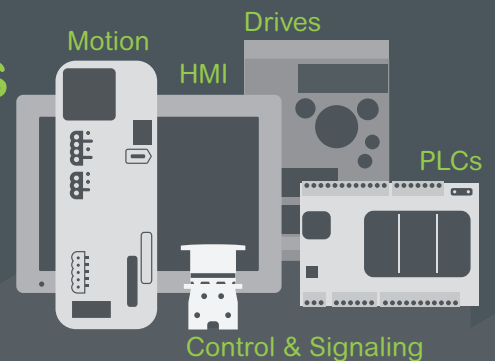




Introducing the **Easy Series**

Essential automation & control products

When just enough is just right!



Easy Modicon ABL2

Regulated switch mode power supplies
Panel Mounting / DIN rail Mounting

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Easy Modicon ABL2 Regulated switch mode power supplies



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Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)

The Easy Modicon ABL2 are Regulated switch mode power supplies, Single-phase, and provide the DC voltage necessary for electrical equipment operating in a low-voltage automation and control system (PLC, HMI, sensors, etc.).

- **ABL2REM●●●●●K/QK** are designed for Panel mounting.
 - They incorporate advanced technology features in a compact housing.
 - They offer high performance for applications with 24 V DC and power ratings from 35 W up to 350 W.
- The **ABL2REM●●●●●D** are designed for DIN rail mounting.
 - They offer competitive functionality for applications with 12, 24 or 48 V DC and power ratings from 75 W up to 960 W.

Panel Mounting (ABL2REM●●●●●K/QK)

Presentation

■ **ABL2REM●●●●●K/QK** power supplies are fully electronic and have a regulated switch mode. The use of electronics makes it possible to significantly improve the efficiency of these power supplies, which offer:

- Compact dimensions (1)
- Wide power range from 35 to 350 W
- High degree of output voltage stability (precision: $\pm 1\%$)
- Proven performance (MTBF over 600K hours)
- Diagnostics via LEDs at the output terminal

■ These power supplies also provide the following protection functions:

- Integrated output/overload/overvoltage and short-circuit protection with Hiccup restart for all models and overtemperature for models from 200 to 350 W
- Input overvoltage protection
- Protective terminal cover to prevent direct finger contact, helping to protect against electric shock hazards
- Specially designed hole in casing to help prevent risk of short-circuit with long screws.



35, 50, and 100 W power supplies



150 and 200 W power supplies



250 and 350 W power supplies

Applications

ABL2REM●●●●●K/QK power supplies meet the needs encountered in standard commercial machines and conform to worldwide standards.

They can be widely used with other electronic appliances and systems in the industry. OEMs and panel builders can easily integrate it into their machines or machine control panels.

■ OEMs can integrate these power supplies in simple machines used in the following fields:

- Material handling
- Textile machine
- Packaging
- Machine tools
- Food & Beverage

■ Panel builders can integrate them in control panels installed in the following fields:

- Construction
- Lift
- Automobile industry
- Chemical industry
- Municipal buildings
- Infrastructure

(1) See [page 4](#).

Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)

Panel Mounting (ABL2REM●●●●●K/QK)

A user-oriented range of products

Fit for purpose

- **ABL2REM●●●●●K/QK** are more compact than previous ABL2 versions (up to 20% smaller). They are also smaller than other models currently available on the market, thus saving space inside a cabinet for other electric appliances.
- Moreover, the high performance of these products (24 V DC stable output) means less downtime and their high-efficiency design means lower energy consumption.

Ease of use throughout the whole life cycle

- **ABL2REM●●●●●K/QK** power supplies can be mounted quickly and easily owing to the specially designed mounting holes in their casing which help to prevent mistakes.
- In addition, 3 types of mounting are available for more flexibility with the use of accessories:
 - mounting on rear 35 mm (1.37 in.) U-rails
 - mounting with 4-corner bracket
 - mounting with L-type accessories
- New, improved labeling and packaging help to ensure quick identification and offer a better view of the products (their appearance is printed on the box).
- For existing installations, non-Schneider power supplies can easily be replaced (same installation dimensions, same mounting hole locations) (1).

