

EAN CODE : 3760244880338

UNIVERSAL 12 V or 24 V

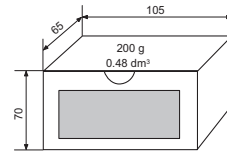
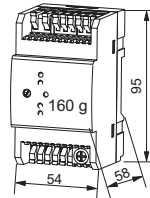
MS122402

- UNIVERSAL** : direct operation for 12 or 24 V system
- CONTROL** : state of faults on relay status
- PRACTICAL** : batterie charge current adjustable from 0,3 to 2 A
- Toggle push of release the " by-pass " system
- FASTER** : screw terminal blocks
- PROTECTED** : against short-circuits in the mains & battery polarity inversion
- EASY** : direct DIN rail or panel mounting
- INTELLIGENT** : Preponderance to start, on AC input or battery



10 A MAX
12 V or 24 V
for lead-acid battery from 2 to 20 Ah

* See annex



Specifications

12 or 24 V auto configuration.

- For operation with lead-acid batteries
- Connexion on disconnect screw terminal block for 2,5mm² wires [AWG12].

	SYSTEM 12 V	SYSTEM 24 V
Voltage		
Output voltage (mini, maxi)	10 to 14 V	20 to 28 V
Voltage in normal operation	13.5 to 13.8 V	27 to 27.6 V
Voltage in safety mode	13.8 to 10.8 V	27.6 to 21.6 V
Current		
Max current allowed	10 A	
Battery charge current	Adjustable from 300 mA to 2 A	
Batteries capacity allowed	from 2 to 20 Ah	

Fonctions

	INDICATOR	RELAY STATUS
Sector absence	Led Jaune	1 RT 250 V~1 A
Battery charge fault	Led Jaune	1 RT 250 V~1 A
Output voltage presence	Led Verte	
Inverse battery	Led Rouge	

Sector supervision

- Inputs on disconnect screw terminal block for 2,5 mm² wires [AWG12].
- Input voltage : 230 V ±10%. Power consumption : 0,2 W
- Detection : by coupler and automatic switch without power cut.

Battery supervision

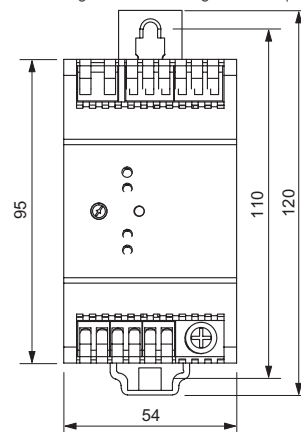
- Supervision system of status and current charge of the battery
- Discharge limiter system (DLS) : disjonction at 90% voltage rms
- Monitoring : " by-pass " push toggle to start only on battery.

Protection

- Against overcurrent or short-circuits in the primary by 10A fuse
- Against voltage inversion by électronique protection and by fuse

Other specifications

- Safety : Class II, Complies with EN 61010-1, EN 61010-2-201 and § A4-A6 of the standard NF S 61-940
- EMC : Complies with EN 61000-6-2, and EN 61000-6-4
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP30
- Operating temperature : +5°C to +50°C
- Power consumption : 150 mA
- Dielectric strength : 2500 VAC from input to output
- Presentation modular polycarbonate case (3 modules) screenprinted
- Dimension : 54 x 95 x 58 mm (lxhxp)
- Mounting : Case integrated clips for symmetrical DIN rails 35x7,5 mm or 35x15 mm.
Case removable wall mounting clips for 4 mm screws.



EAN CODE :3760244880239

$\pm 15\text{ V}$ or 12 V or 24 V

ALE1502D



PRECISE : Switching power supply offering a ripple < 3 mV rms.

- Output voltage adjustable from ± 10 to $\pm 15\text{ V}$

SMALL : Modular,

EASY : direct DIN rail or panel mounting

PROTECTED : against short circuits and reverse polarity.

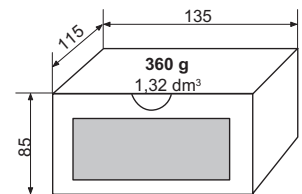
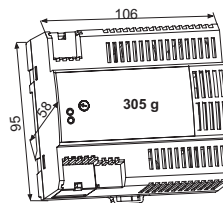
RESISTANT TO SHOCK

60 WATTS

± 10 to $15\text{ V } 2\text{ A}$

or $12\text{ V } 5\text{ A}$

or $24\text{ V } 2\text{ A}$



Specifications

- Floating outputs on spring terminal block with levers for 2,5 mm² (AWG 12) wires.

- Balanced-output voltage adjustable from ± 10 to $\pm 15\text{ V}$

+15 V output

- Regulation : < 20 mV for a load variation from 0 to 100%.
< 2 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including :
< 3 mV peak to peak of the signal at 100 kHz
< 5 mV peak to peak of the signal at 100 Hz
< 12 mV peak to peak of switching spikes

-15 V output

- Regulation : < 20 mV for a load variation from 0 to 100%.
< 2 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including :
< 4 mV peak to peak of the signal at 330 kHz
< 4 mV peak to peak of the signal at 100 Hz
< 15 mV peak to peak of switching spikes

24V Output (Adjustable from 20 to 30V)

Available between output + and -

- Regulation : < 35 mV for a load variation from 0 to 100%
< 10 mV for a line variation from -10 to +10%.
- Ondulation : < 3 mV rms including:
< 8 mV peak to peak of the switching signal
< 5 mV peak to peak of the signal at 100 Hz
< 15 mV peak to peak of switching spikes.

