



- AC solid state relay for PCB mounting.
- Zero switching.
- 2 A and 4 A load current
- Up to 850 V_p non-repetitive voltage.
- Up to 480 V_{RMS} line voltage.
- Input range: 3-32 VDC.
- Isolation: OPTP (Input-output) 4 KV.

SPECIFICATIONS

Input

Control voltage range	3-32 VDC
Pick up voltage, max.	3 VDC
Drop out voltage, min.	1 VDC
Reverse voltage, max.	6 VDC.
Resp. time pick up, max.	1/2 cycle
Resp. time drop out, max.	1/2 cycle
Input impedance	1.5 K Ω

Output

	RP 100 x40-2-0	RP 100 x40-4-0
Load current, max.	2 A _{RMS}	4 A _{RMS}
Load current, min.	20 mA _{RMS}	20 mA _{RMS}
Overload current		
t=1 s, max.	6 A	12 A
Non-rep. surge current		
t=20 ms, max.	42 A _p	90 A _p
Off-state leakage curr.		
@ rated voltage, max.	5 mA _{RMS}	5 mA _{RMS}
I ² t for fusing t=10 ms, max.	15 A ² s	40 A ² s
di/dt, max.	10 A/ μ s	10 A/ μ s
On-state voltage		
@ rated current, max.	1.6 V _{RMS}	1.6 V _{RMS}
dV/dt Off-state, max.	100 V/ μ s	100 V/ μ s
dV/dt Comm., max.	4 V/ μ s	4 V/ μ s

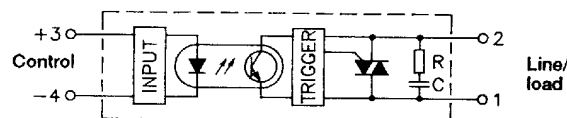
	RP 100 240-x-0	RP 100 440-x-0
Line voltage range	24-280 VAC	48-480 VAC
Non-rep. voltage, max.	650 V _p	850 V _p
Zero voltage turn-on, max.	± 20 V	± 40 V
Line frequency range	47-63 Hz	47-63 Hz
Power factor, min.	< 0 @ 240 V	< 0.5 @ 380 V

Thermal data	RP 100 x40-2-0	RP 100 x40-4-0
Operating temp. range	-40 to +100°C	-40 to +100°C
Storage temp. range	-40 to +100°C	-40 to +100°C
Junction temperature, max.	125°C	125°C
Thermal resistance		
junction-ambient, max.	37.5°C/W	22.5°C/W
Thermal resistance		
junction-case, max.	20.5°C/W	15.6°C/W

Isolation

Input-output	
Voltage	4000 VAC _{RMS}
Resistance, min.	10 ¹⁰ Ω
Capacitance, max.	16 pF

WIRING DIAGRAM



◇ Items not produced by the holder of the ISO 9001 certificate

ORDERING KEY

ELECTROMATIC CONTROLS

49E D 3213074 0002842 853 ELEC

100: Zero switching

Line voltage
240: 24-280 VAC
440: 48-480 VAC

Load current
2: 2 A
4: 4 A

Control voltage
0: 3-32 VDC

◇RP	100	240	-2	-0
		440	-4	

Horsepower Rating

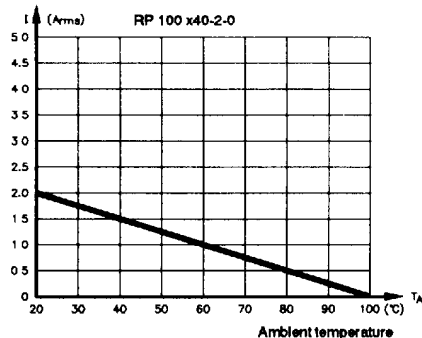
	240 VAC	480 VAC
2A	1/8 HP	*1 HP
4A	1/3 HP	*2 HP

*Three Phase

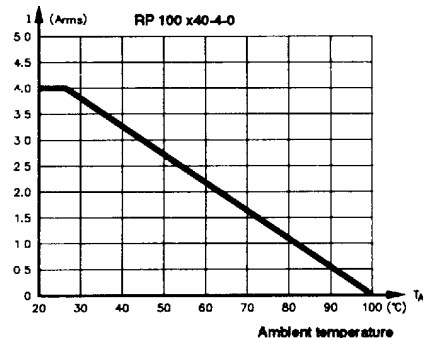
T-25-31

Derating curves

Load current



Load current

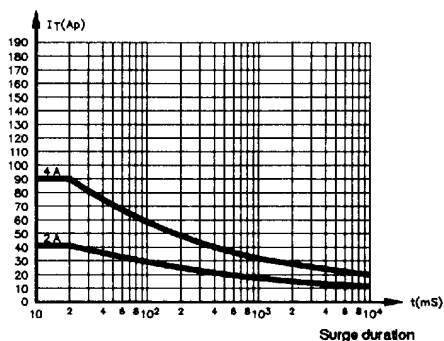


Non-repetitive surge current curve

f=50 Hz

The curve is only applicable in case of faults such as completely or partly short-circuited loads. The curve is *not* applicable for normal operation.

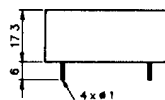
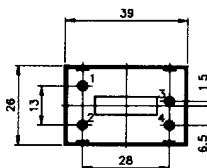
Peak surge current



MECHANICAL DATA

Housing material/colour
Terminals
Potting compound

Noryl GFN 1, black
Tin-plated brass
Polyurethane



◇ Items not produced by the holder of the ISO 9001 certificate