

PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

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 documentation. Our general terms of use for downloads are valid.



PLC-INTERFACE for output functions, consisting of PLC-BPT.../ACT basic terminal block with Push-in 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	1176847
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	DK62B8
Product key	DK62B8
GTIN	4063151207779
Weight per piece (including packing)	70.7 g
Weight per piece (excluding packing)	56.8 g
Customs tariff number	85364190
Country of origin	DE

PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

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

Data management status

Date of last data management	01.04.2026
------------------------------	------------

Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV _{rms} (50 Hz, 1 min.)
Test voltage (open contact)	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)
Nominal voltage (plugged-in electromechanical relay)	24 V DC
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

PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

Switching

Contact switching type	2 N/O contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC (The divider 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 (60 V DC) 44 W (110 V DC) 60 W (220 V DC) 1500 VA (250 V AC)
Switching power min.	50 mW
Switching capacity	2 A (24 V (DC-13)) 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	Push-in connection
Stripping length	10 mm
Conductor cross-section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ² 2x 0.5 mm ² ... 1 mm ² (TWIN ferrule)
Conductor cross-section AWG	26 ... 14

Dimensions

Item dimensions

Width	14 mm
Height	80 mm
Depth	94 mm

Material specifications

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

Environmental and real-life conditions

PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

Ambient conditions

Degree of protection (Relay)	RT III
Degree of protection (Relay base)	IP20
Degree of protection (Installation location)	≤ IP54
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

EMC data

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

Standards and regulations

Standards/regulations

Standards/regulations	IEC 61810-1
-----------------------	-------------

Air clearances and creepage distances between the power circuits

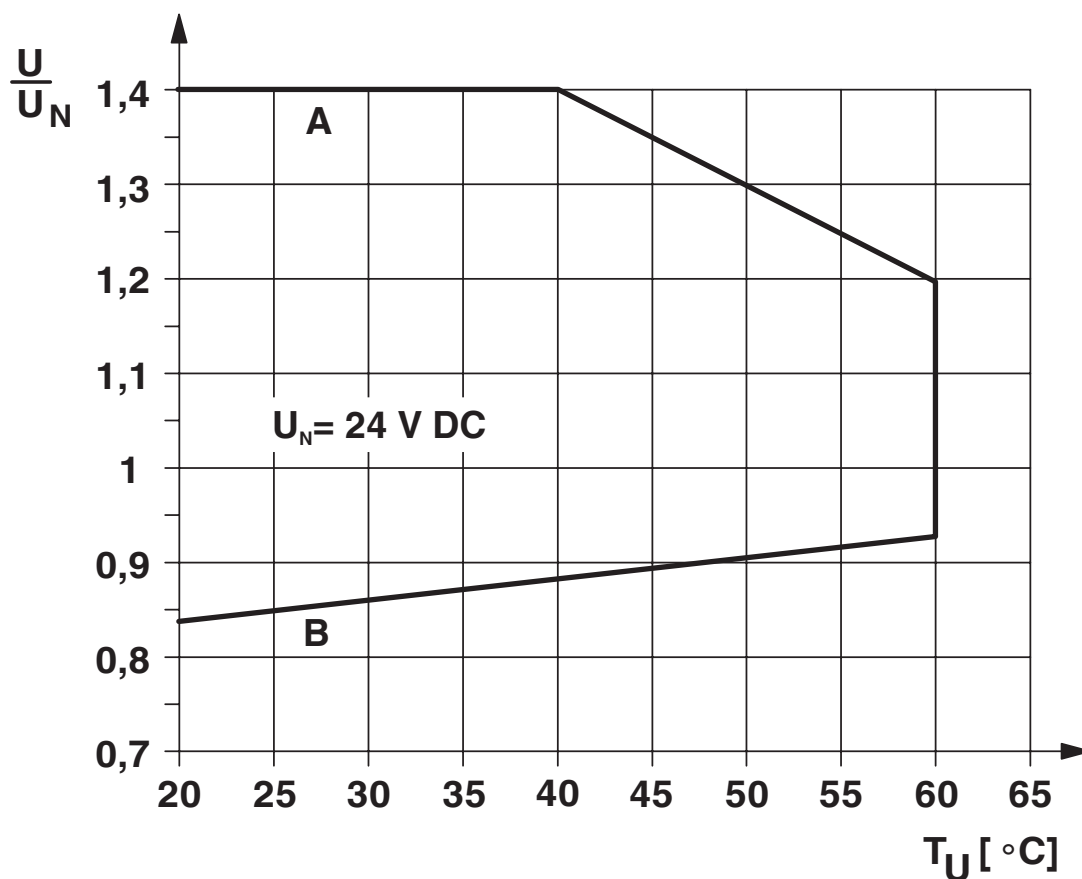
Standards/regulations	IEC 60947-5-1
-----------------------	---------------

