GNB®
INDUSTRIAL POWER
A Division of Exide Technologies

Industrial Batteries / Network Power

Marathon L / XL

»More energy for safer storage«

MARATHON®

Industrial Batteries

The powerful range of Network Power

Energy storage solutions for critical systems that require uninterrupted power supply. GNB® Industrial Power offers powerful batteries for your individual needs. The below table is only indicative and depends on customers' specific applications. For more information please ask a GNB sales representative.

Applications	Battery ranges																		
	Sonnenschein							Marathon		Sprinter			Absolyte	Powerfit	Classic				
	A400/ A600	A400 FT	A500	A700	SOLAR	RAIL	Power Cycle	M - FT	M/L/ XL	S	P/XP	XP - FT	GP/GX	S300	GRoE	OCSM	OPzS	Energy Bloc/OGi	Solar	rail
Telecom	●	●	●	●			●	●	●	●		●	●			●	●	●		
UPS		●	●	●			●	●	●	●	●	●	●			●		●		
Emergency lighting	●		●						●		●	●		●			●	●		
Security	●		●	●							●	●		●		●	●			
Utility	●	●		●			●	●	●	●			●		●	●	●	●		
Railways	●	●	●	●		●	●	●	●	●			●			●		●		●
Photovoltaic					●		●						●						●	
Universal	●	●	●	●			●	●	●	●	●	●	●	●		●	●	●		

The GNB Network Power brand overview

ABSOLYTE® MARATHON® Sprinter® Powerfit®

> VRLA batteries (**V**alve **R**egulated **L**ead **A**cid) in which the electrolyte is fixed in an absorbent glass mat (AGM)
> Excellent high current capability
> Very economical
> Maintenance-free (no topping up)

Sonnenschein®

> VRLA batteries (**V**alve **R**egulated **L**ead **A**cid) in which the electrolyte is fixed in a gel (dryfit technology)
> Inventor of Gel technology
> Highest reliability, even in non-optimal conditions
> Particularly suitable for cyclic applications
> Maintenance-free (no topping up)

Classic®

> Conventional lead-acid batteries with liquid electrolyte
> Extreme reliability, proven over decades
> Low maintenance

BATTERY SERVICE ENERGY SOLUTIONS

> Further information about service is available on page 14

Marathon L/XL

The safe storage system with long design life

Designed for durability in telecommunications and electric utility applications, the Marathon L/XL series provides high performance and reliability in medium and long duration discharge applications.

Your benefits:

> **Robust design** – for maximum service float life

> **Wide range of capacities and voltages** – scalable to any power need

> **Short recharging time** – high availability

> **Optimal energy density** – saves floor space

> **Completely recyclable** – low CO_2 footprint

Specifications:

> Maintenance-free (no topping up) during the whole service life
> High-Compression Absorbent Glass Mat (AGM) technology
> Nominal capacity 14 – 575 Ah
> Design life: »> 12 years – Very Long Life« according to EUROBAT 2015 Classification
> Available as standard or flame retardant version (UL 94-V0)
> Grid plates with superior lead calcium alloy for excellent corrosion resistance
> Very low gassing due to internal gas recombination (99% efficiency)
> Low self discharge rate, enabling extended storage capability
> Designed in accordance with IEC 60896-21/-22
> Approval for blocks: Underwriter Laboratories (UL)
> Trouble-free transportation of operational blocks and cells, no restriction for most rail, road, sea and air transportation (IATA, DGR clause A67)
> Manufactured in Europe in our ISO 9001 certified production plants

Design life > 12 years – Very Long Life | Nominal capacity 14.0 - 575 Ah | Block battery/ single cell | Grid plate | Recyclable | Valve regulated lead-acid batteries | Maintenance free (no topping up) | Special high current performance

Marathon L/XL
Technical data

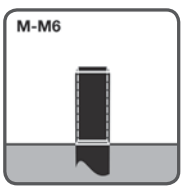
Technical characteristics and data

Type	Part number	Nom. voltage V	Nominal capacity C_{10} 1.80 Vpc 20°C Ah	Nominal capacity C_{20} 1.80 Vpc 20°C Ah	Nominal capacity C_1 1.60 Vpc 20°C Ah	Length (l) mm	Width (b/w) mm	Height (h1) max. mm	Height incl. connectors (h2) max. mm	Weight approx. kg	Internal resistance mOhm	Short circuit current A	Terminal	Pole pairs
L2V220	NALL020220HM0FA	2	220	236	150	209	136	265	283	16.0	0.41	5142	F-M8	1
L2V270	NALL020270HM0FA	2	270	289	183	209	136	265	283	18.3	0.35	6012	F-M8	1
L2V320	NALL020320HM0FA	2	320	346	225	209	202	265	283	24.2	0.23	8907	2xF-M8	2
L2V375	NALL020375HM0FA	2	375	404	262	209	202	265	283	26.5	0.24	8586	2xF-M8	2
L2V425	NALL020425HM0FA	2	425	456	291	209	202	265	283	28.8	0.25	8238	2xF-M8	2
L2V470	NALL020470HM0FA	2	470	507	324	209	270	265	283	32.6	0.22	9437	2xF-M8	2
L2V520	NALL020520HM0FA	2	520	559	357	209	270	265	283	35.0	0.13	15659	2xF-M8	2
L2V575	NALL020575HM0FA	2	575	618	394	209	270	265	283	37.3	0.25	8390	2xF-M8	2
L6V110	NALL060110HM0MC	6	112	118	75.5	272	166	190	-	21.3	2.1	3010	M-M8	1
XL6V180	NAXL060180HM0FA	6	179	187	120	309	172	223	241	30.0	1.6	3934	F-M6	1
L12V15	NALL120015HM0MA	12	14.0	14.4	9.90	181	76.0	167	-	6.50	20.3	616	M-M6	1
L12V24	NALL120024HM0MA	12	23.5	24.0	15.8	168	127	174	-	9.50	14.3	880	M-M6	1
L12V32	NALL120032HM0MC	12	31.5	33.0	21.4	198	168	175	-	13.5	13.0	966	M-M6	1
XL12V50	NAXL120050HM0FA	12	50.4	55.4	32.7	220	172	219	235	19.5	9.2	1367	F-M6	1
XL12V70	NAXL120070HM0FA	12	66.6	71.8	45.6	262	172	223	239	24.6	9.0	1420	F-M6	1
XL12V85	NAXL120085HM0FA	12	85.7	90.8	57.5	309	172	223	239	29.3	5.7	2192	F-M6	1

