



RELAYS

INSTANTANEOUS MONOSTABLE RELAY

RE 3000 SERIES

USER SECTORS



Power generation



Nuclear



Power transmission



Rolling Stock



Fixed railway installations



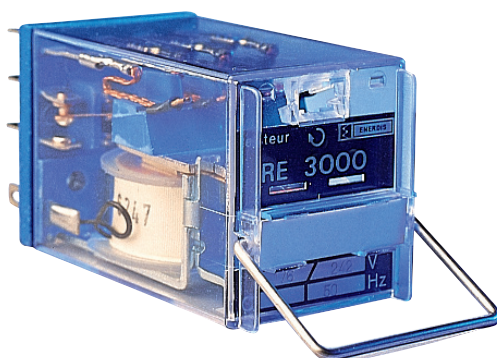
Shipbuilding



Petroleum industry



Heavy industry



RE 3000

PRODUCT ADVANTAGES

- EDF certification for 48 Vdc and 125 Vdc
- Complies with the HM-2A/03/111/A standard
- Numerous AC and DC power supply voltages
- Breaking capacity suitable for inductive loads

DESCRIPTION

RE 3000 relays have 4 x 10 A contacts, with high reliability for intensive use in harsh conditions. The relays in the RE 3000 Series are intended for all automation applications.

Designed to operate in a harsh climatic and electrical environment, as well as in zones with high seismic constraints.

Their production quality gives them a **very long life expectancy**.

The total transparency and polished finish of the cover leave the condition of the contacts constantly visible.

The RE 3000N benefits from more a stringent manufacturing process, notably in terms of the tests performed on cleaning and measurement of the contacts' resistances.

Models	Number of contacts
RE 3000	4

MONOSTABLE
INSTANTANEOUS

SEE THE "ORDERING SCHEME" TABLE

INSTANTANEOUS
MONOSTABLE WITH
FORCIBLY GUIDED
CONTACTS

Coil specifications	RE 3000	RE 3000 S / RE 3000 N
Nominal voltages Un ⁽¹⁾	DC: 12, 24, 30, 48, 60, 100, 110, 125, 200, 220, 250	AC: 12, 24, 48, 100/√3, 60, 110/√3, 110, 125, 220, 415/√3, 380
Max. consumption at Un (DC/AC)	< 3 W	
Operating range	80 to 110%	
Type of duty	Continuous	
Drop-out voltage ⁽²⁾	> 15%	> 10%

BISTABLE

FAST-ACTING
MONOSTABLE
(AND BISTABLE)

- For the RE 3000 N, only nominal voltages 48 and 125 are available.
- Limit value for supply voltage, expressed as % of the nominal value, beneath which the relay is certain to be de-energized.

Contact specifications	RE 3000 - RE 3000 S - RE 3000 N	
Number and type	4 CO, Form C	
Current	10 A	
Nominal ⁽¹⁾	250 A for 30 ms	
Maximum pulse (30 ms) ⁽²⁾		
Minimum load		
Standard contacts		
Gold-plated contact		
Maximum breaking voltage	250 Vdc	
Contact material	Silver	
Contact closure pressure	≥ 0.2 N	
Contact opening pressure	≥ 0.2 N	
Contact closure time	DC	≤ 45 ms
	AC	≤ 30 ms
Contact opening time	DC	≤ 25 ms
	AC	≤ 65 ms

TIME DELAY
(ON PICK-UP
OR DROP-OUT)

TIME DELAY WITH
FORCIBLY GUIDED
CONTACTS

MEASUREMENT

SOCKET
NUMBERING
EXPLANATIONS

Insulation		
Insulation resistance (at 500 Vdc)		
between the independent circuits and the ground		> 1,000 MΩ
between open contact parts		> 1,000 MΩ
Withstand voltage at industrial frequency		
between the independent circuits and the ground		2 kV (1 min)
between open contact parts		1 kV (1 min)
Impulse withstand voltage (1.2/50 μs - 0.5 J)		
between the independent circuits and the ground		5 kV
between open contact parts		5 kV

