RIF-3-RSC-LV-120AC/3X21 - Relay module

2903299

https://www.phoenixcontact.com/us/products/2903299

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Preassembled relay module with screw connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact switching type: 3 changeover contacts. Input voltage: 120 V AC

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

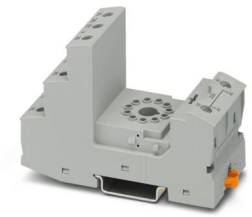
Item number	2903299
Packing unit	5 pc
Minimum order quantity	5 pc
Note	Made to order (non-returnable)
Sales key	C465
Product key	DK651B
GTIN	4046356732055
Weight per piece (including packing)	187.24 g
Weight per piece (excluding packing)	99.99 g
Customs tariff number	85364900
Country of origin	CN

Set consists of

RIF-3-BSC/3X21 - Relay base

2900936

https://www.phoenixcontact.com/us/products/2900936



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

REL-OR3/L-120AC/3X21 - Single relay

2903695

https://www.phoenixcontact.com/us/products/2903695



Plug-in octal relays with power contacts, 3 changeover contacts, test button, mechanical switching position indicator, coil voltage: 120 V AC

RIF-V-120-230 UC - Plug-in module

2900948

https://www.phoenixcontact.com/us/products/2900948



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 120 V AC ... 230 V AC / DC ±20 %

RIF-RH-3 - Retaining bracket

2900955

https://www.phoenixcontact.com/us/products/2900955



Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

Technical data

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. 2x 10^7 cycles

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	09.07.2026

Electrical properties

Maximum power dissipation for nominal condition	2.8 W
Test voltage (Winding/contact)	2.5 kV_{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2 kV_{rms} (50 Hz, 1 min., contact/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	120 V AC
Input voltage range	102 V AC ... 132 V AC (20 °C)
Input voltage range in reference to U_N	see diagram
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	23 mA
Typical response time	5 ms ... 15 ms
Typical release time range	5 ms ... 20 ms
Coil voltage	120 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	3 changeover contacts
Type of switch contact	Single contact

Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V (24 mA)
Limiting continuous current	6 A (see diagram)
Maximum inrush current	30 A (20 ms, N/O contacts)
Min. switching current	10 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)
Switching capacity	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 1.5 A/240 V (N/O contact)
	DC13, 2 A/240 V (N/O contact)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross-section rigid	0.5 mm² ... 4 mm²
Conductor cross-section rigid (2 conductors with same cross section)	0.5 mm² ... 2.5 mm²
Conductor cross-section flexible	0.5 mm² ... 4 mm²
	0.5 mm² ... 4 mm² (Ferrule with plastic sleeve)
Conductor cross-section flexible (2 conductors with same cross section)	0.5 mm² ... 2.5 mm²
	0.5 mm² ... 1.5 mm² (TWIN ferrule with plastic sleeve)
Conductor cross-section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Tightening torque	0.5 Nm ... 0.6 Nm

Dimensions

Item dimensions

Width	40 mm
Height	96 mm
Depth	90 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V2 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT I (Relay)
Ambient temperature (operation)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