Robustness

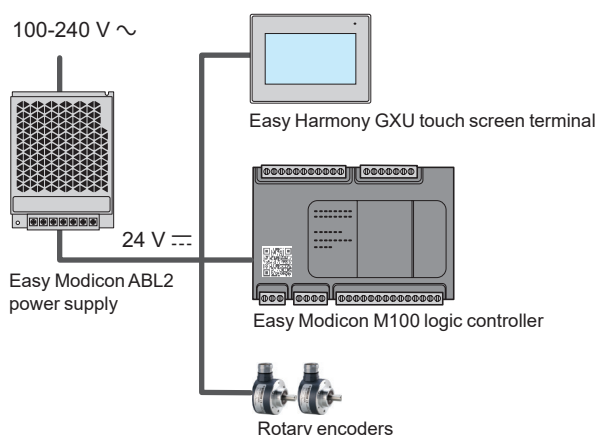
ABL2REM●●●●●K/QK power supplies have been designed to meet the majority of customer specifications:

- They feature short circuit protection as well as overload protection with an auto-recovery mode (automatic protection reset). This means that the protection resets itself automatically on elimination of the detected fault, which avoids the need to take any action or change a fuse.
- They are equipped with an input voltage (100-240 V AC) smart switch offering increased performance and durability.
- They can operate within a wide temperature range.

Widely available

- Fast delivery through a large distribution network
- Fast access to information and support through the Partner Relationship Management tool and a dedicated network of engineers

Control architecture



(1) The position of the mounting holes on the casing varies slightly compared with previous ABL2 power supply ranges. Please see dimensions on our website <https://www.schneider-electric.cn>

Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)

Panel Mounting (ABL2REM●●●●●K/QK)

Main characteristics

Nominal input voltage	100-240 V AC, single-phase (240 V DC compliant)
Output voltage	24 V DC
Efficiency	> 88%
Vibration resistance	4 G
Ambient air temperature	☐ For 150 W models: - -30... +45 °C (-22...113 °F) without derating - 45... 70 °C (113...158 °F) with derating (1) ☐ For 35 to 100 W models, and 200 to 350 W models: - -30...+50 °C (-22...122 °F) without derating - 50... 70 °C (122...158 °F) with derating (1)
Ambient humidity	10...95% around the device):
Degree of protection	IP 20 - Insulation class: I
Altitude	0...5000 m (16404,2 ft)(2)
Thermal design	Efficient cooling with triangle hole
Product certifications	☐ EAC, KC and RCM ☐ Safety standard: EN62368-1 compliant ☐ EMC standard: EN 61000-6-2, EN 61000-4, EN 55032 Class B ☐ RoHS directives compliant

For more technical information, visit our [website](#).

Description

Power supplies with natural convection (ABL2REM240●●K, ABL2REM240●●KQ)

- 100/240 V AC input voltage selector (on 150 and 200 W models only)
- Fixing holes for panel mounting with M3 screws (excluding 200 W model). Four fixing holes for 4-corner bracket mounting with M4 screws (on 200 W model only)
- Technical information
- A green LED indicating status of the DC output voltages
- An output voltage adjustment potentiometer ($\pm 15\%$)
- A 4 mm² screw clamp terminal block (equipped with plastic protective cover as standard) for connection of the AC input voltage and DC output voltage

Power supplies with forced air cooling by built-in DC fan (ABL2REM241●0K)

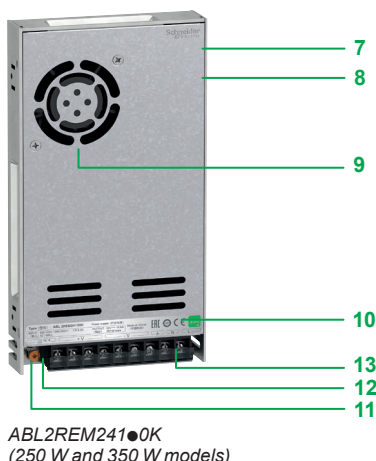
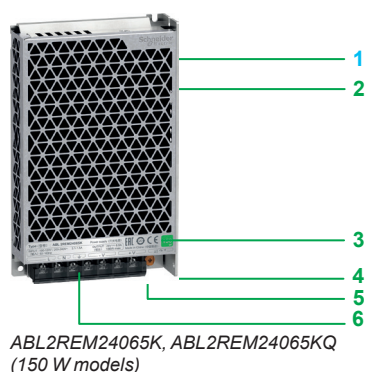
- 100/240 V AC input voltage selector (on 250 and 350 W models)
- Four fixing holes for mounting with 4-corner bracket and M4 screws
- Built-in DC fan
- Technical information
- A green LED indicating status of the DC output voltages
- An output voltage adjustment potentiometer ($\pm 15\%$)
- A 4 mm² screw clamp terminal block (equipped with plastic protective cover as standard) for connection of the AC input voltage and DC output voltage

Dimensions (overall)

Model	Reference	Dimensions (Height x Width x Depth)	
		mm	in.
35 W	ABL2REM24015K ABL2REM24015KQ	99 x 82 x 30	3.90 x 3.23 x 1.17
50 W	ABL2REM24020K ABL2REM24020KQ		
100 W	ABL2REM24045K ABL2REM24045KQ	129 x 97 x 30	5.08 x 3.78 x 1.17
150 W	ABL2REM24065K , ABL2REM24065KQ	159 x 97 x 30	6.20 x 3.78 x 1.17
200 W	ABL2REM24085K	215 x 115 x 30	4.53 x 8.46 x 1.17
250 W	ABL2REM24100K		
350 W	ABL2REM24150K		

(1) Please visit our [website](#) for more information about derating.

