

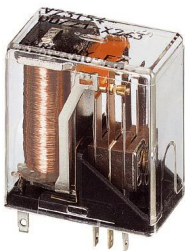
# REL-SW230/F104 - Single relay

2960193

<https://www.phoenixcontact.com/us/products/2960193>



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KAMMRELAIS®, contact F 104, size 2, heavy-duty contact, 2 changeover contacts, 230 V AC

## Commercial data

Item number	2960193
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	CK6192
Catalog page	Page 103 (IF-2002)
GTIN	4017918086602
Weight per piece (including packing)	39.22 g
Weight per piece (excluding packing)	35.266 g
Customs tariff number	85364900
Country of origin	DE

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## Technical data

### Product properties

Product type	Single relay
Mechanical service life	approx. 10 <sup>6</sup> cycles

### Electrical properties

Test voltage (Winding/contact)	1 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	1 kV AC (50 Hz, 1 min., changeover contact/changeover contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	230 V AC
Input voltage range	184 V AC ... 243.8 V AC
Input voltage range in reference to $U_N$	0.8 ... 1.06
Typical response time	4 ms ... 15 ms
Typical release time range	4 ms ... 15 ms
Coil resistance	14000 $\Omega$ $\pm$ 15 %

### Output data

#### Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	Ag, gold-flashed
Maximum switching voltage	250 V AC/DC
Limiting continuous current	5 A
Maximum inrush current	5 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC)
	60 W (at 48 V DC)
	50 W (at 60 V DC)
	70 W (at 110 V DC)
	70 W (for 250 V DC)
	500 VA (for 250 V AC)

### Connection data

Connection method	Plug-in connection
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### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

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## Classifications

### ECLASS

ECLASS-11.0	27371601
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## Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 5
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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