EAN CODE : 3760244880338

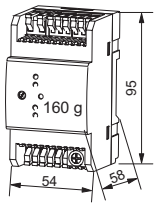
UNIVERSAL 12 V or 24 V — MS122402

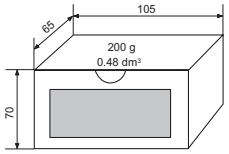
UNIVERSAL : direct operation for 12 or 24 V system
CONTROL : state of faults on relay status
PRACTICAL : batterie charge current adjustable from 0,3 to 2 A
Toggle push of release the " by-pass " system
FASTER : screw terminal blocks
PROTECTED : against short-circuits in the mains & battery polarity inversion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

Panel mounting

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

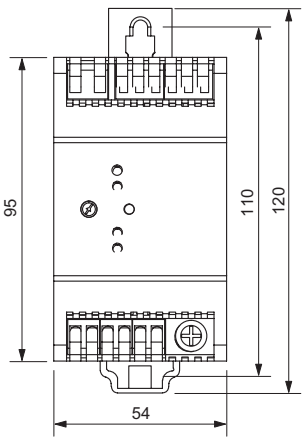
- Supervision system of status and current charge of the battery
- Discharge limiter system (DLS) : disjonction at 90% voltage rms
- Monitoring : " by-pass " push toggle to start only on battery.

Protection

- Against overcurrent or short-circuits in the primary by 10A fuse
- Against voltage inversion by électronic 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 symetrical DIN rails 35x7,5 mm or 35x15 mm.
  Case removable wall mounting clips for 4 mm screws.



EAN CODE :3760244880239

± 15 V or 12 V or 24 V **ALE1502D**

PRECISE : Switching power supply offering a ripple < 3 mV rms.
- Output voltage adjustable from ±10 to ±15 V

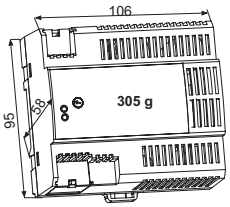
SMALL : Modular,

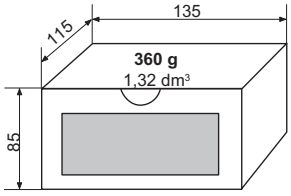
EASY: direct DIN rail or panel mounting

PROTECTED : against short circuits and reverse polarity.

RESISTANT TO SHOCK

60 WATTS
±10 to 15 V 2 A
or 12V 5 A
or 24V 2 A





Specifications

- Floating outputs on spring terminal block with levers for 2,5 mm² (AWG 12) wires.
- Balanced-output voltage adjustable from ±10 to ±15 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 ±15 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.

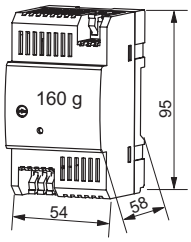
PRACTICAL : Output voltage adjustable from 10 to 15 V.
- Spring terminal block.

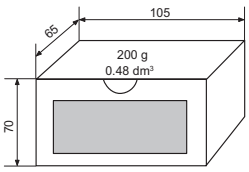
PROTECTED : Short circuit protection.

EASY : Direct DIN rail or panel mounting.

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 : adujustable 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

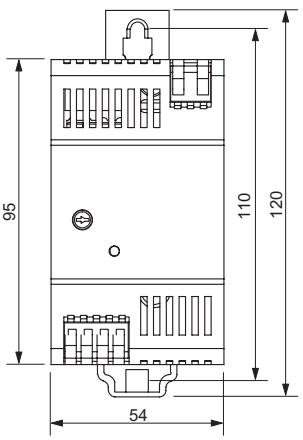
Current
- Max I : 3 A at 10 V
  2,5 A at 12 V
  2 A at 15 V

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

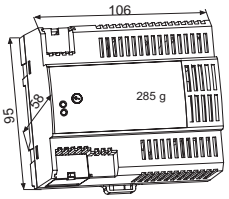
PRECISE : Switching power supply offering a ripple < 3 mV rms.
- Output voltage adjustable from 10 to 15 V

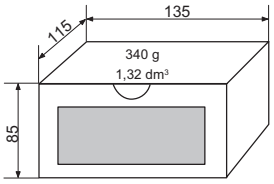
SMALL : Modular,

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.

