



Modicon Power Supply

Migration Guide MODULAR

Life Is On



MODICON Power Supply MODULAR

New Modular range becomes **ABLM****

Phaseo Range	Modicon Range
ABL8MEM24003	<u>ABLM1A24004</u>
ABL8MEM24006	<u>ABLM1A24006</u>
ABL8MEM05040	<u>ABLM1A05036</u>
ABL8MEM12020	<u>ABLM1A12021</u>
ABL8MEM24012	<u>ABLM1A24012</u>
ABL7RM24025	<u>ABLM1A24025</u>

ABL8MEM24003 → ABLM1A24004

Installation



Main Technical Differences

Feature	ABL8MEM24003	ABLM1A24004
Voltage range	85-264Vac	90-264Vac
Nominal current	< 0.3A @ 115Vac, < 0.2A @ 230Vac	< 0.3A @ 115Vac, < 0.2A @ 230Vac
Inrush current limitation (+25°C) typ.	< 20A @ 230Vac	< 15A @ 115Vac, < 30A @ 230Vac
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 150ms @ 230Vac	> 10ms @ 115Vac, > 60ms @ 230Vac
Voltage output	Adjustable	Not adjustable
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A24004>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection

ABL8MEM24003 → ABLM1A24004

Benefits

Feature	ABL8MEM24003	ABLM1A24004
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 36 mm	91 x 18 x 55.6 mm
Derating in temperature	4.67%/°C for temperature > 55°C	2.67%/°C for temperature > 55°C*
Efficiency	78%	80%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

ABL8MEM24006 → ABLM1A24006

Installation



Main Technical Differences

Feature	ABL8MEM24006	ABLM1A24006
Voltage range	85-264Vac	90-264Vac
Nominal current	< 0.3A @ 115Vac, < 0.2A @ 230Vac	< 0.4A @ 115Vac, < 0.25A @ 230Vac
Inrush current limitation (+25°C) typ.	< 20A @ 230Vac	< 15A @ 115Vac, < 30A @ 230Vac
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 150ms @ 230Vac	> 10ms @ 115Vac, > 60ms @ 230Vac
Voltage output	Adjustable	Not adjustable
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A24006>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection

ABL8MEM24006 → ABLM1A24006

Benefits

Feature	ABL8MEM24006	ABLM1A24006
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 36 mm	91 x 18 x 55.6 mm
Derating in temperature	4.67%/°C for temperature > 55°C	2.67%/°C for temperature > 55°C*
Efficiency	80%	81%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

ABL8MEM05040 → ABLM1A05036

Installation



Main Technical Differences

Feature	ABL8MEM05040	ABLM1A05036
Nominal output current	4A	3,6A
Voltage range	85-264Vac	90-264Vac
Nominal input current	< 0.6A @ 115Vac, < 0.35A @ 230Vac	< 0.6A @ 115Vac, < 0.4A @ 230Vac
Inrush current limitation (+25°C) typ.	< 20A @ 230Vac	< 25A @ 115Vac, < 50A @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A05036>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection

ABL8MEM05040 → ABLM1A05036

Benefits

Feature	ABL8MEM05040	ABLM1A05036
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 54 mm	91 x 36 x 55.6 mm
Derating in temperature	4.67%/°C for temperature > 55°C	2.67%/°C for temperature > 55°C*
Efficiency	75%	80%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

ABL8MEM12020 → ABLM1A12021

Installation



Main Technical Differences

Feature	ABL8MEM12020	ABLM1A12021
Voltage range	85-264Vac	90-264Vac
Nominal input current	< 0.6A @ 115Vac, < 0.35A @ 230Vac	< 0.8A @ 115Vac, < 0.6A @ 230Vac
Inrush current limitation (+25°C) typ.	< 20A @ 230Vac	< 25A @ 115Vac, < 50A @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A12021>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection

ABL8MEM12020 → ABLM1A12021

Benefits

Feature	ABL8MEM12020	ABLM1A12021
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 54 mm	91 x 36 x 55.6 mm
Derating in temperature	4.67%/°C for temperature > 55°C	2.67%/°C for temperature > 55°C*
Efficiency	80%	85%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

ABL8MEM24012 → ABLM1A24012

Installation



Main Technical Differences

Feature	ABL8MEM24012	ABLM1A24012
Voltage range	85-264Vac	90-264Vac
Nominal current	< 0.65A @ 115Vac, < 0.40A @ 230Vac	< 0.8A @ 115Vac, < 0.6A @ 230Vac
Inrush current limitation (+25°C) typ.	< 20A @ 230Vac	< 25A @ 115Vac, < 50A @ 230Vac
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 150ms @ 230Vac	> 20ms @ 115Vac, > 60ms @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A24012>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection

ABL8MEM24012 → ABLM1A24012

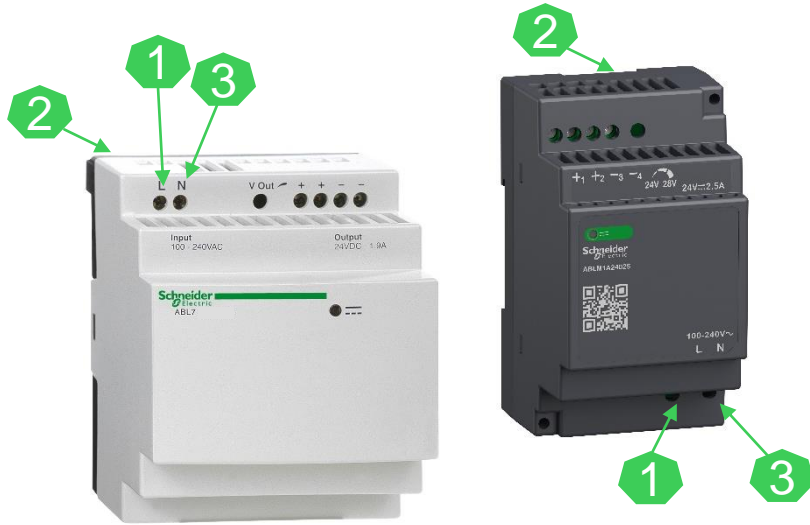
Benefits

Feature	ABL8MEM24012	ABLM1A24012
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 54 mm	91 x 36 x 55.6 mm
Derating in temperature	4.67%/°C for temperature > 55°C	2.67%/°C for temperature > 55°C*
Efficiency	82%	87%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

ABL7RM24025 → ABLM1A24025

Installation



Main Technical Differences

Feature	ABL7RM24025	ABLM1A24025
Voltage range	85-264Vac	90-264Vac
Nominal current	< 1.2A @ 115Vac, < 0.7A @ 230Vac	< 1.5A @ 115Vac, < 1A @ 230Vac
Inrush current limitation (+25°C) typ.	< 90A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 150ms @ 230Vac	> 20ms @ 115Vac, > 60ms @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLM1A24025>

1. Input terminals are at the bottom
2. Drilling distances are shorter (only screw fixing)
3. Change or remove the external input protection


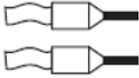



ABL7RM24025 → ABLM1A24025

Benefits

Feature	ABL8MEM24025	ABLM1A24025
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	110 x 59 x 72 mm	91 x 53 x 55.6 mm
Derating in temperature	Max temperature 55°C No derating	2.67%/°C for temperature > 55°C*
Efficiency	84%	90%
Overvoltage protection	OVC II	OVC III up to 2000m*
Immunity to surges	line to line : 1kV	3 kV line to ground, 1.5 kV line to line
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

*Refer to datasheet for details

Wires characteristics

							
ABL8M*****		°C	≥ 105°C				
	Input/ output	mm2		0.14...0.75	0.14...2.5	0.14...4	0.14...1.5
		AWG			26...18	26...14	26...12
ABL7RM****	Input/ output	mm2	0.14...1.5	0.14...0.75	0.14...2.5	0.14...4	0.14...1.5
		AWG	26...16	26...18	26...14	26...12	26...16
	<u>ABLM1A24004</u> <u>ABLM1A24006</u> <u>ABLM1A12021</u> <u>ABLM1A24012</u>		°C	75°C			
Input/ output		mm2	0.5...1.0	2 x 0.5	0.5...1.5	0.5...1.5	2 x 0.5...0.75
		AWG	20-18	2 x 20	20-16	20-16	2 x 20-18
<u>ABLM1A05036</u>		°C	90°C				
	Input/ output	mm2	0.5...1.0	2 x 0.5	0.5...1.5	0.5...1.5	2 x 0.5...0.75
		AWG	20-18	2 x 20	20-16	20-16	2 x 20-18
<u>ABLM1A24025</u>		°C	75°C				
	output	mm2	0.5...1.5	2 x 0.5...1.0	0.5...2.5	0.5...2.5	2 x 0.5...1.0
		AWG	20-16	2 x 20-18	20-14	20-14	2 x 20-18
	input	mm2	0.5...1.5	2 x 0.5	0.5...1.5	0.5...1.5	2 x 0.5...0.75
		AWG	20-16	2 x 20	20-16	20-16	2 x 20-18