



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

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

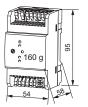


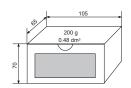


10 A MAX

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.

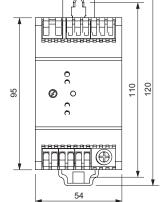
- Against overcurrent or short-circuits in the primary by 10A fuse
- Against voltage inversion by électronic protection and by fuse

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
- : 2500 VAC from input to output • Dielectric strength
- 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.



MODULAR SYMMETRICAL & REGULATED POWER SUPPLY





EAN CODE: 3760244880239

<u>+</u> 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

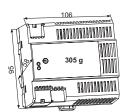
PROTECTED: against short circuits and reverse polarity.

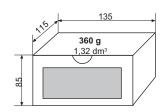
RESISTANT TO SHOCK



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%.
- : < 3 mV rms including: • Ripple
 - < 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)

: 5.5 A in short circuit condition • I max

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)

: 2,1 A in short-circuit condition I max

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.
- \bullet 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.
- : Clips package integrated in modular case for DIN rails Mounting

profile 35x7,5 mm or 35x15 mm.

Removable wall mouting integrated to the case for 4 mm screws.





12 V REMOTE SENSING

ALE1202



PRECISE: Output ripple < 3 mV rms.

- Remote sensing to overcome voltage drop in the power lines.

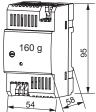
PRACTICAL: Output voltage adjustable from 10 to 15 V.

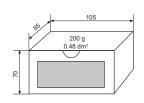
- Spring terminal block.

PROTECTED: Short circuit protection. EASY: Direct DIN rail or panel mounting.











30 WATTS

2.5 A



Specifications |

• 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%

: < 3 mV rms including: • Ripple

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) : green power-on LED indicator • 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)

: Max 3 V (1,5 V per wire)

: < 30 mV for a load variation from 0 to max. Ripple

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.

: IP30 Protection level

• Operating temperature : from -25 °C to +70 °C

Derating: 1 W/°C from. +55 °C

: 190 to 264 V, 50-60 Hz • Input voltage

• 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

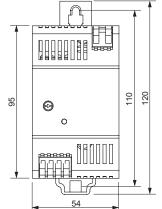
: polycarbonate modular case (3 modules) screenprinted Presentation

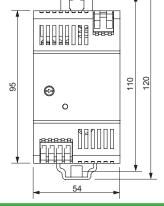
: 54 x 95 x 58 mm (lxhxp) Dimension

 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.









12 V REMOTE-SENSING

ALE1205



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

- Output voltage adjustable from 10 to 15 V

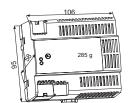
SMALL: Modular.

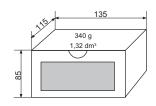
EASY: Direct DIN rail or panel mounting.

PROTECTED: against short circuits and reverse polarity.

RESISTANT TO SHOCK









Specifications

60 WATTS

5 A

12 V (Adj. 10 to 15 V)

Voltage

- Floating outputs on spring terminal block with levers for 2,5 mm² (AWG 12) wires.
- Output voltage : adjustable from 10 to 15 V.
- : < 20 mV for a load variation from 0 to 100% Regul
 - < 2 mV for a line variation from -10 to+10%.
- : < 3 mV rms including: • Ripple
 - < 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)

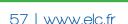
Input on spring terminal block with levers for 2,5 mm² wires (AWG12)

Correction: Max 3 V (1,5 V per wire)

: < 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.
- : IP 30. • Protection level
- \bullet 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. : Clips package integrated in modular case for DIN rails Mounting
- profile 35x7,5 mm or 35x15 mm.
 - Removable wall mouting integrated to the case for 4 mm screws.







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.

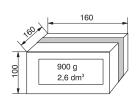
- Plug-in terminal block.

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.

: < 25 mV for a load variation from 0 to 100%. Regulation

< 1 mV for a line variation from -10 to +10%.

