



Modicon Power Supply

Migration Guide OPTIMIZED

Life Is On



MODICON Power Supply OPTIMIZED

New Modular range becomes **ABLS****

Phaseo Range	Modicon Range
ABL7RP1205	<u>ABLS1A12062</u>
ABL8REM24030	<u>ABLS1A24031</u>
ABL8REM24050	<u>ABLS1A24050</u>
ABL7RP4803	<u>ABLS1A48025</u>

ABL7RP1205 → ABL51A12062

Installation



Main Technical Differences

Feature	ABL7RP1205	ABLS1A12062
Nominal input current	< 0.8A @ 115Vac, < 0.4A @ 230Vac	< 1.8A @ 115Vac, < 1A @ 230Vac, < 0.8A @ 140Vdc
Nominal input voltage	100...240Vac 100...250Vdc	100...240Vac 140...340Vdc
Max temperature without derating	50°C	40°C @ 115Vac, 50°C @ 230Vac,
Power derating	Click Here	
Inrush current limitation (+25°C) typ.	< 30A @ 230Vac	< 40A @ 115Vac, < 80A @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLS1A12062>

1. Input and output terminals are reversed
2. No more sealing cover
3. Change or remove the external input protection
4. No ground/earth terminal on output side
5. Automatic reset after overload (no choice between manual and automatic)

ABL7RP1205 → ABLS1A12062

Benefits

Feature	ABL7RP1205	ABLS1A12062
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	120 x 54 x 120 mm	123.6 x 27 x 102 mm
Mains buffering at nominal load (typ.)	> 20ms @ 115Vac, > 20ms @ 230Vac	20ms @ 115Vac, 40ms @ 230Vac
Max operating temperature	0...60°C	-20...70°C
Efficiency	84% @ 115 VAC & 230 VAC	87% @ 230 VAC
Immunity to fast transients	2 kV	4 kV
Easy access to documentation	No	Yes with QR code

ABL8REM24030 → ABL51A24031

Installation



Main Technical Differences

Feature	ABL8REM24030	ABL51A24031
Nominal input current	< 1.46A @ 115Vac, < 0.83A @ 230Vac	< 1.8A @ 115Vac, < 1A @ 230Vac, < 0.8A @ 140Vdc
Nominal input voltage	100...240Vac 100...250Vdc	100...240Vac 140...340Vdc
Max temperature without derating	50°C	40°C @ 115Vac, 50°C @ 230Vac,
Power derating	Click Here	
Inrush current limitation (+25°C) typ.	< 30A @ 230Vac	< 40A @ 115Vac, < 80A @ 230Vac
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABL51A24031>

1. Input and output terminals are reversed
2. No more sealing cover
3. Change or remove the external input protection
4. No ground/earth terminal on output side

ABL8REM24030 → ABLS1A24031

Benefits

Feature	ABL8REM24030	ABLS1A24031
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 10ms @ 230Vac	20ms @ 115Vac, 40ms @ 230Vac
Max operating temperature	0...60°C	-20...70°C
Efficiency	85% @ 115 VAC & 230 VAC	88% @ 230 VAC
Immunity to fast transients	2 kV	4 kV
NEC Class II approval	No	Yes
Easy access to documentation	No	Yes with QR code

ABL8REM24050 → ABL51A24050

Installation



Main Technical Differences

Feature	ABL8REM24050	ABL51A24050
Nominal current	< 1.9A @ 115Vac, < 1.2A @ 230Vac	< 2.5A @ 115Vac, < 1.4A @ 230Vac, < 1.3A @ 140Vdc
Inrush current limitation (+25°C) typ.	< 30A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac
Max temperature without derating	50°C	40°C @ 115Vac, 50°C @ 230Vac,
Power derating	Click Here	
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABL51A24050>

1. Input and output terminals are reversed
2. No more sealing cover
3. Change or remove the external input protection
4. No ground/earth terminal on output side

ABL8REM24050 → ABLS1A24050

Benefits

Feature	ABL8REM24050	ABLS1A24050
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	120 x 54 x 120 mm	123.6 x 40 x 117.6 mm
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 10ms @ 230Vac	20ms @ 115Vac, 40ms @ 230Vac
Max operating temperature	0...60°C	-20...70°C
Efficiency	85% @ 115 VAC & 230 VAC	85% @ 115 VAC 88% @ 230 VAC
Immunity to fast transients	2 kV	4 kV
Easy access to documentation	No	Yes with QR code
Terminals (-) (+)	2 of each	3 of each

ABL7RP4803 → ABL51A48025

Installation



Main Technical Differences

Feature	ABL7RP4803	ABLS1A48025
Nominal current	< 1.A @ 115Vac, < 0.6A @ 230Vac	< 2.5A @ 115Vac, < 1.4A @ 230Vac, < 1.3A @ 140Vdc
Inrush current limitation (+25°C) typ.	< 30A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac
Max temperature without derating	50°C	40°C @ 115Vac, 50°C @ 230Vac,
Power derating	Click Here	
Nominal output (DC) current	3A	2.5A
Nominal output (DC) power	144W	120W
Max wiring capacity	Click Here	