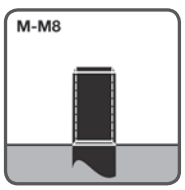
Container, terminal and torque

> Container: - UL 94-HB = Polypropylene (PP)
- UL 94-V0 = Polypropylene (PP)

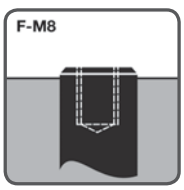
Figures are also valid for UL 94-V0 version.
Change »**H**« to »**V**« in the part number. E.g.:
> Standard: NALL120015 **H** M0MA
> UL 94-V0: NALL120015 **V** M0MA



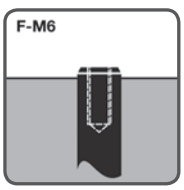
6 Nm



8 Nm



20 Nm

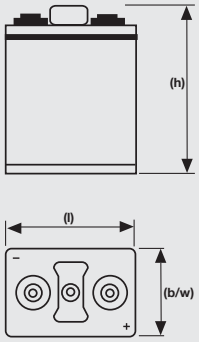


11 Nm

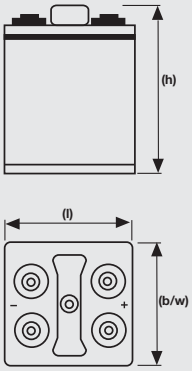
Marathon L/XL

Drawings

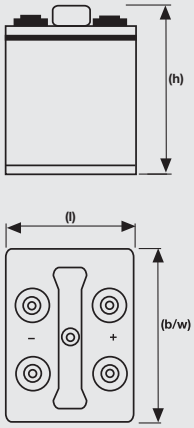
L2V220 - L2V270



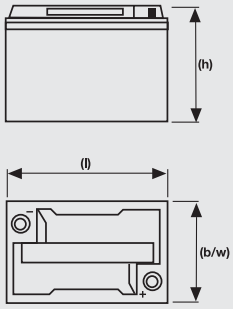
L2V320 - L2V425



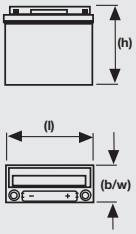
L2V470 - L2V575



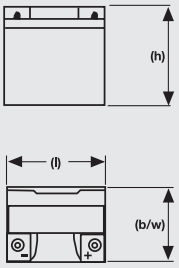
L6V110



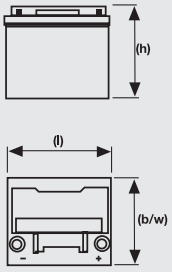
L12V15



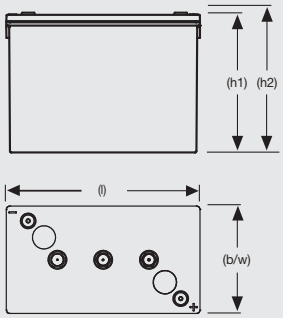
L12V24



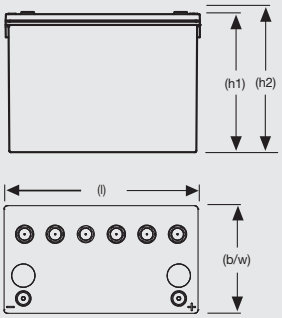
L12V32



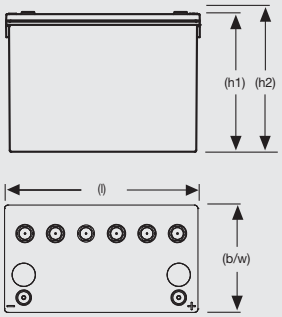
XL6V180



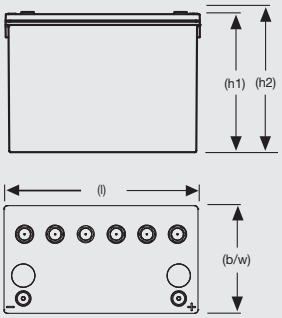
XL12V50



XL12V70



XL12V85



Not to scale!.

Marathon L/XL

Constant current discharge

1.95 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	215	203	176	161	146	122	99.0	85.5	55.6	42.0	28.3	19.5	16.2	8.70
L2V270	NALL020270HM0FA	248	237	210	190	174	148	121	105	68.4	51.5	34.7	23.9	19.9	10.7
L2V320	NALL020320HM0FA	358	336	288	256	230	190	153	130	83.7	62.0	41.9	28.9	23.9	12.8
L2V375	NALL020375HM0FA	405	380	330	295	265	222	179	152	98.0	72.7	49.1	33.9	28.0	15.1
L2V425	NALL020425HM0FA	420	394	344	310	282	236	192	163	107	81.1	54.7	37.7	31.2	16.8
L2V470	NALL020470HM0FA	460	433	390	348	317	272	217	183	118	88.4	60.2	41.5	34.6	18.5
L2V520	NALL020520HM0FA	490	468	417	374	346	291	238	202	130	97.8	66.6	45.9	38.3	20.4
L2V575	NALL020575HM0FA	515	495	447	404	370	317	260	221	143	108	73.6	50.7	42.4	22.6
L6V110	NALL060110HM0MC	143	139	125	111	99.0	80.0	62.0	50.0	30.2	23.0	14.5	9.90	8.60	4.50
XL6V180	NAXL060180HM0FA	NA	212	191	173	155	124	96.9	81.0	48.0	33.8	23.1	15.5	13.7	7.18
L12V15	NALL120015HM0MA	22.0	21.0	18.0	15.0	14.0	10.6	8.20	6.50	4.00	2.80	1.80	1.30	1.20	0.60
L12V24	NALL120024HM0MA	35.0	34.0	29.0	25.0	22.0	17.3	13.1	10.7	6.30	4.60	3.10	2.10	1.80	1.00
L12V32	NALL120032HM0MC	45.0	44.0	39.0	33.0	29.0	23.0	17.5	14.2	8.20	6.00	4.00	2.70	2.40	1.30
XL12V50	NAXL120050HM0FA	NA	63.6	53.7	46.9	42.5	35.0	27.4	22.1	12.6	8.90	6.24	4.36	3.86	2.10
XL12V70	NAXL120070HM0FA	NA	101	84.1	69.2	61.8	47.7	35.8	27.6	16.8	12.2	8.39	5.79	4.99	2.63
XL12V85	NAXL120085HM0FA	NA	114	94.5	82.0	76.3	62.1	47.5	38.1	23.1	17.1	11.3	7.55	6.45	3.43