Corrosive gas test

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

Standards and regulations

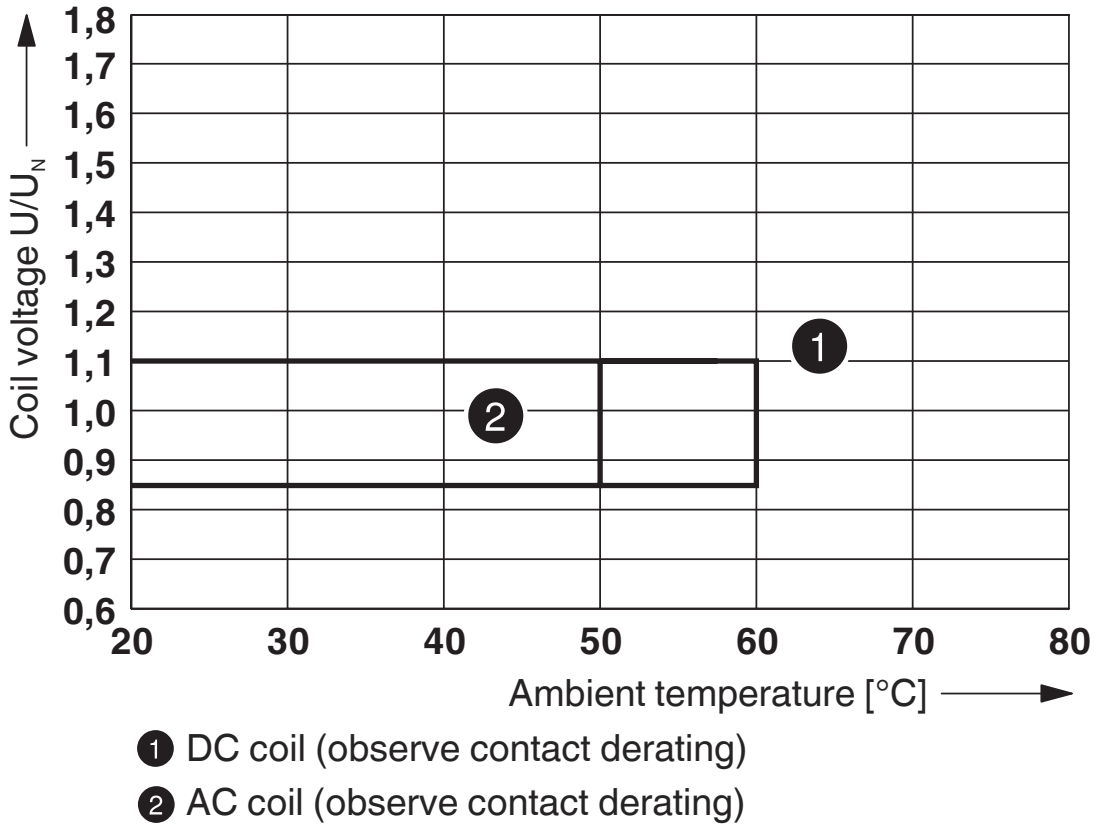
Standards/regulations	IEC 60947-5-1

Mounting

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

Drawings

Diagram