(2) The ambient temperature derating of 5 °C (41 °F)/1000 m (3280.8 ft) is needed for operating altitude greater than 2000 m (6561.7 ft).



Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

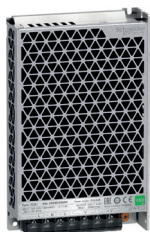
DIN rail mounting (ABL2REM●●●●●D)



ABL2REM24015K/KQ
ABL2REM24020K/KQ



ABL2REM24045K/KQ



ABL2REM24065K/KQ



ABL2REM24085K



ABL2REM24100K
ABL2REM24150K



ABL2K01



ABL2K02



ABL2K03A



ABL2K03B

Panel Mounting (ABL2REM●●●●●K/QK)

ABL2REM●●●●●K/QK regulated switch mode power supplies

Model	Input voltage	Output voltage	Nominal power	Output current	Voltage switching	Cooling design	Overload hiccup protection	Reference	Weight kg lb
35 W	100...240 V AC	24 V DC	36 W	1.5 A	Automatic	Natural convection	110-160%	ABL2REM24015K	0.230 0.507
							170-190%	ABL2REM24015KQ	0.230 0.507
50 W	100...240 V AC	24 V DC	53 W	2.2 A	Automatic	Natural convection	110-160%	ABL2REM24020K	0.250 0.551
							170-190%	ABL2REM24020KQ	0.250 0.551
100 W	100...240 V AC	24 V DC	108 W	4.5 A	Automatic	Natural convection	110-160%	ABL2REM24045K	0.350 0.772
							170-190%	ABL2REM24045KQ	0.350 0.772
150 W	100...120 V AC 200...240 V AC	24 V DC	156 W	6.5 A	Manual	Natural convection	110-160%	ABL2REM24065K	0.440 0.970
							170-190%	ABL2REM24065KQ	0.440 0.970
200 W	100...120 V AC 200...240 V AC	24 V DC	200 W	8.3 A	Manual	Natural convection	110-150%	ABL2REM24085K	0.730 1.609
250 W	100...120 V AC 200...240 V AC	24 V DC	252 W	10.5 A	Manual	Forced air cooling by built-in DC fan	110-150%	ABL2REM24100K	0.750 1.653
350 W	100...120 V AC 200...240 V AC	24 V DC	351 W	14.6 A	Manual	Forced air cooling by built-in DC fan	110-150%	ABL2REM24150K	0.790 1.742

Options for ABL2 power supplies

Type of mounting accessory	Description	For power supplies	Sold in lots of	Unit reference	Weight kg lb
4-corner bracket	For direct mounting on back panel Mounting screws not provided. Recommended use: M4 (6 mm/ 0.24 in) or M4 (8 mm/ 0.31 in) screws	ABL2REM24085K, ABL2REM24100K, ABL2REM24150K	40	ABL2K01	0.003 0.007
Clip-on mounting plate	For mounting on 35 mm (1.37 in.) DIN rail	All models	5 (1)	ABL2K02	0.028 0.062
L-type accessories	Size: Small L	ABL2REM24015K, ABL2REM24015KQ, ABL2REM24020K, ABL2REM24020KQ, ABL2REM24045K, ABL2REM24045KQ, ABL2REM24065K, ABL2REM24065KQ	1	ABL2K03A	0.110 0.240
	Size: Big L	ABL2REM24085K, ABL2REM24100K, ABL2REM24150K	1	ABL2K03B	0.150 0.331

(1) ABL2K02 is a pack of 5 accessories usable on 35 mm (1.37 in.) DIN rails. Please note that only 1 accessory is necessary for mounting a 35 to 150 W model but 2 accessories are needed for the other three models (200, 250, and 350 W).

Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)

DIN rail Mounting (ABL2REM●●●●●D)

Presentation

ABL2REM●●●●●D regulated switch mode power supplies are designed for mounting on DIN rail and to supply control circuits in industrial applications from 75 up to 960 W.

