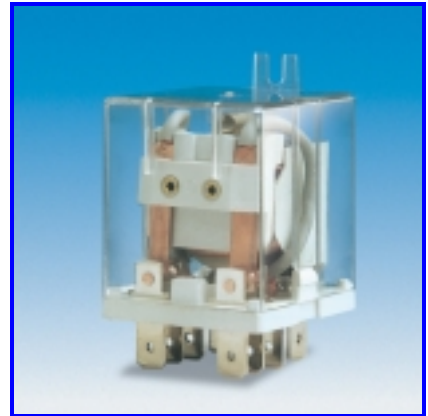


SERIES A

Power Industrial Relays

All-or-Nothing relays designed to switch up to 30A 250V AC1 loads with good reliability and minimum dimensions. Particularly suited for any high power application in heating, air conditioning, UPS, etc

Featuring a clear protective dust cover, printed circuit or 0.25 Faston terminals (6.3x0.8 mm) and flame resistant terminal block. Meeting IEC-CEI-VDE standards.



DIELECTRIC STRENGTH

Coil spring set to contacts :	2000 V RMS
Between adjacent contacts :	2000 V RMS
Between open contacts :	1500 V ⁽¹⁾ RMS
Ground / live parts :	2000 V RMS

⁽¹⁾ 3mm contact-gap types: 2000V RMS

OPERATING TIMES (At Rated Voltage)

Operate (excluding bounces) :	max 10	milliseconds
Release (excluding bounces) :	max 12	milliseconds
Bounces :	max 10	milliseconds

SPECIFICATION

Min. insulation resistance
Insulation group (VDE 110)
Enclosure classification
Type of duty
Mechanical life expectancy

2x10⁴ MΩ @ 500 VDC (all circuits)
1° Gr. C 250 VAC
IP 40 (IEC 144)
continuous
2x10⁶ operations (30A)
5x10⁵ operations (16 / 20A)
3000 (AC / DC)
500 (AC / DC)
-20 to +70° C
-40 to +80° C
0
C
73 grams

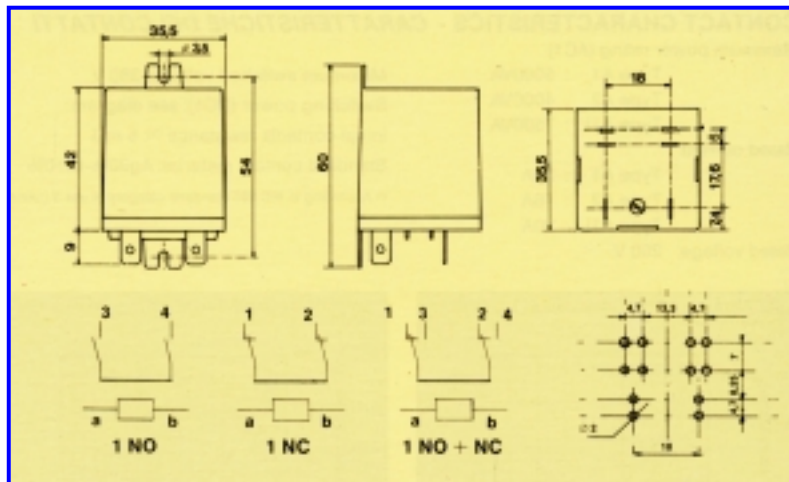
Max ops./hour @ no load
Max ops./hour @ rated load
Temperature range
Storage temperature
Impulse voltage class
Operating class (CEI 41-1)
Weight

AVAILABLE TYPES

A1 Single pole - Double break contact

Contact types available:

- 1 Normally Open (NO) - **30A-250V AC**
- 1 Normally Closed (NC) - **20A-250V AC**
- 1 NO+NC - **20A-250V AC**



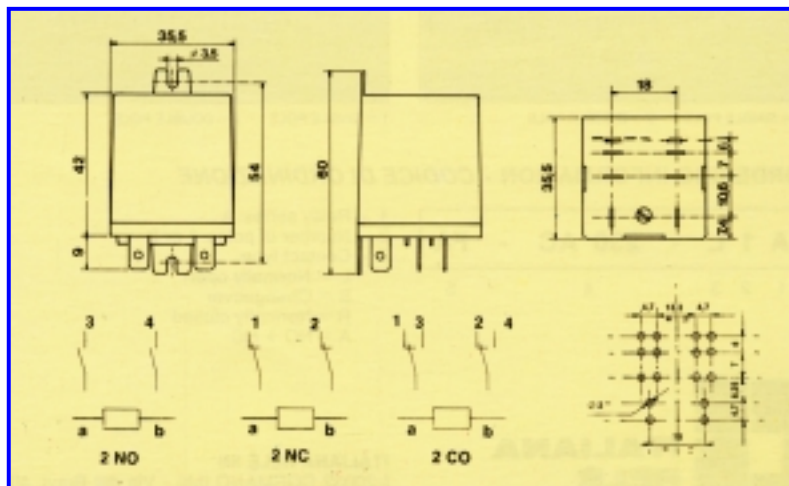
A2 Double pole - 16A-250V AC

Contact types available:

- 2 Normally Open (NO) *
- 2 Normally Closed (NC)
- 2 Changeover (CO) **

* ≥ 3 mm contact-gap (standard)

