93PM G2 50-360 kVA UPS on-battery runtimes with different load ratings

External Batteries with Eaton EBC-C and EBC-E Battery Cabinets

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# EBC-C (up to 100 kW)

## CSB HRL12110W

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12110W | 1 | 24 | 14 | 8 | 5 | 3 | - | - | - | - |
| 1x40 | CSB HRL12110W | 1 | 27 | 16 | 10 | 7 | 4 | 3 | - | - | - |
| 2x36 | CSB HRL12110W | 2 | 62 | 34 | 24 | 18 | 14 | 10 | 8 | 7 | 5 |
| 2x40 | CSB HRL12110W | 2 | 73 | 40 | 27 | 20 | 16 | 13 | 10 | 8 | 7 |
| 3x36 | CSB HRL12110W | 3 | 102 | 62 | 41 | 29 | 24 | 19 | 16 | 14 | 11 |
| 3x40 | CSB HRL12110W | 3 | 114 | 73 | 47 | 34 | 27 | 22 | 19 | 16 | 14 |
| 4x36 | CSB HRL12110W | 4 | 142 | 88 | 62 | 44 | 34 | 28 | 24 | 20 | 18 |
| 4x40 | CSB HRL12110W | 4 | 159 | 100 | 73 | 52 | 40 | 31 | 27 | 23 | 20 |
| Power factor **0.9** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12110W | 1 | 20 | 11 | 7 | 4 | - | - | - | - | - |
| 1x40 | CSB HRL12110W | 1 | 23 | 13 | 8 | 5 | 3 | - | - | - | - |
| 2x36 | CSB HRL12110W | 2 | 52 | 29 | 20 | 15 | 11 | 9 | 7 | 5 | 4 |
| 2x40 | CSB HRL12110W | 2 | 61 | 33 | 23 | 17 | 13 | 10 | 8 | 7 | 5 |
| 3x36 | CSB HRL12110W | 3 | 88 | 52 | 34 | 26 | 20 | 17 | 14 | 11 | 9 |
| 3x40 | CSB HRL12110W | 3 | 100 | 61 | 40 | 29 | 23 | 19 | 16 | 13 | 11 |
| 4x36 | CSB HRL12110W | 4 | 121 | 78 | 52 | 38 | 29 | 24 | 20 | 17 | 15 |
| 4x40 | CSB HRL12110W | 4 | 140 | 87 | 61 | 43 | 33 | 27 | 23 | 20 | 17 |
| Power factor **1.0** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12110W | 1 | 18 | 9 | 5 | 3 | - | - | - | - | - |
| 1x40 | CSB HRL12110W | 1 | 20 | 11 | 7 | 4 | - | - | - | - | - |
| 2x36 | CSB HRL12110W | 2 | 44 | 26 | 18 | 13 | 9 | 7 | 5 | 4 | 3 |
| 2x40 | CSB HRL12110W | 2 | 52 | 29 | 20 | 15 | 11 | 9 | 7 | 5 | 4 |
| 3x36 | CSB HRL12110W | 3 | 79 | 44 | 29 | 23 | 18 | 14 | 11 | 9 | 8 |
| 3x40 | CSB HRL12110W | 3 | 88 | 52 | 34 | 26 | 20 | 17 | 14 | 11 | 9 |
| 4x36 | CSB HRL12110W | 4 | 109 | 69 | 44 | 31 | 26 | 21 | 18 | 15 | 13 |
| 4x40 | CSB HRL12110W | 4 | 121 | 78 | 52 | 38 | 29 | 24 | 20 | 17 | 15 |

***Note!*** *The battery backup tables are given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## CSB HRL12200W

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12200W | 1 | 61 | 37 | 25 | 18 | 13 | 10 | 8 | 6 | 4 |
| 1x40 | CSB HRL12200W | 1 | 72 | 42 | 28 | 20 | 15 | 12 | 9 | 7 | 6 |
| 2x36 | CSB HRL12200W | 2 | 141 | 87 | 61 | 46 | 37 | 29 | 25 | 20 | 18 |
| 2x40 | CSB HRL12200W | 2 | 159 | 99 | 72 | 54 | 42 | 34 | 28 | 24 | 20 |
| 3x36 | CSB HRL12200W | 3 | 221 | 141 | 100 | 79 | 61 | 51 | 43 | 37 | 31 |
| 3x40 | CSB HRL12200W | 3 | 246 | 159 | 112 | 87 | 72 | 58 | 49 | 42 | 37 |
| 4x36 | CSB HRL12200W | 4 | 305 | 191 | 141 | 108 | 87 | 74 | 61 | 54 | 46 |
| 4x40 | CSB HRL12200W | 4 | 356 | 218 | 159 | 119 | 99 | 83 | 72 | 60 | 54 |
| Power factor **0.9** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12200W | 1 | 54 | 30 | 20 | 15 | 11 | 8 | 6 | 4 | 2 |
| 1x40 | CSB HRL12200W | 1 | 60 | 36 | 24 | 17 | 13 | 10 | 7 | 5 | 4 |
| 2x36 | CSB HRL12200W | 2 | 119 | 78 | 54 | 40 | 30 | 25 | 20 | 17 | 15 |
| 2x40 | CSB HRL12200W | 2 | 139 | 86 | 60 | 45 | 36 | 29 | 24 | 20 | 17 |
| 3x36 | CSB HRL12200W | 3 | 191 | 119 | 87 | 68 | 54 | 44 | 37 | 30 | 27 |
| 3x40 | CSB HRL12200W | 3 | 218 | 139 | 99 | 78 | 60 | 50 | 42 | 36 | 30 |
| 4x36 | CSB HRL12200W | 4 | 267 | 169 | 119 | 94 | 78 | 63 | 54 | 45 | 40 |
| 4x40 | CSB HRL12200W | 4 | 299 | 188 | 139 | 107 | 86 | 73 | 60 | 53 | 45 |
| Power factor **1.0** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | CSB HRL12200W | 1 | 46 | 27 | 18 | 12 | 9 | 6 | 4 | 2 | - |
| 1x40 | CSB HRL12200W | 1 | 54 | 30 | 20 | 15 | 11 | 8 | 6 | 4 | 2 |
| 2x36 | CSB HRL12200W | 2 | 108 | 68 | 46 | 35 | 27 | 22 | 18 | 15 | 12 |
| 2x40 | CSB HRL12200W | 2 | 119 | 78 | 54 | 40 | 30 | 25 | 20 | 17 | 15 |
| 3x36 | CSB HRL12200W | 3 | 171 | 108 | 79 | 58 | 46 | 39 | 31 | 27 | 23 |
| 3x40 | CSB HRL12200W | 3 | 191 | 119 | 87 | 68 | 54 | 44 | 37 | 30 | 27 |
| 4x36 | CSB HRL12200W | 4 | 235 | 152 | 108 | 84 | 68 | 55 | 46 | 40 | 35 |
| 4x40 | CSB HRL12200W | 4 | 267 | 169 | 119 | 94 | 78 | 63 | 54 | 45 | 40 |

