



Like Two Batteries In One

Lasts up to two shifts with intermittent rapid recharge

Rapid recharge your ORC traction battery at every opportunity during work shifts up to 0.4C Amps (40A per 100AH) for 1hr



ESPEX
Batteries Limited

DIN & BS ranges
Complete accessories
ISO 9001 certified

DIN Specification

ORC Traction Cells (198mm wide)

Positive plate capacity 60 Ah, overall height 361mm, to lid top 331mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 120A-ORC	120	47	6.45	1.3	8.08
3 IPzS 180A-ORC	180	65	9.07	1.9	11.5
4 IPzS 240A-ORC	240	83	11.55	2.8	15.07
5 IPzS 300A-ORC	300	101	14.08	3.2	18.13
6 IPzS 360A-ORC	360	119	16.71	4.4	22.19
7 IPzS 420A-ORC	420	137	19.15	4.9	25.31
8 IPzS 480A-ORC	480	155	21.69	5.2	28.19
9 IPzS 540A-ORC	540	173	24.28	6.0	31.87
10 IPzS 600A-ORC	600	191	26.87	6.7	35.30

Positive plate capacity 90 Ah, overall height 488mm, to lid top 458mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 180A-ORC	180	47	8.93	1.8	11.32
3 IPzS 270A-ORC	270	65	12.7	2.8	16.37
4 IPzS 360A-ORC	360	83	16.24	3.7	21.05
5 IPzS 450A-ORC	450	101	19.89	4.6	25.78
6 IPzS 540A-ORC	540	119	23.64	5.5	30.77
7 IPzS 630A-ORC	630	137	27.18	6.4	35.39
8 IPzS 720A-ORC	720	155	30.85	7.3	40.21
9 IPzS 810A-ORC	810	173	34.47	8.3	45.06
10 IPzS 900A-ORC	900	191	38.2	9.1	49.84

Positive plate capacity 115 Ah, overall height 563mm, to lid top 533mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 230A-ORC	230	47	10.61	2.1	13.38
3 IPzS 345A-ORC	345	65	15.22	3.3	19.47
4 IPzS 460A-ORC	460	83	19.52	4.3	25.11
5 IPzS 575A-ORC	575	101	23.96	5.3	30.82
6 IPzS 690A-ORC	690	119	28.5	6.5	36.8
7 IPzS 805A-ORC	805	137	32.82	7.5	42.38
8 IPzS 920A-ORC	920	155	37.27	8.5	48.18
9 IPzS 1035A-ORC	1035	173	41.69	9.7	54.03
10 IPzS 1150A-ORC	1150	191	46.2	10.6	59.76

Positive plate capacity 140 Ah, overall height 713mm, to lid top 683mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 280A-ORC	280	47	13.4	2.7	16.92
3 IPzS 420A-ORC	420	65	19.25	4.2	24.68
4 IPzS 560A-ORC	560	83	24.75	5.6	31.91
5 IPzS 700A-ORC	700	101	30.41	6.8	39.15
6 IPzS 840A-ORC	840	119	36.21	8.3	46.83
7 IPzS 980A-ORC	980	137	41.74	9.6	53.98
8 IPzS 1120A-ORC	1120	155	47.44	11	61.41
9 IPzS 1260A-ORC	1260	173	53.22	12.4	69.02
10 IPzS 1400A-ORC	1400	191	58.95	13.7	76.33

Positive plate capacity 80 Ah, overall height 427mm, to lid top 397mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 160A-ORC	160	47	7.85	1.6	9.88
3 IPzS 240A-ORC	240	65	11.12	2.4	14.18
4 IPzS 320A-ORC	320	83	14.17	3.3	18.31
5 IPzS 400A-ORC	400	101	17.31	4.1	22.44
6 IPzS 480A-ORC	480	119	20.55	5.1	26.93
7 IPzS 560A-ORC	560	137	23.6	5.8	30.97
8 IPzS 640A-ORC	640	155	26.76	6.6	35.06
9 IPzS 720A-ORC	720	173	29.89	7.1	38.89
10 IPzS 800A-ORC	800	191	33.12	8.3	43.52

Positive plate capacity 105 Ah, overall height 538mm, to lid top 508mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 210A-ORC	210	47	10.17	2.0	12.81
3 IPzS 315A-ORC	315	65	14.55	3.1	18.61
4 IPzS 420A-ORC	420	83	18.66	4.1	24
5 IPzS 525A-ORC	525	101	22.89	5.1	29.43
6 IPzS 630A-ORC	630	119	27.24	6.2	35.15
7 IPzS 735A-ORC	735	137	31.36	7.1	40.47
8 IPzS 840A-ORC	840	155	35.61	8.1	46
9 IPzS 945A-ORC	945	173	39.82	9.2	51.57
10 IPzS 1050A-ORC	1050	191	44.13	10.2	57.1

