

# Product data sheet

## Characteristics

# ABLU3A24200

Regulated Power Supply, 380...500V AC, 24V, 20A, 3 phases, Universal

Product availability: Stock - Normally stocked in distribution facility

Price\*: 433.43 USD



### Main

Range of Product	Modicon Power Supply
Product or Component Type	Power supply
Power supply type	Regulated switch mode
Variant option	Universal
Enclosure Material	Metal
Input voltage	380...500 V AC three phase
Rated power in W	480 W
Output voltage	24 V DC
Power supply output current	20 A
Permissible temporary current boost	1.5 x In for 5 seconds)

### Complementary

Efficiency at full load	320...575 V AC 3 phase
Network frequency limits	50...60 Hz
Earthing system	TN TT IT
Maximum leakage current	2 MA 500 V AC
Input protection type	Integrated fuse (not interchangeable) 3.15 A External protection (recommended)
Inrush current	35 A 380 V 35 A 500 V
Power factor	0.90 at 380 V AC 0.88 at 500 V AC
Efficiency	93 % 380 V AC 93 % 500 V AC
Output voltage limits	24...28 V
Power dissipation in W	33 W
Current consumption	< 0.85 A 380 V AC < 0.73 A 500 V AC
Response Time	< 1 s
Holding time	> 20 ms 380 V AC > 20 ms 500 V AC

Load capacitance	200000 MF
Residual ripple	< 150 mV
Meantime between failure [MTBF]	876500 H at 77 °F (25 °C), full load conforming to SR 332 374800 H at 131 °F (55 °C), 80 % load conforming to SR 332
Output protection type	Against overload and short-circuits, protection technology: manual or automatic reset-by switch Against over temperature, protection technology: automatic reset Against overvoltage, protection technology: manual reset
Connections - terminals	Screw connection 4...6 mm <sup>2</sup> , AWG 12...AWG 10) without wire end ferrule output Screw connection 4 mm <sup>2</sup> , AWG 12) with wire end ferrule output Screw connection 0.75...6 mm <sup>2</sup> , AWG 18...AWG 12) without wire end ferrule input Screw connection 0.75...4 mm <sup>2</sup> , AWG 18...AWG 12) with wire end ferrule input Cage clamp 0.2...1.5 mm <sup>2</sup> , AWG 22...AWG 16) without wire end ferrule diagnostic relay Cage clamp 0.2...0.75 mm <sup>2</sup> , AWG 22...AWG 18) with wire end ferrule diagnostic relay Cage clamp 0.2...0.75 mm <sup>2</sup> , AWG 22...AWG 18) with wire end ferrule shut down input
Line and load regulation	< 0.17 % network 100 % load in line at 77 °F (25 °C) < 0.6 % +/- 0.5 % network 150 % load at 77 °F (25 °C)
Status LED	1 LED (green and red) product status
Depth	5.01 In (127.3 mm)
Height	4.9 In (124 mm)
Width	2.6 In (65 mm)
Net Weight	2.54 Lb(US) (1.15 kg)
Output coupling	Parallel
Marking	CE UKCA
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	4000 V AC with input to output 2000 V AC with input to ground 1500 V AC with output to ground 4000 V AC with input to diagnostic relay 500 V AC with output to diagnostic relay 1500 V AC with diagnostic relay to ground with shutdown input not isolated from output
Relay type	Electromechanical relay 1000.0 mA 30 V
Service life	10 Year(S) 104 °F (40 °C) 80 % load
Overvoltage category	III II

## Environment

Standards	IEC 62368-1 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 CSA C22.2 No 62368-1 CSA C22.2 No. 107.1
Product certifications	CE[RETURN]CUL Listed[RETURN]CUL Recognized[RETURN]RCM[RE- TURN]CB Scheme[RETURN]EAC[RETURN]KC[RETURN]UKCA[RETURN]CURus
Operating altitude	< 5000 m overvoltage category III overvoltage category II
Shock resistance	150 m/s <sup>2</sup> 11 ms
IP degree of protection	IP20

Ambient air temperature for operation	-13...131 °F (-25...55 °C) without current derating mounting position-A < 6561.68 ft (2000 m) 131...158 °F (55...70 °C) with current derating of 3.3 % per °C mounting position-A < 6561.68 ft (2000 m)
Electrical shock protection class	Class I
Pollution degree	2
Vibration resistance	3.5 mm (f= 3...11.9 Hz) conforming to IEC 60068-2-6 20 m/s <sup>2</sup> (f= 11.9...150 Hz) conforming to 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) conforming 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	US1CP1222524
Discount Schedule	CP12
GTIN	3606482185258
Returnability	Yes
Country of origin	TH

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	6.102 In (15.500 cm)
Package 1 Width	8.268 In (21.000 cm)
Package 1 Length	8.740 In (22.200 cm)
Package weight(Lbs)	3.252 Lb(US) (1.475 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	7
Package 2 Height	11.811 In (30.000 cm)
Package 2 Width	11.811 In (30.000 cm)
Package 2 Length	15.748 In (40.000 cm)
Package 2 Weight	24.097 Lb(US) (10.930 kg)
Unit Type of Package 3	P12
Number of Units in Package 3	168
Package 3 Height	31.496 In (80.000 cm)
Package 3 Width	35.433 In (90.000 cm)
Package 3 Length	47.244 In (120.000 cm)
Package 3 Weight	598.917 Lb(US) (271.664 kg)

## Environmental data

Mercury free	Yes
Sustainable packaging	No
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
Circularity Profile	<a href="#">End Of Life Information</a>
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

Warranty (in months)	18
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Product Life Status : **Commercialised**