AUTOMATION SISTEMS AND EQUIPMENT

MODULE FOR REVERSING ASYNCHRONOUS MOTORS SSR3R



Function

SSR3R is an electronic module used to commutate and reverse 3-phase asynchronous motors up to 750W, powered by 380VAC mains voltage. The use of electronic components instead of mechanical switches makes it especially suitable for applications needing frequent commutating and reversing of asynchronous motors.

The low (safe) constant voltage control allows direct coupling of controllers and other devices, without the need of additional relays and contactors.

All switches have galvanic isolation between power and control circuits, which is a prerequisite for providing electrical safety both of the service personnel and of the control devices.

Block system is provided which is activated in case of simultaneous presence of control voltages for both turning directions.

On the front side there are LEDs indicating presence of control voltage for the corresponding rotation direction.

The module is placed in a plastic enclosure which can be connected to a DIN rail S35.

Specifications

Commutated circuits

- Commutated voltage AC, sine wave, 40 to 100 Hz:
 - maximum value 270 V
 - minimum value 24 V
- On-state value of the commutated voltage U>10V
- Maximum power of the asynchronous motor 750W.
- Commutated current for each phase 2.5A
- Peak on-state current for 10 sec. 16A
- Minimum hold current 50mA
- Max off-state current 1mA
- Frequency of the commutated voltage from 40Hz to 100Hz
- Maximum reversing frequency 5Hz Load active (cosφ > 0.7)

Control circuits

- Control voltage constant, filtered
 - minimum value 18 VDC
 - maximum value 32 VDC
- Control circuit supply current:
 - 6 mA at Uy= 18 V
 - 14 mA at Uy = 32 V
- Blocking system in case of simultaneous commands for rotation in opposite directions
 - Connection diagram n-p-n, p-n-p

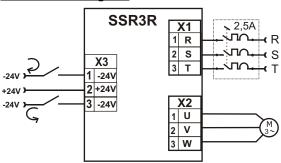
Isolation 2500V

Between the control and the commutated circuits.

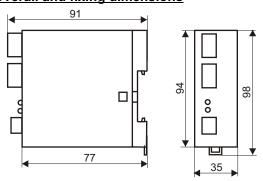
Operation conditions:

- Ambient air temperature from 0°C to 55°C
- Relative humidity of the air from 40 to 80%

Connection diagram



Overall and fixing dimensions



Mounting instructions

Fix vertically on a DIN rail.

Storage conditions:

- •Ambient air temperature from minus 40°C to 70°C
- •Relative humidity of the air not more than 85%

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ISOMATIC COMPLECT Ltd

- •Manufactures: universal and specialized programmable logic controllers with many digital and analog peripherals; multichannel regulators, solid-state relays, signal transmitters, etc.
- •Designs and implements automated systems for machines and processes in all branches of industry and power engineering.