Positive plate capacity 125Ah, overall height 599mm, to lid top 569mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 250A-ORC	250	47	11.38	2.2	14.32
3 IPzS 375A-ORC	375	65	16.35	3.5	20.88
4 IPzS 500A-ORC	500	83	20.96	4.6	26.93
5 IPzS 625A-ORC	625	101	25.74	5.7	33.05
6 IPzS 750A-ORC	750	119	30.63	6.9	39.49
7 IPzS 875A-ORC	875	137	35.29	8.0	45.5
8 IPzS 1000A-ORC	1000	155	40.08	9.1	51.72
9 IPzS 1125A-ORC	1125	173	44.97	10.3	58.15
10 IPzS 1250A-ORC	1250	191	49.82	11.4	64.31

Positive plate capacity 155 Ah, overall height 740mm, to lid top 710mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzS 310A-ORC	310	47	13.98	2.8	17.66
3 IPzS 465A-ORC	465	65	20.1	4.4	25.78
4 IPzS 620A-ORC	620	83	25.83	5.8	33.32
5 IPzS 775A-ORC	775	101	31.74	7.2	40.93
6 IPzS 930A-ORC	930	119	37.79	8.7	48.91
7 IPzS 1085A-ORC	1085	137	43.57	10.1	56.39
8 IPzS 1240A-ORC	1240	155	49.51	11.5	64.13
9 IPzS 1395A-ORC	1395	173	55.71	13	72.25
10 IPzS 1550A-ORC	1550	191	61.73	14.3	79.93

BS Specification

ORC Traction Cells (158mm wide)

Positive plate capacity 42 Ah, overall height 354mm, to lid top 324mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 84A-ORC	84	45	5.1	1.3	6.8
3 IPzB 126A-ORC	126	61	7.2	1.8	9.6
4 IPzB 168A-ORC	168	77	9.6	2.3	12.8
5 IPzB 210A-ORC	210	93	11.6	2.8	15.4
6 IPzB 252A-ORC	252	109	14.2	3.3	18.8
7 IPzB 294A-ORC	294	125	15.4	3.8	20.6
8 IPzB 336A-ORC	336	141	17.4	4.3	23.4
9 IPzB 378A-ORC	378	157	19.4	4.8	26
10 IPzB 420A-ORC	420	173	21.3	5.3	28.7
11 IPzB 462A-ORC	462	189	23.9	5.8	31.9
12 IPzB 504A-ORC	504	205	26.7	6.3	35.5
13 IPzB 546A-ORC	546	221	28.9	6.8	38.4

Positive plate capacity 65 Ah, overall height 478mm, to lid top 448mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 130A-ORC	130	45	7.5	1.8	9.9
3 IPzB 195A-ORC	195	61	10.3	2.4	13.7
4 IPzB 260A-ORC	260	77	13.3	3.1	17.7
5 IPzB 325A-ORC	325	93	16.2	3.7	21.4
6 IPzB 390A-ORC	390	109	19	4.5	25.2
7 IPzB 455A-ORC	455	125	22.4	5.1	29.5
8 IPzB 520A-ORC	520	141	25.5	5.9	33.6
9 IPzB 585A-ORC	585	157	29.1	6.5	38.1
10 IPzB 650A-ORC	650	173	31.4	7.2	41.3
11 IPzB 715A-ORC	715	189	33.7	7.9	44.6
12 IPzB 780A-ORC	780	205	37.4	8.6	49.3
13 IPzB 845A-ORC	845	221	40.3	9.2	53

Positive plate capacity 100 Ah, overall height 595mm, to lid top 565mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 200A-ORC	200	45	8.9	2.2	11.9
3 IPzB 300A-ORC	300	61	13.1	3	17.2
4 IPzB 400A-ORC	400	77	17.1	3.9	22.5
5 IPzB 500A-ORC	500	93	21.1	4.7	27.5
6 IPzB 600A-ORC	600	109	24.2	5.6	31.9
7 IPzB 700A-ORC	700	125	29.1	6.4	37.9
8 IPzB 800A-ORC	800	141	31.8	7.3	42
9 IPzB 900A-ORC	900	157	35.5	8.1	46.8
10 IPzB 1000A-ORC	1000	173	39.3	9	51.7
11 IPzB 1100A-ORC	1100	189	43	9.9	56.7
12 IPzB 1200A-ORC	1200	205	47.5	10.7	62.4
13 IPzB 1300A-ORC	1300	221	51.4	11.5	67.3