Indicators

- Green power-on LED indicator.
- Overheat or overcurrent red LED "status" indicator

Current +15 V (alone)

- I max : 5,5 A in short circuit condition
5 A from 10 to 12 V ; 4 A at 15 V

Current -15 V (alone)

- I max : 2,1 A in short-circuit condition
2 A from 10 to 15 V

Current 24V (Adjustable from 20 to 30 V)

- I max : 2,1 A in short-circuit condition
2 A from 20 to 30 V

Power

- Max output power : 60 W.
- I max $\pm 15\text{ V}$: 2 A

Protections

- Against short-circuits by current limit.
- Against overcurrent on primary circuit by fuse.
- Against overtemperature, by thermal shutdown.
- Cover on input output terminal block.

Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV), complies with EN 61010-1, EN 61010-2-201 and EN61368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature : from -25 to +60 °C ; derating : 1 W/°C from +40 °C
- Input voltage : 190 to 264 Volts, 50-60 Hz.
- Mains input : spring terminal block with levers for 2,5 mm², (AWG 12) wires.
- Power consumption : 78 W max.
- Dielectric strength : 3000 VAC from input to output.
- Presentation : modular polycarbonate case (6 x 17,5 mm) screenprinted.
- Mounting : Clips package integrated in modular case for DIN rails profile 35x7,5 mm or 35x15 mm.
Removable wall mouting integrated to the case for 4 mm screws.

EAN CODE : 3760244880246

12 V REMOTE SENSING

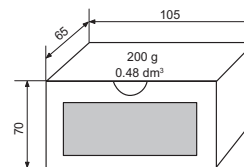
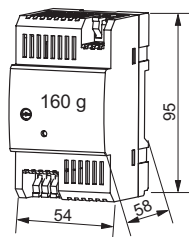
ALE1202

- PRECISE** : Output ripple < 3 mV rms.
- Remote sensing to overcome voltage drop in the power lines.
- PRACTICAL** : Output voltage adjustable from 10 to 15 V.
- Spring terminal block.
- PROTECTED** : Short circuit protection.
- EASY** : Direct DIN rail or panel mounting.



30 WATTS

12 V (Adj. 10 to 15 V)
2,5 A



Specifications

Voltage

- Floating outputs on spring terminal block for 2,5 mm² (AWG12) wires
- Output voltage : adjustable from 10 to 15 V.
- Regulation : < 25 mV for a load variation from 0 to 100%
5 mV for a line variation from -10 to +10%
- Ripple : < 3 mV rms including :
3 mV peak to peak of the signal at 65 kHz
< 4 mV peak to peak of the signal at 100 Hz
< 35 mV peak to peak of switching spikes
- Hold-up time : 50 ms at full load (230 V line input)
- Indicator : green power-on LED indicator

Current

- Max I : 3 A at 10 V
2,5 A at 12 V
2 A at 15 V

Power

- Max output power : 30 W

Protections

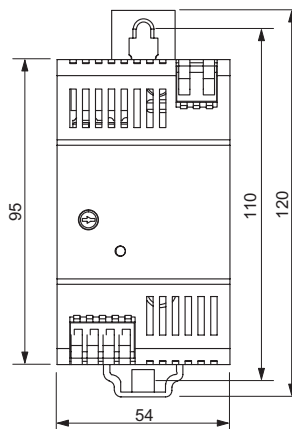
- Against short-circuits by circuit breaker with automatic reset
- Against transients on the primary circuit by varistor
- Against overcurrent on primary circuit by fuse

Remote sensing

- Correction of the voltage drop in the wires (4 wires method)
- Input on disconnect scribe terminal blocks for 2,5 mm² wires (AWG12)
- Correction : Max 3 V (1,5 V per wire)
- Ripple : < 30 mV for a load variation from 0 to max.

Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV),
complies with EN 61010-1, EN 61010-2-201 and EN 61368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP30
- Operating temperature : from -25 °C to +70 °C
Derating : 1 W/°C from +55 °C
- Input voltage : 190 to 264 V, 50-60 Hz
- Mains input : disconnect scribe terminal blocks for 2,5 mm² wires (AWG12)
- Power consumption : max 35 W
- Dielectric strength : 3000 VAC from input to output
- Presentation : polycarbonate modular case (3 modules) screenprinted
- Dimension : 54 x 95 x 58 mm (lxhxp)
- Mounting : Clipspackage integrated in modular case for DIN rail profile 35x7,5 mm or 35x15 mm removable wall mounting integrated case to the 4 mm screws.



