Product data sheet
Characteristics

ABLU3A24050
Regulated Power Supply, 380...500V AC, 24V, 5A, 3 phases, Universal



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	120 W
Output voltage	24 V DC
Power supply output current	5 A
Permissible temporary current boost	1.5 x In (for 5 seconds)

Complementary

Input voltage limits	320...575 V AC 3 phases
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	25 A at 380 V 25 A at 500 V
Power factor	0.40 at 380 V AC 0.40 at 500 V AC
Efficiency	86.5 % at 380 V AC 86.5 % at 500 V AC
Output voltage limits	24...28 V
Power dissipation in W	18.5 W
Current consumption	< 0.5 A 380 V AC < 0.4 A 500 V AC
Response time	< 1 s
Holding time	> 20 ms 380 V AC > 40 ms 500 V AC
Load capacitance	200000 MF
Residual ripple	< 100 mV
Meantime between failure [MTBF]	2168900 H at 25 °C, full load conforming to SR 332 816200 H at 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: 0.75…6 mm², (18 AWG...10 AWG) without wire end ferrule for output Screw connection: 0.75...4 mm², (18 AWG...12 AWG) with wire end ferrule for output Screw connection: 0.75…6 mm², (18 AWG...10 AWG) without wire end ferrule for input Screw connection: 0.75...4 mm², (18 AWG...12 AWG) with wire end ferrule for input Cage clamp: 0.2...1.5 mm², (22 AWG...16 AWG) without wire end ferrule for diagnostic relay Cage clamp: 0.2...0.75 mm², (22 AWG...18 AWG) with wire end ferrule for diagnostic relay Cage clamp: 0.2...0.75 mm², (22 AWG...18 AWG) with wire end ferrule for shut down input
Line and load regulation	< 0.17 % at 100 % load in line at 25 °C < 0.6 % +/- 0.5 % at 150 % load at 25 °C
Status LED	1 LED (green and red) product status 1 LED (green) input voltage
Depth	125.3 Mm
Height	124 Mm
Width	38 Mm
Net weight	0.60 Kg
Marking	CE UKCA
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
Supply	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to 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) 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[RETURN]CB Scheme[RETUR
Operating altitude	< 5000 m overvoltage category III overvoltage category II
Shock resistance	150 m/s² for 11 ms
IP degree of protection	IP20
Ambient air temperature for operation	-25…55 °C without current derating mounting position A < 2000 m 55…70 °C with current derating of 3.3 % per °C mounting position A < 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/s² (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 610 Immunity to electrostatic discharge - test level: 15 kV (air discharge) conforming to IEC 61000- Immunity to conducted RF disturbances - test level: 15 V/m (80 MHz...2 GHz) conforming to IE Immunity to conducted RF disturbances - test level: 5 V/m (2...2.7 GHz) conforming to IEC 610 Immunity to conducted RF disturbances - test level: 5 V/m (2.7...6 GHz) conforming to IEC 610 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 610 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 61 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	7.000 Cm
Package 1 Width	18.000 Cm
Package 1 Length	19.000 Cm
Package 1 Weight	906.000 G
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	30.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	9.562 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	75.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	83.996 Kg

Offer Sustainability

Mercury free	Yes
Sustainable packaging	No
Environmental Disclosure	Product Environmental Profile
Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
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