

PLC-RSC- 24DC/ 1- 1/ACT - Relay Module



2967109

<https://www.phoenixcontact.com/ca/products/2967109>

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PLC-INTERFACE for output functions, consisting of PLC-BSC.../ACT basic terminal block with screw connection and plug-in miniature relay with power contact, for mounting on DIN rail NS 35/7,5, 2 N/O contacts (1-1), input voltage 24 V DC

Your advantages

- Actuator connected directly to relay module
- Efficient connection to system cabling using V8 adapter
- No need for additional modular terminal blocks
- Time savings of up to 60 %
- Relay modules with safe isolation according to DIN EN 50178 between coil and contact
- Space savings of up to 80 %
- Functional plug-in bridges

Commercial data

Item number	2967109
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CK05
Product key	CK621C
Catalog page	Page 375 (C-5-2019)
GTIN	4017918156404
Weight per piece (including packing)	76.19 g
Weight per piece (excluding packing)	67.98 g
Customs tariff number	85364190
Country of origin	DE

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Technical data

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Output function
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV _{rms} (50 Hz, 1 min.)
Test voltage ()	1 kV _{rms} (50 Hz, 1 min.)
Test voltage (N/O contact / N/O contact)	2.5 kV _{rms} (50 Hz, 1 min.)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
Rated surge voltage	4 kV (Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths)

Input data

Coil side

Nominal input voltage U _N	24 V DC
Input voltage range	20.2 V DC ... 33.6 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U _N	18 mA
Input power dissipation for U _N	0.43 W
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	2 N/O contacts
Type of switch contact	Single contact
Contact material	AgNi

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Maximum switching voltage	250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	5 V (10 mA)
Limiting continuous current	6 A
Maximum inrush current	25 A (20 ms)
Min. switching current	10 mA (5 V)
Interrupting rating (ohmic load) max.	144 W (24 V DC) 96 W (48 V DC) 60 W (at 60 V DC) 44 W (at 110 V DC) 60 W (at 220 V DC) 1500 VA (250 V AC)
Switching capacity min.	50 mW
Switching capacity	2 A (24 V (DC13)) 0.2 A (250 V (DC-13)) 3 A (24 V (AC15)) 3 A (120 V (AC15)) 3 A (250 V (AC15))

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ² 0.2 mm ² ... 2.5 mm ² (Single ferrule) 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT III
Degree of protection (Relay base)	IP20

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Degree of protection (Installation location)	≤ IP54
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

Approvals

CE

Certificate	CE-compliant
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UKCA

Certificate	UKCA-compliant
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Shipbuilding approval

Certificate	TAE0000196
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Corrosive gas test

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

DNV GL data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive

Standards and regulations

Standards/regulations

Standards/regulations	IEC 61810-1
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Air clearances and creepage distances between the power circuits