EAN CODE : 3760244880253

12 V REMOTE-SENSING ALE1205

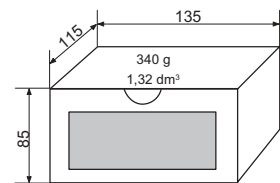
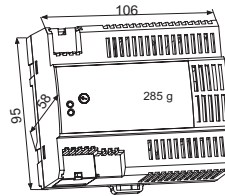


- PRECISE** : Switching power supply offering a ripple < 3 mV rms.
 - Output voltage adjustable from 10 to 15 V
- SMALL** : Modular,
- EASY** : Direct DIN rail or panel mounting.
- PROTECTED** : against short circuits and reverse polarity.
- RESISTANT TO SHOCK**

**60 WATTS**

12 V (Adj. 10 to 15 V)

5 A



Specifications

Voltage

- Floating outputs on spring terminal block with levers for 2,5 mm² (AWG 12) wires.
- Output voltage : adjustable from 10 to 15 V.
- Regul : < 20 mV for a load variation from 0 to 100%
< 2 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including:
< 2 mV peak to peak of the signal at 100 kHz
< 4 mV peak to peak of the signal at 100 Hz
< 10 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator : green power-on LED indicator.
Overheat or overcurrent red LED "status" indicator

Current

- Max I : 5,5 A in short circuit condition.
5 A from 10 to 12 V
4 A to 15 V

Power

- Max output power : 60 W.

Protection

- Short circuit protection, by current limit.
- Against overcurrent on primary circuit by fuse.
- Against overtemperature, by thermal shutdown.
- Cover on input output terminal block.

Remote sensing

- Correction of the voltage drop in the wires (4 wires method)
- Input on spring terminal block with levers for 2,5 mm² wires (AWG12)
- Correction : Max 3 V (1,5 V per wire)
- Ripple : < 30 mV for a load variation from 0 to max.

Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV),
complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature : from -25 to +60 °C ; derating : 1 W/°C from +40 °C
- Input voltage : 190 to 264 Volts, 50/60 Hz.
- Mains input : spring terminal block with levers for 2,5 mm², (AWG 12) wires.
- Power consumption : 74 W max.
- Dielectric strength: 3000 VAC from input to output.
- Presentation : modular polycarbonate case (6 x 17,5 mm) screenprinted.
- Mounting : Clips package integrated in modular case for DIN rails
profile 35x7,5 mm or 35x15 mm.
Removable wall mouting integrated to the case for 4 mm screws.

EAN CODE : 3760244880260

12 V + ACTIVE PFC

ALE1210

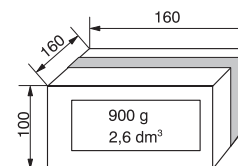
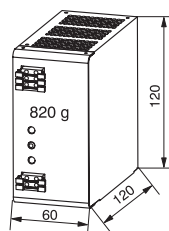
**PRECISE** : Output ripple < 3 mV rms.**COMPLIE** : EN 61000-3-2 Built in active power corrector (PFC).**PRACTICAL** : Output voltage adjustable from 10 to 15 V.**PROTECTED** : Short circuit protection.**EASY** : Direct DIN rail mounting.

- Dual spring terminal block.

**120 WATTS**

12 V (Adj. 10 to 15 V)

10 A



Specifications

Voltage

- Floating outputs on dual spring terminal block for 2.5mm² (AWG 12) wire
- Output voltage : adjustable from 10 to 15 V.
- Regulation : < 25 mV for a load variation from 0 to 100%.
< 1 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including:
< 5 mV peak to peak of the signal at 100 kHz
< 5 mV peak to peak of the signal at 100 Hz
< 35 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator : green power-on LED indicator.
"status, output fault" red LED.

Current

- Max I : 10,5 A in short circuit condition.
10 A from 10 to 15 V

Power

- Max output power : 150 W.

Protection

- Short circuit protection, by current limit.
- Against overcurrent on main input, by fuse.
- Output overload protection by voltage limiting to 17 V.

Other specifications

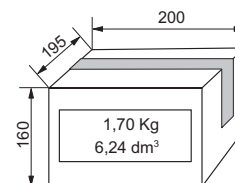
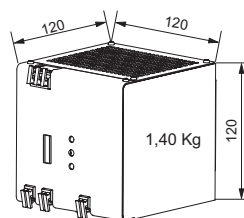
- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I
- Overvoltage Category : II
- Pollution Degree : 2
- Installation altitude : < 2000 m
- Protection level : IP 30
- Operating temperature: from -10 to +60 °C ; derating : 2.5 %/K from +45 °C
- Input voltage : 190 to 264 Volts, 50-60 Hz.
- Mains input : Dual spring terminal block for 2.5 mm² (AWG 12) wire.
- Power consumption : 175 W max.
- Power factor : 0,99 (built with PFC).
- Dielectric strength : 3000 VAC.
1800 VAC from input to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.
- Mounting : Integral symmetrical DIN rail clips.

- PRECISE** : Output ripple < 3 mV rms.
- COMPLIE** : EN 61000-3-2 Built in actif power corrector (PFC).
- DIAGNOSTIS** : Alarm by Relay with invert contact.
- PRACTICAL** : Output voltage adjustable from 10 to 15 V.
- UNIVERSAL** : 198 to 440 V main input voltage.
- POWERFUL** : To cumulate n+1 (Parallel active mode).
- PROTECTED** : against short circuit.
- EASY** : Direct DIN rail mounting
- Spring terminal block.



300 WATTS

12 V (Adj. 10 to 15 V)
25 A



Specifications

Voltage

- Floating outputs on dual spring terminal blocks with levers for 2,5 mm² (AWG 12) wire.
- Output voltage : adjustable from 10 to 15 V.
- Regulation : < 40 mV for a load variation from 0 to 100%.
< 5 mV for a line variation from 198 to 440 V.
- Ripple : < 3 mV rms including :
< 8 mV peak to peak of the signal at 100 kHz
< 5 mV peak to peak of the signal at 100 Hz
< 40 mV peak to peak of switching spikes
- Internal resistance : < 2 mΩ
- Hold-up time : 25 ms at half load and 12 ms at full load (198 V line input).
- Indicator : green power-on LED indicator.
overheat or overvoltage red LED indicator.
- Information Relay : Invert contact, 250 VAC (30 VDC) 1 A.

