

## Static Power Switching Unit (Automatic Transfer Switch)

### OVERVIEW

The new Ashe Series SPX-Series Static Power Transfer Switches are a range of microcontroller based thyristorized AC power switching units. The instrument is used as a watchdog for the AC mains power line in industries. It accepts two single phase power feeders as input line. Depending upon the preset selections for load voltage and current limits, the SPX-Series seamlessly switches one of the two input sources to the output.

The Static Power SPX-Series Switch provides a selection of one primary feeder out of two input power feeders. Further, it monitors the voltage and current continuously and sequentially displays these values on the front panel digital display. The instrument has a membrane switchpad on the front panel through which one may set all the parameters. An active LED mimic indicates the status of the input and output signals.

The Ashe SPX-Series Power Switching unit has intelligent Auto-Recovery facility – hence when power is restored, the instrument automatically returns to the primary power feeder. It is offered in slim and aesthetically designed enclosures of 1U, 2U & 3U/19" Rack mount execution and consumes minimal panel space.

The design uses state of the art techniques in high speed bump-less power switching, providing excellent voltage monitoring, high efficiency and low power dissipation. It is offered in a wide range of output voltages and power ratings. The Series SPX-Series units are designed for continuous full load operation in tough industrial environments, while ensuring the protection of the powered equipment.