***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## EXIDE XP12V1800

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | EXIDE XP12V1800 | 1 | 66 | 40 | 27 | 19 | 14 | 11 | 9 | 8 | 7 |
| 1x40 | EXIDE XP12V1800 | 1 | 79 | 44 | 31 | 22 | 17 | 13 | 11 | 9 | 8 |
| 2x36 | EXIDE XP12V1800 | 2 | 153 | 99 | 66 | 49 | 40 | 32 | 27 | 22 | 19 |
| 2x40 | EXIDE XP12V1800 | 2 | 171 | 109 | 79 | 56 | 44 | 38 | 31 | 26 | 22 |
| 3x36 | EXIDE XP12V1800 | 3 | 254 | 153 | 110 | 88 | 66 | 54 | 45 | 40 | 35 |
| 3x40 | EXIDE XP12V1800 | 3 | 281 | 171 | 119 | 99 | 79 | 60 | 52 | 44 | 40 |
| 4x36 | EXIDE XP12V1800 | 4 | 348 | 220 | 153 | 115 | 99 | 82 | 66 | 56 | 49 |
| 4x40 | EXIDE XP12V1800 | 4 | 396 | 250 | 171 | 130 | 109 | 94 | 79 | 64 | 56 |
| Power factor **0.9** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | EXIDE XP12V1800 | 1 | 56 | 34 | 22 | 15 | 12 | 10 | 8 | 7 | 5 |
| 1x40 | EXIDE XP12V1800 | 1 | 64 | 39 | 26 | 18 | 14 | 11 | 9 | 8 | 7 |
| 2x36 | EXIDE XP12V1800 | 2 | 130 | 86 | 56 | 43 | 34 | 27 | 22 | 18 | 15 |
| 2x40 | EXIDE XP12V1800 | 2 | 151 | 98 | 64 | 48 | 39 | 32 | 26 | 22 | 18 |
| 3x36 | EXIDE XP12V1800 | 3 | 220 | 130 | 99 | 74 | 56 | 46 | 40 | 34 | 29 |
| 3x40 | EXIDE XP12V1800 | 3 | 250 | 151 | 109 | 86 | 64 | 53 | 44 | 39 | 34 |
| 4x36 | EXIDE XP12V1800 | 4 | 296 | 183 | 130 | 105 | 86 | 68 | 56 | 48 | 43 |
| 4x40 | EXIDE XP12V1800 | 4 | 343 | 217 | 151 | 114 | 98 | 81 | 64 | 55 | 48 |
| Power factor **1.0** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | EXIDE XP12V1800 | 1 | 49 | 29 | 19 | 13 | 10 | 8 | 7 | 5 | - |
| 1x40 | EXIDE XP12V1800 | 1 | 56 | 34 | 22 | 15 | 12 | 10 | 8 | 7 | 5 |
| 2x36 | EXIDE XP12V1800 | 2 | 115 | 74 | 49 | 38 | 29 | 23 | 19 | 15 | 13 |
| 2x40 | EXIDE XP12V1800 | 2 | 130 | 86 | 56 | 43 | 34 | 27 | 22 | 18 | 15 |
| 3x36 | EXIDE XP12V1800 | 3 | 187 | 115 | 88 | 60 | 49 | 41 | 35 | 29 | 25 |
| 3x40 | EXIDE XP12V1800 | 3 | 220 | 130 | 99 | 74 | 56 | 46 | 40 | 34 | 29 |
| 4x36 | EXIDE XP12V1800 | 4 | 271 | 164 | 115 | 95 | 74 | 57 | 49 | 43 | 38 |
| 4x40 | EXIDE XP12V1800 | 4 | 296 | 183 | 130 | 105 | 86 | 68 | 56 | 48 | 43 |

***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## FIAMM 12FLB200P

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | FIAMM 12FLB200P | 1 | 56 | 33 | 22 | 16 | 12 | 9 | 7 | 5 | 3 |
| 1x40 | FIAMM 12FLB200P | 1 | 63 | 38 | 25 | 19 | 14 | 11 | 8 | 7 | 5 |
| 2x36 | FIAMM 12FLB200P | 2 | 118 | 78 | 56 | 42 | 33 | 26 | 22 | 19 | 16 |
| 2x40 | FIAMM 12FLB200P | 2 | 139 | 86 | 63 | 48 | 38 | 30 | 25 | 21 | 19 |
| 3x36 | FIAMM 12FLB200P | 3 | 202 | 118 | 87 | 70 | 56 | 45 | 39 | 33 | 28 |
| 3x40 | FIAMM 12FLB200P | 3 | 226 | 139 | 97 | 78 | 63 | 53 | 44 | 38 | 33 |
| 4x36 | FIAMM 12FLB200P | 4 | 278 | 174 | 118 | 92 | 78 | 66 | 56 | 48 | 42 |
| 4x40 | FIAMM 12FLB200P | 4 | 312 | 199 | 139 | 105 | 86 | 75 | 63 | 55 | 48 |
| Power factor **0.9** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | FIAMM 12FLB200P | 1 | 48 | 28 | 19 | 13 | 9 | 7 | 5 | 3 | 2 |
| 1x40 | FIAMM 12FLB200P | 1 | 55 | 32 | 21 | 16 | 11 | 9 | 7 | 5 | 3 |
| 2x36 | FIAMM 12FLB200P | 2 | 105 | 69 | 48 | 36 | 28 | 22 | 19 | 16 | 13 |
| 2x40 | FIAMM 12FLB200P | 2 | 117 | 77 | 55 | 41 | 32 | 26 | 21 | 18 | 16 |
| 3x36 | FIAMM 12FLB200P | 3 | 174 | 105 | 78 | 60 | 48 | 40 | 33 | 28 | 24 |
| 3x40 | FIAMM 12FLB200P | 3 | 199 | 117 | 86 | 69 | 55 | 44 | 38 | 32 | 28 |
| 4x36 | FIAMM 12FLB200P | 4 | 240 | 152 | 105 | 83 | 69 | 57 | 48 | 41 | 36 |
| 4x40 | FIAMM 12FLB200P | 4 | 274 | 172 | 117 | 90 | 77 | 65 | 55 | 47 | 41 |
| Power factor **1.0** on different load levels | | | | | | | | | | | |
|  |  | **kVA**  Strings | **20** | **30** | **40** | **50** | **60** | **70** | **80** | **90** | **100** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |
| 1x36 | FIAMM 12FLB200P | 1 | 42 | 24 | 16 | 11 | 8 | 5 | 3 | 2 | - |
| 1x40 | FIAMM 12FLB200P | 1 | 48 | 28 | 19 | 13 | 9 | 7 | 5 | 3 | 2 |
| 2x36 | FIAMM 12FLB200P | 2 | 92 | 60 | 42 | 31 | 24 | 19 | 16 | 13 | 11 |
| 2x40 | FIAMM 12FLB200P | 2 | 105 | 69 | 48 | 36 | 28 | 22 | 19 | 16 | 13 |
| 3x36 | FIAMM 12FLB200P | 3 | 155 | 92 | 70 | 53 | 42 | 34 | 28 | 24 | 21 |
| 3x40 | FIAMM 12FLB200P | 3 | 174 | 105 | 78 | 60 | 48 | 40 | 33 | 28 | 24 |
| 4x36 | FIAMM 12FLB200P | 4 | 217 | 130 | 92 | 75 | 60 | 50 | 42 | 36 | 31 |
| 4x40 | FIAMM 12FLB200P | 4 | 240 | 152 | 105 | 83 | 69 | 57 | 48 | 41 | 36 |