: < 3 mV rms including: • Ripple

< 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

: 10,5 A in short circuit condition. Max I

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.

: Complies with EN 61000-6-2 and EN 61000-6-4. • EMC

• Insulation Class • Overvoltage Category : II • Pollution Degree • Installation altitude : < 2000 m • Protection level : IP 30

 \bullet 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. : 2-pole plug-in terminal block for 2.5 mm² (AWG 12) wire. DC ouput

• 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.

:Integral symmetrical DIN rail clips.





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

AI F1225



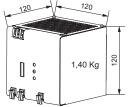
PRECISE: Output ripple < 3 mV rms.

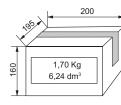
COMPLIE: EN 61000-3-2 Built in actif power corrector (PFC).

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.









Specifications

25 A

300 WATTS 12 V (Adj. 10 to 15 V)

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

40 IIIV peak to peak of Switt

• Internal resistance : < 2 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.

 \bullet 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).



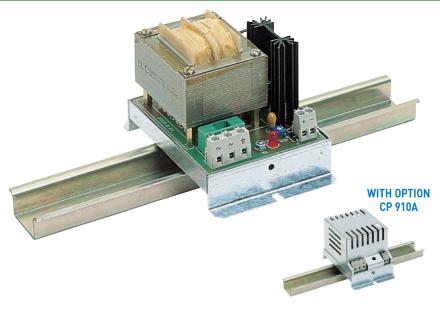




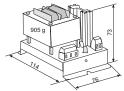
24 V + PRIM 400 V AL 912AES

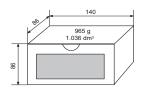


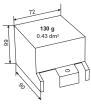
- Optional protective cover.



20 WATTS 24 V 0.8 A Prim. 400 V









Specifications |

• Floating outputs on screw terminal block for 2,5 mm² rigid or 1,5 mm² flexible wire.

• Output voltage: 24 Volts (set). : ± 0,5%. • Accuracy

 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 m Ω .

• Hold-up time : 20 ms at half load and 5 ms at full load.

 Indicator : power-on LED indicator.

Current

Max I

: 2 A (allows current surges). • Idc

Protection

• Against short circuit, by current limit.

· Against overtemperature, by thermal shutdown.

Against overcurrent on transformer primary, by fuse.

Other specifications

Safety

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.

: Complies with EN 61000-6-2 and EN 61000-6-4. • EMC

• 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 M Ω /1000 V from output to chassis.

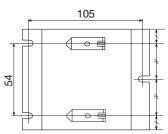
• Presentation : Galvanized base with lugs and clips for symmetrical

DIN rail mounting.

: Protective cover, reference: CP 910A • Optional

Mounting

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







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.

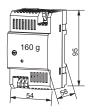
PROTECTED: Short circuit protection. EASY: Direct DIN rail or panel mounting.

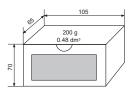




30 WATTS

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 : adujustable from. 20 to 30 V.

: < 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

: 50 ms at full load (230 V line input) • Hold-up time Indicator : green power-on LED indicator

Current

Max I : 1,5 A at 20 V

1,25 A at 24 V

at 30 V

Power

• Max output power : 30 W

• 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)

: Max 3 V (1,5 V per wire) Correction

: <30 mV for a load variation from 0 to max. • Ripple

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. : IP30 Protection level

• 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

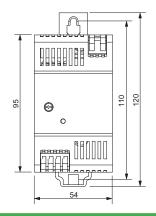
• Presentation : polycarbonate modular case (3 modules) screenprinted

• Dimension : 54 x 95 x 58 mm (lxhxp)

: Clipspackage integrated in modular case for DIN rail profile Mounting

35x7,5 mm or 35x15 mm

removable wall mounting integrated case to the 4 mm screws.