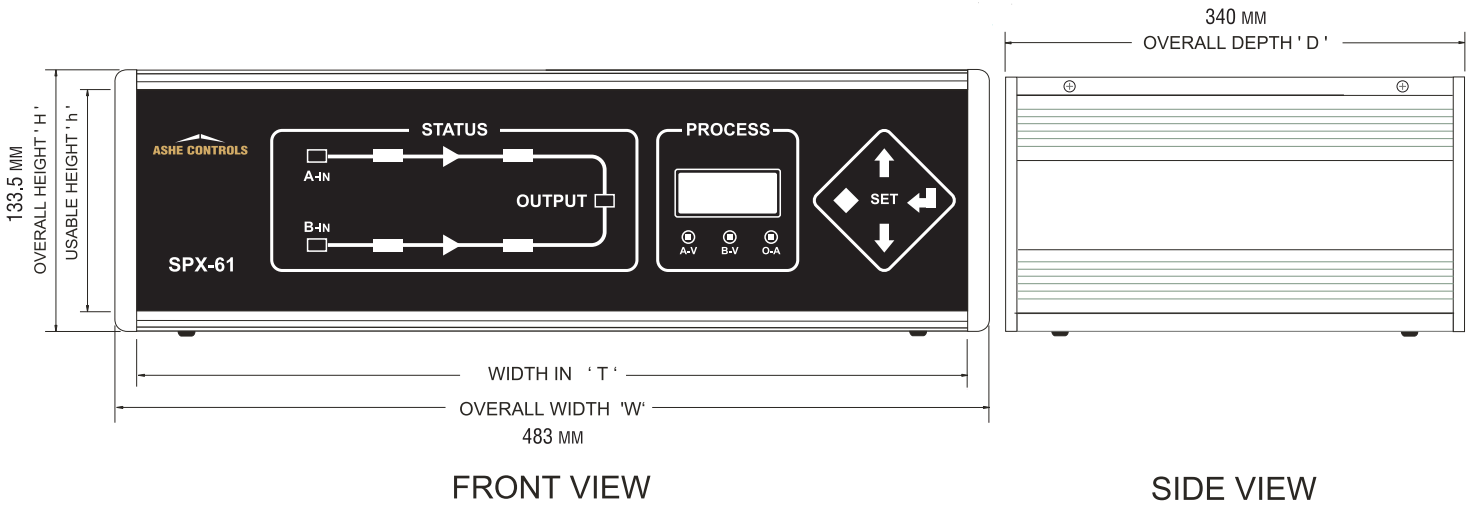
### SPECIFICATIONS

|  |   |
|--|---|
| <b>Model</b>                               | ASHE SPX-Series<br>ASHE SPX 21<br>ASHE SPX 31<br>ASHE SPX 41<br>ASHE SPX 51   |
| <b>Type</b>                                | Microcontroller-based Thyristorized Static Power Switching unit for seamless AC Voltage switching, with digital indication.   |
| <b>Inputs</b>                              | Two nos. AC Voltage inputs.   |
| <b>Output</b>                              | One AC Voltage output (depending on input status).  |
| <b>Voltage Channel A</b>                   | 110 VAC Single phase 50 Hz<br>230 VAC, Single phase 50 Hz (to be Pre-specified).  |
| <b>Voltage Channel B</b>                   | 110 VAC Single phase 50 Hz<br>230 VAC, Single phase 50 Hz (to be Pre-specified).  |
| <b>Priority</b>                            | Precedence to Channel A. If channel A fails, power source will be seamlessly switched to Channel B. When Channel A is restored, power source will be switched back to Channel A.                                  |
| <b>Current Switching Selection Options</b> | Up to 65 Ampere.<br>Primary Source selection, Sound On/Off, Range for Voltage watch-dog, Range for Current watch-dog, etc.  |
| <b>Switching Time</b>                      | <15 mSec.   |
| <b>Alarm Output Indications</b>            | Relay changeover contacts on switch-over.<br>a) 3-digit seven-segment LED display for Input indications and menu selections.<br>b) Active LED Mimic for status indications of Input sources and Output condition. |
| <b>Settings</b>                            | By four-key Membrane Switchpad on front panel.  |
| <b>Switching Devices</b>                   | Solid State Relays @90A   |
| <b>Execution</b>                           | 19" Rack Mounting 1U, 2U & 3U   |
| <b>Dimensions</b>                          | 1U SPX-21 & 31 - 44.5 X 483 X 185 mm [H X W X D]<br>2U SPX-41 & 51 - 89 X 483 X 250 mm [H X W X D]<br>3U SPX-60 - 133.5 X 483 X 340 mm [H X W X D]  |
| <b>Weight</b>                              | Approx 4 kg.  |
| <b>Operating Temperature</b>               | 0 to 55°C.  |

### FEATURES

- Microcontroller based Thyristorized design
- Load Ratings of up to 65 Ampere
- Ultra High-speed switching for seamless power transfer (<15 mSec.)
- Watchdog for power feeders
- Automatic recovery after power failure
- Various AC Power Inputs (Pre-specified)
- Configurable load current and voltage
- Relay changeover on switch-over
- Very low power consumption and heat dissipation
- RFI and EMI filters provided
- Industrial grade ABS enclosure
- Digital metering for both Input Voltages
- Control Relay output for remote power fail alarm
- High Noise immunity
- Aesthetically designed slim execution
- Proven record of hundreds of installations

**DIMENSIONAL DIAGRAM**



**How To ORDER**

| STATIC POWER SWITCHING UNIT<br>(Automatic Transfer Switch) | SPX |  |   |    |
|--|-----|--|---|----|
| Configuration and add-on options                           |     |  |   |    |
| <b>1 LOAD CURRENT</b>                                      |     |  |   |    |
| ▶ 21 Ampere  |     |  |   | 21 |
| ▶ 31 Ampere  |     |  |   | 31 |
| ▶ 41 Ampere  |     |  |   | 41 |
| ▶ 51 Ampere  |     |  |   | 51 |
| ▶ 61 Ampere  |     |  |   | 61 |
| <b>2 EXECUTION</b>   |     |  |   |    |
| ▶ DIN Rail Mounting (up to 31 ampere)                      |     |  | D |    |
| ▶ 19" Rack Mounting - 1U, 2U & 3U                          |     |  | U |    |
| <b>3 INPUT VOLTAGES</b>                                    |     |  |   |    |
| ▶ 230 V AC, Single Phase 50 Hz                             |     |  |   | A  |
| ▶ 110 V AC, Single Phase 50 Hz                             |     |  |   | H  |

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Designed and Manufactured by :

**ASHE CONTROLS PRIVATE LIMITED**

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