

# Product datasheet

Specifications



## battery control module - 24..28.8 V DC - 24 V - 20 A - for regulated SMPS

ABL8BBU24200

### Main

Range of product	Phaseo
Product or component type	Battery control module
Input voltage	24...28.8 V DC
Output voltage	(U <sub>battery</sub> -0.5) V in battery mode DC (U <sub>in</sub> -0.25) V in nominal mode DC
Maximum output current	20 A

### Complementary

Input voltage limits	22...30 V
Maximum power dissipation in W	7 W
Activation threshold	Adjustable 22...36 V
Number of output channels	1
Current consumption	0.6 A on load 0.1 mA no load <= 40.6 A
Output protection type	Against overload, protection technology: 1.5 x I <sub>n</sub> Against short-circuits, protection technology: battery-backed mode, automatic reset Against short-circuits, protection technology: power-supplied mode
Connections - terminals	For diagnostic relay: removable screw terminal block, connection capacity: 1 x 0.75 mm <sup>2</sup> For input connection: screw type terminals, connection capacity: 2 x 0.5...2 x 10 mm <sup>2</sup> AWG 20...AWG 8 For output connection: screw type terminals, connection capacity: 2 x 0.5...2 x 10 mm <sup>2</sup> AWG 20...AWG 8
Fixing mode	By clips on 35 mm symmetrical DIN rail, operating position: horizontal By clips on 35 mm symmetrical DIN rail, operating position: vertical
Operating altitude	2000 m
Marking	CE
Name of test	Electrostatic discharges conforming to EN/IEC 61000-4-2 Emission conforming to EN 61000-6-3 Induced electromagnetic field conforming to EN/IEC 61000-4-6 level 3 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 level 3 Rapid transient conforming to IEC 61000-4-4 level 3 Surge conforming to EN/IEC 61000-4-5 level 2 Conducted/radiated emissions conforming to EN 55022 class B, 20 %
Local signalling	1 C/O relay for alarm status 1 C/O relay for battery status 1 C/O relay for power supply status LCD screen for module status
Width	60 mm
Height	125 mm

Depth	160 mm
Net weight	0.5 kg
<b>Environment</b>	
Product certifications	RCM EAC
Standards	UL 508 CSA C22.2 No 60950-1
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...85 °C
Environmental characteristic	EMC conforming to EN 61000-6-3 EMC conforming to EN/IEC 61000-6-2 Safety conforming to EN/IEC 60950-1 Safety conforming to EN/IEC 61204-3
IP degree of protection	IP20 conforming to EN/IEC 60529
Dielectric strength	500 V between input and ground 500 V between output and ground
Overtoltage category	Class II conforming to VDE 0106-1
Relative humidity	0...90 % during operation 0...95 % during storage
MTBF reliability	718708 H at 24 V DC with UTE C80-810 calculation method
Vibration resistance	2 gn (f= 11.9...150 Hz) conforming to EN/IEC 61131-2 3.5 mm (f= 3...11.9 Hz) conforming to EN/IEC 61131-2

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9 cm
Package 1 Width	19.5 cm
Package 1 Length	19.5 cm
Package 1 Weight	1.468 kg
Unit Type of Package 2	S03
Number of Units in Package 2	8
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	11.929 kg
Unit Type of Package 3	P06
Number of Units in Package 3	72
Package 3 Height	80 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	118.7 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>

<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>PVC free</b>	Yes

## Contractual warranty

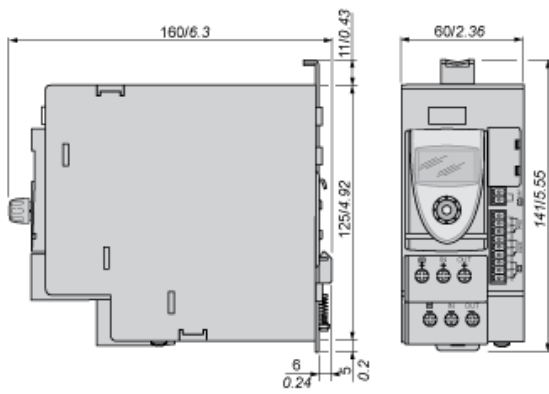
<b>Warranty</b>	18 months
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## 24 Vdc/20 A Battery Control Module