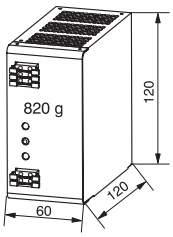
Other specifications
- Safety : Class II, Safety Extra Low Voltage (SELV),
  complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- 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.

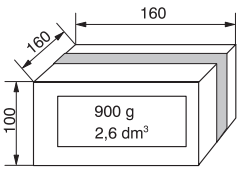
EAN CODE : 3760244880260

12 V + ACTIVE PFC **ALE1210**

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

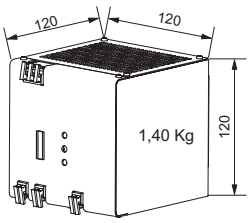
Other specifications

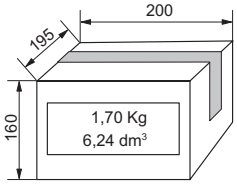
- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I
- Overvoltage Category : II
- Pollution Degree : 2
- Installation altitude : < 2000 m
- Protection level : IP 30
- Operating temperature : from -10 to +60 °C ; derating : 2.5 %/K from +45 °C
- Input voltage : 190 to 264 Volts, 50-60 Hz.
- Mains input : 3-pole plug-in terminal block for 2.5 mm² (AWG 12) wire.
- DC ouput : 2-pole plug-in 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.

EAN CODE :3760244880277 12 V PRIM 190 TO 440 V + ACTIVE PFC ALE1225

PRECISE : Output ripple < 3 mV rms.
COMPLIE : EN 61000-3-2 Built in actif power corrector (PFC).
DIAGNOSIS : 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.

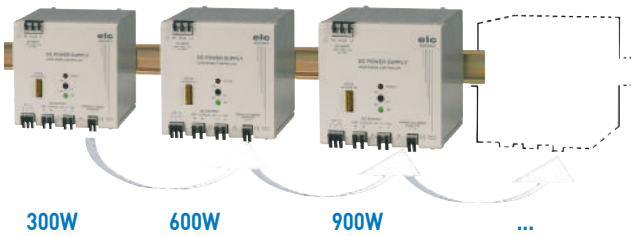
Current
- Max I : 25,5 A in short circuit condition.
  25 A from 10 to 12 V, 20 A 15 V

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.

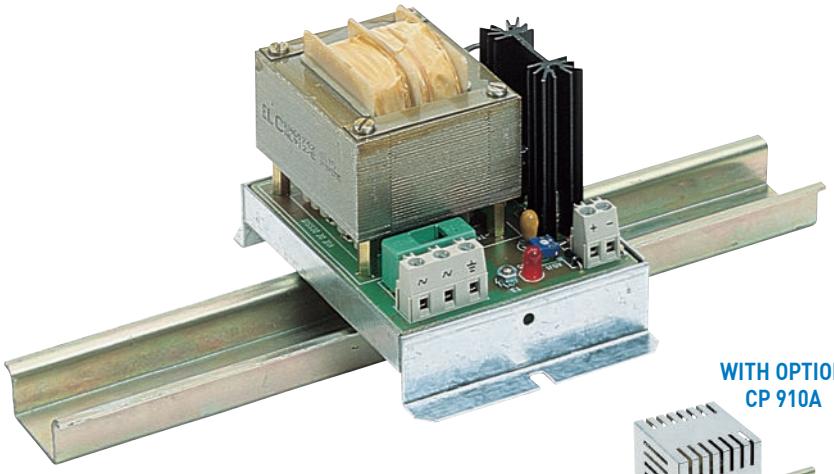
Paralleling
- Load share controller (1 wire) on dual spring terminal blocks for 1,5 mm² wire (AWG 16).