Mounting

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

Drawings

Diagram

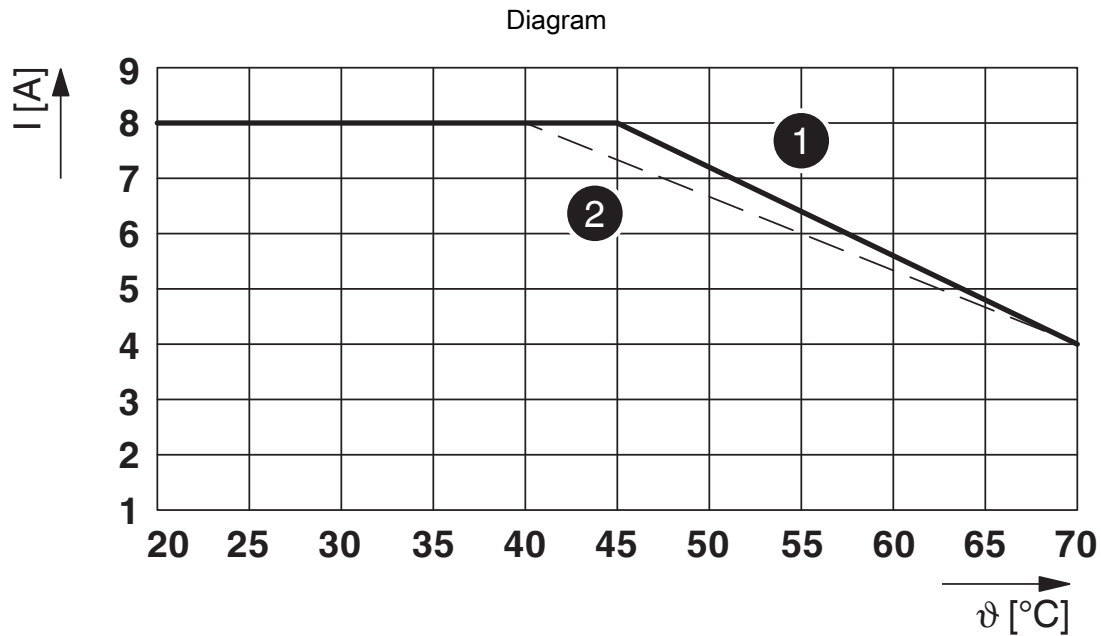


Curve A

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

Curve B

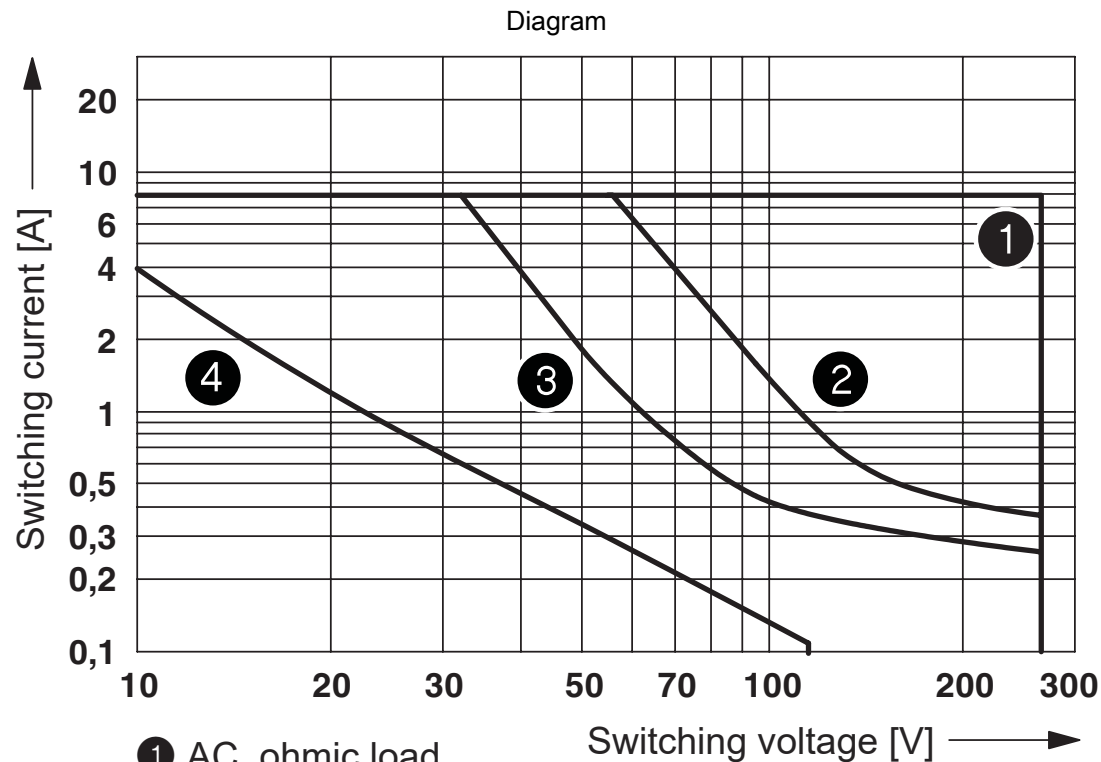
Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)



