



12CP26

Compact-Power Blockline™



Technical specifications

Type

12CP26

Part number

66070026


Electrical Data

Nominal voltage	12 V	
Number of cells	6	
Rated capacity C ₁₀ to 1.80 Vpc at 20 °C	26 Ah	
Rated capacity C ₈ to 1.75 Vpc at 25 °C	26 Ah	
Current/Power for 0.5 h back-up time 1.65 Vpc 20 °C	31.1 A	347.4 W
Current/Power for 1.0 h back-up time 1.67 Vpc 20 °C	18.0 A	202.2 W
Current/Power for 2.0 h back-up time 1.80 Vpc 20 °C	10.0 A	113.4 W
Current/Power for 4.0 h back-up time 1.80 Vpc 20 °C	5.7 A	64.8 W
Current/Power for 8.0 h back-up time 1.80 Vpc 20 °C	3.2 A	36.6 W
Current/Power for 10.0 h back-up time 1.80 Vpc 20 °C	2.6 A	30.6 W
Current/Power for 20.0 h back-up time 1.80 Vpc 20 °C	1.4 A	16.8 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	10.0 mΩ	
Short circuit current (± 10%) to IEC/EN 60896-21	1.2 kA	
Self discharge at 20 °C to IEC/EN 60896-21	max. 3%/month	
Heat loss during float service at 20 °C	≈ 0.16 W	

Mechanical Data

Weight ready for use	16.6 kg	
Height of monobloc	197 mm	
Height over terminal connector	221 mm	
Width	178 mm	
Depth	234 mm	
Number of terminals	1⊕/1⊖	
Dimension of connector screw hole	M5	
Suggested/maximum cable cross-section	50 mm ² /70 mm ² *)	
Connection torque	5 Nm	
Terminal insulation class according to IEC/EN 60529	IP20	
Diameter of diagnostic hole for voltage probe	2 mm Ø	
Connector (copper, tin-coated) rigid and insulated	50 mm ²	
Complete connector and terminal connection accessoires	available	

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 – UL 94 HB
Flame barriers at vents	installed
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

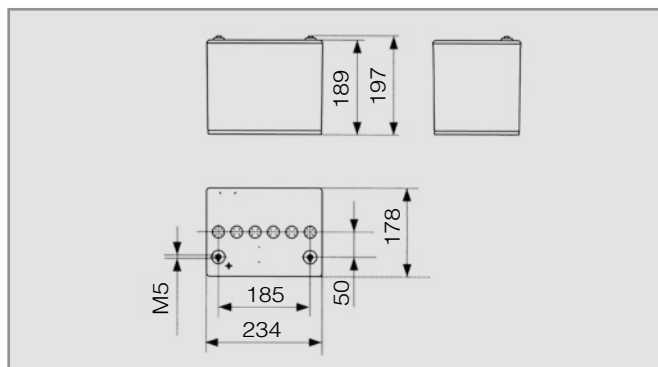
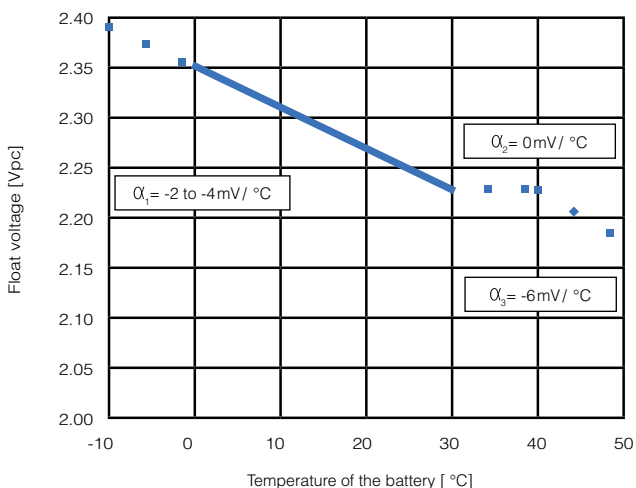


Figure 3



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 ± 1% at 20 to 25 °C (68 to 77 °F)

2.29 Vpc - 2.30 Vpc (no correction factor needed)

unlimited, otherwise 3 · I₁₀ 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 I₁₀ max. for 24 h max. at t < 30 °C

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

$Q = 0.05 \cdot N_{\text{cells}} \cdot I_{\text{gas}} \cdot C_{\text{Ah C10}} \cdot 10^{-3} \text{ [m}^3/\text{h]}$

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

e.g. 48 V: 0.0312 m³/h = 1.10 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)



Discharge data

Constant current performance (in amps) to the defined end-of-discharge voltage

Voltage [Vpc]	Temp	Discharge time [Minutes]																						
		1-2	3	5	7	10	15	20	25	30	40	50	60	90	120	180	240	300	360	480	600	720	1200	1440
1.90	20 °C	68.9	58.9	52.7	47.9	42.3	35.5	30.8	27.2	24.5	20.5	17.7	15.6	11.7	9.5	6.9	5.5	4.6	4.0	3.1	2.6	2.2	1.4	1.2
	25 °C	71.0	60.7	54.3	49.3	43.6	36.6	31.7	28.0	25.2	21.1	18.2	16.1	12.1	9.8	7.1	5.7	4.7	4.1	3.2	2.7	2.3	1.4	1.2
1.87	20 °C	81.5	67.8	59.8	53.7	46.7	38.6	33.1	29.0	25.9	21.5	18.4	16.2	12.0	9.7	7.0	5.6	4.7	4.0	3.2	2.6	2.2	1.4	1.2
	25 °C	83.9	69.8	61.6	55.3	48.1	39.8	34.1	29.9	26.7	22.1	19.0	16.7	12.4	10.0	7.2	5.8	4.8	4.1	3.3	2.7	2.3	1.4	1.2
1.85	20 °C	90.1	73.7	64.3	57.3	49.4	40.4	34.4	30.0	26.7	22.0	18.8	16.5	12.2	9.8	7.1	5.6	4.7	4.0	3.2	2.6	2.2	1.4	1.2
	25 °C	92.8	75.9	66.2	59.0	50.9	41.6	35.4	30.9	27.5	22.7	19.4	17.0	12.6	10.1	7.3	5.8	4.8	4.1	3.3	2.7	2.3	1.4	1.2
1.84	20 °C	94.6	76.6	66.5	59.1	50.7	41.3	35.0	30.5	27.1	22.3	19.0	16.7	12.3	9.8	7.1	5.7	4.7	4.1	3.2	2.6	2.3	1.4	1.2
	25 °C	97.4	78.9	68.5	60.9	52.2	42.5	36.1	31.4	27.9	23.0	19.6	17.2	12.7	10.1	7.3	5.9	4.8	4.2	3.3	2.7	2.4	1.4	1.2
1.83	20 °C	98.9	79.4	68.6	60.7	51.9	42.1	35.6	30.9	27.4	22.5	19.2	16.8	12.4	9.9	7.2	5.7	4.7	4.1	3.2	2.6	2.3	1.4	1.2
	25 °C	102	81.8	70.7	62.5	53.5	43.4	36.7	31.8	28.2	23.2	19.8	17.3	12.8	10.2	7.4	5.9	4.8	4.2	3.3	2.7	2.4	1.4	1.2
1.82	20 °C	103	82.1	70.6	62.2	53.1	42.8	36.1	31.3	27.8	22.7	19.3	16.9	12.4	9.9	7.2	5.7	4.7	4.1	3.2	2.6	2.3	1.4	1.2
	25 °C	106	84.5	72.7	64.1	54.7	44.1	37.2	32.3	28.6	23.4	19.9	17.4	12.8	10.2	7.4	5.9	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.80	20 °C	111	87.4	74.5	65.2	55.2	44.2	37.1	32.1	28.3	23.1	19.6	17.1	12.5	10.0	7.2	5.7	4.7	4.1	3.2	2.6	2.3	1.4	1.2
	25 °C	115	90.0	76.7	67.2	56.9	45.6	38.2	33.0	29.2	23.8	20.2	17.6	12.9	10.3	7.4	5.9	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.77	20 °C	124	94.9	79.9	69.3	58.1	46.1	38.4	33.0	29.1	23.6	20.0	17.4	12.7	10.1	7.3	5.7	4.8	4.1	3.2	2.7	2.3	1.4	1.2
	25 °C	128	97.7	82.3	71.4	59.9	47.5	39.5	34.0	30.0	24.3	20.6	17.9	13.1	10.4	7.5	5.9	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.75	20 °C	132	100	83.2	71.8	59.9	47.2	39.2	33.6	29.5	23.9	20.2	17.5	12.8	10.1	7.3	5.8	4.8	4.1	3.2	2.7	2.3	1.4	1.2
	25 °C	136	103	85.7	74.0	61.7	48.6	40.3	34.6	30.4	24.6	20.8	18.1	13.1	10.4	7.5	5.9	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.72	20 °C	144	106	87.9	75.3	62.2	48.6	40.2	34.3	30.1	24.3	20.4	17.7	12.9	10.2	7.3	5.8	4.8	4.1	3.2	2.7	2.3	1.4	1.2
	25 °C	149	110	90.5	77.5	64.1	50.1	41.4	35.4	31.0	25.0	21.1	18.3	13.2	10.5	7.5	5.9	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.70	20 °C	153	111	90.8	77.4	63.7	49.5	40.8	34.8	30.4	24.5	20.6	17.9	12.9	10.2	7.3	5.8	4.8	4.1	3.2	2.7	2.3	1.4	1.2
	25 °C	157	114	93.5	79.8	65.6	51.0	42.0	35.8	31.3	25.2	21.2	18.4	13.3	10.5	7.6	6.0	4.9	4.2	3.3	2.7	2.3	1.5	1.3
1.67	20 °C	165	117	95.0	80.4	65.7	50.7	41.6	35.4	30.9	24.8	20.8	18.0	13.0	10.3	7.4	5.8	4.8	4.1	3.2	2.7	2.3	1.4	1.2
	25 °C	170	120	97.8	82.8	67.7	52.3	42.8	36.4	31.8	25.5	21.4	18.6	13.4	10.6	7.6	6.0	5.0	4.3	3.3	2.7	2.3	1.5	1.3
1.65	20 °C	173	121	97.6	82.3	67.0	51.5	42.1	35.7	31.1	24.9	20.9	18.1	13.1	10.3	7.4	5.8	4.8	4.1	3.2	2.7	2.3	1.5	1.2
	25 °C	178	125	100	84.8	69.0	53.0	43.3	36.8	32.1	25.7	21.6	18.6	13.4	10.6	7.6	6.0	5.0	4.3	3.3	2.7	2.3	1.5	1.3
1.63	20 °C	180	125	100	84.0	68.1	52.1	42.5	36.0	31.4	25.1	21.0	18.2	13.1	10.3	7.4	5.8	4.8	4.1	3.2	2.7	2.3	1.5	1.2
	25 °C	186	128	103	86.5	70.1	53.7	43.8	37.1	32.3	25.9	21.7	18.7	13.5	10.7	7.6	6.0	5.0	4.3	3.3	2.8	2.3	1.5	1.3
1.60	20 °C	191	130	103	86.3	69.6	53.0	43.1	36.5	31.7	25.3	21.2	18.3	13.1	10.4	7.4	5.8	4.8	4.1	3.2	2.7	2.3	1.5	1.2
	25 °C	197	134	106	88.9	71.7	54.6	44.4	37.6	32.7	26.1	21.8	18.8	13.5	10.7	7.6	6.0	5.0	4.3	3.3	2.8	2.3	1.5	1.3