1.90 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	325	300	250	216	191	156	124	103	65.8	50.0	33.3	22.7	18.8	10.1
L2V270	NALL020270HM0FA	380	350	298	259	232	190	152	128	81.0	61.3	40.8	27.8	23.1	12.4
L2V320	NALL020320HM0FA	505	465	394	345	306	248	196	162	99.0	73.8	49.3	33.6	27.8	14.9
L2V375	NALL020375HM0FA	582	540	455	398	351	288	228	190	116	86.5	57.8	39.4	32.6	17.5
L2V425	NALL020425HM0FA	625	578	493	424	372	305	241	201	127	96.5	64.3	43.8	36.3	19.5
L2V470	NALL020470HM0FA	690	644	550	482	428	352	274	228	145	109	72.6	49.4	41.0	21.8
L2V520	NALL020520HM0FA	740	685	590	515	459	379	299	250	159	120	80.3	54.7	45.3	24.1
L2V575	NALL020575HM0FA	790	730	635	560	500	414	329	276	176	133	88.8	60.5	50.1	26.7
L6V110	NALL060110HM0MC	222	208	169	141	121	94.0	73.0	59.0	37.0	28.0	17.8	11.8	10.3	5.40
XL6V180	NAXL060180HM0FA	NA	314	256	222	192	148	114	94.5	55.0	39.5	27.0	18.3	16.2	8.54
L12V15	NALL120015HM0MA	34.0	30.0	23.0	19.0	16.0	12.4	9.50	7.70	4.80	3.30	2.30	1.50	1.30	0.60
L12V24	NALL120024HM0MA	56.0	50.0	39.0	31.0	26.0	20.1	15.4	12.6	7.70	5.80	3.70	2.40	2.10	1.10
L12V32	NALL120032HM0MC	73.0	65.0	50.0	41.0	34.0	27.0	21.0	17.0	10.1	7.20	5.00	3.20	2.80	1.50
XL12V50	NAXL120050HM0FA	NA	95.5	71.3	59.1	52.4	41.0	31.9	26.4	15.4	10.7	7.78	5.39	4.61	2.55
XL12V70	NAXL120070HM0FA	NA	145	109	86.3	75.2	56.6	42.6	33.1	20.9	15.5	10.3	6.97	5.82	3.11
XL12V85	NAXL120085HM0FA	NA	161	122	102	92.0	72.6	54.5	44.4	27.3	20.1	13.5	9.13	7.76	4.14

Marathon L/XL

Constant current discharge

1.85 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	435	395	324	276	241	192	148	122	75.5	56.4	37.1	25.2	21.0	11.3
L2V270	NALL020270HM0FA	515	470	389	331	290	233	182	150	92.5	69.2	45.5	30.9	25.7	13.8
L2V320	NALL020320HM0FA	655	595	490	417	360	288	223	184	112	82.7	54.4	36.8	30.6	16.5
L2V375	NALL020375HM0FA	750	690	564	482	422	337	263	215	131	97.0	63.7	43.2	35.9	19.4
L2V425	NALL020425HM0FA	840	765	629	540	471	374	289	238	146	109	71.7	48.7	40.6	21.8
L2V470	NALL020470HM0FA	895	820	688	595	520	419	321	264	162	121	80.5	54.4	45.0	24.3
L2V520	NALL020520HM0FA	955	880	743	640	560	452	350	289	178	133	89.0	60.2	49.8	26.8
L2V575	NALL020575HM0FA	1015	940	800	695	612	499	388	321	198	148	98.4	66.6	55.1	29.6
L6V110	NALL060110HM0MC	300	265	208	169	141	106	81.0	66.5	40.3	30.5	19.8	13.0	10.8	5.70
XL6V180	NAXL060180HM0FA	NA	409	315	265	224	168	125	103	60.3	43.3	30.7	20.4	17.0	8.95
L12V15	NALL120015HM0MA	46.0	39.0	28.0	22.0	18.0	14.1	10.7	8.60	5.30	3.70	2.40	1.60	1.30	0.70
L12V24	NALL120024HM0MA	76.0	64.0	47.0	36.5	30.0	22.7	17.1	14.0	8.30	6.30	4.00	2.60	2.20	1.20
L12V32	NALL120032HM0MC	100	84.0	61.0	48.0	40.0	30.0	23.0	18.8	11.4	8.50	5.50	3.50	3.00	1.60
XL12V50	NAXL120050HM0FA	NA	124	87.1	68.5	59.4	46.0	35.5	28.7	17.0	12.2	8.49	5.71	4.83	2.66
XL12V70	NAXL120070HM0FA	NA	179	129	101	87.6	63.2	47.1	37.5	23.0	16.8	11.2	7.56	6.30	3.35
XL12V85	NAXL120085HM0FA	NA	201	147	121	105	81.4	60.4	49.7	29.9	22.2	14.9	9.86	8.16	4.34