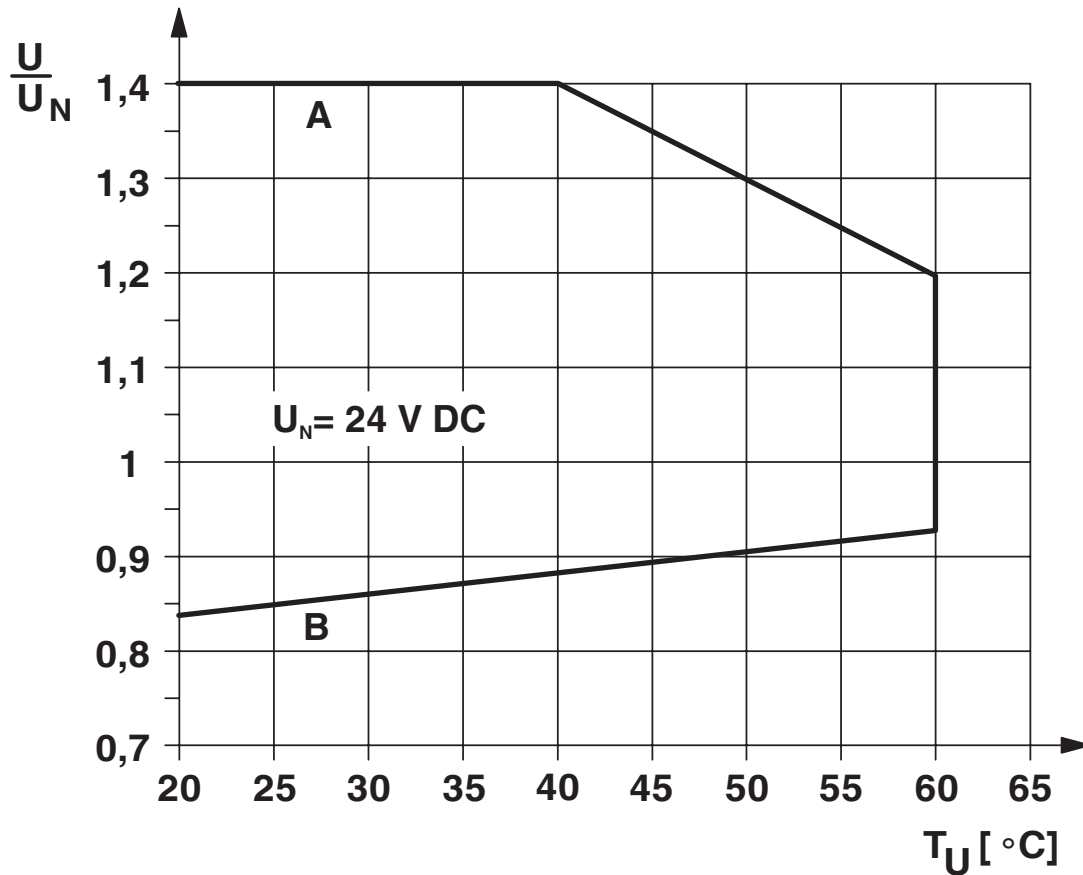
Standards/regulations	IEC 60947-5-1
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Mounting