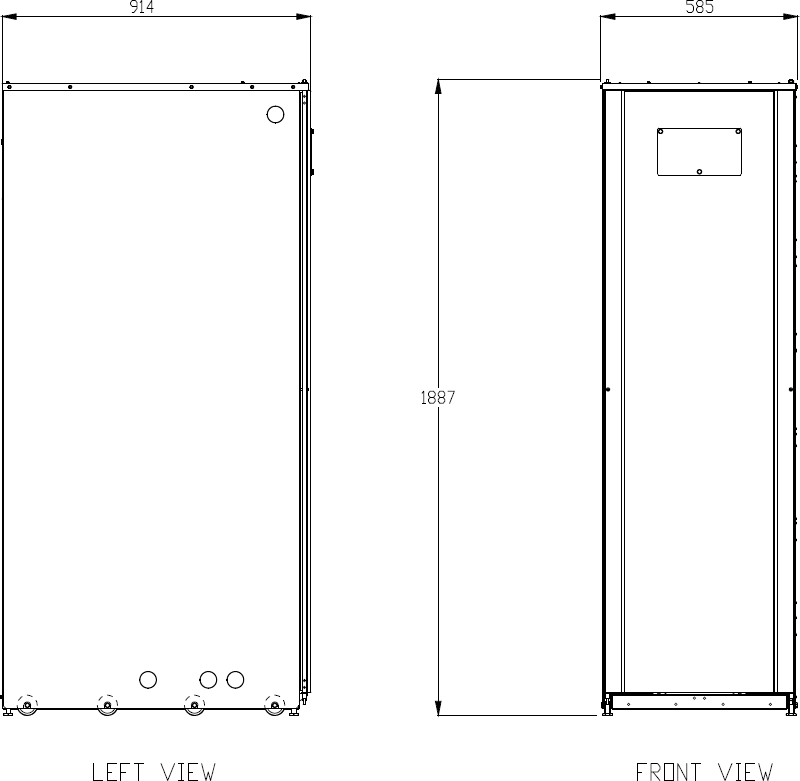
***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## EBC-C battery cabinet details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reference | Breaker | Net Weight | Battery type | Design life | Blocks1 |
| P-105000017-008 | 200 A | 167 kg | EMPTY  M5 cables2 | - | Up to 40 |
| P-105000079-202 | 200 A | 167 kg | EMPTY  M6 cables2 | - | Up to 40 |
| P-105000017-002 | 200 A | 523 kg | CSB HRL12110W | 10 years | 36 |
| P-105000017-009 | 200 A | 557 kg | CSB HRL12110W | 10 years | 40 |
| P-105000017-004 | 200 A | 795 kg | CSB HRL12200W | 10 years | 36 |
| P-105000017-010 | 200 A | 865 kg | CSB HRL12200W | 10 years | 40 |
| P-105000079-216 | 200 A | 977 kg | Exide XP12V1800 | 10 years | 36 |
| P-105000079-217 | 200 A | 1067 kg | Exide XP12V1800 | 10 years | 40 |
| P-105000079-214 | 200 A | 833 kg | FIAMM 12FLB200P | 10 years | 36 |
| P-105000079-215 | 200 A | 907 kg | FIAMM 12FLB200P | 10 years | 40 |