1.80 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	525	470	382	320	275	214	163	133	80.0	59.4	38.8	26.3	22.0	11.8
L2V270	NALL020270HM0FA	630	565	456	384	332	261	200	163	98.0	72.8	47.6	32.2	27.0	14.4
L2V320	NALL020320HM0FA	790	715	575	485	418	326	247	202	120	87.0	56.7	38.4	32.0	17.3
L2V375	NALL020375HM0FA	915	825	670	562	486	381	290	236	141	102	66.5	45.0	37.5	20.2
L2V425	NALL020425HM0FA	1025	920	744	622	535	416	317	259	155	115	75.0	50.8	42.5	22.8
L2V470	NALL020470HM0FA	1085	980	805	688	590	466	356	291	174	127	84.3	56.7	47.0	25.3
L2V520	NALL020520HM0FA	1160	1060	875	745	644	512	392	320	192	141	93.3	62.8	52.0	27.9
L2V575	NALL020575HM0FA	1235	1130	948	816	709	568	434	354	212	156	103	69.4	57.5	30.9
L6V110	NALL060110HM0MC	373	317	234	187	153	115	86.0	71.0	43.3	32.8	20.8	13.5	11.2	5.90
XL6V180	NAXL060180HM0FA	NA	482	355	289	242	181	135	110	63.8	46.7	32.2	21.4	17.9	9.37
L12V15	NALL120015HM0MA	56.0	46.0	32.0	24.0	20.0	15.0	11.5	9.30	5.70	4.10	2.50	1.70	1.40	0.70
L12V24	NALL120024HM0MA	92.0	76.0	52.0	40.0	32.5	24.7	18.2	14.9	9.00	6.80	4.20	2.70	2.30	1.20
L12V32	NALL120032HM0MC	120	99.0	70.0	54.0	44.0	33.0	24.5	20.2	12.3	9.10	5.90	3.70	3.20	1.70
XL12V50	NAXL120050HM0FA	NA	145	99.2	77.9	67.3	51.0	38.6	30.7	18.5	13.6	8.90	5.91	5.04	2.77
XL12V70	NAXL120070HM0FA	NA	203	142	110	94.3	68.2	51.1	40.6	24.6	17.8	12.0	8.04	6.66	3.59
XL12V85	NAXL120085HM0FA	NA	234	168	134	116	88.0	64.7	52.6	31.0	23.1	15.7	10.3	8.57	4.54

Marathon L/XL

Constant current discharge

1.75 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	615	545	432	354	302	232	176	141	83.5	61.2	39.6	26.8	22.3	12.0
L2V270	NALL020270HM0FA	740	660	524	434	370	283	214	173	102	75.0	48.6	32.9	27.4	14.7
L2V320	NALL020320HM0FA	945	835	645	527	450	349	263	214	125	88.8	57.6	39.0	32.4	17.5
L2V375	NALL020375HM0FA	1090	965	750	612	524	406	308	250	146	104	67.5	45.7	38.0	20.5
L2V425	NALL020425HM0FA	1200	1065	835	690	590	451	340	274	162	118	76.5	51.8	43.1	23.2
L2V470	NALL020470HM0FA	1290	1150	905	765	645	503	377	305	179	130	85.7	57.3	47.4	25.7
L2V520	NALL020520HM0FA	1390	1245	990	830	710	555	417	337	197	144	94.8	63.5	52.4	28.2
L2V575	NALL020575HM0FA	1480	1335	1075	900	776	606	459	372	218	159	104	70.0	57.9	31.2
L6V110	NALL060110HM0MC	430	363	259	202	163	120	90.0	73.5	44.2	33.6	21.4	13.8	11.5	6.10
XL6V180	NAXL060180HM0FA	NA	540	385	309	256	189	141	114	66.0	48.1	33.1	22.0	18.3	9.68
L12V15	NALL120015HM0MA	62.0	51.0	35.0	26.0	21.0	15.8	11.8	9.50	5.90	4.30	2.60	1.70	1.50	0.80
L12V24	NALL120024HM0MA	104	83.0	56.0	43.0	34.5	25.7	18.8	15.1	9.20	6.90	4.30	2.80	2.40	1.30
L12V32	NALL120032HM0MC	135	110	75.0	58.0	46.0	34.5	25.0	20.5	12.6	9.20	6.00	3.80	3.30	1.70
XL12V50	NAXL120050HM0FA	NA	162	107	82.6	70.2	53.0	39.6	31.2	19.0	13.9	9.11	6.02	5.15	2.88
XL12V70	NAXL120070HM0FA	NA	222	154	116	100	71.5	53.4	42.8	25.3	18.4	12.3	8.27	6.89	3.70
XL12V85	NAXL120085HM0FA	NA	258	178	142	121	90.2	66.9	53.9	32.1	23.9	16.1	10.7	8.77	4.64

1.70 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	695	610	468	378	318	241	181	146	86.0	62.2	40.2	27.1	22.5	12.1
L2V270	NALL020270HM0FA	845	740	568	462	389	297	223	178	105	76.4	49.3	33.2	27.6	14.8
L2V320	NALL020320HM0FA	1105	955	710	562	473	361	271	220	127	90.6	58.4	39.4	32.7	17.6
L2V375	NALL020375HM0FA	1265	1100	825	658	554	424	319	257	149	106	68.5	46.2	38.3	20.6
L2V425	NALL020425HM0FA	1370	1195	915	738	617	468	351	282	166	120	77.6	52.3	43.5	23.4
L2V470	NALL020470HM0FA	1455	1290	995	818	684	528	391	314	182	133	86.7	57.8	47.6	25.9
L2V520	NALL020520HM0FA	1570	1400	1095	892	760	580	432	347	201	146	95.9	64.1	52.7	28.5
L2V575	NALL020575HM0FA	1665	1490	1180	970	828	635	476	383	222	162	106	70.9	58.3	31.4
L6V110	NALL060110HM0MC	467	391	273	211	169	124	92.0	74.5	44.9	34.1	21.8	14.1	11.7	6.30
XL6V180	NAXL060180HM0FA	NA	592	414	327	265	194	144	116	67.4	49.0	33.9	22.4	18.7	9.79
L12V15	NALL120015HM0MA	68.0	54.0	37.0	27.0	22.0	16.3	12.1	9.70	6.10	4.40	2.70	1.80	1.50	0.80
L12V24	NALL120024HM0MA	112	89.0	60.0	45.0	36.5	26.5	19.2	15.3	9.30	7.00	4.40	2.90	2.40	1.30
L12V32	NALL120032HM0MC	148	118	80.0	60.0	48.0	35.5	26.0	20.8	12.7	9.30	6.10	3.90	3.30	1.80
XL12V50	NAXL120050HM0FA	NA	174	112	86.4	73.2	54.5	40.6	31.7	19.2	14.1	9.21	6.12	5.26	2.88
XL12V70	NAXL120070HM0FA	NA	238	161	121	103	73.8	55.7	43.8	26.0	19.0	12.4	8.39	7.01	3.82
XL12V85	NAXL120085HM0FA	NA	289	190	148	125	92.4	68.5	55.3	32.9	24.5	16.5	10.8	8.87	4.74