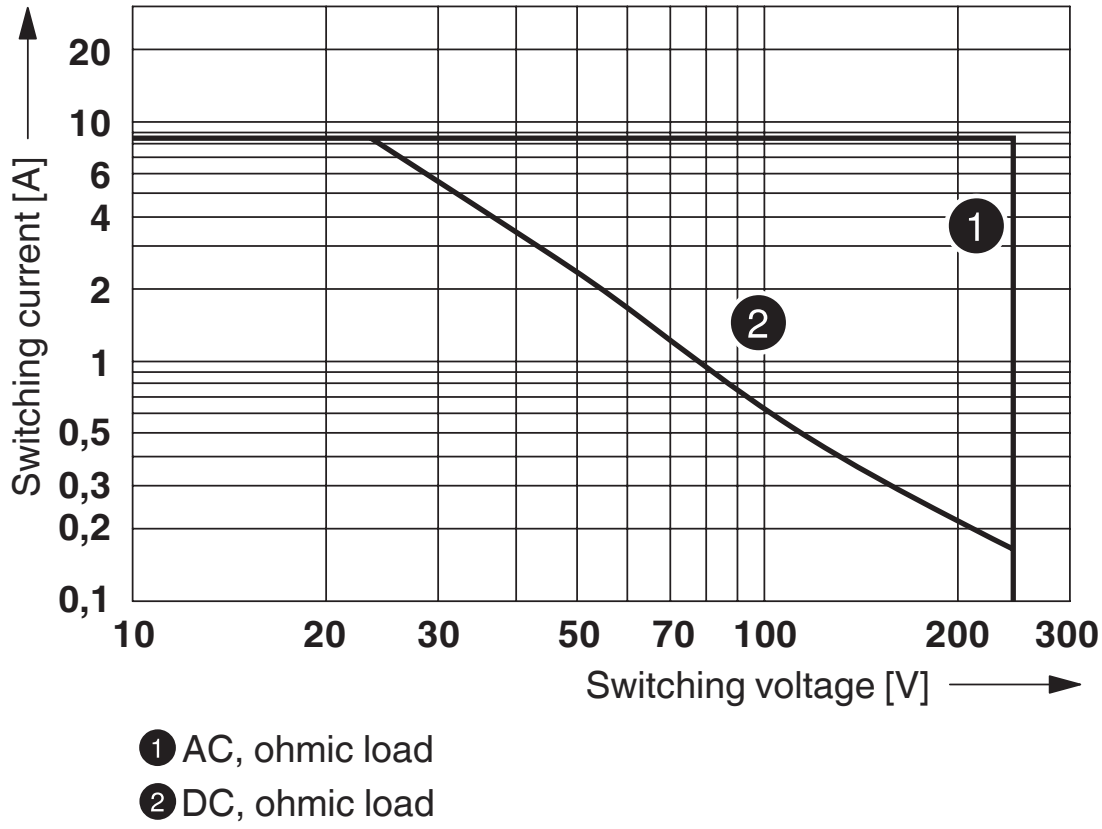


1 DC coil (observe contact derating)

2 AC coil (observe contact derating)

Operating voltage range

Diagram

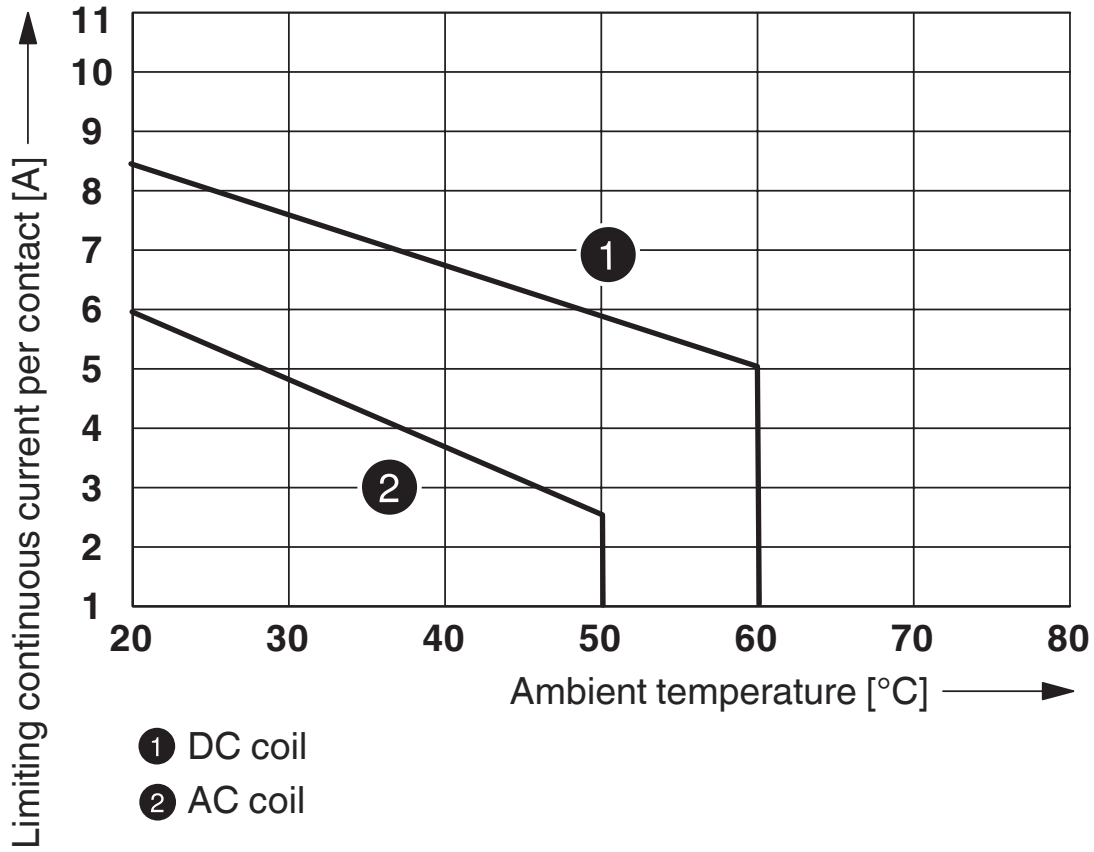


1 AC, ohmic load

2 DC, ohmic load

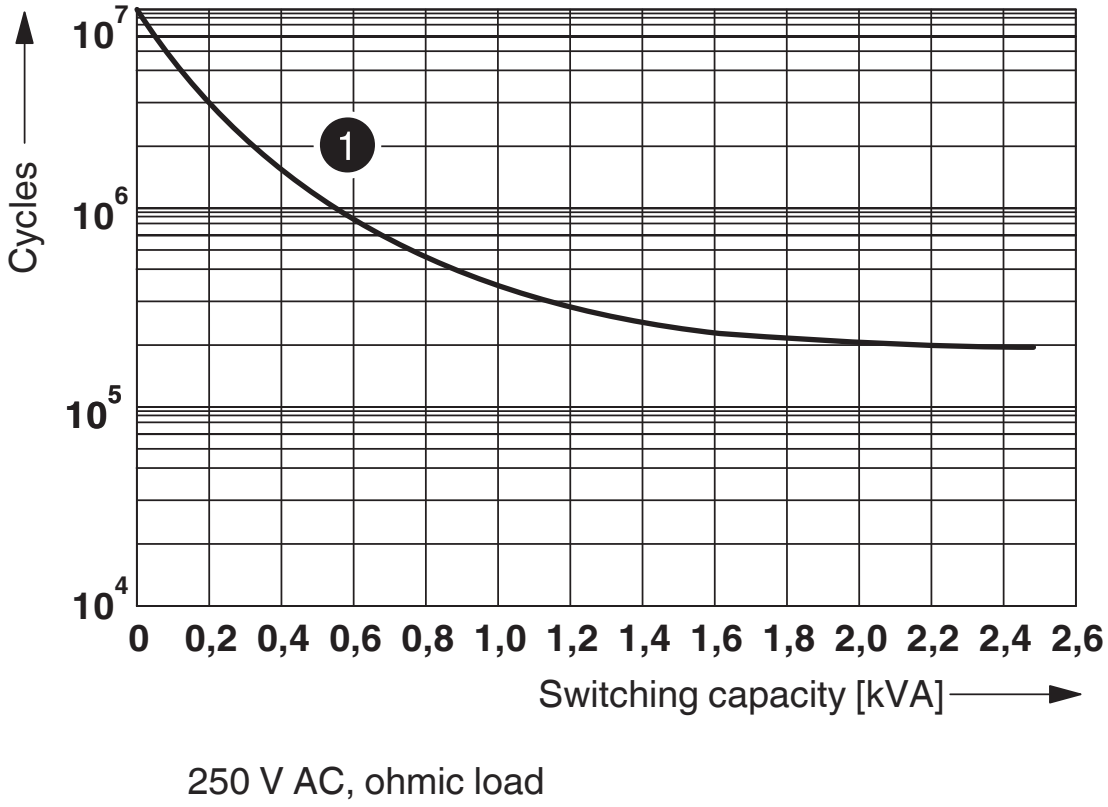
Interrupting rating