Current

- Max I : 25,5 A in short circuit condition.
25 A from 10 to 12 V, 20 A 15 V

Power

- Max output power : 300 W from 12 to 15 V, 250 W at 10 V.

Protections

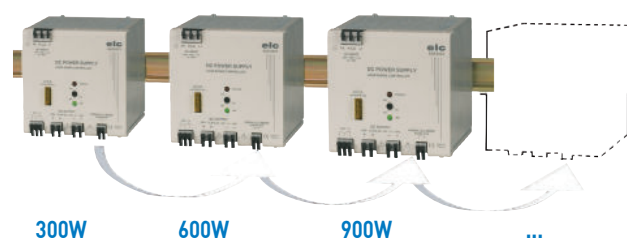
- Against short circuits by current limit.
- Against overcurrent on primary circuit by internal fuse.
- Against output overload by voltage limiting to 17 V.
- Against current reverse power surges on the output, by fuse.

Other specifications

- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature: +5 to 45 °C.
- Input voltage : 220-400 VAC (198 to 440 Volts), 50-60 Hz.
- Mains input : Dual spring terminal blocks for 1,5 mm² (AWG 16) wire.
- Power consumption : 360 W max.
- Power factor : 0,99 (built with PFC).
- Dielectric strength : 4000 VAC between input and output.
2500 VAC from input to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.
- Mounting : Integral symmetrical DIN rail clips.

Paralleling

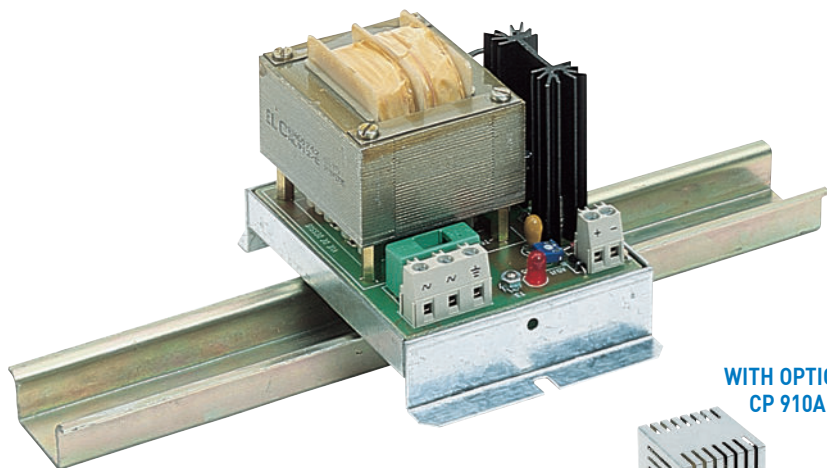
- Load share controller (1 wire) on dual spring terminal blocks for 1,5 mm² wire (AWG 16).



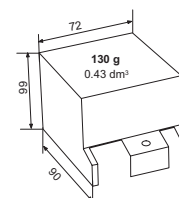
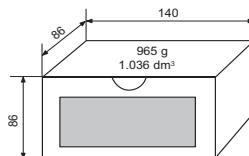
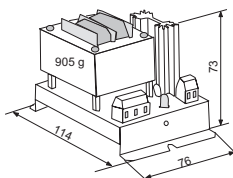
EAN CODE : 3760244880284

24 V + PRIM 400 V AL 912AES

- EASY** : DIN rail or wall mounting.
- QUICK** : Screw terminal blocks.
- PRACTICAL** : Power-on indicator.
- PROTECTED** : Triple protection.
- Optional protective cover.



20 WATTS
 24 V
 0,8 A
 Prim. 400 V



Specifications

Voltage

- Floating outputs on screw terminal block for 2,5 mm² rigid or 1,5 mm² flexible wire.
- Output voltage : 24 Volts (set).
- Accuracy : ± 0,5%.
- Regulation : < 40 mV for a load variation from 0 to 100%.
 < 10 mV for a 10% line variation.
- Ripple : < 3 mV peak to peak or 1 mV rms.
- Internal resistance : < 50 mΩ.
- Hold-up time : 20 ms at half load and 5 ms at full load.
- Indicator : power-on LED indicator.

Current

- Max I : 0,8 A.
- I_{dc} : 2 A (allows current surges).

Protection

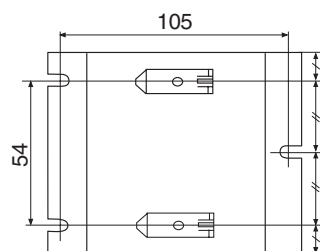
- Against short circuit, by current limit.
- Against overtemperature, by thermal shutdown.
- Against overcurrent on transformer primary, by fuse.