Marathon L/XL

Constant current discharge

1.65 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	775	670	500	400	330	249	185	149	87.0	63.0	40.6	27.2	22.6	12.1
L2V270	NALL020270HM0FA	935	815	610	486	405	305	227	182	106	77.3	49.8	33.4	27.7	14.9
L2V320	NALL020320HM0FA	1245	1055	765	595	495	374	277	223	128	91.8	59.0	39.6	32.9	17.6
L2V375	NALL020375HM0FA	1435	1215	880	695	575	436	324	260	150	107	69.2	46.5	38.5	20.7
L2V425	NALL020425HM0FA	1550	1325	980	775	642	485	360	288	168	122	78.4	52.5	43.7	23.5
L2V470	NALL020470HM0FA	1630	1420	1065	860	720	540	399	320	185	134	87.2	58.1	47.9	26.0
L2V520	NALL020520HM0FA	1765	1545	1170	948	797	597	441	353	204	148	96.5	64.4	53.0	28.7
L2V575	NALL020575HM0FA	1870	1650	1260	1025	865	655	485	389	225	164	106	71.1	58.6	31.6
L6V110	NALL060110HM0MC	496	413	283	216	175	128	93.5	75.0	45.5	34.5	21.9	14.2	11.8	6.40
XL6V180	NAXL060180HM0FA	NA	642	430	336	272	198	146	118	68.6	50.0	34.1	22.6	18.8	9.89
L12V15	NALL120015HM0MA	71.0	57.0	38.0	27.5	22.5	16.6	12.4	9.80	6.10	4.40	2.70	1.80	1.50	0.80
L12V24	NALL120024HM0MA	119	94.0	62.0	46.0	37.5	27.2	19.6	15.5	9.40	7.00	4.40	2.90	2.40	1.30
L12V32	NALL120032HM0MC	156	125	83.0	62.0	50.0	36.5	26.5	21.1	12.8	9.40	6.10	3.90	3.30	1.80
XL12V50	NAXL120050HM0FA	NA	183	116	89.2	74.7	55.5	41.1	32.2	19.4	14.3	9.31	6.12	5.26	2.88
XL12V70	NAXL120070HM0FA	NA	253	168	126	106	76.0	56.8	44.4	26.3	19.3	12.5	8.39	7.01	3.82
XL12V85	NAXL120085HM0FA	NA	319	201	154	129	94.6	70.1	56.7	33.6	24.9	16.7	10.9	8.87	4.74

1.60 Vpc – Discharge in A at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	850	725	525	410	338	254	187	150	87.5	63.5	40.8	27.3	22.7	12.2
L2V270	NALL020270HM0FA	1020	870	638	500	414	311	229	183	107	78.0	50.0	33.5	27.8	15.0
L2V320	NALL020320HM0FA	1400	1160	815	625	508	381	280	225	129	92.5	59.4	39.7	33.0	17.7
L2V375	NALL020375HM0FA	1600	1330	935	720	590	443	328	262	151	108	69.6	46.6	38.7	20.8
L2V425	NALL020425HM0FA	1700	1430	1020	800	658	494	364	291	169	123	78.8	52.7	43.8	23.5
L2V470	NALL020470HM0FA	1740	1505	1120	895	743	554	405	324	187	135	87.6	58.3	48.1	26.1
L2V520	NALL020520HM0FA	1885	1640	1225	983	817	609	446	357	206	149	96.9	64.6	53.2	28.8
L2V575	NALL020575HM0FA	2015	1755	1325	1065	886	669	492	394	228	165	107	71.3	58.8	31.7
L6V110	NALL060110HM0MC	519	431	291	222	178	130	95.0	75.5	45.9	34.7	21.9	14.2	11.8	6.40
XL6V180	NAXL060180HM0FA	NA	672	446	348	279	201	148	120	69.1	50.3	34.2	22.7	18.8	9.89
L12V15	NALL120015HM0MA	74.0	59.0	39.0	28.0	23.0	17.0	12.6	9.90	6.10	4.40	2.70	1.80	1.50	0.80
L12V24	NALL120024HM0MA	123	97.0	64.0	47.0	38.5	27.9	19.9	15.8	9.50	7.00	4.40	2.90	2.40	1.30
L12V32	NALL120032HM0MC	160	129	85.0	64.0	51.0	37.5	27.0	21.4	12.9	9.50	6.10	3.90	3.30	1.80
XL12V50	NAXL120050HM0FA	NA	190	120	91.1	76.2	56.5	41.6	32.7	19.6	14.4	9.31	6.12	5.26	2.88
XL12V70	NAXL120070HM0FA	NA	264	172	130	109	78.2	58.0	45.6	26.6	19.4	12.5	8.39	7.01	3.82
XL12V85	NAXL120085HM0FA	NA	334	208	158	131	96.2	71.2	57.5	33.9	25.1	16.7	10.9	8.87	4.74