Positive plate capacity 55 Ah, overall height 428mm, to lid top 398mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 110A-ORC	110	45	6.7	1.6	8.9
3 IPzB 165A-ORC	165	61	9.2	2.2	12.2
4 IPzB 220A-ORC	220	77	11.8	2.8	15.7
5 IPzB 275A-ORC	275	93	14.4	3.4	19.1
6 IPzB 330A-ORC	330	109	16.8	4.0	22.4
7 IPzB 385A-ORC	385	125	19.4	4.6	25.7
8 IPzB 440A-ORC	440	141	22.7	5.3	30
9 IPzB 495A-ORC	495	157	26.2	5.9	34.3
10 IPzB 550A-ORC	550	173	28.6	6.5	37.6
11 IPzB 605A-ORC	605	189	31.2	7.1	41
12 IPzB 660A-ORC	660	205	33.1	7.7	43.8
13 IPzB 715A-ORC	715	221	35.6	8.3	47.1

Positive plate capacity 75 Ah, overall height 537mm, to lid top 507mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 150A-ORC	150	45	8.5	2.0	11.2
3 IPzB 225A-ORC	225	61	11.8	2.7	15.5
4 IPzB 300A-ORC	300	77	15.5	3.5	20.3
5 IPzB 375A-ORC	375	93	18.5	4.2	24.3
6 IPzB 450A-ORC	450	109	21.8	5.0	28.7
7 IPzB 525A-ORC	525	125	25.4	5.7	33.3
8 IPzB 600A-ORC	600	141	28.6	6.5	37.7
9 IPzB 675A-ORC	675	157	32.7	7.2	42.8
10 IPzB 750A-ORC	750	173	36	8.0	47.1
11 IPzB 825A-ORC	825	189	39.3	8.8	51.5
12 IPzB 900A-ORC	900	205	42.7	9.5	55.9
13 IPzB 975A-ORC	975	221	45.4	10.3	59.7

Positive plate capacity 108 Ah, overall height 706mm, to lid top 676mm

Cell type	Ah @ C5 at 30°C	Length (mm)	Dry weight (kg)	Acid vol. (lt)	Filled weight (kg)
2 IPzB 216A-ORC	216	45	11.2	2.6	14.9
3 IPzB 324A-ORC	324	61	15.8	3.6	20.9
4 IPzB 432A-ORC	432	77	21	4.7	27.5
5 IPzB 540A-ORC	540	93	25.5	5.6	33.2
6 IPzB 648A-ORC	648	109	30.2	6.7	39.4
7 IPzB 756A-ORC	756	125	35.2	7.6	45.8
8 IPzB 864A-ORC	864	141	39.6	8.8	51.8
9 IPzB 972A-ORC	972	157	45.5	9.7	59
10 IPzB 1080A-ORC	1080	173	48.7	10.7	63.6
11 IPzB 1188A-ORC	1188	189	53.8	11.8	70.1
12 IPzB 1296A-ORC	1296	205	59.3	12.8	77
13 IPzB 1404A-ORC	1404	221	63.9	13.7	83

Espex recommends the ORC battery be fitted with Filling System and Air-Circulation System to obtain highest efficiency, performance and life.

Weight and acid volume data are typical with level at separator top height

All dimensions and weights within reasonable tolerances

Opportunity Rapid Charge **ORC** Traction Cells are developed by Espex's parent Exide-India, with new composition plates, for up to two work-shift operations with a single **ORC** battery.



Opportunity charging refers to the new **ORC** battery system being able to receive partial 'top-up' charges several times during a work cycle, if required.

ORC battery cells may be recharged intermittently for short periods (15–60 minutes) during the operating shifts, at normal current or high current (up to 0.4C Amps), followed by a full normal recharge at end of shift.



ORC batteries are of trusted lead-acid heritage, robust, heavy-duty and 100% recyclable.

Advantages of **ORC** lead-acid batteries:

- Replaces regular lead-acid traction batteries in same tray size, without the need for adding any ballast.
- Existing battery charger can be used, or a higher rated one, up to 0.4C Amps (40A per 100AH) for rapid opportunity charging (15–60 minutes).
- Not necessary to buy very expensive new battery chargers and battery monitoring systems (BMS).
- No need to upgrade fixed electrical wiring to the charger in most cases.
- Safe as regular lead-acid batteries which lift-truck operators are used to.
- Extended operating time up to 10 hours (equivalent to 2 x work-shifts) using a single battery with intermittent opportunity rapid charges.
- Partial state of charge operation all day.
- Maximum energy throughput.
- Design life 1800 cycles as per EN IEC 60254-1 standard.
- Very easily recycled with positive financial return to user.



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