Other specifications

- Safety : Class I
 Complies with EN 61010-1 and EN 61010-2-201 overvoltage category II, pollution degree 2.
 Built-in transformer as per EN 61558-2-6.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Installation altitude : < 2000 m.
- Input voltage : 400 Volts, ± 10%, 50/60 Hz.
- Mains input : screw terminal block for 2,5 mm² rigid or 1,5 mm² flexible wire.
- Power consumption : 50 VA max.
- Dielectric strength : 5550 VAC from input to output, 3250 VAC from input to chassis.
- Insulation resistance : 100 MΩ/1000 V from output to chassis.
- Presentation : Galvanized base with lugs and clips for symmetrical DIN rail mounting.
- Optional : Protective cover, reference: CP 910A

Mounting

- 3 through slots (4,5 x 9 mm) for M4 screws, or 2 symmetrical DIN rail mounting clips (fitted).



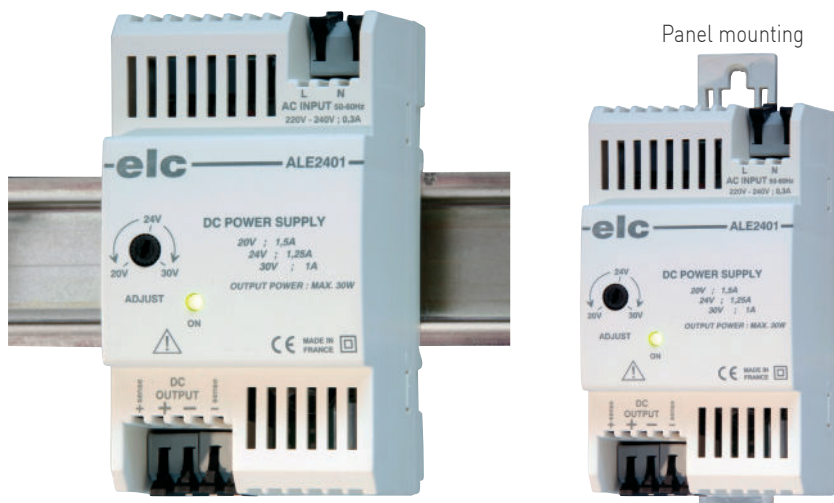
EAN CODE : 3760244880291

24 V REMOTE-SENSING

ALE2401



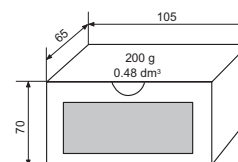
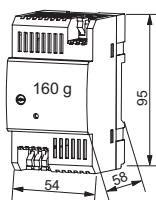
- PRECISE** : Output ripple < 3 mV rms.
- Remote sensing to overcome voltage drop in the power lines.
- PRACTICAL** : Output voltage adjustable from 20 to 30 V.
- Spring terminal block.
- PROTECTED** : Short circuit protection.
- EASY** : Direct DIN rail or panel mounting.



30 WATTS

24 V (Adj. 20 to 30 V)

1,25 A



Specifications

Voltage

- Floating outputs on spring terminal block for 2,5 mm² (AWG12) wires
- Output voltage : adjustable from 20 to 30 V.
- Regulation : < 20 mV for a load variation from 0 to 100%
5 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including :
3 mV peak to peak of the signal at 65 kHz
< 4 mV peak to peak of the signal at 100 Hz
< 20 mV peak to peak of switching spikes
- Hold-up time : 50 ms at full load (230 V line input)
- Indicator : green power-on LED indicator

Current

- Max I : 1,5 A at 20 V
1,25 A at 24 V
1 A at 30 V

Power

- Max output power : 30 W

Protections

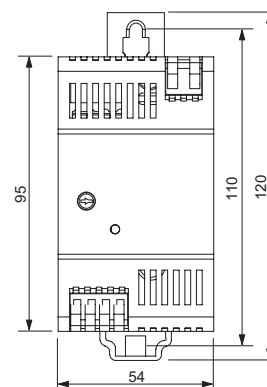
- Against short-circuits by circuit breaker with automatic reset
- Against transients on the primary circuit by varistor
- Against overcurrent on primary circuit by fuse

Remote sensing

- Correction of the voltage drop in the wires (4 wires method)
- Input on disconnect scribe terminal blocks for 2,5 mm² wires (AWG12)
- Correction : Max 3 V (1,5 V per wire)
- Ripple : < 30 mV for a load variation from 0 to max.

Other specifications


- Safety : Class II, Safety Extra Low Voltage (SELV),
complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP30
- Operating temperature : from -25 °C to +70 °C
Derating : 1 W/°C from +55 °C
- Input voltage : 220-240 VAC (190 to 264 VAC), 50-60 Hz
- Mains input : disconnect scribe terminal blocks for 2,5 mm² wires (AWG12)
- Power consumption : max 34,5 W
- Dielectric strength : 3000 VAC from Input to output
- Presentation : polycarbonate modular case (3 modules) screenprinted
- Dimension : 54 x 95 x 58 mm (l x h x p)
- Mounting : Clipspackage integrated in modular case for DIN rail profile 35x7,5 mm or 35x15 mm
removable wall mounting integrated case to the 4 mm screws.





EAN CODE : 3760244880307

5 V TO 29 V REMOTE-SENSING ALE2902M

-  **PRECISE** : Switching power supply offering a ripple <math>< 3\text{mV rms}</math>.
- UNIVERSAL** : 12 settings in 2 V steps with $\pm 1\text{V}$ adjustment range.
- COMPLETE** : 12 or 24 V lead-acid battery charger function and remote sensing.
- PRACTICAL** : Charger position and status indicators.
- PROTECTED** : against short circuits and reverse polarity.