1 Amount of battery blocks that are provided with the cabinet or can be installed in the battery cabinet (if empty).

2M5 cables are used for e.g. CSB 110W and FIAMM FLB200 batteries. M6 cables are for e.g. CSB 200W, GNB XP12V1800 and P12V875 batteries. For other battery types, please see the battery datasheet.



Eaton EBC-C battery cabinet dimensions. 585 x 914 x 1887 mm (WxDxH)

# EBC-E

## CSB batteries

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | CSB HRL12280W | 1 | 30 | 24 | 15 | 10 | 6 | 0 | - | - | - | - | - |
| 1x40 | CSB HRL12330W | 1 | 41 | 31 | 21 | 15 | 10 | 7 | 5 | 2 | - | - | - |
| 1x40 | CSB HRL12540W | 1 | 73 | 57 | 39 | 28 | 19 | 14 | 10 | 7 | 3 | - | - |
| 2x40 | CSB HRL12280W | 2 | 77 | 59 | 42 | 30 | 22 | 16 | 13 | 10 | 6 | - | - |
| 2x40 | CSB HRL12330W | 2 | 102 | 82 | 54 | 41 | 29 | 23 | 18 | 15 | 10 | 7 | 4 |
| 2x40 | CSB HRL12540W | 2 | 164 | 132 | 93 | 73 | 54 | 42 | 34 | 28 | 19 | 14 | 9 |
| 3x40 | CSB HRL12280W | 3 | 119 | 99 | 70 | 53 | 40 | 30 | 25 | 20 | 14 | 10 | 7 |
| 3x40 | CSB HRL12330W | 3 | 170 | 137 | 93 | 71 | 52 | 41 | 33 | 27 | 19 | 15 | 11 |
| 3x40 | CSB HRL12540W | 3 | 259 | 211 | 153 | 115 | 89 | 73 | 59 | 49 | 37 | 28 | 21 |
| 4x40 | CSB HRL12280W | 4 | 165 | 136 | 99 | 77 | 57 | 45 | 38 | 30 | 22 | 16 | 12 |
| 4x40 | CSB HRL12330W | 4 | 237 | 192 | 137 | 102 | 78 | 59 | 48 | 41 | 29 | 23 | 18 |
| 4x40 | CSB HRL12540W | 4 | 373 | 293 | 211 | 164 | 124 | 102 | 85 | 73 | 54 | 42 | 33 |
| 5x40 | CSB HRL12540W | 5 | 458 | 390 | 273 | 211 | 164 | 132 | 110 | 93 | 73 | 57 | 44 |
| 6x40 | CSB HRL12540W | 6 | 548 | 458 | 344 | 259 | 200 | 164 | 137 | 115 | 89 | 73 | 57 |
| Power factor **0.9** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | CSB HRL12280W | 1 | 26 | 19 | 12 | 7 | - | - | - | - | - | - | - |
| 1x40 | CSB HRL12330W | 1 | 35 | 27 | 18 | 13 | 8 | 5 | 3 | - | - | - | - |
| 1x40 | CSB HRL12540W | 1 | 61 | 48 | 33 | 23 | 16 | 11 | 8 | 5 | - | - | - |
| 2x40 | CSB HRL12280W | 2 | 65 | 52 | 36 | 26 | 18 | 14 | 10 | 7 | - | - | - |
| 2x40 | CSB HRL12330W | 2 | 87 | 70 | 46 | 35 | 26 | 19 | 15 | 13 | 8 | 5 | 2 |
| 2x40 | CSB HRL12540W | 2 | 144 | 114 | 83 | 61 | 45 | 36 | 29 | 23 | 16 | 11 | 7 |
| 3x40 | CSB HRL12280W | 3 | 106 | 86 | 59 | 45 | 34 | 26 | 20 | 16 | 11 | 7 | 5 |
| 3x40 | CSB HRL12330W | 3 | 149 | 116 | 82 | 59 | 44 | 35 | 28 | 23 | 17 | 13 | 9 |
| 3x40 | CSB HRL12540W | 3 | 226 | 180 | 132 | 102 | 79 | 61 | 50 | 42 | 30 | 23 | 17 |
| 4x40 | CSB HRL12280W | 4 | 147 | 117 | 86 | 65 | 49 | 40 | 31 | 26 | 18 | 14 | 10 |
| 4x40 | CSB HRL12330W | 4 | 209 | 168 | 116 | 87 | 65 | 51 | 41 | 35 | 26 | 19 | 15 |
| 4x40 | CSB HRL12540W | 4 | 319 | 255 | 180 | 144 | 109 | 88 | 75 | 61 | 45 | 36 | 28 |
| 5x40 | CSB HRL12540W | 5 | 415 | 339 | 235 | 180 | 144 | 114 | 95 | 83 | 61 | 48 | 38 |
| 6x40 | CSB HRL12540W | 6 | 479 | 415 | 293 | 226 | 174 | 144 | 117 | 102 | 79 | 61 | 48 |

