

EMG 12-TR/INV - Switching amplifier



2943437

<https://www.phoenixcontact.com/us/products/2943437>

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Inverter module. The inverter module inverts the signals of ground switching n-p-n transistor outputs into plus switching p-n-p outputs, and vice versa.

Commercial data

Item number	2943437
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK61C3
GTIN	4017918081089
Weight per piece (including packing)	30.65 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85365019
Country of origin	DE

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Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Solid-state relay module
Data management status	
Article revision	04
Insulation characteristics	
Overvoltage category	II
Pollution degree	2

Electrical properties

Supply

Supply voltage range	20 V DC ... 30 V DC (U_V)
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Input data

NPN

Switching threshold "1" signal voltage	$< 7 \text{ V}$ (at $U_V = 24 \text{ V}$; $< (U_V - 17 \text{ V})$)
Switching threshold "0" signal, voltage	$> 15 \text{ V}$ (at $U_V = 24 \text{ V}$; $> (U_V - 9 \text{ V})$)
Min. voltage input signal	-2 V
Max. voltage input signal	26 V (at $U_V = 24 \text{ V}$; $U_V + 2 \text{ V}$)

PNP

Switching threshold "1" signal voltage	$> 17 \text{ V}$
Switching threshold "0" signal, voltage	$< 9 \text{ V}$
Min. voltage input signal	-2 V
Max. voltage input signal	26 V (at $U_V = 24 \text{ V}$; $U_V + 2 \text{ V}$)

Output data

Continuous load current	200 mA
Leakage current	$< 1 \text{ mA}$
Residual voltage	$< 1 \text{ V}$
Transmission frequency	15 kHz

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

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Conductor cross section rigid	0.2 mm² ... 4 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12

Dimensions

Width	12.5 mm
Height	75 mm
Depth	55 mm

Material specifications

Color	green (RAL 6021)
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Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
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Standards and regulations

Standards/regulations	IEC 664
	IEC 664 A
	DIN VDE 0110-1

Mounting

Mounting type	DIN rail mounting
Mounting position	any

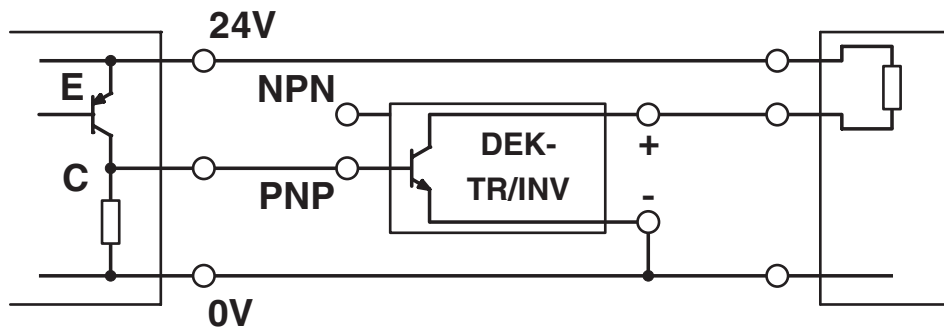
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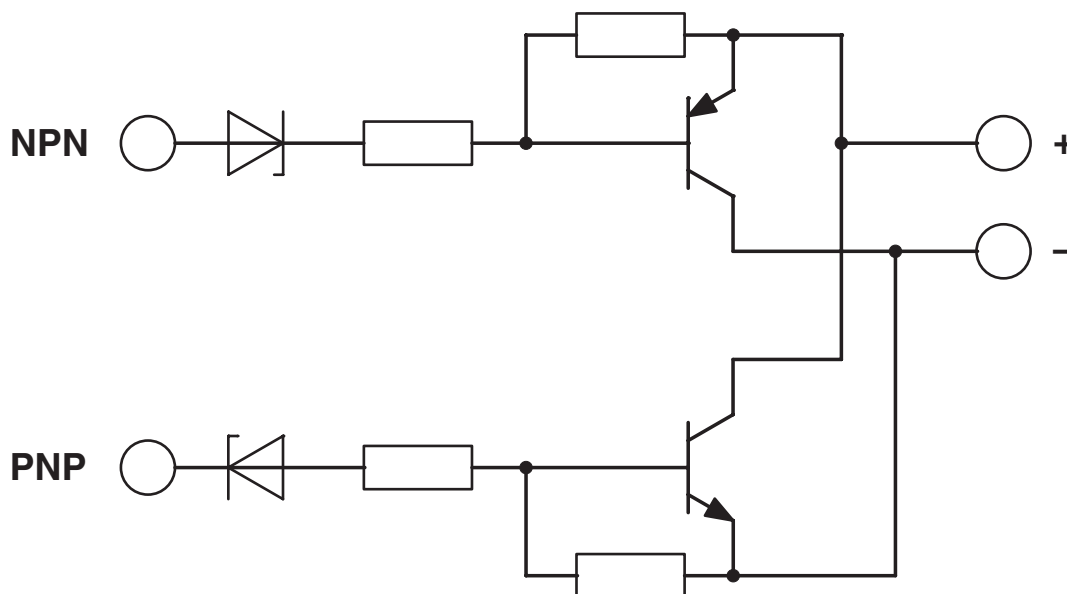
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Drawings

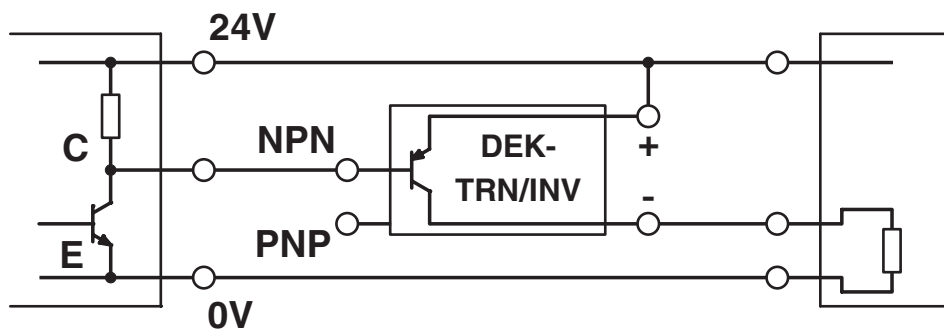
Application drawing



Circuit diagram



Application drawing



a = NPN output
b = load

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Approvals

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EAC

Approval ID: RU*DE*08.B.01841/19

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Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 8.0	EC001504
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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	6(c), 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.)	Lead(CAS: 7439-92-1)
SCIP	968e3bee-5809-4854-bb3b-763a0336fd7d

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