60 WATTS

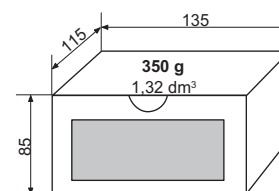
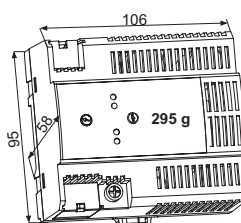
5 V to 29 V

2,5 A to 24 V

3,5 A to 12 V

4 A to 5 V

battery charger 12V or 24 V



Specifications

Voltage

- Floating outputs on spring terminal block with levers for 2,5 mm² (AWG12) wires.
- Output voltage : adjustable from 5 to 29 V by 12 position switch, and fine adjustment switch positions : 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 Volts.
Fine adjustment range : ± 1 Volt, whatever the switch setting
12 and 24 V lead-acid battery charger positions identified by two LED indicators.
- Regulation :
<math>< 30\text{ mV}</math> at 5 V and <math>< 10\text{ mV}</math> at 29 V for a load variation from 0 to 100%.
<math>< 1\text{ mV}</math> at 29 V @ 2,1 A and <math>< 4\text{ mV}</math> at 5 V @ 4 A for $\pm 10\%$ line variation.
- Dynamic regul. :
<math>< 1\%</math> to 29V and <math>< 5\%</math> to 5 V for a load change from 10 to 90%.
- Ripple : <math>< 3\text{ mV rms}</math> including :
<math>< 3\text{ mV}</math> peak to peak of the 100 kHz signal
<math>< 4\text{ mV}</math> peak to peak of the 100 Hz signal
<math>< 10\text{ mV}</math> peak to peak of switching transients
- Hold-up time : 25 ms at half load and 12 ms at full load. (190 V line input)
- Indicators : Green LED indicator : "power supply operating"
Yellow LEDs indicator : "12 V and 24 V battery charger position"
Red LED indicator : "status, output fuse broken" or "overheat"
The yellow LEDs also indicate battery-backed operation.

Current

- Max I : 4,2 A in short circuit condition
4 A to 5 V, 3,5 A to 12 V, 2,5 A to 24 V and 2,1 A to 29 V

Battery charger

- Rated capacity of the lead-acid batteries with electrolyte free :
35 Ah for 12 V and 20 Ah for 24 V.
- Minimum capacity of the lead-acid batteries sealed :
10 Ah for 12 V and 7 Ah for the 24 V.
(In all the cases, to refer to the note of the batteries manufacturer)

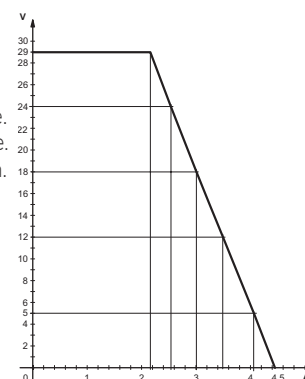
Remote sensing

- Correction of the voltage drop in the wires (4 wires method)
- Input on disconnect scribe terminal blocks for 2,5mm² wires (AWG12)
- Correction : Max 3 V (1,5 V per wire)

- Ripple : <math>< 30\text{ mV}</math> for a load variation from 0 to max.
- Power**
- A linear function of voltage from 60 W to 20 W (29 to 5 Volts).

Protection

- Against short circuit, by current limit.
- Against overcurrent on primary circuit, by fuse.
- Battery reverse polarity protection by output fuse.
- Against overtemperature, by thermal shutdown.
- Cover on input output terminal block.



Other specifications

- Safety : Class II, Safety Extra Low Voltage (SELV),
complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : <math>< 2000\text{ m}</math>.
- Protection level : IP 30.
- Operating temperature: from -25 to +60 °C ; derating : 1 W/°C from +40 °C
- Input voltage : 220-240 VAC (190 to 264 Volts), 50-60 Hz.
- Mains input : spring terminal block with levers for 2,5 mm², (AWG 12) wires.
- Power consumption : 71 W max.
- Dielectric strength : 3000 VAC from input to output.
- Presentation : modular polycarbonate case (6 x 17,5 mm) screenprinted.
- Mounting : Clips package integrated in modular case for DIN rails
profile 35x7,5 mm or 35x15 mm.
Removable wall mouting integrated to the case for 4mm screws.

EAN CODE : 3760244880314

24 V + ACTIVE PFC

ALE2405

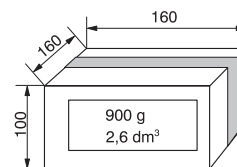
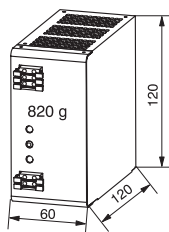
**PRECISE** : Output ripple < 3 mV rms.**COMPLIE** : EN 61000-3-2 Built in active power corrector (PFC).**PRACTICAL** : Output voltage adjustable from 20 to 29 V.**PROTECTED** : Short circuit protection.**EASY** : Direct DIN rail mounting.

- Dual spring terminal block.