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



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



5 V to 29 V

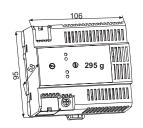
2.5 A to 24 V

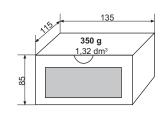
3.5 A to 12 V

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 \pm 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)
- : Green LED indicator : "power supply operating" • Indicators 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)

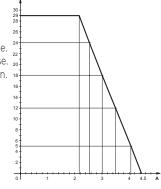
Remote sensing

- 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. 20
- 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.
- : IP 30. Protection level
- \bullet 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.
- : 71 W max. Power consumption
- Dielectric strength : 3000 VAC from input to output.
- Presentation: modular polycarbonate case (6 x 17.5 mm) screenprinted.
- : Clips package integrated in modular case for DIN rails Mounting

profile 35x7,5 mm or 35x15 mm.

Removable wall mouting integrated to the case for 4mm screws.





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.

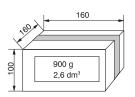
- Plug-in terminal block.





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.

: < 20 mV for a load variation from 0 to 100%. Regulation < 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

: 25 ms at half load and 12 ms at full load (190 V line input). • Hold-up time

: green power-on LED indicator. 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.

: Complies with EN 61000-6-2 and EN 61000-6-4. EMC

• Insulation Class • Overvoltage Category : II. • Pollution Degree : 2. • Installation altitude : < 2000 m. Protection level : IP 30.

 \bullet 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. : 3-pole plug-in terminal block for 2.5 mm² Mains input

(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).

: 3000 VAC • Dielectric strength

1800 VAC from input to chassis.

• Presentation : galvanized steel case and front panel with epoxy finish.

: Integral symmetrical DIN rail clips. Mounting





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



PRECISE :Output ripple < 3 mV rms.

COMPLIE: EN 61000-3-2 Built in actif power corrector (PFC).

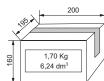
DIAGNOSIS: Alarm by Relay with invert contact. PRACTICAL: Output voltage adjustable from 20 to 30 V. UNIVERSAL: 198 to 440 V main input voltage. **POWERFUL**: to cumulate n+1(Parallel active mode).

PROTECTED: against short circuit.

EASY: Direct DIN rail mounting - Spring terminal block.









Specifications

300 WATTS 24 V (Adj. 20 to 30 V)

12,5 A

• Floating outputs on dual spring terminal blocks with levers for 2,5 mm² (AWG 12) wire.

• Output voltage : adjustable from 20 to 30 V.

: < 10 mV for a load variation from 0 to 100%. Regulation

< 5 mV for a line variation from 198 to 440 V.

: < 3 mV rms including: • Ripple

< 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

ullet Internal resistance : < 1 m Ω

: 25 ms at half load and 12 ms at full load • Hold-up time

(198 V line input).

: green power-on LED indicator. Indicator

overheat or overvoltage red LED indicator.

• Information Relay : Invert contact, 250 VAC (30 VDC) 1 A.

Current

: 15,5 A in short circuit condition. Max I

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.

: Complies with EN 61000-6-2 and EN 61000-6-4. • EMC

• Insulation Class : 1.

• Overvoltage Category: II; Pollution Degree: 2.

• Installation altitude : < 2000 m. Protection level : IP 30. • Operating temperature: +5 to +50 °C.

: 220-400 VAC (198 to 440 Volts), 50-60 Hz. Input voltage

: Dual spring terminal blocks for 1,5 mm² (AWG 16) wire. Mains input

• Power consumption : 360 W max.

: 0,99 (built with PFC). • Power factor

• 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).







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:** >90% (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

240 WATTS

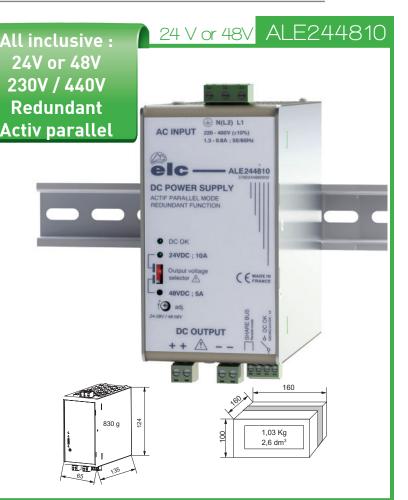
24 V (Aj. 23,5 to 28,6 V) - 10 A

or

48V (Ai. 47 to 57,2 V) - 5A

REDUNDANT

ACTIV PARALLEL MODE





Specifications

Voltage

Floating outputs on double pluggable terminal blocks

• Maximum wire section : 2,5mm² (AWG12).

