

Product data sheet

Characteristics

ABLS1A24200

Regulated Power Supply, 100 to 240V AC, 24V, 20A, single phase, Optimized



Product availability: Stock - Normally stocked in distribution facility

Price*: 365.00 USD



Main

Range of Product	Modicon Power Supply
Product or Component Type	Power supply
Power supply type	Regulated switch mode
Variant option	Optimized
Enclosure Material	Aluminum
Input voltage	100...240 V AC single phase 100...240 V AC phase to phase 140...340 V DC
Kw Rating	480 W
Output voltage	24 V DC
Power supply output current	20 A

Complementary

Efficiency at full load	85...264 V AC without temperature derating 120...375 V DC without temperature derating
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) 10 A External protection (recommended) 20 A Curve C External protection (recommended) 16 A Curve B External protection (recommended) 13 A Curve C
Inrush current	45.0 A 115 V 90.0 A 230 V
Power factor	0.95 at 115 V AC 0.95 at 230 V AC
Efficiency	85 % 115 V AC 88 % 230 V AC
Output voltage limits	22...28 V
Power dissipation in W	60 W

Current consumption	< 5.4 A 115 V AC < 2.7 A 230 V AC < 5 A 140 V DC
Response Time	< 1.5 s
Holding time	> 20 ms 115 V AC > 20 ms 230 V AC
Load capacitance	8000 MF
Residual ripple	< 120 mV
Meantime between failure [MTBF]	700000 H at 77 °F (25 °C), full load conforming to SR 332
Output protection type	Against overload and short-circuits automatic reset Against over temperature manual reset Against overvoltage manual reset
Connections - terminals	Screw connection 0.75...4 mm ² , AWG 20...AWG 12) without wire end ferrule output Screw connection 0.75...4 mm ² , AWG 20...AWG 14) with wire end ferrule output Screw connection 0.75...4 mm ² , AWG 18...AWG 12) without wire end ferrule input Screw connection 0.75...4 mm ² , AWG 18...AWG 12) with wire end ferrule input
Line and load regulation	< 0.5 % network 0 to 100 % load at 77 °F (25 °C) < 1 % network full voltage range in line at 77 °F (25 °C)
Status LED	1 LED (Green) output voltage
Depth	5.06 In (128.5 mm)
Height	4.9 In (123.6 mm)
Width	3.4 In (85.5 mm)
Net Weight	2.76 Lb(US) (1.25 kg)
Output coupling	Parallel Serial
Mounting support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 Double-profile DIN rail
Supply	SELV IEC 60950-1 SELV IEC 60204-1 SELV IEC 60364-4-41
Dielectric strength	3000 V AC with input to output
Service life	10 Year(S)
Overvoltage category	II

Environment

Standards	IEC 62368-1 EN/IEC 61010-1 EN 61010-2-201 EN/IEC 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 EN/IEC 62368-1
Product certifications	CE[RETURN]CUL Listed[RETURN]CUL Recognized[RETURN]RCM[RE- TURN]CB Scheme[RETURN]EAC[RETURN]KC
Operating altitude	< 5000 m
Shock resistance	150 m/s ² 11 ms
IP degree of protection	IP20

Ambient air temperature for operation	-4...104 °F (-20...40 °C) without derating mounting position- A 115 V AC < 6561.68 ft (2000 m) -4...122 °F (-20...50 °C) without derating mounting position- A 230 V AC < 6561.68 ft (2000 m) 104...158 °F (40...70 °C) with current derating of 1.67 % per °C mounting position- A 115 V AC < 6561.68 ft (2000 m) 122...158 °F (50...70 °C) with current derating of 2.5 % per °C mounting position- A 230 V AC < 6561.68 ft (2000 m)
Electrical shock protection class	Class I
Pollution degree	2
Vibration resistance	3 mm 2...9 Hz)IEC 60068-2-6 10 m/s ² 9...200 Hz)IEC 60068-2-6
Electromagnetic compatibility	Immunity to electrostatic discharge - test level: 8 kV (contact discharge) conforming- to IEC 61000-4-2 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) con- forming to IEC 61000-4-3 Immunity to conducted RF disturbances - test level: 5 V/m (2...2.7 GHz) conforming- to IEC 61000-4-3 Immunity to conducted RF disturbances - test level: 5 V/m (2.7...6 GHz) conforming- to IEC 61000-4-3 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 61000-4-5 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 61000-4-6 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 IEC 61000-6-3 Radiated emissions IEC 61000-6-4

Ordering and shipping details

Category	US1CP1222525
Discount Schedule	CP12
GTIN	3606481500267
Returnability	Yes
Country of origin	SG

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.7 In (9.5 cm)
Package 1 Width	6.9 In (17.5 cm)
Package 1 Length	7.09 In (18.0 cm)
Package 1 Weight	3.128 Lb(US) (1.419 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Height	11.8 In (30 cm)
Package 2 Width	11.8 In (30 cm)
Package 2 Length	15.7 In (40 cm)
Package 2 Weight	23.186 Lb(US) (10.517 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	"WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov "
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Product Life Status : **Commercialised**