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

Drawings

Diagram

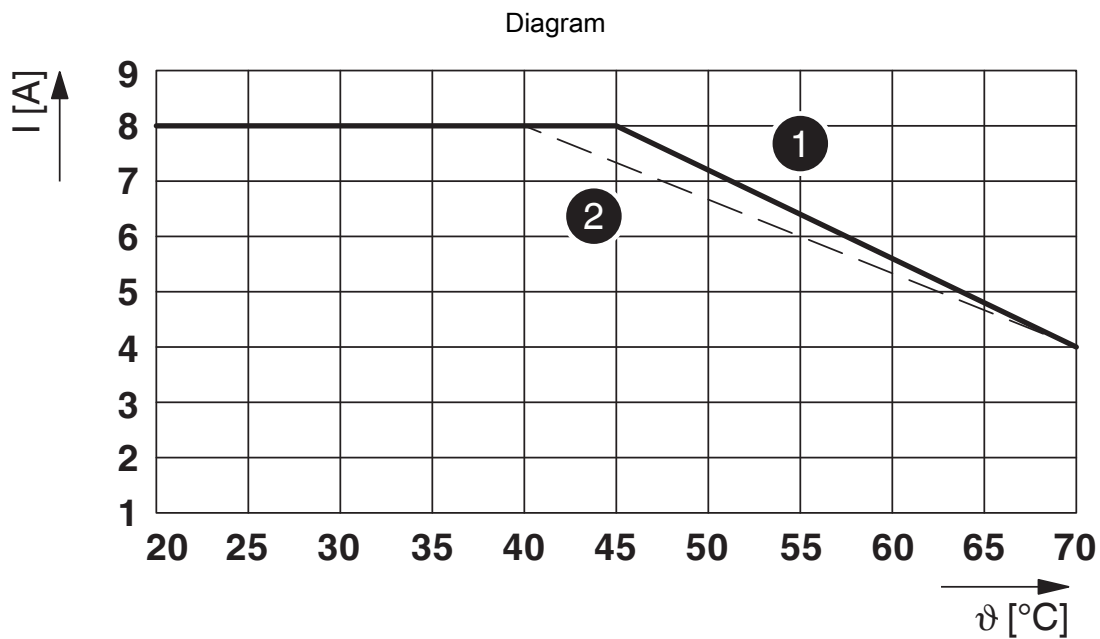
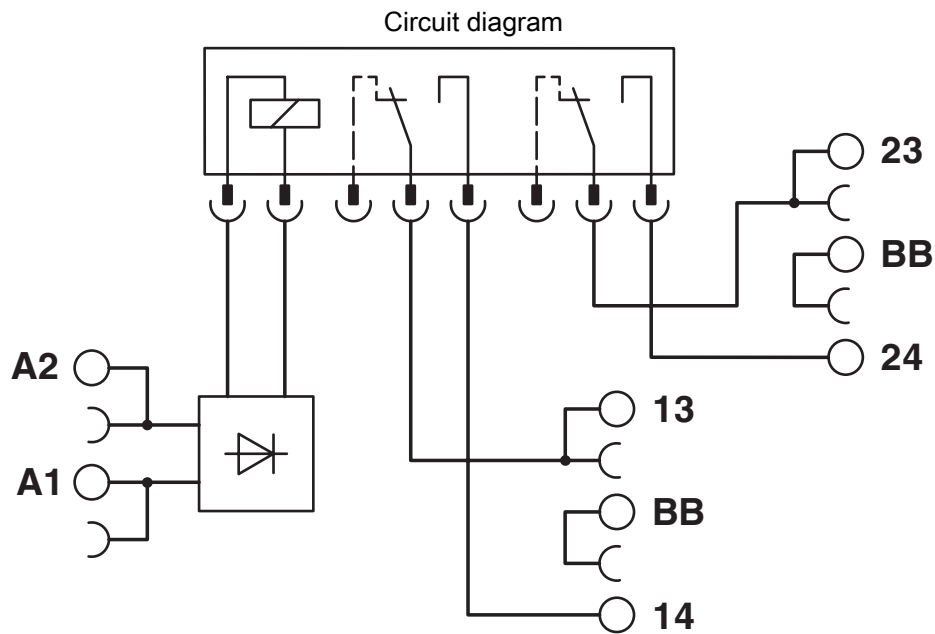


Curve A

Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)

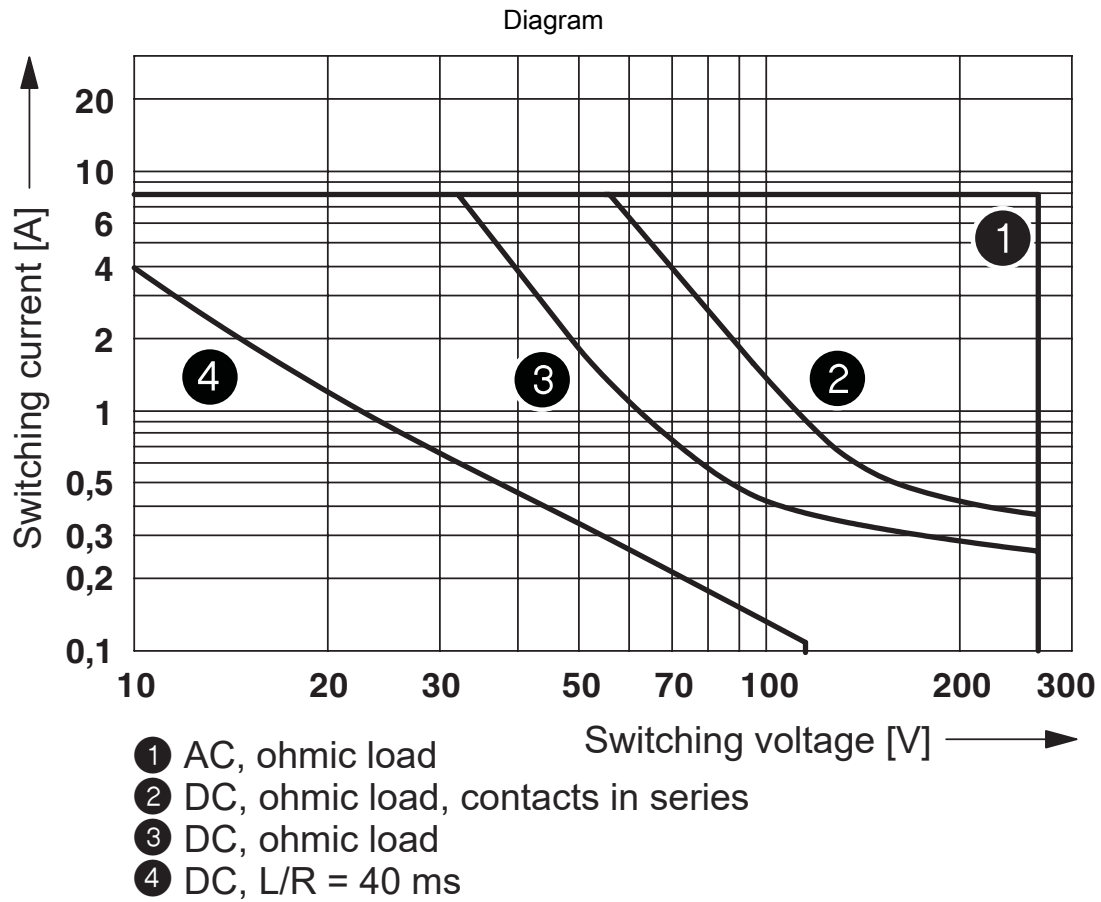
Curve B

Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)



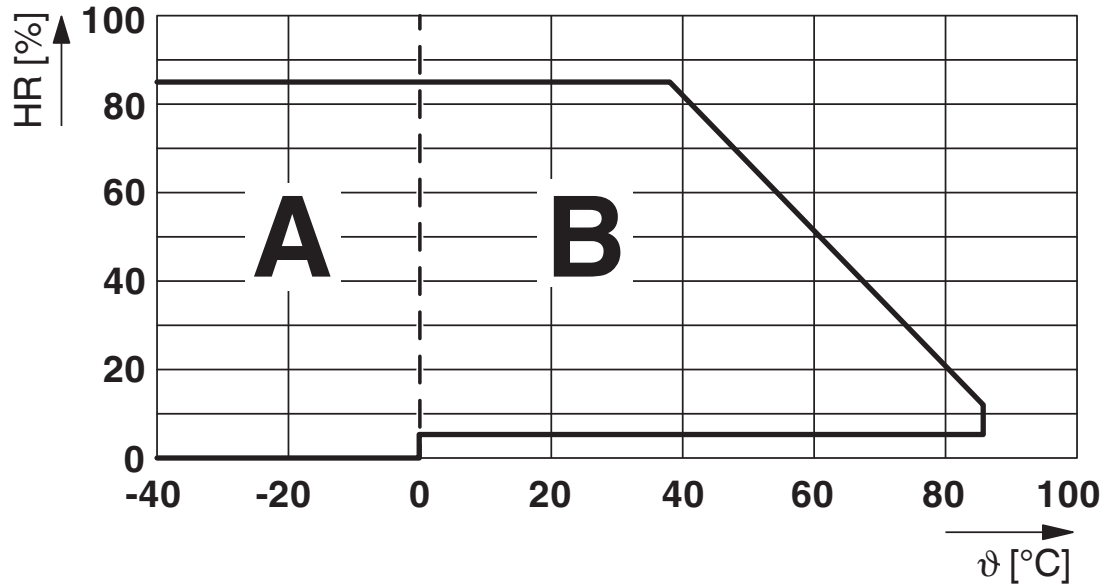
Limiting continuous current per contact for 0.85 ... 1.1 U_N (contact-side)

- (1) Limiting continuous current for horizontal installation position without clearance
- (2) Limiting continuous current for vertical installation position without clearance



Interrupting rating

Diagram



Permissible humidity for operation and storage.

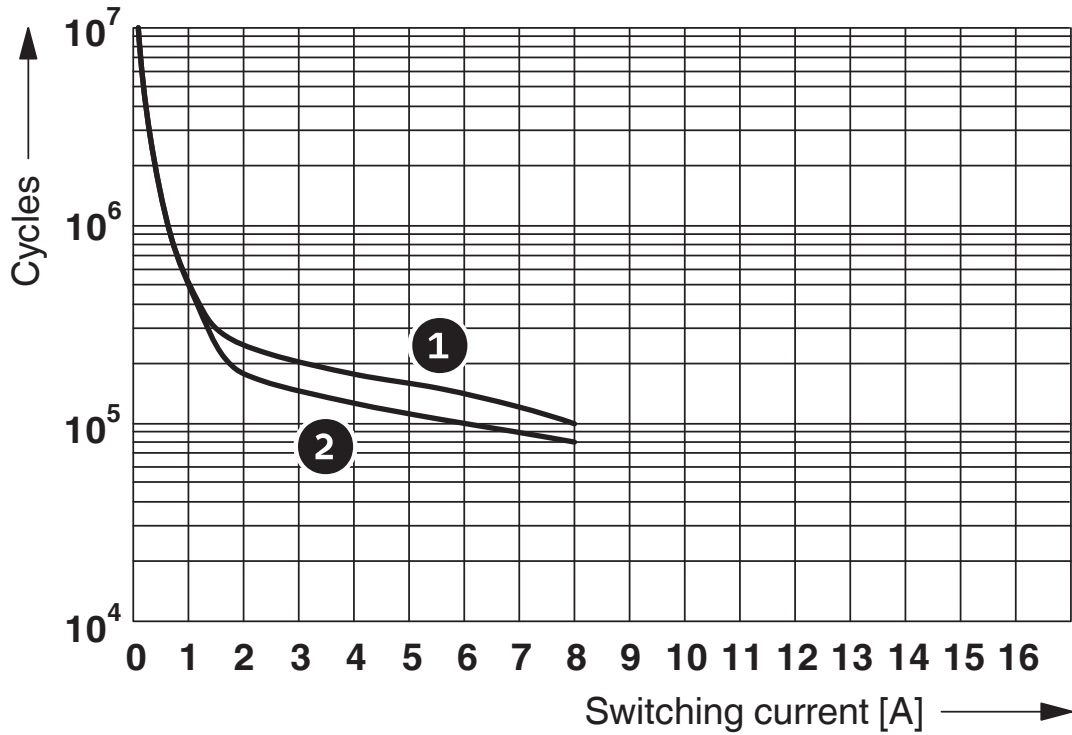
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^\circ\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^\circ\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^\circ\text{C}$.

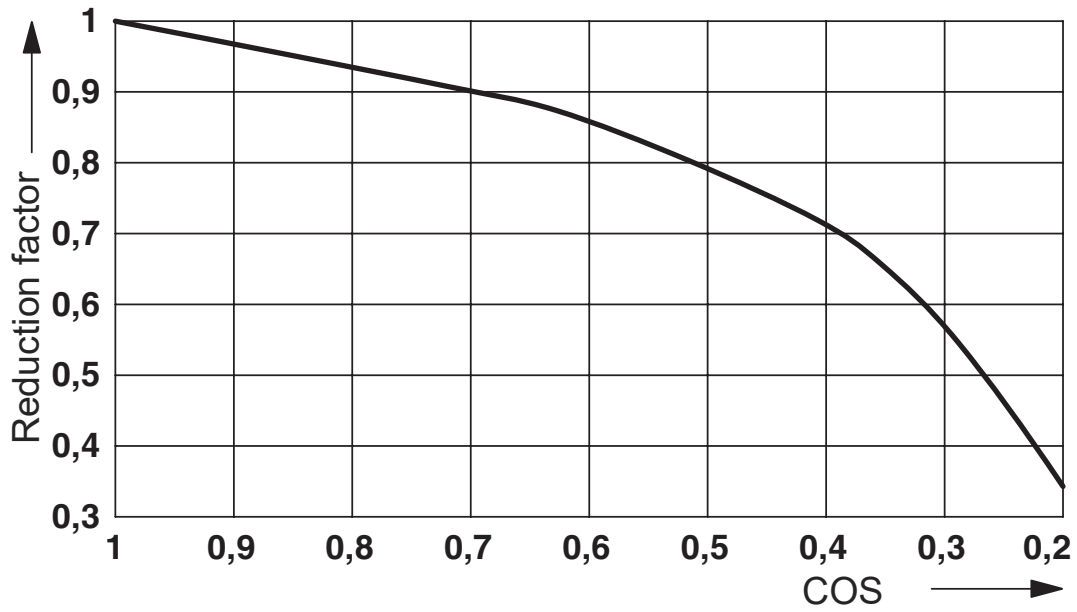
Diagram



- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

Diagram



Service life reduction factor

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Approvals

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cUL Recognized
Approval ID: FILE E 238705



UL Recognized
Approval ID: FILE E 238705



EAC
Approval ID: TR_TS_D_00573_c



DNV GL
Approval ID: TAE0000196



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



UL Listed
Approval ID: FILE E 172140



cUL Listed
Approval ID: FILE E 172140



cULus Listed
Approval ID: E140324

cULus Recognized

cULus Listed

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	affa149b-50fb-4acd-ab3a-127fb412eee5

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