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

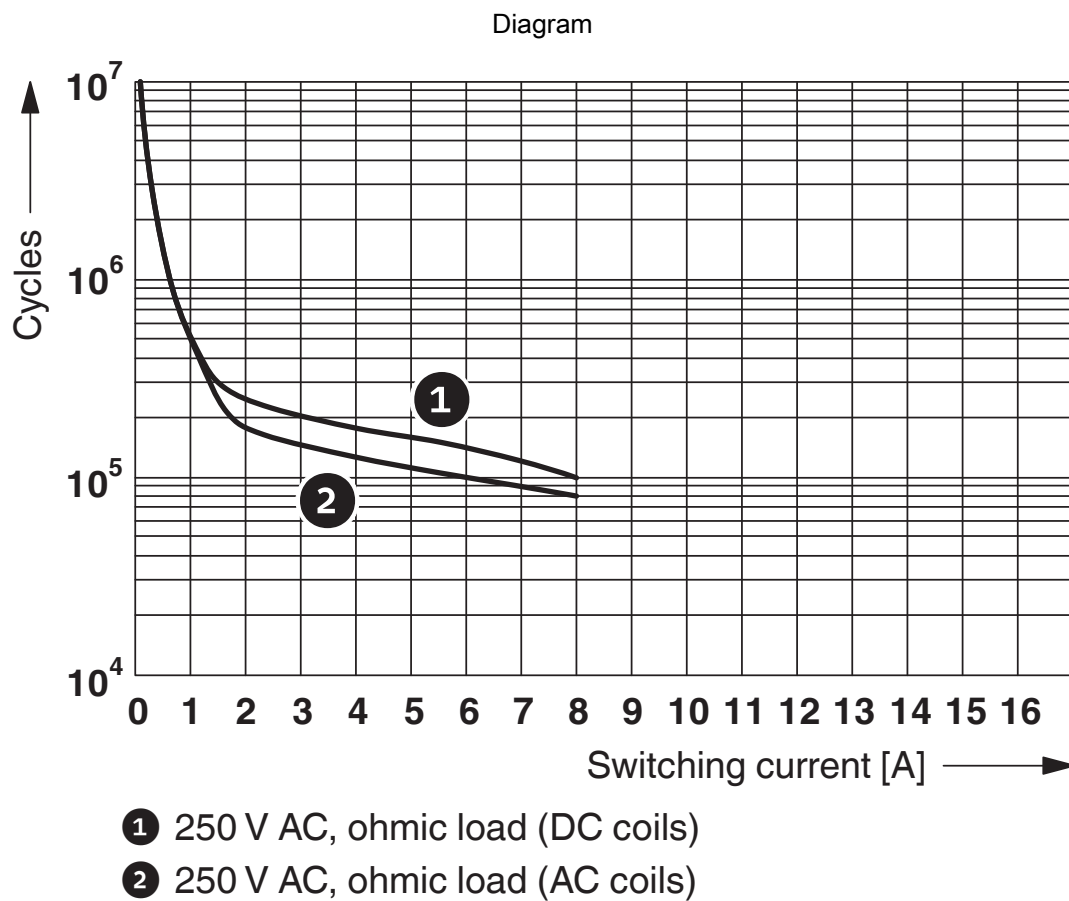


① AC, ohmic load

② DC, ohmic load, contacts in series

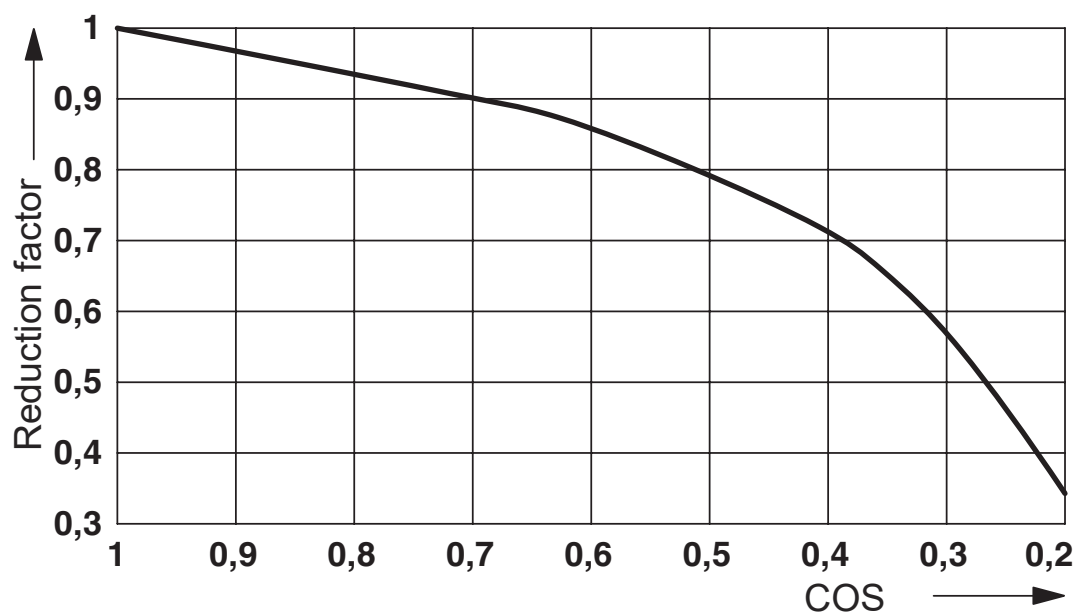
③ DC, ohmic load

④ DC, L/R = 40 ms



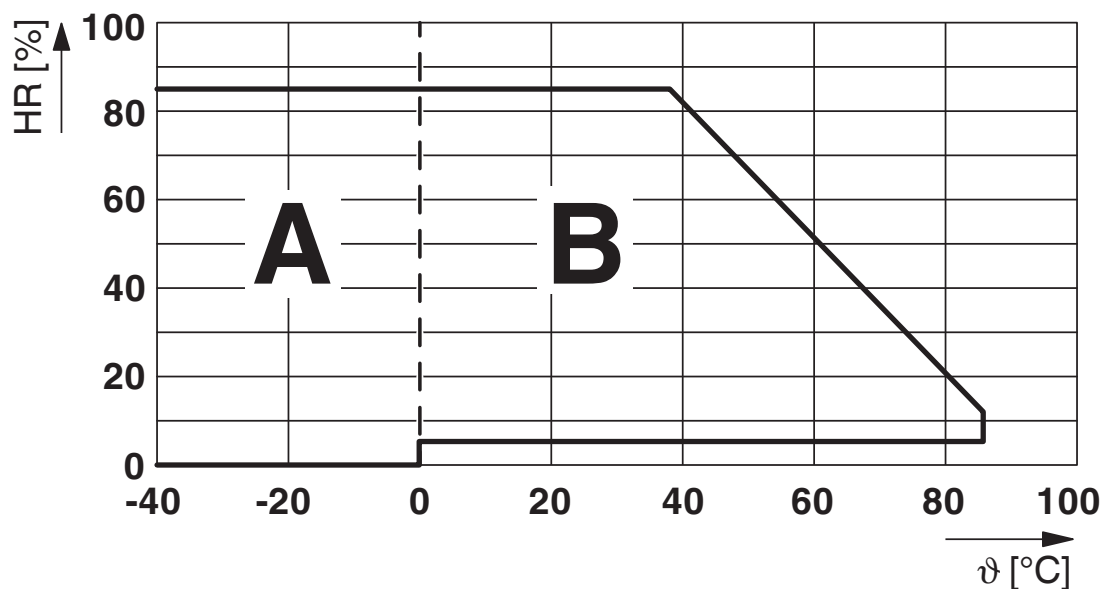
Electrical service life

Diagram



Service life reduction factor

Diagram



