



Ready for use design - DIN rail mounting - Zero Switching

Types

Solitron RN
1 pole 30/50/63 A

Solitron RN Full Cycle
1 pole 30/50 A

Solitron RN Low noise
1 pole 25 A

Solitron RN Sense
1 pole 30/50 A

Semiconductor contactors with integrated heatsink. AC operating frequency range 45÷65 Hz. Rated insulation voltage ≥4000 Vrms.



Dimensions (mm) H x W x D
Features

120 x 45 x 110 (30A)
120 x 90 x 110 (50/63 A)
Built-in varistor

120 x 45 x 110 (30 A)
120 x 90 x 110 (50 A)
High precision temperature control

120 x 45 x 110 (25 A)
Complies with EN55022

120 x 45 x 110 (30 A)
120 x 90 x 110 (50 A)
Detects supply and load failure

Control Specifications

Control input range

5-32 VDC [RN..D]
24-265 Vrms [RN..A]

4-20 mA [RN.F.I.]
0-10 VDC [RN.F.V.]

20-30 Vrms

7-32 VDC

Max. input current

9 mA [RN..D]
12 mA [RN..D]

50 mA [RN.F.I.]
0.1 mA [RN.F.V.]

26 mA

4 mA

Control supply

7-10 VDC [RN.F.I.]
12-32VDC/24VAC [RN.V.]

20-32 VDC (≤4 mA)

Alarm output PNP
NPN

Vcc - 2VDC (100mA)
2VDC@100mA

Output Specifications

Rated operational current
AC 51 @ Ta=30°C

30 Arms [RN..30]
50 Arms [RN..50]
63 Arms [RN..63]
6 Arms [RN..30]
12 Arms [RN..50]
24 Arms [RN..63]

30 Arms [RN.F..30]
50 Arms [RN.F..50]

24 Arms

30 Arms [RN1S...30..]
50 Arms [RN1S...50..]

AC 53a @ Ta=40°C

4 Arms

6 Arms [RN1S...30..]
12 Arms [RN1S...50..]

Min. operational current

200 mArms

500 mArms

2 Arms

200 mArms

Non rep. surge current (t=10 ms)

250 A_p [RN..30]
600 A_p [RN..50]
1000 A_p [RN..63]

250 A_p [RN..30]
600 A_p [RN..50]

230 A_p

250 A_p [RN1S...30..]
600 A_p [RN1S...50..]

Off-state leakage current

<1 mArms

<6 mArms

<8 mArms

<6 mArms

I²t for fusing (t=10 ms)

310 A²s [RN..30]
1800 A²s [RN..50]
5000 A²s [RN..63]

310 A²s [RN.F..30]
1800 A²s [RN.F..50]

265 A²s

310 A²s [RN1S...30..]
1800 A²s [RN1S...50..]

General Specifications

Operational voltage range

24-265 Arms [RN..23..]
42-530 Arms [RN..48..]

85-140 Arms [RN..F12..]
85-265 Arms [RN..F23..]
190-530 Arms [RN..F48..]

100-265 Arms [RN1L23..]
100-440 Arms [RN1L40..]
100-530 Arms [RN1L48..]

120-265 Arms [RN1L23..]
150-440 Arms [RN1L40..]
180-530 Arms [RN1L48..]

Non rep. peak voltage

800 V_p [RN..23..]
1200 V_p [RN..48..]

800 V_p [RN..F12..]
800 V_p [RN..F23..]
1000 V_p [RN..F48..]

800 V_p [RN1L23..]
1000 V_p [RN1L40..]
1200 V_p [RN1L48..]

800 V_p [RN1S23..]
1000 V_p [RN1S40..]
1200 V_p [RN1S48..]

Power factor

≥0.5

≥0.9

≥0.5

≥0.5

Operating temperature

-20°C to +70°C

-20°C to +70°C

+10°C to +60°C

-20°C to +70°C

Terminals

Screw captive wire clamp

Screw captive wire clamp

Screw captive wire clamp

Screw captive wire clamp

Approvals/Marks

CE - UL - CSA

CE - UL - CSA

CE - UL - CSA

CE - UL - CSA

References

1-phase, zero switching

30 A **RN1A23A30**
RN1A23D30
RN1A48A30
RN1A48D30
50 A **RN1A23A50**
RN1A23D50
RN1A48A50
RN1A48D50
63 A **RN1A23A63**
RN1A23D63
RN1A48A63
RN1A48D63

30 A **RN1F12I30**
RN1F12V30
RN1F23I30
RN1F23V30
RN1F48I30
RN1F48V30
50 A **RN1F12I50**
RN1F12V50
RN1F23I50
RN1F23V50
RN1F48I50
RN1F48V50

25 A **RN1L23M25**
RN1L40M25
RN1L48M25

30 A **RN1S23H30NO**
RN1S23H30PO
RN1S40H30NO
RN1S40H30PO
RN1S48H30NO
RN1S48H30PO
50 A **RN1S23H50NO**
RN1S23H50PO
RN1S40H50NO
RN1S40H50PO
RN1S48H50NO
RN1S48H50PO

Switch