



12CP25

Compact-Power Rackline™



Technical specifications

Type

12CP25

Part number

66300025


Electrical Data

Nominal voltage	12 V	
Number of cells	6	
Rated capacity C ₁₀ to 1.80 Vpc at 20 °C	25 Ah	
Rated capacity C ₈ to 1.75 Vpc at 25 °C	25 Ah	
Current/Power for 0.5 h back-up time 1.65 Vpc 20 °C	30.9 A	338.4 W
Current/Power for 1.0 h back-up time 1.67 Vpc 20 °C	17.8 A	199.8 W
Current/Power for 2.0 h back-up time 1.80 Vpc 20 °C	9.7 A	111.6 W
Current/Power for 4.0 h back-up time 1.80 Vpc 20 °C	5.5 A	63.6 W
Current/Power for 8.0 h back-up time 1.80 Vpc 20 °C	3.0 A	34.8 W
Current/Power for 10.0 h back-up time 1.80 Vpc 20 °C	2.5 A	28.8 W
Current/Power for 20.0 h back-up time 1.80 Vpc 20 °C	1.4 A	15.6 W
Conversion to capacity at 25 °C (77 °F)	20 °C Ah x 1,03 (t > 1 h)	
Internal resistance (± 10%) to IEC/EN 60896-21	18.6 mΩ	
Short circuit current (± 10%) to IEC/EN 60896-21	0.6 kA	
Self discharge at 20 °C to IEC/EN 60896-21	max. 3% / month	
Heat loss during float service at 20 °C	≈ 0.15 W	

Mechanical Data

Weight ready for use	12.5 kg	
Height of monobloc	192 mm	
Height over gas collection system GCS™	207 mm	
Height over terminal connector	217 mm	
Width	100 mm	
Depth	275 mm	
Number of terminals	1⊕ / 1⊖	
Dimension of connector screw hole	M6	
Suggested/maximum cable cross-section	16 mm ² /70 mm ² *)	
Connection torque	8 Nm	
Terminal insulation class according to IEC/EN 60529	IP20	
Diameter of diagnostic hole for voltage probe	2.5/5 mm Ø	
Connector (copper, tin-coated) rigid and insulated	40 mm ²	
Complete connector and terminal connection accessoires	available (as 48 V/60 V-Set)	

Environmental Data

Shelves, cabinets and racks	available upon request	
Installation	vertically/horizontally	
Distance for cooling and ventilation (preset with the rigid connectors)	10 mm	
Flame retardancy rating case/cover according to Underwriters Laboratories (UL) USA	ABS-PC – UL 94 V-0 with LOI > 32%, halogen-free	
Flame barriers at vents	installed	
Gas collection system GCS™ UL V-0 quality	available upon request	
UL file number 	MH 26065	
Service life expected at 20 °C	15 years	

*) for UPS duties the connecting cables must be dimensioned specially

Operating specifications

Figure 1



Figure 2

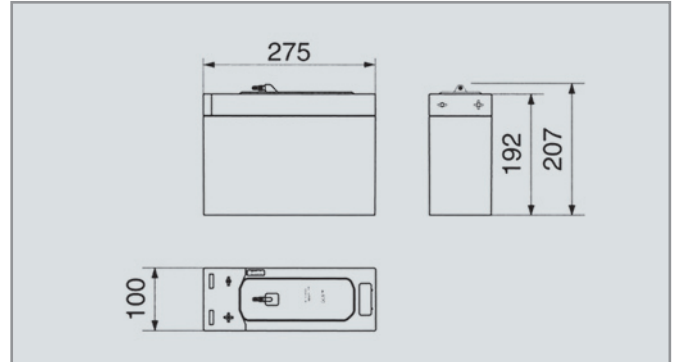
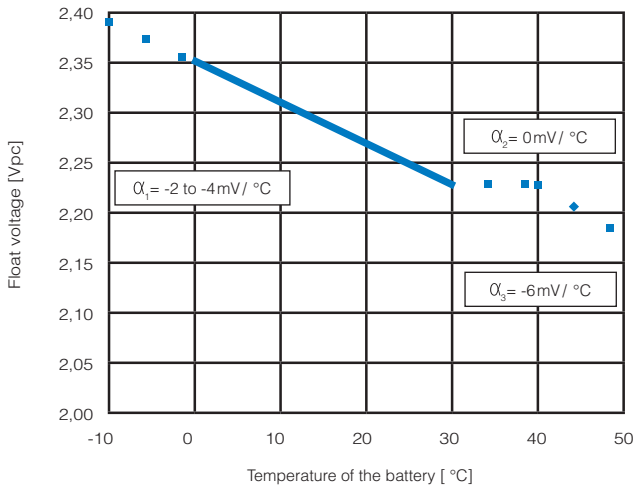


Figure 3



Temperature in °C	Temperature in °F	Percent of the rated capacity
40	104	104.8
35	95	104.2
30	86	103.6
25	77	103.0
20	68	100.0
15	59	97.0
10	50	94.0
5	41	90.0
0	32	84.7
-5	23	77.7
-10	14	69.4
-15	5	60.0
-20	-4	49.6
-25	-13	38.4
-30	-22	25.6
-35	-31	14.1
-40	-40	2.1

Battery installation and operation

Float voltage setting according to DIN 41773

Float voltage with daily discharge cycles

CC-CV charge current according to DIN 41773

Float voltage compensation in function of temperature

Boost charge

Air exchange

Preferred operating temperature range

Maximum long term operating temperature

Maximum short term operating temperature (for hours)

Minimum fully charged operating temperature

Stand-by mode with constant voltage float operation according to EN 50272-2:2001

2.25 Vpc at 20 to 25 °C (68 to 77 °F)

2.29 Vpc - 2.30 Vpc (no correction factor needed)

unlimited, otherwise $3 \cdot I_{10}$ max. if $T > 25$ °C

-2 to -4 mV/°C or with profile as displayed figure 3

Not needed, if desirable then 2.35 Vpc and I_{10} max. for 24 h max. at $t < 30$ °C

As a VRLA battery according to EN 50272-2:2001

$Q = 0.05 \cdot N_{\text{cells}} \cdot I_{\text{gas}} \cdot C_{\text{Ah } C_{10}} \cdot 10^{-3}$ [m³/h]

$I_{\text{gas}} = 1$ (at 2.25 Vpc) $I_{\text{gas}} = 8$ (at 2.40 Vpc)

e.g. 48 V: 0.03 m³/h = 1.06 cu.ft/h (at 2.25 Vpc)

Between 15 °C (68 °F) and 25 °C (77 °F)

+40 °C (104 °F) with ventilation assured (reduced service life)

+50 °C (122 °F) with ventilation assured (reduced service life)

-40 °C (-40 °F)

