

Miniature Power Relay LN / LNH

- 1 pole 10 A / 16 A, 1 CO or 1 NO contact
- High performance 10 A version (LN1)
- 16 A High capacity version available (LN3)
- Version for HOT-applications (LNH)
- Flux proof
- Plastic materials according to IEC60335-1 (domestic appliances)
- RoHS compliant (Directive 2002/95/EC)
as per product date code 0424



F0278-A

Applications

Domestic appliances

Approvals

VDE REG.-Nr. 40004596, cULus E214025
Technical data of approved types on request

Contact data	LN1	LN3	LNH
Contact configuration	1 CO or 1 NO	1 CO or 1 NO	1 CO or 1 NO
Contact set	single contact		
Type of interruption	micro-disconnection		
Rated current	10 A	16 A ¹⁾	10 A
Rated voltage / max.switching voltage AC	240/400 VAC	240/400 VAC	240/400 VAC
Maximum breaking capacity AC	2500 VA	4000 VA	2500 VA
Limiting making capacity, max 4 s, df 10%	35 A	35 A	35 A
Contact material	AgSnO ₂	AgSnO ₂ (AgCdO)	AgSnO ₂
Mechanical endurance	10x10 ⁶ cycles		
Rated frequency of operation with / without load	30/300 min ⁻¹		

Contact ratings

Type	Load	Cycles
LN1	10 A, 250V, 85 °C, resistive, EN61810-1	250x10 ³
LN3	16 A, 250V, 85 °C, resistive, EN61810-1	50x10 ³ ¹⁾
LNH NO	10 A, 250V, 105 °C, resistive, EN61810-1	200x10 ³
LNH NO	8 A, 250V, 105 °C, resistive, EN61810-1	250x10 ³

¹⁾ For 16 A at 85°C: coil power reduction to 50% necessary
For 16A with 100% coil power: max. ambient temperature 75°C
For 100% coil power at 85°C: max. contact current 15A

Coil data	LN1	LN3	LNH
Rated coil voltage range DC coil	6...48 VDC	6...48 VDC	6...48 VDC
Coil power DC coil	typ. 400 mW	typ. 400 mW	typ. 400 mW
Operative range	2	2	
Operative voltage range, % of rated coil voltage			90 - 110%
Coil insulation system according UL1446	class F	class F	class F

Coil versions, DC-coil

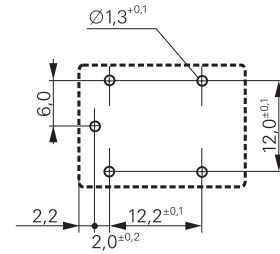
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
006	6	4.2	0.6	90±10%	400
009	9	6.3	0.9	202±10%	401
012	12	8.4	1.2	360±10%	400
024	24	16.8	2.4	1440±10%	400
036	36	25.2	3.6	3240±10%	400
048	48	33.6	4.8	5760±10%	400

All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request

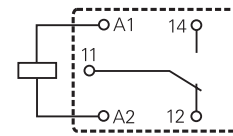
Insulation	LN1	LN3	LNH
Dielectric strength coil-contact circuit		2000 V _{rms}	
open contact circuit		1000 V _{rms}	
Clearance / creepage coil-contact circuit		≥ 2,5/2,5 mm	
Material group of insulation parts		IIIa	
Tracking index of relay base		CTI 325	
Insulation to IEC 60664-1			
Type of insulation coil-contact circuit		basic	
open contact circuit		functional	
Rated insulation voltage		250 V	
Pollution degree		2	
Rated voltage system		240 V	
Overvoltage category		II	

Other data	LN1	LN3	LNH
RoHS - Directive 2002/95/EC		compliant per product date code 0424	
Flammability class according to UL94	V-0	V-0	V-0
For WG version: GWFI to IEC 60695-2-12	850°C	850°C	850°C
GWIT to IEC 60695-2-13	775°C	775°C	775°C
Ambient temperature range	-40...85°C	-40...75 (85)°C	-40...105°C
Operate- / release time		typ. 10/5 ms	
Vibration resistance (function), NO / NC contact		>14 / 8 g, 30...400 Hz	
Shock resistance (destruction)		100 g	
Category of protection		RTII - flux proof	
Mounting		PCB	
Resistance to soldering heat flux proof		270°C / 10 s	
Relay weight		12 g	
Packaging unit		25/1000 pcs	

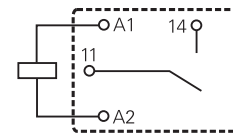
PCB layout / terminal assignment
Bottom view on solder pins



S0260-AN

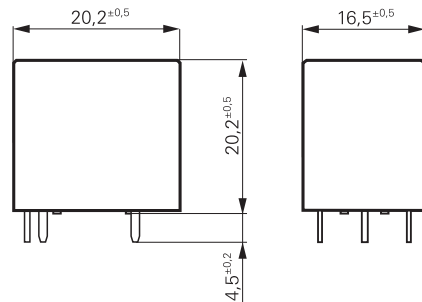


S0260-AB



S0260-AC

Dimensions



S0486-A

Miniature Power Relay LN / LNH (Continued)

Product key

Type					
Version					
1 10 A, 85°C					3 16 A, 85°C
H 10 A, 105°C					
Contact configuration					
1 1 CO contact					3 1 NO contact
Contact material					
0 AgCdO					3 AgSnO ₂
Coil					
006 6 VDC					024 24 VDC
009 9 VDC					036 36 VDC
012 12 VDC					

Product key	Version	Cont. material	Cont. configuration	Coil	Part number	
LN133006	LN1	AgSnO ₂	1 NO contact	6 VDC	0-1721249-1	
LN133009	10 A			9 VDC	0-1721249-2	
LN133012	85°C			12 VDC	0-1721249-3	
LN133024				24 VDC	0-1721249-4	
LN133036				36 VDC	0-1721249-5	
LN133048				48 VDC	0-1721249-6	
LN113006			1 CO contact	6 VDC	0-1721249-7	
LN113009				9 VDC	0-1721249-8	
LN113012				12 VDC	0-1721249-9	
LN113024				24 VDC	1-1721249-0	
LN113036				36 VDC	1-1721249-2	
LN113048				48 VDC	1-1721249-3	
LNH33006	LNH			1 NO contact	6 VDC	0-1721253-2
LNH33009	10 A				9 VDC	0-1721253-3
LNH33012	105°C		12 VDC		0-1721253-4	
LNH33024			24 VDC		0-1721253-5	
LNH33036		36 VDC	0-1721253-6			
LNH33048		48 VDC	0-1721253-7			
LNH13006		1 CO contact	6 VDC		0-1721253-9	
LNH13009			9 VDC		1-1721253-0	
LNH13012			12 VDC		1-1721253-1	
LNH13024			24 VDC		1-1721253-2	
LNH13036			36 VDC		1-1721253-3	
LNH13048			48 VDC		1-1721253-4	