**120 WATTS**

24 V (Adj. 20 to 29 V)

5 A



Specifications

Voltage

- Floating outputs on dual spring terminal block for 2.5 mm² (AWG 12) wire
- Output voltage : adjustable from 20 to 29 V.
- Regulation : < 20 mV for a load variation from 0 to 100%.
< 1 mV for a line variation from -10 to +10%.
- Ripple : < 3 mV rms including:
< 5 mV peak to peak of the signal at 100 kHz
< 5 mV peak to peak of the signal at 100 Hz
< 15 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 12 ms at full load (190 V line input).
- Indicator : green power-on LED indicator.
"status, output fault" red LED.

Current

- Max I : 5,5 A in short circuit condition.
5 A from 20 to 29 V

Power

- Max output power : 145 W.

Protection

- Against short circuit protection, by current limit.
- Against overcurrent on primary circuit, by fuse.
- Against overload on outputs, by voltage limit to 33 V.

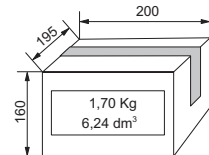
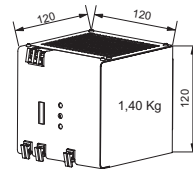
Other specifications

- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I.
- Overvoltage Category : II.
- Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature : from -10 to +60 °C ; derating : 2.5%/K from +50 °C
- Input voltage : 220-240 VAC (190 to 264 Volts), 50-60 Hz.
- Mains input : Dual spring terminal block for 2.5 mm² (AWG 12) wire.
- Power consumption : 170 W max.
- Power factor : 0,99 (built with PFC).
- Dielectric strength : 3000 VAC
1800 VAC from input to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.
- Mounting : Integral symmetrical DIN rail clips.

- PRECISE** : Output ripple < 3 mV rms.
- COMPLIE** : EN 61000-3-2 Built in active power corrector (PFC).
- DIAGNOSTIS** : Alarm by Relay with invert contact.
- PRACTICAL** : Output voltage adjustable from 20 to 30 V.
- UNIVERSAL** : 198 to 440 V main input voltage.
- POWERFUL** : to cumulate n+1(Parallel active mode).
- PROTECTED** : against short circuit.
- EASY** : Direct DIN rail mounting - Spring terminal block.



300 WATTS
 24 V (Adj. 20 to 30 V)
 12,5 A



Specifications

Voltage

- Floating outputs on dual spring terminal blocks with levers for 2,5 mm² (AWG 12) wire.
- Output voltage : adjustable from 20 to 30 V.
- Regulation : < 10 mV for a load variation from 0 to 100%.
 < 5 mV for a line variation from 198 to 440 V.
- Ripple : < 3 mV rms including :
 < 8 mV peak to peak of the signal at 100 kHz
 < 5 mV peak to peak of the signal at 100 Hz
 < 40 mV peak to peak of switching spikes
- Internal resistance : < 1 m Ω
- Hold-up time : 25 ms at half load and 12 ms at full load (198 V line input).
- Indicator : green power-on LED indicator.
 overheat or overvoltage red LED indicator.
- Information Relay : Invert contact, 250 VAC (30 VDC) 1 A.

Current

- Max I : 15,5 A in short circuit condition.
 15 A at 20 V, 12,5 A at 24 V, 10 A at 30 V.

Power

- Max output power : 300 W from 20 to 30 V.

Protections

- Against short circuits by current limit.
- Against primary circuit overcurrent, by internal fuse.
- Against output overload by voltage limiting to 33 V.
- Against current reverse power surges on the output, by fuse.

Other specifications

- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature : +5 to +50 °C.
- Input voltage : 220-400 VAC (198 to 440 Volts), 50-60 Hz.
- Mains input : Dual spring terminal blocks for 1,5 mm² (AWG 16) wire.
- Power consumption : 360 W max.
- Power factor : 0,99 (built with PFC).
- Dielectric strength : 4000 VAC between input and output.
 2500 VAC between input to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.
- Mounting : Integral symmetrical DIN rail clips.

Paralleling

- Load share controller (1 wire) on dual spring terminal blocks with level for 1,5 mm² wire (AWG 16).



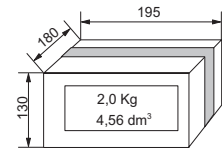
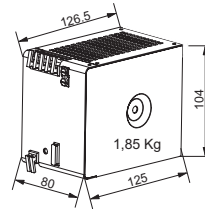
EAN CODE : 3760244880352

24 V PRIM 230/400 V ALE2402R

- UNIVERSAL** : 230/400 V ± 15 V input.
- COMPLIANT** : EN 61131-2 or programmable logic controllers (PLCs), peripherals, and other applications requiring 24 V filtered rectified .
- HIGH OUTPUT** : Toroidal safety transformer (SELV).
- EASY** : Direct DIN rail mounting.
- Spring terminal block.
- SMALL**: Lightweight and small sized.



60 WATTS
24 V
2,5 A



Specifications

Voltage

- Floating outputs on spring terminal block with levers.
- Max wire cross sectional area : 2.5mm² (AWG 12).
- Output voltage : 24 V DC (according to EN 61131-2)
- Ripple : < 5%
- Hold up time : 20 ms at nominal voltage and current
- Indicator : green power-on LED indicator.

Current

- Max I : 2,5A

Current / Voltage / Ripple

Current	Voltage	Ripple
0 A	28,3 V	0%
0,5 A	26,9 V	1%
1 A	26,0 V	2%
1,5 A	25,3 V	3%
2 A	24,6 V	4%
2,5 A	24,0 V	5%

Power

- Output power : 60 W.