EAN CODE : 3760244880284

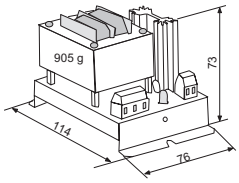
24 V + PRIM 400 V AL 912AES

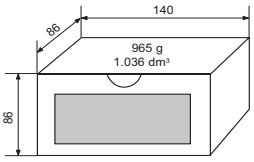
EASY : DIN rail or wall mounting.
QUICK : Screw terminal blocks.
PRACTICAL : Power-on indicator.
PROTECTED : Triple protection.
- Optional protective cover.

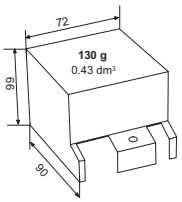


WITH OPTION CP 910A

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







Specifications

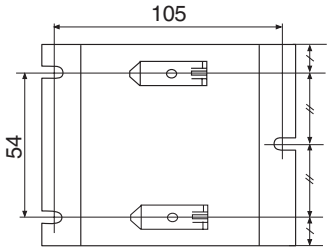
Voltage
- Floating outputs on screw terminal block for 2,5 mm² rigid or 1,5 mm² flexible wire.
- Output voltage : 24 Volts (set).
- Accuracy : ± 0,5%.
- Regulation : < 40 mV for a load variation from 0 to 100%.
  < 10 mV for a 10% line variation.
- Ripple : < 3 mV peak to peak or 1 mV rms.
- Internal 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.
- Idc : 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

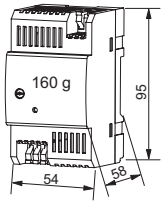
PRECISE : Output ripple < 3 mV rms.
- Remote sensing to overcome voltage drop in the power lines.

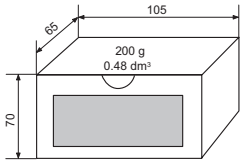
PRACTICAL : Output voltage adjustable from 20 to 30 V.
- Spring terminal block.

PROTECTED : Short circuit protection.

EASY : Direct DIN rail or panel mounting.

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

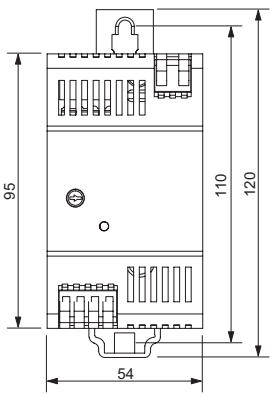
Current
- Max I : 1,5 A at 20 V
  1,25 A at 24 V
  1 A at 30 V

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.

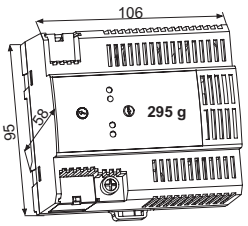
Other specifications
- Safety : Class II, Safety Extra Low Voltage (SELV),
  complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP30
- 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 (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.

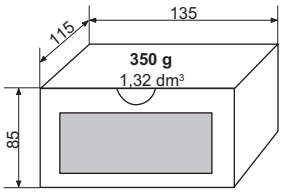


EAN CODE : 3760244880307 5 V TO 29 V REMOTE-SENSING **ALE2902M**

PRECISE : Switching power supply offering a ripple <3mV rms.
UNIVERSAL : 12 settings in 2 V steps with ±1V 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

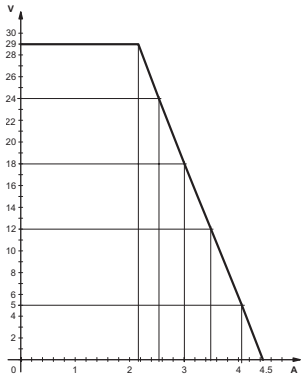
Voltage
- Floating outputs on spring terminal block with levers for 2,5 mm2 (AWG12) wires.
- Output voltage : adjustable from 5 to 29 V by 12 position switch, and fine adjustment switch positions : 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 Volts. Fine adjustment range : ± 1 Volt, whatever the switch setting 12 and 24 V lead-acid battery charger positions identified by two LED indicators.
- Regulation :
  < 30 mV at 5 V and < 10 mV at 29 V for a load variation from 0 to 100%.
  < 1 mV at 29 V @ 2,1 A and < 4 mV at 5 V @ 4 A for ±10% line variation.
- Dynamic regul. :
  < 1% to 29V and < 5% to 5 V for a load change from 10 to 90%.
- Ripple : < 3 mV rms including :
  < 3 mV peak to peak of the 100 kHz signal
  < 4 mV peak to peak of the 100 Hz signal
  < 10 mV 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 elctrolyte 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 : < 30 mV for a load variation from 0 to max.