Marathon L/XL

Constant power discharge

1.90 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	615	570	485	420	370	307	246	207	131	99.0	66.4	45.4	37.8	NA
L2V270	NALL020270HM0FA	735	675	575	504	448	370	297	251	160	122	81.5	55.7	46.4	NA
L2V320	NALL020320HM0FA	920	855	725	630	555	456	357	296	187	143	96.1	66.2	54.9	NA
L2V375	NALL020375HM0FA	1080	1000	850	740	650	527	412	348	219	167	112	77.5	64.3	NA
L2V425	NALL020425HM0FA	1170	1085	915	795	700	577	459	388	249	190	128	88.0	73.0	NA
L2V470	NALL020470HM0FA	1230	1155	1010	880	795	652	520	437	281	215	145	99.2	82.3	NA
L2V520	NALL020520HM0FA	1300	1225	1070	950	850	706	569	480	309	237	161	109	91.0	NA
L2V575	NALL020575HM0FA	1375	1300	1130	1005	915	770	621	525	341	262	178	121	100	NA
L6V110	NALL060110HM0MC	1310	1212	990	831	712	559	432	359	220	166	107	71.0	60.0	NA
XL6V180	NAXL060180HM0FA	NA	1680	1570	1310	1120	876	683	565	334	246	155	106	91.8	50.9
L12V15	NALL120015HM0MA	399	357	275	222	188	148	116	98.0	57.0	44.0	29.0	19.0	16.0	NA
L12V24	NALL120024HM0MA	660	588	448	362	305	240	185	153	92.0	68.0	44.0	29.0	25.0	NA
L12V32	NALL120032HM0MC	862	759	585	477	407	318	248	207	122	89.0	60.0	40.0	34.0	NA
XL12V50	NAXL120050HM0FA	NA	1064	820	699	597	483	376	314	186	134	92.3	64.1	53.9	29.6
XL12V70	NAXL120070HM0FA	NA	1640	1230	1000	836	657	498	398	240	177	121	81.6	69.9	38.5
XL12V85	NAXL120085HM0FA	NA	1770	1380	1180	1070	854	647	534	327	244	152	106	91.7	48.7

1.85 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	775	710	585	505	440	363	282	236	146	109	72.5	49.7	41.5	NA
L2V270	NALL020270HM0FA	930	850	700	604	532	438	343	287	178	133	89.0	61.0	50.9	NA
L2V320	NALL020320HM0FA	1160	1070	885	750	655	527	410	340	212	161	106	72.6	60.6	NA
L2V375	NALL020375HM0FA	1340	1230	1020	875	765	617	482	400	249	188	125	85.0	70.9	NA
L2V425	NALL020425HM0FA	1490	1370	1135	970	855	685	543	450	282	213	142	96.6	80.5	NA
L2V470	NALL020470HM0FA	1595	1480	1255	1080	955	770	599	496	308	234	157	108	89.2	NA
L2V520	NALL020520HM0FA	1690	1570	1340	1160	1030	840	657	545	339	258	174	120	98.6	NA
L2V575	NALL020575HM0FA	1785	1650	1420	1245	1105	907	719	599	374	285	193	132	109	NA
L6V110	NALL060110HM0MC	1722	1530	1184	971	811	625	479	393	244	181	118	77.0	64.0	NA
XL6V180	NAXL060180HM0FA	NA	2140	1880	1520	1270	978	750	629	366	268	173	117	97.9	55.1
L12V15	NALL120015HM0MA	519	442	321	254	210	164	127	106	64.0	48.0	31.0	20.0	17.0	NA
L12V24	NALL120024HM0MA	859	732	529	419	348	267	205	167	100	73.0	48.0	31.0	26.0	NA
L12V32	NALL120032HM0MC	1132	955	696	555	468	355	271	222	136	100	66.0	43.0	36.0	NA
XL12V50	NAXL120050HM0FA	NA	1335	975	813	691	545	412	338	204	147	101	69.6	58.2	31.7
XL12V70	NAXL120070HM0FA	NA	1970	1430	1140	948	730	549	443	269	199	131	88.5	74.6	41.1
XL12V85	NAXL120085HM0FA	NA	2110	1630	1370	1220	943	712	589	358	266	168	116	98.8	52.8

Marathon L/XL
Constant power discharge

1.80 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	915	830	675	575	498	398	303	248	151	114	75.0	51.4	43.2	NA
L2V270	NALL020270HM0FA	1085	990	810	690	595	480	370	304	186	139	92.0	63.1	53.0	NA
L2V320	NALL020320HM0FA	1380	1250	1010	860	735	580	440	364	222	167	110	75.2	62.8	NA
L2V375	NALL020375HM0FA	1595	1440	1170	995	860	668	515	423	261	196	129	88.0	73.5	NA
L2V425	NALL020425HM0FA	1750	1585	1305	1100	955	755	580	478	296	222	147	100	83.5	NA
L2V470	NALL020470HM0FA	1940	1780	1470	1240	1080	855	657	540	331	247	164	111	92.4	NA
L2V520	NALL020520HM0FA	2045	1875	1565	1330	1170	936	722	594	364	272	182	123	102	NA
L2V575	NALL020575HM0FA	2150	1985	1675	1430	1260	1015	790	652	401	300	201	136	113	NA
L6V110	NALL060110HM0MC	2048	1802	1357	1077	891	672	505	416	253	190	123	80.0	66.5	NA
XL6V180	NAXL060180HM0FA	NA	2510	2130	1680	1390	1040	796	661	387	285	181	121	101	57.2
L12V15	NALL120015HM0MA	614	514	363	280	230	177	137	113	67.0	50.0	32.0	20.5	17.0	NA
L12V24	NALL120024HM0MA	1013	845	597	459	378	286	216	176	104	78.0	50.0	32.0	27.0	NA
L12V32	NALL120032HM0MC	1321	1114	796	618	511	385	289	237	144	107	70.0	45.0	37.0	NA
XL12V50	NAXL120050HM0FA	NA	1560	1115	904	762	590	443	359	218	158	106	72.8	60.3	32.3
XL12V70	NAXL120070HM0FA	NA	2190	1570	1250	1020	780	586	473	283	210	140	91.9	77.5	42.3
XL12V85	NAXL120085HM0FA	NA	2370	1860	1540	1330	1020	759	622	375	276	177	121	102	54.7