** ≥ 3 mm contact-gap (available on request for agreed quantities)



APPROVALS



All dimensions in mm

COIL CHARACTERISTICS

Rated Voltage V	DC		AC		
	Rated Current mA	Resistance R Ω	Rated Current mA	Resistance R Ω	Impedance Z Ω
6	273	22.5	400	5	15
12	133	90	200	20	60
24	67	360	100	80	240
48	33	1440	50	320	960
110	14	7900	22	1800	5000
230	-	-	10	7700	22000

Power supply voltage:

6-12-24-48-110-230 VAC

6-12-24-48--110 VDC

Rated power:

1.3W (DC) ; 2.2 VA (AC)

Operating range:

- 20% to + 10% of nominal

Minimum hold voltage:

80% of nominal (AC)

50% of nominal (DC)

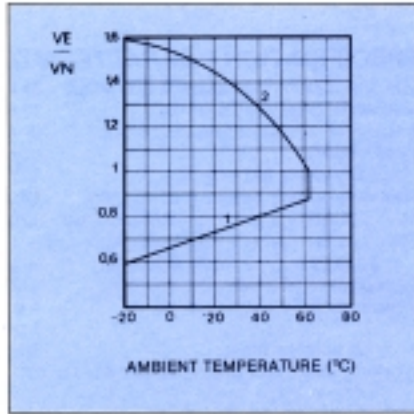
Must release voltage:

15% of nominal (AC)

5% of nominal (DC)

Thermic insulation class of winding

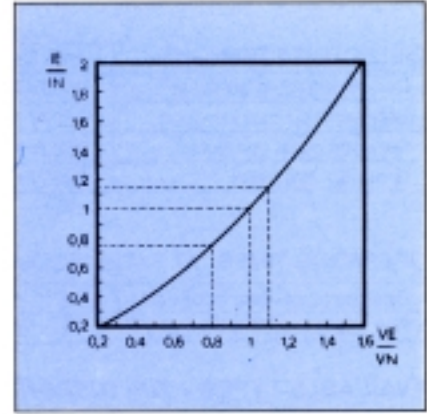
MAX ADMITTED OPERATING RANGE (DC) VERSUS AMBIENT TEMPERATURE



Curve 1: Min. coil operation voltage at stabilized temperature
Curve 2: Max. coil operation voltage at rated load.

VE - Operating voltage
VN - Rated voltage

VARIATION OF POWER CONSUMPTION VERSUS OPERATING RANGE (AC - 50 Hz)



IE - Operating current
IN - Rated current
VE - Operating voltage
VN - Rated voltage

(IEC 317): F (155°C)

CONTACT CHARACTERISTICS

Power rating (AC1) : Type A1-L 7500 VA

Type A1 5000 VA

Type A2 4000 VA

Rated current : Type A1-L 30 A

Type A1 20 A

Type A2 16 A

Rated voltage: 250V AC

Max switched voltage: 400 VAC

Switching power (DC1) : see diagram

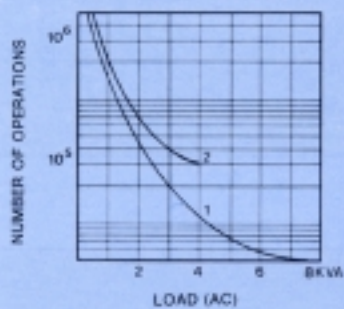
Initial contact resistance ⁽¹⁾: max. 30 m Ω

standard 5 m Ω

Contact material: Ag90% - Ni10%

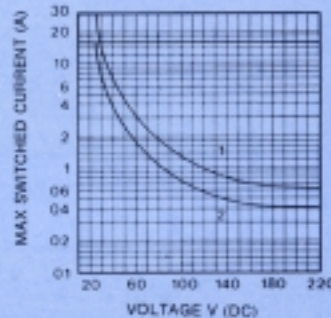
⁽¹⁾ Category of application (EN 60255) : 3

CONTACT LIFE VERSUS AC1 LOAD AT 500 OPERATIONS PER HOUR



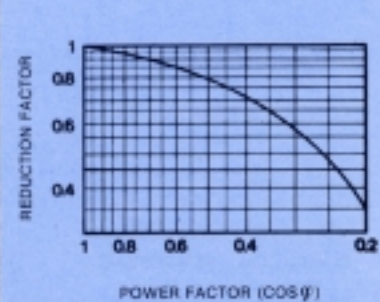
1 - SINGLE POLE 2 - DOUBLE POLE

SWITCHING POWER (DC1) AT 500 OPERATIONS PER HOUR



1 - SINGLE POLE 2 - DOUBLE POLE

REDUCTION FACTOR FOR INDUCTIVE AC LOAD



ORDERING INFORMATION

A1L - 230 AC - FA

1 2 3 4 5

- 1 - Relay Series: A
- 2 - Number of poles: 1 or 2
- 3 - Contact type:
L = Normally Open
S = Changeover
R = Normally Closed
A = NO + NC

4 - Coil supply voltage: AC or DC

5 - Connection options:

FA = 0.25" Faston terminals (6.3x0.8mm)

CS = Printed Circuit

AD = Faston + DIN-rail flange