Protection

- Short circuit protection by fuse in the secondary circuit.

Other specifications

- Input voltage : 230/400 V ± 15 V AC single or two-phase 50/60 Hz.
- Mains input : spring terminal block with levers.
- Max wire cross sectional area : 1.5 mm² (AWG 16).
- Screw type earth terminal : 2.5 mm² (AWG 12).
- Safety : Class I, complies with EN 61558-2-6.
- Protection level : IP 30.
- Output voltage complying with EN 61131-2 for automation systems.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Power consumption : 75 W max.
- Operating temperature : +5 to +55 °C.
- Dielectric strength : 4500 VAC from input to output, 2250 VAC from input to chassis, 500VAC from output to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.

Mounting

- Integral symmetrical DIN rail clips.

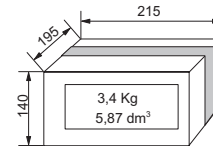
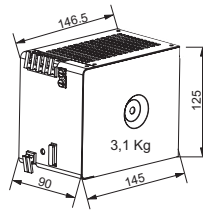
EAN CODE : 3760244880369

24 V PRIM 230/400 V ALE2405R

- UNIVERSAL** : 230/400 V ± 15 V input.
- COMPLIANT** : EN 61131-2 or programmable logic controllers (PLCs), peripherals, and other applications requiring 24 V filtered rectified.
- EASY** : Direct DIN rail mounting.
- Spring terminal block.
- HIGH OUTPUT** : Toroidal safety transformer (SELV).
- LITTLE** : Lightweight and small sized.



120 WATTS
24 V
5 A



Specifications

Voltage

- Floating outputs on spring terminal block with levers.
- Max wire cross sectional area : 2.5 mm² (AWG 12).
- Output voltage : 24 V DC (according to EN 61131-2)
- Ripple : < 5%
- Hold up time : 20 ms at nominal voltage and current
- Indicator : green power-on LED indicator.

Current

- Max I : 2,5 A

Current / Voltage / Ripple

Current	Voltage	Ripple
0 A	28,3 V	0%
1 A	26,9 V	1%
2 A	26,0 V	2%
3 A	25,3 V	3%
4 A	24,7 V	4%
5 A	24,0 V	5%

Power

- Output power : 120 W.

Protection

- Short circuit protection by fuse in the secondary circuit.

Other specifications

- Input voltage : 230/400 V ± 15 V AC single or two-phase 50/60 Hz.
- Mains input : spring terminal block with levers.
- Max wire cross sectional area : 1.5 mm² (AWG 16).
- Screw type earth terminal : 2.5 mm² (AWG 12).
- Safety : Class I, complies with EN 61558-2-6.
- Protection level : IP 30.
- Output voltage complying with EN 61131-2 for automation systems.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Power consumption : 147 W max..
- Operating temperature : +5 to +55 °C.
- Dielectric strength : 4500 VAC from input to output, 2250 VAC from input to chassis, 500VAC from output to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.

Mounting

- Integral symmetrical DIN rail clips.

EAN CODE : 3760244880376

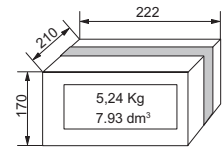
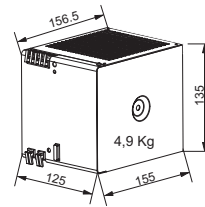
24 V PRIM 230/400 V ALE2410R

- UNIVERSAL** : 230/400 V ± 15 V input.
- COMPLIANT** : EN 61131-2 or programmable logic controllers (PLCs), peripherals, and other applications requiring 24 V filtered rectified .
- EASY** : Direct DIN rail mounting.
- Spring terminal block.
- HIGH OUTPUT** : Toroidal safety transformer (SELV).
- LITTLE** : Lightweight and small sized.
- PERFORMING** : split output



240 WATTS

24 V
10 A



Specifications

Voltage

- Floating outputs on 2 spring terminal block with levers.
- Max wire cross sectional area : 2.5 mm² (AWG 12).
- Output voltage : 24 VDC (according to EN 61131-2)
- Ripple : < 5%
- Hold up time : 20 ms at nominal voltage and current
- Indicator : green power-on LED indicator.

Current

- Max I : 10 A

Current / Voltage / Ripple

Current	Voltage	Ripple
0 A	28,1 V	0%
2 A	26,7 V	1%
4 A	25,9 V	2%
6 A	25,3 V	3%
8 A	24,6 V	4%
10 A	24,0 V	5%

Power

- Output power : 240 W.

Protection

- Short circuit protection by fuse in the secondary circuit.

Other specifications

- Input voltage : 230/400 V ± 15 V AC single or two-phase 50/60 Hz.
- Mains input : spring terminal block with levers.
- Max wire cross sectional area : 1.5 mm² (AWG 16).
- Screw type earth terminal : 2.5 mm² (AWG 12).
- Safety : Class I
complies with EN 61558-2-6.
- Protection level : IP 30.
- Output voltage complying with EN 61131-2 for automation systems.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Power consumption : 287 W max.
- Operating temperature : +5 to +55 °C.
- Dielectric strength : 4500 VAC from input to output,
2250 VAC from input to chassis.
500 VAC from output to chassis.
- Presentation : galvanized steel case and front panel with epoxy finish.

Mounting

- Integral symmetrical DIN rail clips.