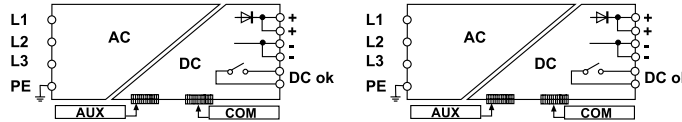


- 3-phase 400-500 Vac input
- Short circuit, overload, input and output overvoltage protections
- Over temperature protection
- Suitable for applications that require high reliability and performance
- Smart and programmable alarm contact
- High overload capability to ensure the protections selectivity and start-up of heavy loads

NOTE

Please refer to the datasheet for more details  
Overcurrent protection can be set to Hiccup or constant current mode, the maximum current supplied depends by the line resistance  
Produced on demand, contact our sales office for availability



APPLICATIONS

Series CSG2401 has an internal micro-processor that controls the many functions of the power supply, which can be programmed thanks to a user-friendly menu activated by 4 buttons on the front and shown on the front display.

**Front display:** during normal operation, this shows the output voltage value and current used by the load; during programming, it allows for the choice of the various functions available.

**Input protection:** the input circuit has been designed to avoid the most common problems seen in 3-phase networks. It therefore has:

- 1) a PFC circuit failure (latched shut-down) circuit
- 2) a system for controlling lack of phase that automatically reduces output power
- 3) an auto-restart switch-off system in the event of overvoltage and undervoltage

**Output protection:** limit current can be selected as between 10% and 100% of rated current; protection type against overload and short circuit can be chosen from:

- 1) hiccup auto reset with limit current, equal to 150% of rated current and ON/OFF time can be altered;
- 2) Constant power

**Output signals:** in addition to the "DC OK" and "FAULT" LEDs, the device also has:

- 1) an analogue signal 0...10V or 4...20mA that provides an indication of current used by the load
- 2) a programmable alarm contact able to signal and record the exceeding of the various limits to a memory: output voltage, input current, output overload, over temperature and other parameters that can be defined by programming.

**Additional functions:**

- 1) Battery charger: the acid lead battery charging function can be selected;
- 2) Remote sensing (sense): this allows for the monitoring and compensation of voltage drops on long power supply lines
- 3) The power supply can be switched off and disabled from a remote position
- 4) Auxiliary voltage: auxiliary 12 Vdc is also available, regardless of the main output voltage status
- 5) Temperature control: by connecting an external sensor (NTC), the battery charge temperature can be controlled.
- 6) Communication port: by means of an RS232 communication device the power supply can be piloted and monitored from a remote position.

| CODE                                    | XCSG2401G  | XCSG2401R  |
|---|--|--|
| <b>TYPE</b>                             | CSG2401G   | CSG2401R   |
| <b>INPUT TECHNICAL DATA</b>             |  |  |
| Input rated voltage                     | 3x 400-500 Vac                                     | 3x 400-500 Vac                                     |
| Input voltage AC                        | 340...550 Vac                                      | 340...550 Vac                                      |
| Input voltage DC                        | —  | —  |
| Frequency                               | 47...63 Hz   | 47...63 Hz   |
| Current consumption                     | 4.2 A (400 Vac) / 3.5 A (500 Vac)                  | 4.2 A (400 Vac) / 3.5 A (500 Vac)                  |
| Inrush peak current                     | 10 A (with active limitation circuit)              | 10 A (with active limitation circuit)              |
| Power factor                            | > 0.92   | > 0.92   |
| Internal protection fuse                | —  | —  |
| External protection on AC line          | MCB: C-10 A / Fuse: T-10 A                         | MCB: C-10 A / Fuse: T-10 A                         |
| <b>OUTPUT TECHNICAL DATA</b>            |  |  |
| Output rated voltage                    | 72 Vdc ±1%   | 100-110-170 Vdc ±1%                                |
| Output adjustable range                 | 50...87 Vdc  | 88...175 Vdc                                       |
| Continuous current                      | 33 A at 45°C                                       | 14 A at 45°C                                       |
| Overload limiting                       | 50 A for >5 s                                      | 21 A for >5 s                                      |
| Short circuit peak current              | 50 A for 5 s                                       | 21 A for 5 s                                       |
| Ripple @ nominal ratings                | 200 mVpp   | 200 mVpp   |
| Hold up time                            | 10 ms (400 Vac) / 10 ms (500 Vac)                  | 10 ms (400 Vac) / 10 ms (500 Vac)                  |
| Status indication                       | LED "DC OK" / LED "Alarm" / Display                | LED "DC OK" / LED "Alarm" / Display                |
| Alarm contact                           | dry contact, max. 1A @ 24 Vdc (programmable)       | dry contact, max. 1A @ 24 Vdc (programmable)       |
| Parallel connection                     | possible   | possible   |
| Redundant parallel connection           | already fitted with internal ORing diode           | already fitted with internal ORing diode           |
| <b>GENERAL TECHNICAL DATA</b>           |  |  |
| Efficiency                              | 92% (400 Vac) / 92% (500 Vac)                      | 92% (400 Vac) / 92% (500 Vac)                      |
| Dissipated power                        | 200 W (400 Vac) / 200 W (500 Vac)                  | 200 W (400 Vac) / 200 W (500 Vac)                  |
| Operating temperature range             | -20...+60°C (derating -40 W >45°C)                 | -20...+60°C (derating -40 W >45°C)                 |
| Input / output isolation                | 3 kVac / 60 s (no SELV output)                     | 3 kVac / 60 s (no SELV output)                     |
| Input / ground isolation                | 1.5 kVac / 60 s                                    | 1.5 kVac / 60 s                                    |
| Output / ground isolation               | 0.5 kVac / 60 s                                    | 0.5 kVac / 60 s                                    |
| Standard / approvals                    | EN 60950-1   | EN 60950-1   |
| EMC Standards                           | EN 61000-6-2, EN 61000-6-4                         | EN 61000-6-2, EN 61000-6-4                         |
| Overvoltage category / Pollution degree | II / 2   | II / 2   |
| Protection degree                       | IP 20  | IP 20  |
| Connection terminal IN/OUT              | 4 mm <sup>2</sup> / 35 mm <sup>2</sup>             | 4 mm <sup>2</sup> / 35 mm <sup>2</sup>             |
| Housing material                        | aluminium  | aluminium  |
| Dimension                               | 234x105x130 mm                                     | 234x105x130 mm                                     |
| Approximate weight                      | 2.8 Kg   | 2.8 Kg   |
| Mounting information                    | vertical on a rail, 60 mm from adjacent components | vertical on a rail, 60 mm from adjacent components |
| <b>APPROVALS</b>                        |  |  |
| <b>ACCESSORIES</b>                      |  |  |
| Mounting rail (IEC60715/TH35-7.5)       | PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB           | PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB           |
| Mounting rail (IEC60715/TH35-15)        | PR/3/PP, PR/3/PP/ZB, PR/3/PA, PR/3/PA/ZB           | PR/3/PP, PR/3/PP/ZB, PR/3/PA, PR/3/PA/ZB           |
| Marking tag                             | TAP207A, TAP128A, TAP178A, TAP209A                 | TAP207A, TAP128A, TAP178A, TAP209A                 |