# **Product datasheet**

Main





power relay, Harmony electromechanical relays, DIN rail or panel mount relay, 30A, 2NO, 24V AC

RPF2AB7



! Discontinued on: 10 Jul 2021



Range Of Product	Harmony Electromechanical Relays	
Series Name	Power	
Product Or Component Type	DIN rail/panel mount relay	
Device Short Name	RPF	
Contacts Type And Composition	2 NO	
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz	
Control Type	Without lockable test button	
Shape Of Pin	Flat	
Contacts Material	Silver tin oxide	
[Ithe] Conventional Enclosed Thermal Current	25 A at -4055 °C relays side by side without a gap 30 A at -4055 °C 13 mm gap between two relays	
Resistive Rated Load	25 A at 28 V DC 30 A at 250 V AC	
Utilisation Coefficient	10 %	

## Complementary

Mounting Support	DIN rail Panel	
Control Circuit Voltage Limits	19.226.4 V	
[le] Rated Operational Current	30 A at 277 V (AC) NO conforming to UL 20 A at 28 V (DC) NO conforming to UL 30 A at 250 V (AC) NO conforming to IEC 25 A at 28 V (DC) NO conforming to IEC	
[Ui] Rated Insulation Voltage	250 V conforming to IEC 300 V conforming to UL	
[Uimp] Rated Impulse Withstand Voltage	4 kV during 1.2/50 μs	
Maximum Switching Voltage	250 V conforming to IEC	
Maximum Switching Capacity	7500 VA/700 W	
Minimum Recommended Switching Capacity	6000 mW 500 mA / 12 V for NO	
Operating Rate	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load	
Mechanical Durability	5000000 cycles	
Electrical Durability	100000 cycles for resistive load	

Average Coil Consumption	4 VA at 60 Hz	
Drop-Out Voltage Threshold	>= 0.15 Uc	
Operate Time	25 ms	
Release Time	25 ms	
Average Resistance	170 Ohm at 20 °C +/- 15 %	
Safety Reliability Data	B10d = 100000	
Protection Category	RT II	
Test Levels	Level A group mounting	
Operating Position	Any position	
Cad Overall Width	33.7 mm	
Cad Overall Height	68.5 mm	
Cad Overall Depth	39.2 mm	
Net Weight	0.082 kg	
Device Presentation	Complete product	

## **Environment**

Dielectric Strength	2000 V AC between poles with basic 4000 V AC between coil and contact with reinforced 1500 V AC between contacts with micro disconnection	
Standards	UL 508 IEC 61810-1 CSA C22.2 No 14	
Product Certifications	UL CSA GOST CE	
Ambient Air Temperature For Storage	-4085 °C	
Ambient Air Temperature For Operation	-4055 °C	
Vibration Resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 10 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating	
Ip Degree Of Protection	IP40 conforming to IEC 60529	
Shock Resistance	10 gn for in operation 30 gn for not operating	
Pollution Degree	3	

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.200 cm
Package 1 Width	3.500 cm
Package 1 Length	6.900 cm
Package 1 Weight	81.000 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	4.500 cm

Package 2 Width	14.300 cm
Package 2 Length	18.500 cm
Package 2 Weight	878.000 g
Unit Type Of Package 3	S02
Number Of Units In Package 3	60
Package 3 Height	15.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	5.847 kg

# **Contractual warranty**

Warranty 18 months

## Sustainability Green Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance



Reach Free Of Svhc



Rohs Exemption Information

Yes

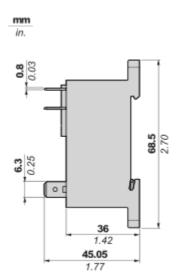
### **Certifications & Standards**

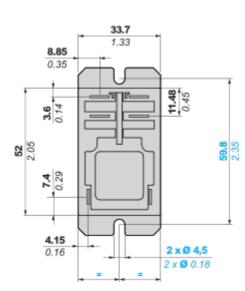
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

### RPF2AB7

#### **Dimensions Drawings**

#### **Dimensions**

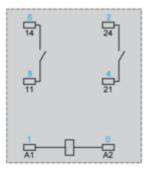




### RPF2AB7

Connections and Schema

### Wiring Diagram



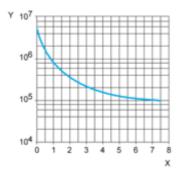
Symbols shown in blue correspond to Nema marking.

### RPF2AB7

#### Performance Curves

#### **Electrical Durability of Contacts**

#### **AC Resistive load**

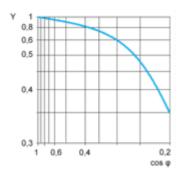


X Switching capacity (kVA)

Y Durability (number of operating cycles)

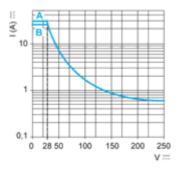
#### AC Reduction coefficient for inductive load (depending on power factor $\cos \phi$ )

Durability (inductive load) = durability (resistive load) x reduction coefficient.



Y reduction coefficient

#### Maximum switching capacity on DC resistive load



**A** 30 A **B** 25 A

Note: These are typical curves, actual durability depends on load, environment, duty cycle, etc.