Permissible humidity for operation and storage.

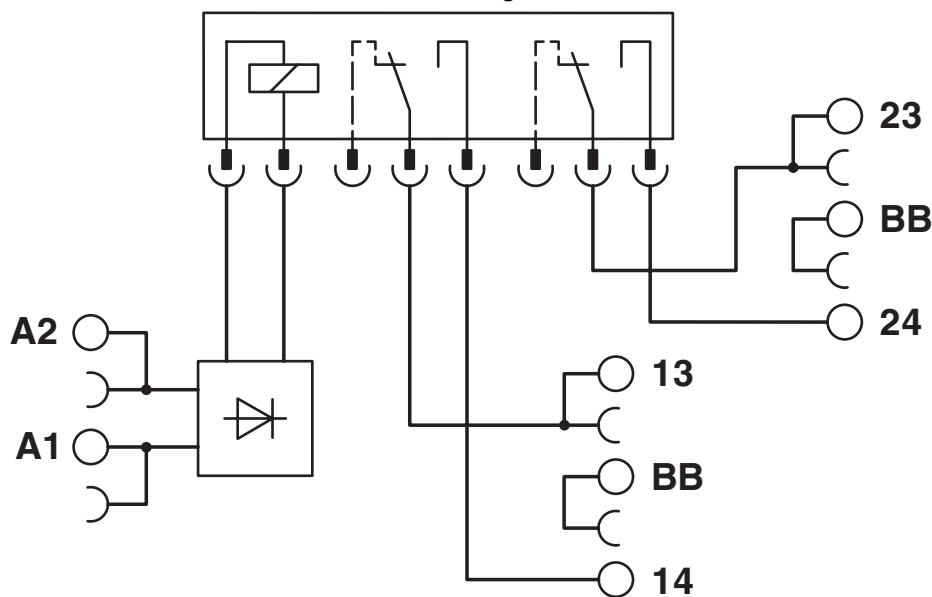
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^\circ\text{C}$ 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 $\leq 25^\circ\text{C}$.

Circuit diagram



PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1176847>



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324

PLC-RPT- 24DC/ 1- 1/ACT - Relay module



1176847

<https://www.phoenixcontact.com/gb/products/1176847>

Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 10.0	EC001437
-----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

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	fc5cfd1c-804d-4475-8586-eebbe26fa335

EF3.1 Climate Change

CO2e kg	1.002 kg CO2e
---------	---------------