



# RS 300 240 - XX - 0

- 3-phase solid state relay.
- Zero switching.
- Ohmic loads.
- Load current: 3 x 10 A, 25 A, 40 A.
- Line voltage: 12-240 VAC.
- Control voltage: 3-32 VDC.
- Output: 3 alternistors.
- Isolation: OPTO (Input-output) 4 KV/8 mm.
- Reverse polarity protection of input.

## SPECIFICATIONS

### Input

	RS 300 240 - XX - 0
Control voltage range	3-32 VDC
Pick up voltage	Max. 3 VDC
Drop out voltage	Min. 1 VDC
Max. voltage	32 VDC
Input current at nominal control volt. 3 V	Max. 25 mA
30 V	Max. 35 mA
Input impedance	(Current regulator)
Resp. time pick up	Max. 1/2 cycle
Resp. time drop out	Max. 1 cycle

### Output

	RS 300 240 - 10 - x	RS 300 240 - 25 - x	RS 300 240 - 40 - x
Nominal line voltage		220/380 VAC <sub>RMS</sub>	40 - x
Break down voltage		Min. 600 V <sub>p</sub>	
Leakage current		Max. 10 mA	
Critical du/dt off state		200 V/μs	
Frequency range		47-63 Hz	
Min. load current		100 mA	
Max. load current	10 A	25 A	40 A
Surge current - non repetitive			
t=20 ms, f=50 Hz	100 A <sub>p</sub>	250 A <sub>p</sub>	350 A <sub>p</sub>
I <sup>2</sup> t for fusing t=1 ms	40 A <sup>2</sup> s	265 A <sup>2</sup> s	610 A <sup>2</sup> s
Critical di/dt	50 A/μs	100 A/μs	100 A/μs
On state voltage	Max. 1.6 V	Max. 1.6 V	Max. 1.6 V
Power factor	1	1	1

### Isolation

	RS 300 240 - XX - 0	RS 300 240 - XX - 0	RS 300 240 - XX - 0
Isolation voltage (input-output)		4000 VAC <sub>RMS</sub>	
Isolation voltage (input-case)		4000 VAC <sub>RMS</sub>	
Isolation voltage (output-case)		2500 VAC <sub>RMS</sub>	
Isolation resistance (input-output)		10 <sup>10</sup> Ω	
Capacitance (input-output)		25 pF	
Capacitance (input-case)		30 pF	
Capacitance (output-case)		100 pF	
Creepage distance (input-output)		8 mm	

### Thermal data

	RS 300 240 - 10 - x	RS 300 240 - 25 - x	RS 300 240 - 40 - x
Ambient operating temperature		-20 to +80°C	
Storage temperature		-40 to +100°C	
Max. junction temperature		110°C	
Thermal resistance (junction-case) 3 ph.	0.75°C/W	0.5°C/W	0.4°C/W
Thermal resistance (junction-case) 1 ph.	2.25°C/W	1.5°C/W	1.2°C/W

See surge current and derating curves page 5

### MECHANICAL DATA

	RS 300 240 - XX - 0
Housing material/colour	Noryl/black
Bottom plate material	Tin-plated aluminium

### WIRING DIAGRAMS

