

SITOP POWER 24 V/40 A  
 SITOP POWER 40 STABILIZED POWER SUPPLY INPUT: 400-500 V 3 AC OUTPUT: 24 V DC/40 A

| Input  |  |
|--|--|
| Input  | 3-phase AC   |
| Rated voltage value $V_{in}$ rated   | 400 ... 500 V  |
| Voltage range AC   | 360 ... 550 V  |
| <ul style="list-style-type: none"> <li>Note</li> </ul>                         | 340 ... 360 V for max. 2 s or at max. 0.9 x $I_{out}$ rated  |
| Wide-range input   | Yes  |
| Oversvoltage resistance  | $2.3 \times V_{in}$ rated, 1.3 ms  |
| Mains buffering at $I_{out}$ rated, min.                                       | 3 ms; at $V_{in} = 360$ V  |
| Rated line frequency 1   | 50 Hz  |
| Rated line frequency 2   | 60 Hz  |
| Rated line range   | 47 ... 63 Hz   |
| Input current  |  |
| <ul style="list-style-type: none"> <li>at rated input voltage 400 V</li> </ul> | 1.9 A  |
| Switch-on current limiting (+25 °C), max.                                      | 25 A   |
| $I^2t$ , max.  | 1 A <sup>2</sup> ·s  |
| Built-in incoming fuse   | none   |
| Protection in the mains power input (IEC 898)                                  | Required: 3-pole connected miniature circuit breaker characteristic C up to 25 A (recommended: 6 A) or circuit-breaker 3RV1021-1DA10 (setting 3 A) or 3RV1721-1DD10 (UL 489) |
| Output   |  |
| Output   | Controlled, isolated DC voltage  |
| Rated voltage $V_{out}$ DC   | 24 V   |
| Total tolerance, static $\pm$  | 3 %  |
| Residual ripple peak-peak, max.  | 150 mV   |
| Residual ripple peak-peak, typ.  | 50 mV  |
| Spikes peak-peak, max. (bandwidth: 20 MHz)                                     | 240 mV   |
| Spikes peak-peak, typ. (bandwidth: 20 MHz)                                     | 200 mV   |
| Adjustment range   | 22.8 ... 26.4 V  |
| Product function Output voltage adjustable                                     | Yes  |
| Output voltage setting   | via potentiometer; only permissible at ambient temperature 0 °C to +45 °C  |
| Status display   | Green LED for 24 V OK  |
| On/off behavior  | Slight overshoot of $V_{out}$ (< 2 V for max. 500 ms)  |
| Startup delay, max.  | 3 s  |
| Voltage rise, typ.   | 40 ms  |
| Rated current value $I_{out}$ rated  | 40 A   |

|   |  |
|---|--|
| Current range   | 0 ... 40 A   |
| Supplied active power typical                                 | 960 W  |
| Short-term overload current                                   |  |
| • on short-circuiting during the start-up typical             | 70 A   |
| • at short-circuit during operation typical                   | 70 A   |
| Duration of overloading capability for excess current         |  |
| • on short-circuiting during the start-up                     | 600 ms   |
| • at short-circuit during operation                           | 600 ms   |
| Parallel switching for enhanced performance                   | Yes; only permissible at ambient temperature 0 °C to 45 °C |
| Numbers of parallel switchable units for enhanced performance | 2  |

### Efficiency

|   |       |
|---|-------|
| Efficiency at Vout rated, Iout rated, approx. | 90 %  |
| Power loss at Vout rated, Iout rated, approx. | 107 W |

### Closed-loop control

|   |      |
|---|------|
| Dynamic mains compensation (Vin rated ±15 %), max.      | 1 %  |
| Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ. | 4 %  |
| Setting time maximum                                    | 3 ms |

### Protection and monitoring

|  |  |
|--|--|
| Output overvoltage protection              | Yes, according to EN 60950             |
| Current limitation                         | 42 ... 52 A                            |
| Property of the output Short-circuit proof | Yes                                    |
| Short-circuit protection                   | Electronic shutdown, automatic restart |
| Enduring short circuit current RMS value   |  |
| • maximum                                  | 62 A                                   |
| Overload/short-circuit indicator           | -                                      |

### Safety

|                                 |  |
|---------------------------------|--|
| Primary/secondary isolation     | Yes  |
| Galvanic isolation              | Safety extra low output voltage Vout according to EN 60950-1 |
| Protection class                | Class I  |
| Leakage current                 |  |
| • maximum                       | 3.5 mA   |
| • typical                       | 0.78 mA  |
| CE mark                         | Yes  |
| UL/cUL (CSA) approval           | cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289       |
| Explosion protection            | -  |
| FM approval                     | -  |
| CB approval                     | Yes  |
| Marine approval                 | -  |
| Degree of protection (EN 60529) | IP20   |

| EMC                         |                  |
|-----------------------------|------------------|
| Emitted interference        | EN 55022 Class B |
| Supply harmonics limitation | EN 61000-3-2     |
| Noise immunity              | EN 61000-6-2     |

| Operating data   |  |
|--|--|
| Ambient temperature  |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>— Note</li> <li>• during transport</li> <li>• during storage</li> </ul> | 0 ... 55 °C<br>with natural convection<br>-25 ... +85 °C<br>-25 ... +85 °C |
| Humidity class according to EN 60721   | Climate class 3K3, no condensation   |

| Mechanics   |   |
|---|---|
| Connection technology   | screw-type terminals  |
| Connections   |   |
| <ul style="list-style-type: none"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul> | L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded<br>L+: 1 screw terminal for 0.33 ... 10 mm <sup>2</sup> ; M: 2 screw terminals for 0.33 ... 10 mm <sup>2</sup><br>- |
| Width of the enclosure  | 280 mm  |
| Height of the enclosure   | 180 mm  |
| Depth of the enclosure  | 92 mm   |
| Weight, approx.   | 3.6 kg  |
| Product feature of the enclosure housing for side-by-side mounting                                      | No  |
| Installation  | Snaps onto DIN rail EN 60715 35x15  |
| Mechanical accessories  | Mounting bracket 90° (6EP1971-2BA00)  |
| MTBF at 40 °C   | 515 274 h   |
| Other information   | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)   |