Diagram



Contact derating

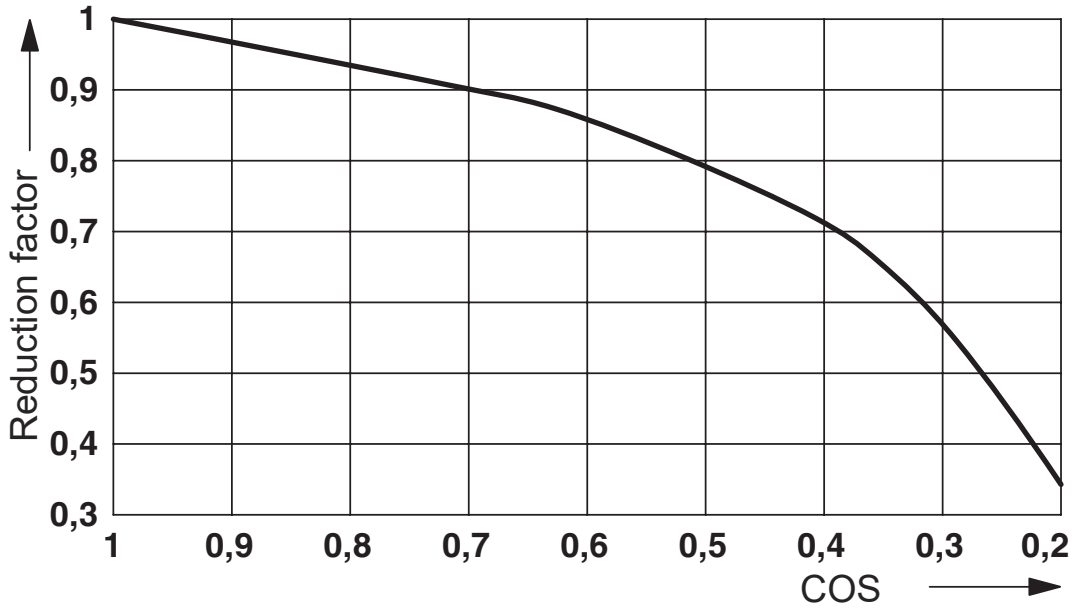
Diagram



250 V AC, ohmic load

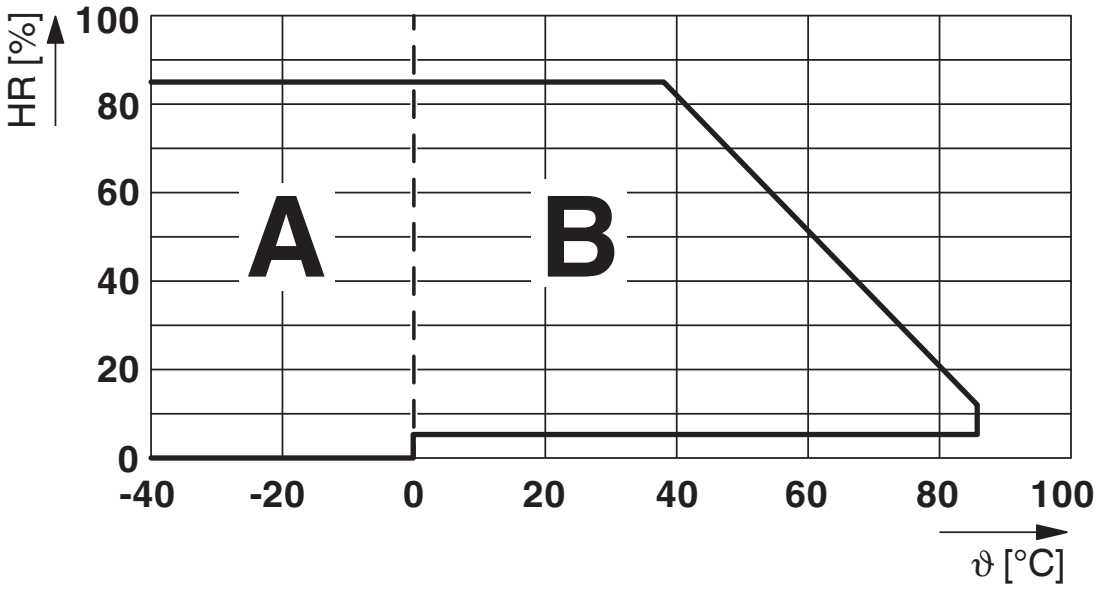
Electrical service life

Diagram



Service life reduction factor

Diagram

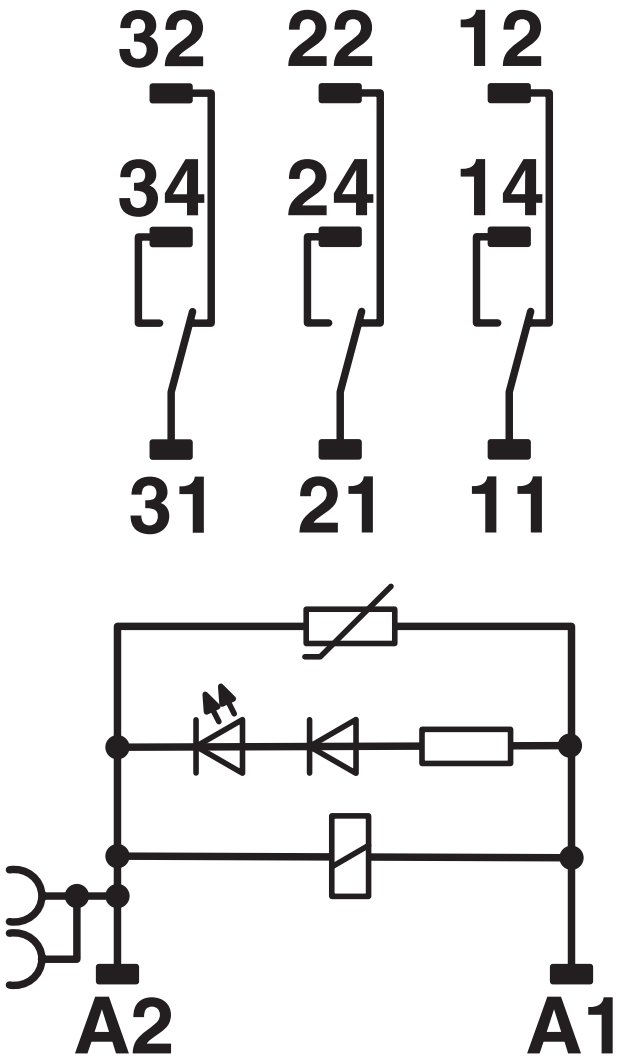


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°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 ≤ 25°C.

Circuit diagram



AC coils

Classifications

ECLASS

ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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