Power
- A linear function of voltage from 60 W to 20 W (29 to 5 Volts).



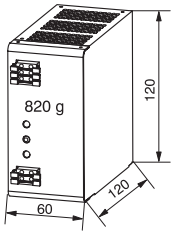
Protection
- Against short circuit, by current limit.
- Against overcurrent on primary circuit, by fuse.
- Battery reverse polarity protection by output fuse.
- Against overtemperature, by thermal shutdown.
- Cover on input output terminal block.

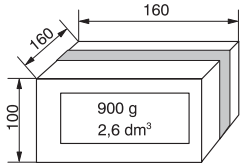
Other specifications
- Safety : Class II, Safety Extra Low Voltage (SELV),
  complies with EN 61010-1, EN 61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Overvoltage Category : II ; Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- 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 actif power corrector (PFC).
PRACTICAL : Output voltage adjustable from 20 to 29 V.
PROTECTED : Short circuit protection.
EASY : Direct DIN rail mounting.
- Plug-in 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.

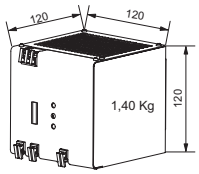
Protection
- Against short circuit protection, by current limit.
- Against overcurrent on primary circuit, by fuse.
- Against overload on outputs, by voltage limit to 33 V.

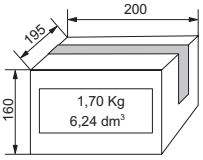
Other specifications
- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Insulation Class : I.
- Overvoltage Category : II.
- Pollution Degree : 2.
- Installation altitude : < 2000 m.
- Protection level : IP 30.
- Operating temperature : 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 : 3-pole plug-in terminal block for 2.5 mm² (AWG 12) wire.
- DC ouput : 2-pole plug-in 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.

EAN CODE :3760244880321 24 V PRIM 190 TO 440 V + ACTIVE PFC ALE2412

PRECISE : Output ripple < 3 mV rms.
COMPLIE : EN 61000-3-2 Built in actif power corrector (PFC).
DIAGNOSIS : 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.

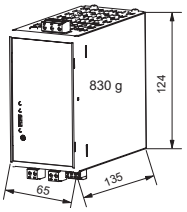
Paralleling
- Load share controller (1 wire) on dual spring terminal blocks with level for 1,5 mm² wire (AWG 16).

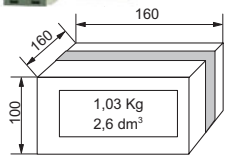
EAN CODE : 3760244880932

All inclusive :
24V or 48V
230V / 440V
Redundant
Activ parallel

24 V or 48V ALE244810

PRACTICAL : Output voltage 24V (adj. from 23,5 to 28,6 V).
48V (adj. from 47 to 57,2 V).
UNIVERSAL : 198 to 440 V main input voltage.
POWERFUL : to cumulate n+1(Parallel active mode).
REDUNDANT : integrated function - without option
SPACE SAVING - WIRING SAVINGS
DIAGNOSIS : Alarm by Relay with invert contact.
EFFICIENCY : Until 93% (cost and energy saving)
ACTIF power corrector (PFC).
PROTECTED : against short circuit.
EASY : Direct DIN rail mounting.
Double pluggable terminal blocks at the output.
POWER BOOST : Delivers 20% more current for one second.
No need to oversize the installation