It offers:

- Power ratings including 75 W, 120 W, 240 W, 480 W, and 960 W
- Rated input Voltage: 100...240 VAC
- Rated output Voltage: 12, 24 and 48 VDC
- Up to 6 output terminals for easy wiring

Main characteristics

Nominal input voltage	100...240 VAC, compatible with 140...340 VDC
Network system compatibility	TN, TT, IT
Nominal output voltage	12, 24 and 48 VDC
Operating temperature	-20...+70°C (-4...+158°F) (1)
Product certifications	☐ CE ☐ RoHS directives compliant ☐ REACH directives compliant
Conformity to standards	☐ IEC/EN 62368-1 ☐ EN 61000-6-2 ☐ EN 61000-6-4 ☐ UL 508

Description

- 1 Screw terminals for connection of the DC output voltage
- 2 Output voltage adjustment potentiometer
- 3 Output DC status LED (green)
- 4 QR code for access to the Technical documentation
- 5 Screw terminals for connection of the input voltage (single-phase N-L1, $\frac{1}{2}$)



(1) Derating for temperature higher than 50°C (122°F) at lowest input voltage and other mounting.

Dimensions (overall)

Reference	Dimensions (Height x Width x Depth)	
	mm	in.
ABL2REM12060D	125 x 32 x 102	4.92 x 1.26 x 4.02
ABL2REM24030D		
ABL2REM12100D	125 x 36 x 113	4.92 x 1.42 x 4.45
ABL2REM24050D		
ABL2REM24100D	125 x 60 x 113	4.92 x 2.36 x 4.45
ABL2REM24200D	125 x 85 x 128	4.92 x 3.34 x 5.04
ABL2REM48100D		
ABL2REM24400D	125 x 110 x 150	4.92 x 4.33 x 5.90
ABL2REM48200D		

Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)



ABL2REM12060D
ABL2REM24030D



ABL2REM12100D
ABL2REM24050D



ABL2REM24100D



ABL2REM24200D
ABL2REM48100D



ABL2REM24400D
ABL2REM48200D

DIN rail Mounting (ABL2REM●●●●●D)

Selection of protection on the power supply primary

The device is designed, tested and approved for branch circuits up to 16 A (IEC) and 20 A (UL) without additional protection devices. If external protection is used, do not use circuit breakers smaller than those indicated in the table below to avoid spurious over-current/short-circuit detection by the circuit breaker. Use the **Acti9 iC60** range of Miniature Circuit Breakers (1).

ABL2REM●●●●●D regulated switch mode power supplies

Input voltage	Output voltage	Nominal power (2)	Nominal current	Protection mode for overload or short circuit	Output voltage adjustment potentiometer	Reference	Weight kg lb
100...240 VAC 50/60 Hz 140...340 VDC	12 VDC	75.6 W	6.3 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM12060D	0.396/ 0.873
		120 W	10 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM12100D	0.451/ 0.994
		24 VDC	3.2 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM24030D	0.396/ 0.873
	24 VDC	120 W	5 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM24050D	0.451/ 0.994
		240 W	10 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM24100D	0.935/ 2.061
		480 W	20 A	Constant current mode, shutting down after time delay. Re-power on to recover	With	ABL2REM24200D	1.320/ 2.910
	48 VDC	960 W	40 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM24400D	2.200 4.85
		480 W	10 A	Constant current mode, shutting down after time delay. Re-power on to recover	With	ABL2REM48100D	1.320/ 2.910
		960 W	20 A	Constant current mode, automatic recovery after overload is removed	With	ABL2REM48200D	2.200 4.85

(1) More information on **Acti9 iC60** range on our [website](#).

(2) Nominal power given for mounting on horizontal rail, for 230 VAC input voltage and for +50°C (131°F) ambient temperature.

Easy Modicon ABL2

Regulated switch mode power supplies

Panel mounting (ABL2REM●●●●●K/QK)

DIN rail mounting (ABL2REM●●●●●D)

Panel Mounting

ABL2K01	5
ABL2K02	5
ABL2K03A	5
ABL2K03B	5
ABL2REM24015K	5
ABL2REM24015KQ	5
ABL2REM24020K	5
ABL2REM24020KQ	5
ABL2REM24045K	5
ABL2REM24045KQ	5
ABL2REM24065K	5
ABL2REM24065KQ	5
ABL2REM24085K	5
ABL2REM24100K	5
ABL2REM24150K	5

DIN rail Mounting

ABL2REM12060D	7
ABL2REM12100D	7
ABL2REM24030D	7
ABL2REM24050D	7
ABL2REM24100D	7
ABL2REM24200D	7
ABL2REM24400D	7
ABL2REM48100D	7
ABL2REM48200D	7

Life Is On



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www.se.com

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DIA3ED2170501EN
July 2024 - V6.0