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### Dimensions

mm  
inch



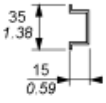
**24 Vdc Battery Control Module**

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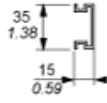
**Mounting**

mm  
inch

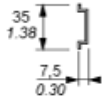
AM1 DE200  
IEC/EN 60715



AM1 ED200



AM1 DP200



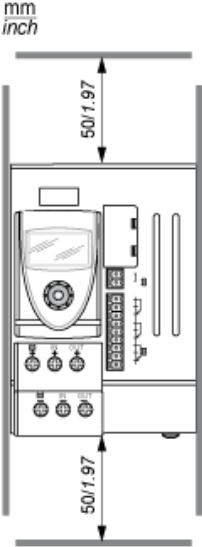
DZ5 MB200



**24 Vdc Battery Control Module**

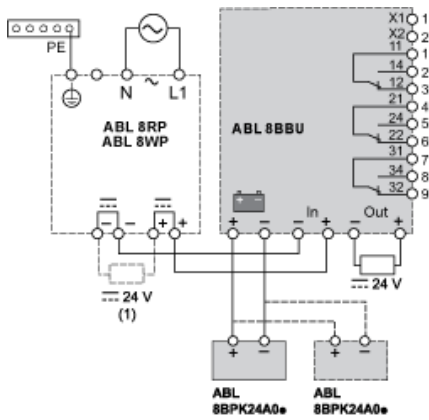
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**Clearance**



**24 Vdc Battery Control Module**

**Wiring Diagram**



(1) See table below for the maximum unstored charge capacity ( $\mu\text{F}$ )

ABL	Max. Unstored Charge Capacity ( $\mu\text{F}$ )
8RPS24030	30 000
8RPS24050	50 000
8RPS24100	100 000
8RPM24200	100 000
8WPS24200	100 000
8WPS24400	100 000

**24 Vdc Battery Control Module**

**Outputs States (U = 24 Vdc: I > 5 mA, U = 230 Vac: I < 500 mA)**

	No power from the power supply		Power from the power supply
	Alarm or device not supplied		No alarm
	No power from the battery pack		Power from the battery pack

**Inputs States (Dry Contact)**

	Operational battery		Battery inhibited
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**Wiring Requirements**

**Cable Types and Wire Sizes**

IEC / EN

		ABL 8RPS24030 8RPS24050 8RPS24100	ABL 8RPM24200 8WPS24200 8WPS24400
<b>ABL 8BBU24200</b>	In + / -	1... 4 mm <sup>2</sup>	4... 10 mm <sup>2</sup>
	+ / -	6 mm <sup>2</sup>	-
	Out + / -	6 mm <sup>2</sup>	-
<b>ABL 8BBU24400</b>	In + / -	1... 4 mm <sup>2</sup>	4... 10 mm <sup>2</sup>
	+ / -	10 mm <sup>2</sup>	-
	Out + / -	10 mm <sup>2</sup>	-
	±	10 mm <sup>2</sup>	-
		-	-
OFF / PSU / Alarm /		0,14... 1 mm <sup>2</sup>	-

UL

		ABL 8RPS24030 8RPS24050 8RPS24100	ABL 8RPM24200 8WPS24200 8WPS24400
<b>ABL 8BBU24200</b>	In + / -	16... 12 AWG	12... 6 AWG
	+ / -	10 AWG	-
	Out + / -	10 AWG	-
<b>ABL 8BBU24400</b>	In + / -	16... 12 AWG	12... 6 AWG
	+ / -	6 AWG	-
	Out + / -	6 AWG	-
	±	6 AWG	-
		-	-
OFF / PSU / Alarm /		26... 16 AWG	-

**Recommended replacement(s)**