Constant power performance (in watt per cell) to the defined end-of-discharge voltage

Voltage [Vpc]	Temp	Discharge time [Minutes]																						
		1-2	3	5	7	10	15	20	25	30	40	50	60	90	120	180	240	300	360	480	600	720	1200	1440
1.90	20 °C	134	114	102	93.0	81.9	68.7	59.3	52.4	47.0	39.2	33.8	29.8	22.3	18.0	13.2	10.5	8.8	7.6	6.0	5.0	4.3	2.8	2.4
	25 °C	138	118	105	95.7	84.4	70.7	61.1	54.0	48.4	40.4	34.9	30.7	23.0	18.6	13.6	10.9	9.1	7.9	6.2	5.2	4.4	2.9	2.5
1.87	20 °C	156	130	114	103	89.5	73.9	63.2	55.4	49.4	40.9	35.1	30.8	22.8	18.4	13.4	10.7	8.9	7.7	6.1	5.0	4.3	2.8	2.4
	25 °C	161	134	118	106	92.2	76.1	65.1	57.1	50.9	42.1	36.1	31.7	23.5	18.9	13.8	11.0	9.2	7.9	6.2	5.2	4.5	2.9	2.5
1.85	20 °C	170	139	122	109	94.1	77.0	65.5	57.1	50.8	41.8	35.7	31.3	23.1	18.5	13.5	10.7	9.0	7.7	6.1	5.1	4.3	2.8	2.4
	25 °C	176	144	126	112	96.9	79.3	67.4	58.8	52.3	43.1	36.8	32.3	23.8	19.1	13.9	11.0	9.2	7.9	6.3	5.2	4.5	2.9	2.5
1.84	20 °C	178	144	126	112	96.2	78.4	66.5	57.9	51.4	42.2	36.0	31.6	23.3	18.6	13.5	10.7	9.0	7.7	6.1	5.1	4.3	2.8	2.4
	25 °C	183	149	129	115	99.1	80.8	68.5	59.6	53.0	43.5	37.1	32.5	24.0	19.2	13.9	11.1	9.2	8.0	6.3	5.2	4.5	2.9	2.5
1.83	20 °C	185	149	129	115	98.2	79.8	67.4	58.6	52.0	42.6	36.3	31.8	23.4	18.7	13.6	10.8	9.0	7.7	6.1	5.1	4.3	2.8	2.4
	25 °C	190	153	133	118	101	82.1	69.5	60.4	53.6	43.9	37.4	32.7	24.1	19.3	14.0	11.1	9.3	8.0	6.3	5.2	4.5	2.9	2.5
1.82	20 °C	192	153	132	117	100	81.0	68.3	59.3	52.5	43.0	36.6	32.0	23.5	18.8	13.6	10.8	9.0	7.8	6.1	5.1	4.3	2.8	2.4
	25 °C	197	158	136	121	103	83.5	70.4	61.1	54.1	44.3	37.7	32.9	24.2	19.3	14.0	11.1	9.3	8.0	6.3	5.2	4.5	2.9	2.5
1.80	20 °C	205	162	139	122	104	83.3	70.0	60.5	53.5	43.6	37.1	32.3	23.7	18.9	13.7	10.8	9.0	7.8	6.1	5.1	4.4	2.8	2.4
	25 °C	211	167	143	126	107	85.8	72.1	62.4	55.1	45.0	38.2	33.3	24.4	19.5	14.1	11.2	9.3	8.0	6.3	5.2	4.5	2.9	2.5
1.77	20 °C	224	174	147	129	108	86.4	72.1	62.1	54.7	44.5	37.6	32.8	23.9	19.0	13.7	10.9	9.1	7.8	6.1	5.1	4.4	2.8	2.4
	25 °C	231	179	152	133	112	88.9	74.3	64.0	56.4	45.8	38.8	33.7	24.6	19.6	14.2	11.2	9.3	8.0	6.3	5.2	4.5	2.9	2.5
1.75	20 °C	236	181	153	133	111	88.1	73.3	63.0	55.4	44.9	38.0	33.0	24.0	19.1	13.8	10.9	9.1	7.8	6.1	5.1	4.4	2.8	2.4
	25 °C	244	186	157	137	115	90.7	75.5	64.9	57.1	46.3	39.1	34.0	24.8	19.7	14.2	11.2	9.4	8.0	6.3	5.3	4.5	2.9	2.5
1.72	20 °C	254	191	160	138	115	90.4	74.9	64.2	56.3	45.5	38.4	33.3	24.2	19.2	13.8	10.9	9.1	7.8	6.2	5.1	4.4	2.8	2.4
	25 °C	261	196	164	142	118	93.1	77.1	66.1	58.0	46.9	39.5	34.3	24.9	19.8	14.3	11.3	9.4	8.1	6.3	5.3	4.5	2.9	2.5
1.70	20 °C	265	197	164	141	117	91.7	75.8	64.9	56.8	45.8	38.6	33.5	24.3	19.3	13.9	11.0	9.1	7.8	6.2	5.1	4.4	2.8	2.4
	25 °C	273	203	169	145	121	94.5	78.1	66.8	58.5	47.2	39.8	34.5	25.0	19.9	14.3	11.3	9.4	8.1	6.4	5.3	4.5	2.9	2.5
1.67	20 °C	280	205	170	145	120	93.5	77.0	65.7	57.5	46.3	38.9	33.7	24.4	19.4	13.9	11.0	9.1	7.9	6.2	5.1	4.4	2.8	2.4
	25 °C	289	211	175	150	124	96.3	79.4	67.7	59.2	47.7	40.1	34.8	25.2	19.9	14.3								