Product data sheet
Characteristics

ABLP1A12085
Regulated Power Supply, modicon power supply, 100...240V AC, 12V, 8.5A, single phase, Panel Mount



Main

Range of product	Modicon Power Supply
Product or component type	Power supply
Power supply type	Regulated switch mode
Variant option	Panel mount
Enclosure material	Aluminium
Input voltage	100...240 V AC single phase
Rated power in W	100 W
Output voltage	12 V DC
Power supply output current	8.5 A

Complementary

Input voltage limits	90...264 V AC
Network frequency limits	50…60 Hz
Earthing system	TN TT IT
Maximum leakage current	1 MA 240 V AC
Input protection type	Integrated fuse (not interchangeable) 4 A
Inrush current	45 A at 115 V 85 A at 230 V
Power factor	0.55 at 115 V AC 0.45 at 230 V AC
Efficiency	88 % at 230 V AC
Output voltage limits	10.8...13.2 V
Power dissipation in W	21 W
Current consumption	< 2.3 A 115 V AC < 1.5 A 230 V AC
Response time	< 500 ms
Holding time	> 20 ms 115 V AC > 40 ms 230 V AC
Load capacitance	4000 MF
Residual ripple	< 120 mV
Meantime between failure [MTBF]	700000 H at 25 °C, full load conforming to SR 332
Output protection type	Against overload and short-circuits, protection technology: automatic reset Against over temperature, protection technology: manual reset Against overvoltage, protection technology: manual reset
Connections - terminals	Screw connection: 0.75...2.5 mm², (18 AWG...14 AWG) without wire end ferrule Screw connection: 0.75...1.5 mm², (18 AWG...16 AWG) with wire end ferrule

Line and load regulation	< 0.5 % at 0 to 100 % load at 25 °C < 1 % at full voltage range in line at 25 °C
Status LED	1 LED (green) output voltage
Depth	129 Mm
Height	30 Mm
Width	97 Mm
Net weight	0.3 Kg
Output coupling	Parallel Serial
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 Double-profile DIN rail panel mounting
Supply	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to IEC 60364-4-41
Dielectric strength	3750 V AC with input to output
Service life	10 Year(S)
Overvoltage category	II

Environment

Standards	IEC 62368-1 IEC 61010-1 EN 61010-2-201 EN 61204-3 IEC 61000-6-1 IEC 61000-6-2 IEC 61000-6-3 IEC 61000-6-4 IEC 61000-3-2 EN 61000-3-3 UL 62368-1 UL 61010-1 UL 61010-2-201 CSA C22.2 No 62368-1 CSA C22.2 No 61010-1 CSA C22.2 No 61010-2-201
Product certifications	CE[RETURN]CULus[RETURN]EAC[RETURN]RCM[RETURN]CB Scheme[RETURN]KC
Operating altitude	5000 m
Shock resistance	150 m/s² for 11 ms
IP degree of protection	IP10
Ambient air temperature for operation	-30…50 °C without derating mounting position A, B, F, G < 2000 m 50…70 °C with current derating of 2 % per °C mounting position A, B, F, G < 2000 m
Electrical shock protection class	Class I
Pollution degree	2
Vibration resistance	3 mm (f= 2…9 Hz) conforming to IEC 60068-2-6 10 m/s² (f= 9…200 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Immunity to electrostatic discharge - test level: 8 kV (contact discharge) conforming to IEC 61000- Immunity to electrostatic discharge - test level: 15 kV (air discharge) conforming to IEC 61000-4-2 Immunity to conducted RF disturbances - test level: 15 V/m (80 MHz...2 GHz) conforming to IEC 6 Immunity to conducted RF disturbances - test level: 5 V/m (2...2.7 GHz) conforming to IEC 61000- Immunity to conducted RF disturbances - test level: 5 V/m (2.7...6 GHz) conforming to IEC 61000- Immunity to fast transients - test level: 4 kV (on input-output) conforming to IEC 61000-4-4 Surge immunity test - test level: 4 kV (between power supply and earth) conforming to IEC 61000- Surge immunity test - test level: 3 kV (between phases) conforming to IEC 61000-4-5 Immunity to conducted RF disturbances - test level: 15 V (0.15...80 MHz) conforming to IEC 6100 Immunity to magnetic fields - test level: 30 A/m (50...60 Hz) conforming to IEC 61000-4-8 Immunity to voltage dips conforming to IEC 61000-4-11 Disturbing field emission conforming to EN 55016-2-3 Limits for harmonic current emissions conforming to IEC 61000-3-2 Conforming to EN 55016-1-2 conforming to EN 55016-2-1
Electromagnetic emission	Conducted emissions conforming to IEC 61000-6-3 Radiated emissions conforming to IEC 61000-6-4

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.000 Cm
Package 1 Width	14.800 Cm
Package 1 Length	18.500 Cm
Package 1 Weight	429.000 G
Unit Type of Package 2	S03
Number of Units in Package 2	19
Package 2 Height	30.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	8.540 Kg

Offer Sustainability

Recyclability potential, in %	41
Total lifecycle Carbon footprint	1 050 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	5.1695489373460175
Carbon footprint of the manufacturing phase [A1 to A3]	5 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.08324891114042435
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.004427362683972364
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1043.9305389259096
Carbon footprint of the use phase [B2, B3, B4, B6]	1 044 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.45337626629200395
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	1050
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
SCIP Number	E8b5e85f-3dd8-4246-afe7-a3c3cb549e5c
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised