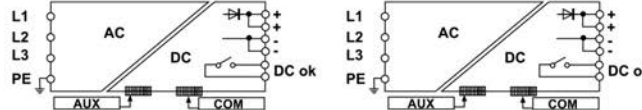


- 3-phase 400-500 Vac input
- Short circuit, overload, input and output overvoltage protections
- Over temperature protection
- Suitable for applications that require high reliability and performance
- Smart and programmable alarm contact
- High overload capability to ensure the protections selectivity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



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 shutdown) 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.

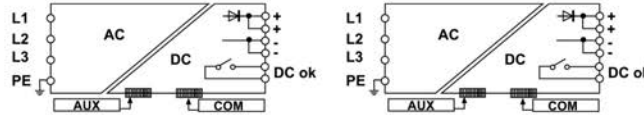
CODE	XCSG2401C	XCSG2401D
TYPE	CSG2401C	CSG2401D
INPUT TECHNICAL DATA		
Input rated voltage	3x 400-500 Vac	3x 400-500 Vac
Input voltage AC	340...550 Vac	340...550 Vac
Input voltage DC	—	—
Frequency	47...63 Hz	47...63 Hz
Current consumption	4.2 A (400 Vac) / 3.5 A (500 Vac)	4.2 A (400 Vac) / 3.5 A (500 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
OUTPUT TECHNICAL DATA		
Output rated voltage	12-24 Vdc ±1%	24-48 Vdc ±1%
Output adjustable range	11.5...29 Vdc	23...56 Vdc
Continuous current	100 A at 45°C	50 A at 45°C
Overload limiting	150 A for >5 s	75 A for >5 s
Short circuit peak current	150 A for 5 s	75 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
GENERAL TECHNICAL DATA		
Efficiency	92% (400 Vac) / 92% (500 Vac)	93% (400 Vac) / 93% (500 Vac)
Dissipated power	200 W (400 Vac) / 200 W (500 Vac)	180 W (400 Vac) / 180 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 (SELV output)	3 kVac / 60 s (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 ² / 35 mm ²	4 mm ² / 35 mm ²
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
APPROVALS	CE	CE
ACCESSORIES		
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

- 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 shutdown) 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 under-voltage

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
TYPE	CSG2401G	CSG2401R
INPUT TECHNICAL DATA		
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
OUTPUT TECHNICAL DATA		
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
GENERAL TECHNICAL DATA		
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 ² / 35 mm ²	4 mm ² / 35 mm ²
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
APPROVALS	CE	CE
ACCESSORIES		
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