1.75 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	1055	945	765	640	545	427	325	265	156	116	76.2	52.2	43.7	NA
L2V270	NALL020270HM0FA	1250	1125	915	763	660	515	395	323	191	142	93.5	64.0	53.6	NA
L2V320	NALL020320HM0FA	1595	1430	1135	935	800	625	472	385	230	171	112	76.5	63.4	NA
L2V375	NALL020375HM0FA	1825	1630	1315	1080	925	725	549	447	272	200	131	89.5	74.2	NA
L2V425	NALL020425HM0FA	1995	1800	1450	1215	1050	818	620	505	308	227	149	101	84.3	NA
L2V470	NALL020470HM0FA	2245	2035	1645	1375	1185	928	705	573	341	251	166	112	93.2	NA
L2V520	NALL020520HM0FA	2370	2155	1760	1490	1290	1016	774	630	376	277	183	124	103	NA
L2V575	NALL020575HM0FA	2490	2290	1880	1615	1390	1110	848	692	414	306	203	137	114	NA
L6V110	NALL060110HM0MC	2314	1995	1456	1144	938	698	525	431	261	196	126	81.0	67.5	NA
XL6V180	NAXL060180HM0FA	NA	2740	2280	1780	1460	1090	830	688	398	293	187	124	102	58.1
L12V15	NALL120015HM0MA	666	553	385	293	241	184	141	116	69.0	51.0	32.5	21.0	17.0	NA
L12V24	NALL120024HM0MA	1112	915	635	486	400	297	221	178	106	80.0	51.0	33.0	28.0	NA
L12V32	NALL120032HM0MC	1450	1206	847	655	537	400	296	241	146	109	71.0	46.0	38.0	NA
XL12V50	NAXL120050HM0FA	NA	1690	1185	958	801	612	455	365	222	162	109	75.0	60.9	32.6
XL12V70	NAXL120070HM0FA	NA	2360	1670	1320	1070	817	616	495	289	215	143	94.2	79.2	42.9
XL12V85	NAXL120085HM0FA	NA	2680	2000	1600	1380	1050	780	640	380	282	182	123	103	55.6

Marathon L/XL
Constant power discharge

1.70 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	1150	1025	810	670	570	442	336	271	159	117	77.0	52.7	44.1	NA
L2V270	NALL020270HM0FA	1375	1230	975	805	690	537	403	331	195	144	94.5	64.7	54.1	NA
L2V320	NALL020320HM0FA	1770	1565	1215	990	840	645	485	393	235	173	113	76.9	63.8	NA
L2V375	NALL020375HM0FA	2040	1790	1410	1150	980	755	568	460	275	202	132	90.0	74.7	NA
L2V425	NALL020425HM0FA	2220	1985	1575	1300	1100	850	643	519	311	229	150	102	84.7	NA
L2V470	NALL020470HM0FA	2480	2220	1765	1455	1245	962	724	586	345	254	167	113	93.9	NA
L2V520	NALL020520HM0FA	2630	2350	1890	1575	1350	1055	797	645	380	280	185	125	103	NA
L2V575	NALL020575HM0FA	2775	2515	2035	1705	1475	1154	876	710	418	309	205	138	114	NA
L6V110	NALL060110HM0MC	2487	2121	1516	1184	964	716	531	435	263	198	127	82.0	68.0	NA
XL6V180	NAXL060180HM0FA	NA	2960	2420	1860	1510	1110	838	696	403	297	191	127	103	58.6
L12V15	NALL120015HM0MA	714	585	400	301	248	189	143	118	70.0	52.0	33.0	21.0	17.0	NA
L12V24	NALL120024HM0MA	1188	972	664	505	411	305	224	180	107	81.0	52.0	34.0	28.0	NA
L12V32	NALL120032HM0MC	1576	1284	884	677	555	410	303	245	147	110	72.0	47.0	39.0	NA
XL12V50	NAXL120050HM0FA	NA	1795	1240	990	829	629	461	371	225	165	110	76.1	61.4	32.9
XL12V70	NAXL120070HM0FA	NA	2490	1740	1350	1100	831	631	506	293	218	145	95.4	80.4	43.1
XL12V85	NAXL120085HM0FA	NA	2940	2110	1660	1400	1060	791	649	385	286	184	124	104	55.9

1.65 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	1225	1090	855	698	590	453	341	275	162	118	77.8	53.0	44.2	NA
L2V270	NALL020270HM0FA	1465	1300	1020	838	710	547	412	336	198	145	95.5	65.1	54.3	NA
L2V320	NALL020320HM0FA	1910	1675	1290	1045	880	665	499	402	237	173	114	77.2	64.0	NA
L2V375	NALL020375HM0FA	2200	1920	1495	1205	1015	780	581	470	277	203	133	90.3	74.9	NA
L2V425	NALL020425HM0FA	2380	2115	1640	1335	1130	868	651	527	313	230	152	102	85.0	NA
L2V470	NALL020470HM0FA	2655	2365	1835	1495	1270	982	737	595	348	255	168	113	94.3	NA
L2V520	NALL020520HM0FA	2820	2515	1985	1635	1400	1080	810	654	383	281	186	125	104	NA
L2V575	NALL020575HM0FA	2985	2685	2140	1785	1535	1186	892	720	421	310	206	139	115	NA
L6V110	NALL060110HM0MC	2587	2201	1556	1204	984	725	535	437	265	199	128	83.0	69.0	NA
XL6V180	NAXL060180HM0FA	NA	3160	2480	1900	1530	1120	844	701	407	301	193	128	104	58.8
L12V15	NALL120015HM0MA	742	607	409	307	254	193	145	119	71.0	52.0	33.0	21.0	17.0	NA
L12V24	NALL120024HM0MA	1239	1007	680	513	419	311	226	181	108	81.0	52.0	34.0	28.0	NA
L12V32	NALL120032HM0MC	1628	1328	907	692	562	416	305	247	148	111	72.0	47.0	39.0	NA
XL12V50	NAXL120050HM0FA	NA	1860	1270	1010	839	634	464	374	227	167	110	76.1	61.4	33.2
XL12V70	NAXL120070HM0FA	NA	2600	1780	1380	1120	845	638	511	296	220	146	96.5	80.4	43.2
XL12V85	NAXL120085HM0FA	NA	3200	2210	1700	1420	1070	801	657	388	288	185	125	105	56.1