240 WATTS
24 V (Aj. 23,5 to 28,6 V) - 10 A
or
48V (Aj. 47 to 57,2 V) - 5 A
REDUNDANT
ACTIV PARALLEL MODE

Specifications

Voltage
- Floating outputs on double pluggable terminal blocks
- Maximum wire section : 2,5mm² (AWG12).
- Output voltage : configurable 24 V (Adj. 23,5 to 28,6 V) or 48 V (Adj. 47 to 57,2 V).
- Regulation : < 10 mV for a load variation from 10 to 90%. < 5 mV for a line variation from 198 to 440 V.
- Ripple : < 10 mV rms including : < 10 mV peak to peak of the signal at 100 kHz < 60 mV peak to peak of switching spikes
- Hold-up time : 25 ms at half load and 18 ms at full load (198 V line input).
- Indicator : green power-on LED indicator. yellow LED "selection of the output voltage".
- Information relay : Invert contact, 120 VAC (30 VDC) 1 A on plug-in terminal block for 1.3 mm² wires (AWG16)

Current
- Max I : 24 V -> 11,5 A in short-circuit condition. 10 A at 24 V ; 8,6 A at 28 V.
: : 48 V -> 5,75 A in short-circuit condition. 5 A at 48 V ; 4,3 A at 56 V.

Power
- Constant output power : 240 W.

Protections
- Against short circuits by current limit.
- Against primary circuit overcurrent, by internal fuse.
- Against output overload by disruption.

Other specifications
- Safety : Complies with EN 61010-1, EN61010-2-201 and EN 62368-1.
- EMC : Complies with EN 61000-3-2, 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 20.
- Operating temperature : -25 to +70 °C, derating 6W/°C from 50°C.
- Input voltage : 220-400 VAC (198 to 440 Volts), 50-60 Hz.
- Mains input : 3-pin plug-in terminal block for 2,5 mm² (AWG 12) wire.
- Power consumption : 270 W max.
- Power factor : built with PFC.
- Dielectric strength : 4500 VAC between input and output. 2500 VAC between input to chassis.
- Presentation : metal case with screen printed front panel.
- Mounting : Integral symmetrical DIN rail clips.

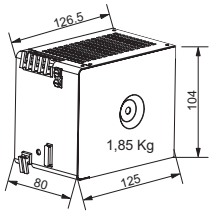
Paralleling / Redundant
- Load share controller (1 wire) on dual spring pluggable terminal blocks with for 1,3 mm² wire (AWG 16).
- Redundant mode (n+1) include with OR-ing

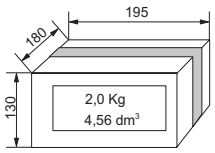
EAN CODE : 3760244880352

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 filtred 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 ±15V AC single or two-phase 50/60 Hz.
- Mains input : spring terminal block with leveres.
- 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.

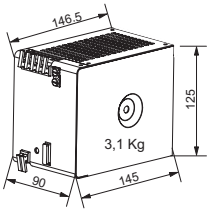
EAN CODE : 3760244880369

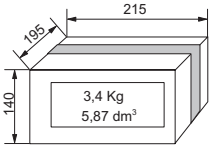
24 V PRIM 230/400 V

ALE2405R

UNIVERSAL : 230/400 V ±15 V input.
COMPLIANT : EN 61131-2 or programmable logic controllers (PLCs), peripherals, and other applications requiring 24 V filtred 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 ±15V AC single or two-phase 50/60 Hz.
- Mains input : spring terminal block with leveres.
- 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.

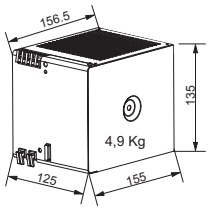
EAN CODE : 3760244880376

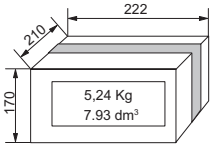
24 V PRIM 230/400 V

ALE2410R

UNIVERSAL : 230/400 V ±15 V input.
COMPLIANT : EN 61131-2 or programmable logic controllers (PLCs), peripherals, and other applications requiring 24 V filtred 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 leveres.
- 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.