

SFR - industry relay, PCB version



number of contacts **2 WK**
switching current range **50 mA bis 5 A**
inrush current **15 A**
specialities **mechanical position indication**
mechanical actuation with lever

order numbers

SFR 082 A ..VDC/AC

contact specifications

contact material	AgCuNi
contact type	single contact
nominal switching capacity	250 VAC 5 A AC1 1250 VA 440 VAC 4 A AC1
electric life expectancy	app. 200'000 operations 250 VAC, 5 A, AC1 (360 operations/h)
max. inrush current	15 A for 20 ms
switching current range	50 mA to 5 A
switching power range	0,3 VA to 1760 VA

options

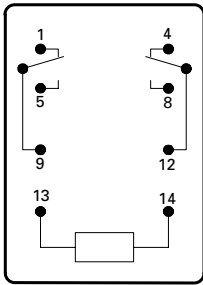
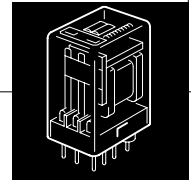
electrical position indication
SFR 082 AL ..VDC/AC

general data

mechanic life expectancy	10 x 10 ⁶ operations
mechanical switching frequency	20 Hz
pull-in time	8 ms at DC / 3-9 ms at AC
release time	3,5 ms at DC / 4-12 ms at AC
bounce time normally open contact	3,0 ms at DC / 1-8 ms at AC
bounce time break contact	8 ms at DC / 9-16 ms at AC
shock resistance	AK: > 10 g
test voltage, coil/contact	2000 V _{eff}
test voltage, set of contacts/set of contacts	2000 V _{eff}
test voltage, open contact	1000 V _{eff}
insulation resistance	250 MΩ
creeping resistance	CTI 250
weight	app. 34 g
installation situation	any
ambient temperature	-40 to +70 °C
protection standard	IP 40