: configurable 24 V (Adj. 23,5 to 28,6 V) or 48 V (Adj. 47 to 57,2 V). Output voltage

: < 10 mV for a load variation from 10 to 90%. Regulation

< 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

: 24 V -> 11,5 A in short-circuit condition. Max I

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. : Complies with EN 61000-3-2, EN 61000-6-2 and EN 61000-6-4. • EMC

• Insulation Class

• Overvoltage Category: II; Pollution Degree: 2.

• Installation altitude : < 2000 m. : IP 20. Protection level

• Operating temperature : -25 to +70 °C, derating 6W/°C from 50°C. : 220-400 VAC (198 to 440 Volts), 50-60 Hz. • Input voltage

: 3-pin plug-in terminal block for 2,5 mm² (AWG 12) wire. Mains input

• 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







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

HIGH OUTPUT: Toroidal safety transformer (SELV).

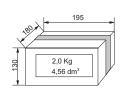
EASY: Direct DIN rail mounting.

- Spring terminal block.

SMALL: Lightweight and small sized.









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 N V	5%

Power

• Output power : 60 W.

Protection

• Short circuit protection by fuse in the secondary circuit.

Other specifications

• Input voltage $\pm 230/400 \text{ V} \pm 15 \text{V}$ 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.

: IP 30. • Protection level

• Output voltage complying with EN 61131-2 for automation systems.

: Complies with EN 61000-6-2 and • EMC

EN 61000-6-4.

: 75 W max. • Power consumption : +5 to +55 °C. • Operating temperature

• Dielectric strength : 4500 VAC from input to output,

> 2250 VAC from input to chassis. 500VAC from output to chassis.

: galvanized steel case and front panel • Presentation

with epoxy finish.

Mounting

• Integral symmetrical DIN rail clips.





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.

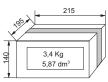
- Spring terminal block.

HIGH OUTPUT: Toroidal safety transformer (SELV).

LITTLE: Lightweight and small sized.











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)

: < 5% • Ripple

: 20 ms at nominal voltage and current • Hold up time

• Indicator : green power-on LED indicator.

Current

Max I : 2.5 A

Current / Voltage / Ripple

ı	CIIL / VOL	lage / Kipp	rc.
	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 Δ	2/L N V	5%

Power

• Output power: 120 W.

Protection

• Short circuit protection by fuse in the secondary circuit.

Other specifications

• Input voltage $: 230/400 \text{ V} \pm 15 \text{V} \text{ AC}$ single or two-phase

50/60 Hz.

 Mains input : spring terminal block with leveres.

• Max wire cross sectional area: 1.5 mm² (AWG 16). : 2.5 mm² (AWG 12). • Screw type earth terminal

: Class I, complies with EN 61558-2-6. Safety

Protection level

• Output voltage complying with EN 61131-2 for automation systems.

: Complies with EN 61000-6-2 and • EMC EN 61000-6-4.

• Power consumption : 147 W max.. : +5 to +55 °C. • Operating temperature

• 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.





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.

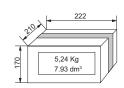
HIGH OUTPUT: Toroidal safety transformer (SELV).

LITTLE: Lightweight and small sized.

PERFORMING: split output









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)

: < 5%

• Hold up time : 20 ms at nominal voltage and current

 Indicator : green power-on LED indicator.

Current

: 10 A Max I

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 $\pm 230/400 \text{ V} \pm 15 \text{ V}$ 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).

: Class I Safety

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.

: 287 W max. Power consumption • 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.