<http://www.se.com/en/product/ABLS1A48025>

1. Input and output terminals are reversed
2. No more sealing cover
3. Change or remove the external input protection
4. No ground/earth terminal on output side

Life Is On


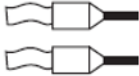



Schneider
Electric

ABL7RP4803 → ABL51A48025

Benefits

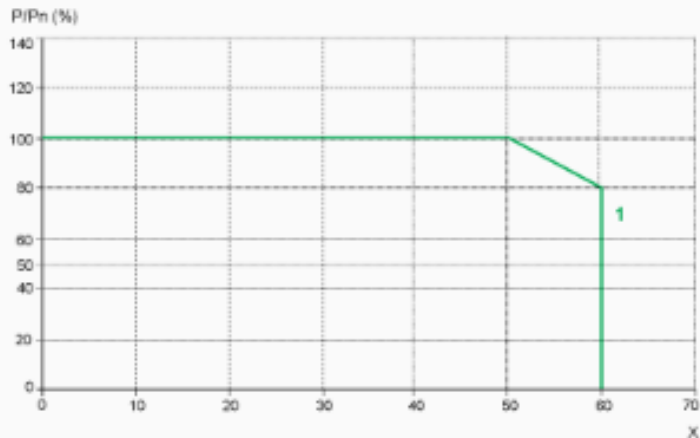
Feature	ABL7RP4803	ABL51A48025
External protection	Circuit breaker or fuse required	Not required if there is a 20A branch protection
Dimensions (LxWxH)	120 x 54 x 120 mm	123.6 x 40 x 117.6 mm
Mains buffering at nominal load (typ.)	> 10ms @ 115Vac, > 10ms @ 230Vac	20ms @ 115Vac, 40ms @ 230Vac
Max operating temperature	0...60°C	-20...70°C
Efficiency	85% @ 115 VAC & 230 VAC	85% @ 115 VAC 88% @ 230 VAC
Immunity to fast transients	2 kV	4 kV
Easy access to documentation	No	Yes with QR code

Wires characteristics

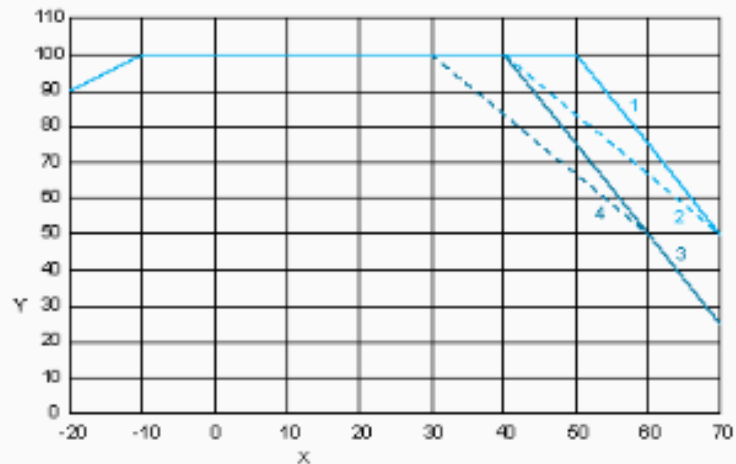
							
ABL8REM***** ABL7RP****		°C	≥ 105°C				
	Input/ output	mm2	0.14...1.5	0.14...0.75	0.14...2.5	0.14...4	0.14...1.5
		AWG	26-16	26...18	26...14	26...12	26...16
<u>ABLS1A12062</u> <u>ABLS1A24031</u>	output	°C	75°C				
		mm2	0.5...2.5	2 x 0.5...1.0	0.5...2.5	0.5...2.5	2 x 0.5...1.5
	AWG	20-14	2 x 20-18	20-14	20-14	2 x 20-16	
	input	mm2	0.75...2.5	2 x 0.75-1.0	0.75...2.5	0.75...2.5	2 x 0.75...1.5
		AWG	18-14	2 x 18	18-14	18-14	2 x 18-16
	<u>ABLS1A24050</u> <u>ABLS1A48025</u>	output	°C	75°C			
mm2			0.5...2.5	2 x 0.5...1.5	0.5...4	0.5...4	2 x 0.5...2.5
AWG		20-14	2 x 20-16	20-12	20-12	2 x 20-14	
input		mm2	0.75...4	2 x 0.75...1.5	0.75...4	0.75...4	2 x 0.75...2.5
		AWG	18-12	2 x 18-16	18-12	18-12	2 x 18-14

Derating curves

ABL7, ABL8



ABLS1A12062, ABLS1A24031,
ABLS1A24050, ABLS1A48025



- X: Surrounding Air Temperature
- Y: Percentage of Max Load (%)
- 1: Altitude 2000m, Input voltage = 230 VAC / 325 VDC
- 2: Altitude 2000m, 115 VAC / 162 VDC
- 3: Altitude 5000m, Input voltage = 230 VAC / 325 VDC
- 4: Altitude 5000m, 115 VAC / 162 VDC