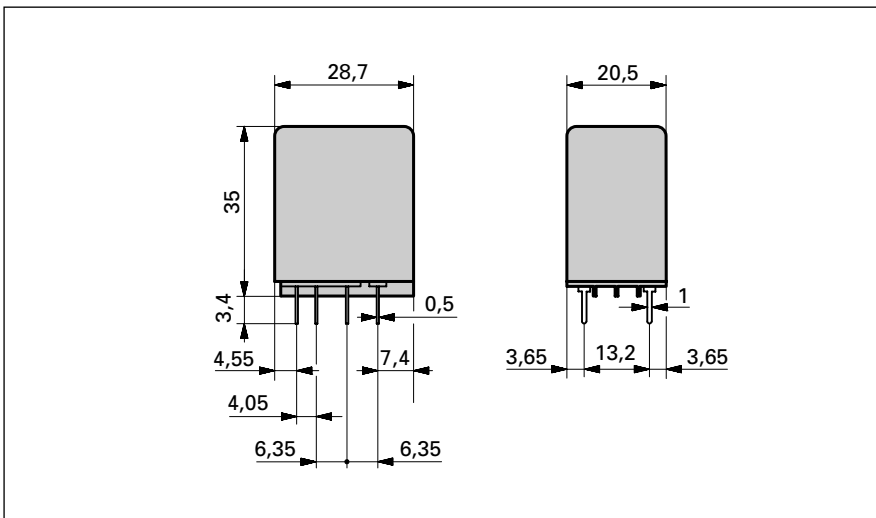
tests, instructions

certificates	VDE
insulations group	VDE 0110 / group C 250 VAC

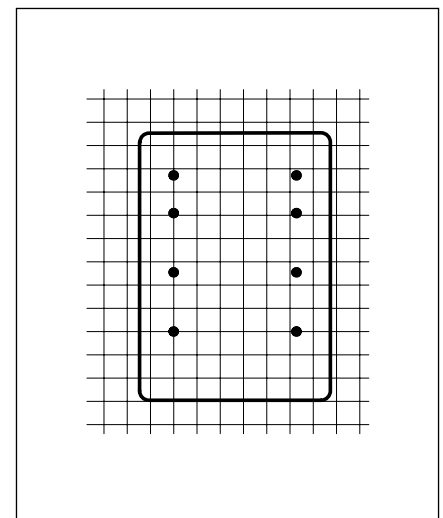


circuit diagram

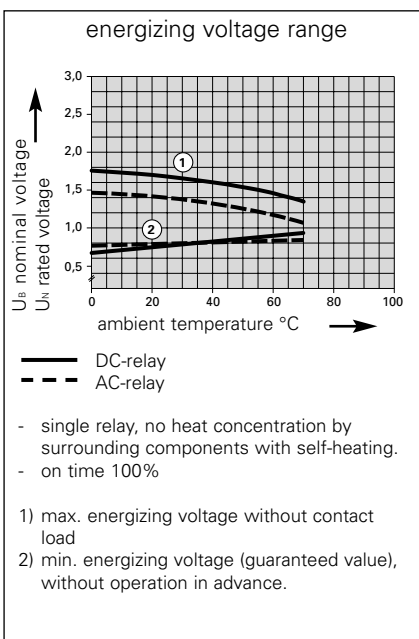
dimensions



drilling plan



coil specifications



standard coils for direct current (other voltages on enquiry)

rated voltage VDC	pull-in voltage at 20 °C	reset voltage at 20 °C	nominal current mA	resistance Ohm at 20 °C	tolerance %
12	9,0	≥ 0,6	70,60	170	+/-10
24	18,0	≥ 1,2	37,21	645	+/-10
48	36,0	≥ 2,4	18,46	2'600	+/-10
110	82,5	≥ 5,5	8,33	13'200	+/-15

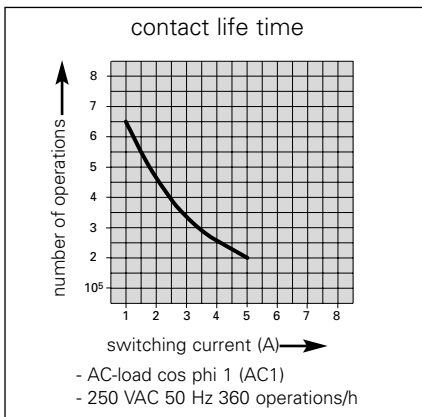
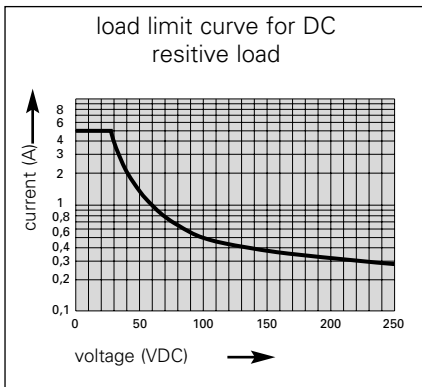
standard coils for alternated current (other voltages on enquiry)

VAC	pull-in voltage at 20 °C	reset voltage at 20 °C	nominal current mA	resistance Ohm at 20 °C	tolerance %
12	9,0	≥ 1,8	105,3	39	+/-10
24	18,0	≥ 3,6	51,6	165	+/-10
48	36,0	≥ 7,2	26,0	650	+/-10
110	82,5	≥ 16,5	12,9	3'500	+/-10
230	172,5	≥ 34,5	5,9	15'000	+/-15

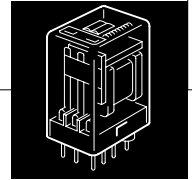


SFR - contact specifications

AgCuNi single contact



data valid for relay	SFR 143
contact material	AgCuNi (Ag1,88 Ni0,12)
contact type	single contact
nominal switching capacity	250 VAC 5 A AC1 1250 VA 440 VAC 4 A AC1
electric life expectancy	app. 200'000 operations 250 VAC 5 A AC1 (360 operations/h)
inrush current max.	15 A for 20 ms
switching current range	50 mA to 5 A
switching power range	0,3 VA to 2500 VA
contact resistance	20 mΩ



socket

ES15/4N



data

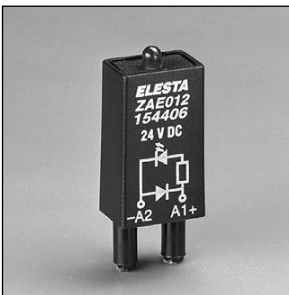
nominal data		300 VAC 12 A
dimensions (L x B x H)	[mm]	66 x 29,5 x 29
ambient temperature	[°C]	-40 to +85

accessories

plug-in modules	E...
metal clamp	Clip MHO
plastic clamp	Clip MS35

plug-in modules

E...



data

compatible to socket		ES15/4N
free wheel diode	230 VDC	E22
RC-circuit	240 VAC	E52C
LED	24 - 60 VAC/DC	E62EV
LED	110 - 230 VAC/DC	E92V