FRONT
CONNECTION

BACK
CONNECTION

PCB MOUNT

RETAINING CLIPS

KEYING



Mechanical specifications

Mechanical life expectancy	20x10 ⁶ operations
Maximum switching rate	Mechanical 3,600 operations / hour
Degree of protection (with relay mounted)	IP20
Dimensions (mm)	45x40x103 ⁽¹⁾
Weight (g)	200

1. Excluding the output terminals



Environmental specifications

Operating temperature	Standard	-10 ÷ +55°C
Storage and shipping temperature		-25 ÷ +70°C
Relative humidity		Standard: 65%



Standards and reference values

Resistance to vibrations (as per EN 61810)	5 g from 5 to 60 Hz (1 min)
EDF specifications	HM-2 A / 03 / 111 / A

EDF specifications

EDF application certification

EDF certification (K3/SEPTEN)	At 48 Vdc and 125 Vdc for RE 3000 N model
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Ordering scheme

Coded products				Qualified products	
RE 3000		RE 3000		RE 3000 N	
12 Vdc	RE3A 4126	24 Vac	RE3A 4107	48 Vdc	RE3A4121-CFG
24 Vdc	RE3A 4127	48 Vac	RE3A 4111	48 Vdc + Diode	RE3A4122-CFG
48 Vdc	RE3A 4131	110 Vac	RE3A 4113	125 Vdc	RE3A4125-CFG
110 Vdc	RE3A 4133	127 Vac	RE3A 4115		
127 Vdc	RE3A 4135	220 Vac	RE3A 4116		
220 Vdc	RE3A 4136	380 Vac	RE3A 4117		

Sockets and retaining clips		RE 3000 / N	Retaining clip
Type of installation	Type of outputs	Model	Retaining clip
For wall mounting	Single faston	EVL 3100	ACCA 4162
	Screw	EVV 3100	ACCA 4162
For flush mounting	Screw	EVR 3100	ACCA 4162
	Single blade	ERL 310	ACCA 4162
	Double blade	ERL 320	ACCA 4162

Mounting tips

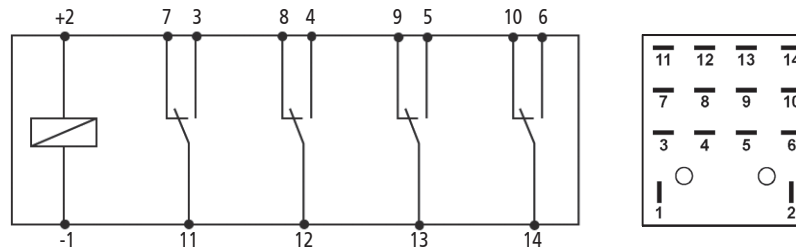
The preferred mounting position is on the wall, with the relay positioned horizontally in the reading direction on the nameplate. For correct use of the relays, they should be spaced apart by at least 5 mm in the horizontal direction and 20 mm in the vertical direction. This is to allow correct upward dissipation of the heat generated by the coil. Set these distances according to the socket used. Distances can be reduced depending on the environmental application conditions and on the relay duty cycle.

For safe and secure operation, it is advisable to use retaining clips.

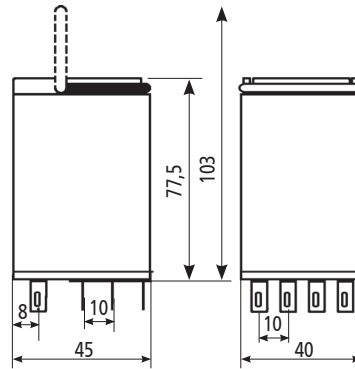
No special maintenance is required.

Condensation can form inside the relay when powered up and the outside ambient temperature is cold; this is quite normal and does not affect the operation of the relay. The plastic materials of the relay do not possess hygroscopic properties.

Wiring diagram



Dimensions



Electrical life expectancy

