	---------------

Single relay - REL-MR- 18DC/21AU - 2961493

Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
----------------	--	---	---------------

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
----------------	--	---	---------------

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40010212
------------------------	--	---	----------

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40032864
------------------------	--	---	----------

Accessories

Additional products

Relay base - PLC-BSP- 24DC/21RW - 2961396



6.2 mm PLC basic terminal block for railway applications with spring-cage connection, without relay or solid-state relay, range from $0.7 \times U_N$ to $1.25 \times U_N$, temperature range from -25°C to $+70^\circ\text{C}$, 1 changeover contact, input voltage 24 V DC

Relay base - PLC-BPT- 24DC/21RW - 2900261



6.2 mm PLC basic terminal block for railway applications with Push-in connection, without relay or solid-state relay, range from $0.7 \times U_N$ to $1.25 \times U_N$, temperature range from -25°C to $+70^\circ\text{C}$, 1 changeover contact, input voltage 24 V DC