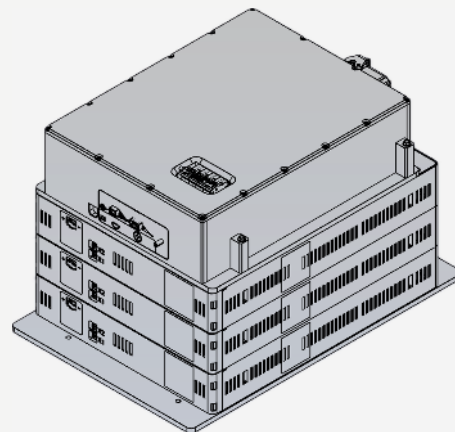




BEN **BM01**
BATTERY SYSTEM
614 V | LFP | 14.4 Ah



BEN BM01 Battery System – 614 V | LFP | 14.4 Ah

This energy storage solution with integrated battery management system is designed for industrial applications in tough environments.

Part no.: 4260629980206

ELECTRICAL DATA

Parameter	Value
System voltage	480–691 V DC
Nominal voltage	614 V
Nominal enegery	8.8 kWh
Max. charge current	8 A
Max. peak charge current	14.4 A (max. 10 sec)
Max discharge current	20 A
Max. peak discharge current	43.2 A (max. 10 sec)

MECHANICAL DATA

Parameter	Value
Dimensions battery system	670 mm x 445 mm x 415 mm
E-box	588 mm x 440 mm x 150mm
Battery module	560 mm x 440 mm x 85 mm
Base plate	670 mm x 445 mm x 10 mm
Battery modules	3
Single battery module	28 kg
Total weight	100 kg

SYSTEM INTERFACES

Parameter	Value
PROFINET	1x M12 4-pin D-Coded female
Battery poles	Housing Han 10B 80 Han hinged frame plus Han 70A crimp module
Control contacts	Han E module, crimp female
External BCU Power Supply	Han E module, crimp male

PROFINET

Parameter	Value
Device function	PROFINET IO device
Transfer rate	100 Mbps
Update rate	100 ms (RT, adjustable)
PROFINET IO version	2.32 / 2.35
Supported protocols	SNMP, LLDP
Supported MIBs	MIB2
Real-time class	RT_CLASS_1
Netload class	II
Conformance class	B

AMBIENT CONDITIONS

Parameter	Value
Vibration & Shock EN IEC 60721-3-2 EN IEC 60721-3-3	Transport [2M5] Operation [3M2]
Basic module certification	UN38.3
Ambient temperature - charge - discharge Ambient temperature storage at least - 3 days - 1 month - 3 months - 1 year	-10 °C to 58 °C* -18 °C to 65 °C* * full temperature range with current derating -40 °C to 60 °C -20 °C to 60 °C -20 °C to 40 °C -20 °C to 20 °C
Relative humidity - Without restriction - Reduced lifetime - Max 4h/day or 30 days/year	0 % to 70 %, no condensation 70 % to 85 % 85 % to 95 %
Altitude for operation	< 4000 m above sea level
Protection rating	IP20 [as per DIN EN 60529]
Protection class	II
Insulation DIN EN IEC 60664-1	6 kV

COMPLIANCE WITH EMC DIRECTIVE

Parameter	Value
Discharge of static electricity acc. to EN 61000-4-2	Contact discharge: 4 kV Air discharge: 8 kV Performance Criteria B
Electromagnetic fields acc. to EN 61000-4-3	80 MHz to 1 GHz, 10 V/m 1.4G Hz to 1.6 GHz and 1.8 GHz to 2.2 GHz 1.4 GHz to 6 GHz , 3 V/m Performance Criteria A
Fast transients (burst) acc. to EN 61000-4-4	Signal ports: ±1 kV 5 kHz repetition frequency External 24 V DC input: ±2 kV 5/50 ns 5 kHz repetition frequency Ethernet ports: ±1 kV 5/50 ns 5 kHz repetition frequency Performance Criteria B
Conducted disturbances acc. to EN 61000-4-6	150 kHz to 80 MHz 10 V/m 80 % AM [1 kHz]
Power frequency field acc. to EN 61000-4-8	Battery output: 10 A/m