

# CB E1 24DC/1A SI-R P - Electronic circuit breaker



2905799

<https://www.phoenixcontact.com/us/products/2905799>

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Electronic circuit breaker, 1-pos., active current limitation, inverted status output and control input, plug for base element.

## Commercial data

Item number	2905799
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	CL04
Product key	CLA134
GTIN	4046356997522
Weight per piece (including packing)	34.9 g
Weight per piece (excluding packing)	34.9 g
Customs tariff number	85362010
Country of origin	DE

## Technical data

### Product properties

Product type	Device circuit breakers
Product family	CB E
Type	Male
Number of positions	1

### Insulation characteristics

Degree of pollution	2
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### Electrical properties

Maximum current with single arrangement	1 A
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### General

Operating voltage	24 V DC
	18 V DC ... 30 V DC
Nominal current $I_N$	1 A
Rated insulation voltage $U_i$	30 V (Load circuit)
Rated surge voltage	0.5 kV
Tripping method	E (electronic)
Required backup fuse	not required, integrated failsafe element
Dielectric strength	max. 30 V DC (Load circuit)
Active current limitation	typ. $1.25 \times I_N$
Fuse	electronic
Closed circuit current $I_0$	typ. 8 mA (When switched on)
	typ. 11 mA (With status output)
Power dissipation	0.4 W (Nominal operation)
Temperature derating	1 A (at 50 °C)
Voltage drop	140 mV (at $I_N$ )
Fail-safe element	2 A DC
Contact switching type	without electrical isolation

### Load circuit

Shutdown time	800 ms (see time/current characteristic curve)
Undervoltage switch-off	< 14 V (typ. OFF)
	> 17 V (typ. ON)
Max. capacitive load	20000 $\mu$ F
Switch-on delay	typ. 2 ms

### Auxiliary contact

Contact connection type	Positive-switching signal output
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### Reset

Input voltage range	7 V DC ... 30 V DC (Reset with falling edge)
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Current consumption	typ. 2.6 mA (at 24 V DC)
Pulse length	min. 20 ms
Voltage	< 3 V DC (Low state)
	> 8 V DC (High state)

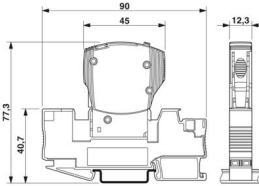
## Status output

Output voltage	24 V DC
Output current	max. 0.2 A (Short-circuit-proof)

## Connection data

Connection method	pluggable
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## Dimensions

Dimensional drawing	
Width	12.3 mm
Height	45 mm
Depth	52 mm
Complete module width	12.3 mm
Complete module height	90 mm
Complete module depth	77.3 mm

## Material specifications

Flammability rating according to UL 94	V-0
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP30 (Actuation area)
Ambient temperature (operation)	-25 °C ... 50 °C (non-condensing)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Humidity test	96 h, 95 % RH, 40 °C
Vibration (operation)	3g (according to IEC 60068-2-6, Test Fc)

## Approvals

### UL approval

Identification	UL Listed UL 508
	UL Recognized UL 2367

### Shipbuilding approval

Identification	DNV GL
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## Standards and regulations

Standard designation	EMV
Standards/specifications	EN 61000-6-3
Note	Interference emission
Standard designation	EMV
Standards/specifications	EN 61000-6-2
Note	Noise immunity

## Mounting

Mounting type	on base element
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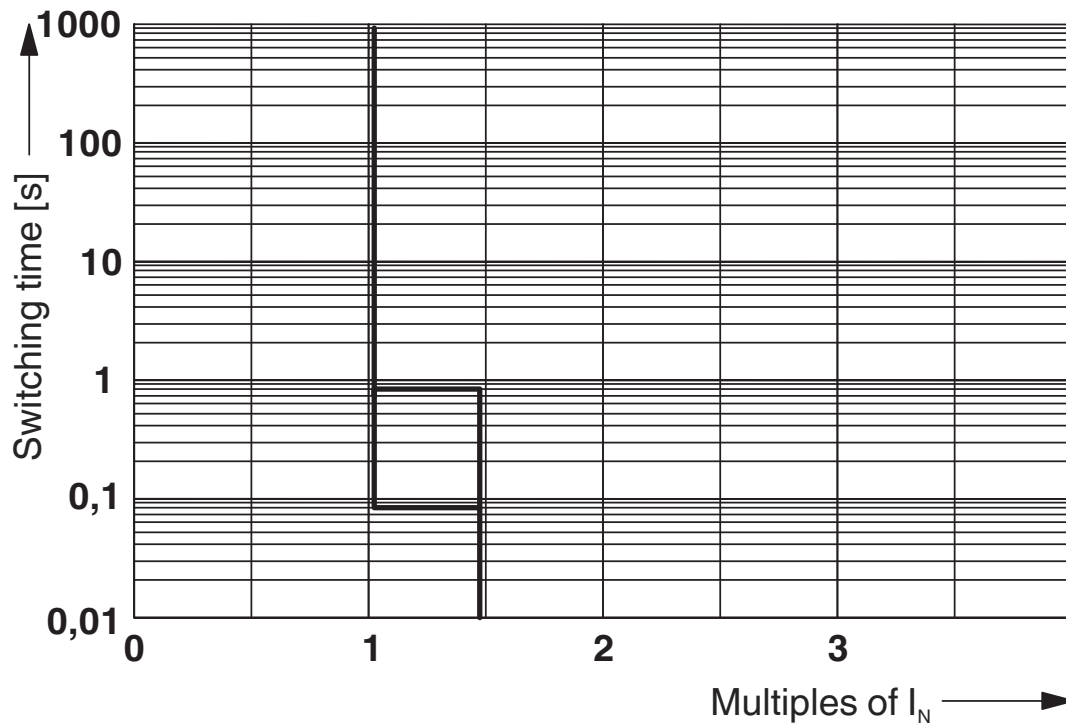
## Drawings



The figure shows the complete module consisting of a base element and connector



Diagram



Trigger characteristic

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