Marathon L/XL
Constant power discharge

1.60 Vpc – Discharge in W/block at 20 °C

Type	Part number	3 min	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
L2V220	NALL020220HM0FA	1300	1145	880	715	600	460	343	278	163	119	78.2	53.2	44.3	NA
L2V270	NALL020270HM0FA	1555	1365	1050	855	725	555	417	338	199	146	96.0	65.3	54.4	NA
L2V320	NALL020320HM0FA	2020	1770	1350	1080	900	678	508	408	238	174	114	77.3	64.1	NA
L2V375	NALL020375HM0FA	2320	2030	1540	1245	1040	790	590	477	279	204	134	90.5	75.0	NA
L2V425	NALL020425HM0FA	2515	2205	1690	1370	1150	875	657	530	315	231	153	103	85.2	NA
L2V470	NALL020470HM0FA	2760	2450	1885	1550	1305	1000	748	602	350	256	169	114	94.5	NA
L2V520	NALL020520HM0FA	2945	2625	2055	1685	1430	1098	822	662	385	282	187	126	104	NA
L2V575	NALL020575HM0FA	3130	2800	2220	1840	1565	1205	905	729	424	311	206	139	115	NA
L6V110	NALL060110HM0MC	2673	2268	1583	1220	991	731	539	439	266	200	128	83.0	69.0	NA
XL6V180	NAXL060180HM0FA	NA	3260	2530	1940	1540	1130	848	704	409	303	194	128	104	58.8
L12V15	NALL120015HM0MA	760	617	416	310	257	195	147	120	71.0	52.0	33.0	21.0	17.0	NA
L12V24	NALL120024HM0MA	1266	1026	691	520	424	313	227	181	108	81.0	52.0	34.0	28.0	NA
L12V32	NALL120032HM0MC	1658	1354	921	700	570	422	307	248	148	111	72.0	47.0	39.0	NA
XL12V50	NAXL120050HM0FA	NA	1895	1290	1010	850	640	466	376	228	168	110	76.1	61.4	33.4
XL12V70	NAXL120070HM0FA	NA	2680	1810	1400	1130	859	646	517	298	221	146	96.5	80.4	43.3
XL12V85	NAXL120085HM0FA	NA	3310	2270	1740	1440	1080	810	663	391	290	186	125	105	56.2

Battery Service – Energy Solutions

Keeping your business on the move

GNB® is the Expert

Who could do this job better than the professionals of a company with more than 100 years of experience in battery development, production and application?

Leave the responsibility for the maintenance of your batteries and chargers to the professionals: a GNB service contract provides you with exceptional economic advantages through time savings, cost savings and safety!

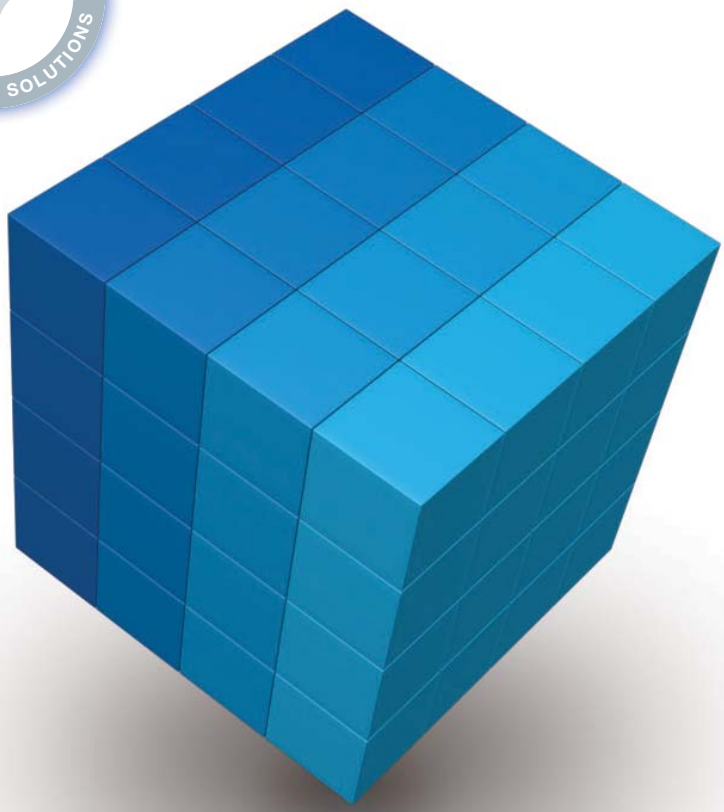
Installation of Batteries and Systems for Network Power

> Development of complete turnkey solutions from the design concept to installation and commissioning.

> Installation according to legal and safety regulations including CE certification by approved installation technicians.

> Training and certification of external installation technicians according to CE regulations.

BATTERY SERVICE ENERGY SOLUTIONS



- **Inspection Contract**
- **Maintenance Contract**
- **Lifetime Warranty Contract**
- **Full Service Contract**

*»**GNB Service** – individualized, professional and all over Europe!«*

Marathon L/XL

Notes

GNB®
INDUSTRIAL POWER
A Division of Exide Technologies

Exide Technologies, with operations in more than 80 countries, is one of the world's largest producers and recyclers of lead-acid batteries. Exide Technologies provides a comprehensive and customized range of stored electrical energy solutions. Based on over 120 years of experience in the development of innovative technologies, Exide Technologies is an esteemed partner of OEMs and serves the spare parts market for industrial and automotive applications.

GNB Industrial Power – A division of Exide Technologies – offers an extensive range of storage products and services, including solutions for telecommunication systems, railway applications, mining, photovoltaic (solar energy), uninterrupted power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

Exide Technologies takes pride in its commitment to a better environment. An integrated approach to manufacturing, distributing and recycling of lead-acid batteries has been developed to ensure a safe and responsible life cycle for all of its products.

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GNB® INDUSTRIAL POWER devises enduring energy concepts that convince with efficiency, flexibility and profitability.

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