Power factor **1.0** on different load levels

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | CSB HRL12280W | 1 | 22 | 16 | 10 | 6 | - | - | - | - | - | - | - |
| 1x40 | CSB HRL12330W | 1 | 29 | 23 | 15 | 10 | 6 | 4 | - | - | - | - | - |
| 1x40 | CSB HRL12540W | 1 | 54 | 42 | 28 | 19 | 13 | 8 | 6 | 3 | - | - | - |
| 2x40 | CSB HRL12280W | 2 | 57 | 45 | 30 | 22 | 15 | 11 | 8 | 6 | - | - | - |
| 2x40 | CSB HRL12330W | 2 | 78 | 59 | 41 | 29 | 22 | 17 | 13 | 10 | 6 | 4 | - |
| 2x40 | CSB HRL12540W | 2 | 124 | 102 | 73 | 54 | 40 | 30 | 25 | 19 | 13 | 8 | 5 |
| 3x40 | CSB HRL12280W | 3 | 94 | 77 | 53 | 40 | 29 | 22 | 17 | 14 | 9 | 6 | - |
| 3x40 | CSB HRL12330W | 3 | 129 | 102 | 71 | 52 | 39 | 29 | 24 | 19 | 14 | 10 | 7 |
| 3x40 | CSB HRL12540W | 3 | 200 | 164 | 115 | 89 | 69 | 54 | 43 | 37 | 26 | 19 | 14 |
| 4x40 | CSB HRL12280W | 4 | 129 | 106 | 77 | 57 | 43 | 34 | 27 | 22 | 15 | 11 | 7 |
| 4x40 | CSB HRL12330W | 4 | 181 | 149 | 102 | 78 | 56 | 44 | 36 | 29 | 22 | 17 | 13 |
| 4x40 | CSB HRL12540W | 4 | 280 | 226 | 164 | 124 | 96 | 79 | 64 | 54 | 40 | 30 | 23 |
| 5x40 | CSB HRL12540W | 5 | 373 | 293 | 211 | 164 | 124 | 102 | 85 | 73 | 54 | 42 | 33 |
| 6x40 | CSB HRL12540W | 6 | 444 | 373 | 259 | 200 | 157 | 124 | 105 | 89 | 69 | 54 | 42 |

***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## Exide batteries

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | EXIDE XP12V3000 | 1 | 44 | 36 | 24 | 17 | 12 | 8 | 5 | - | - | - | - |
| 1x40 | EXIDE XP12V3400 | 1 | 53 | 42 | 28 | 20 | 14 | 10 | 8 | 5 | - | - | - |
| 2x40 | EXIDE XP12V3000 | 2 | 109 | 91 | 58 | 44 | 34 | 27 | 21 | 17 | 12 | 8 | - |
| 2x40 | EXIDE XP12V3400 | 2 | 121 | 105 | 75 | 53 | 40 | 30 | 25 | 20 | 14 | 10 | 7 |
| 3x40 | EXIDE XP12V3000 | 3 | 172 | 139 | 103 | 80 | 56 | 44 | 37 | 31 | 23 | 17 | 13 |
| 3x40 | EXIDE XP12V3400 | 3 | 198 | 161 | 115 | 95 | 70 | 53 | 43 | 37 | 27 | 20 | 15 |
| 4x40 | EXIDE XP12V3000 | 4 | 251 | 198 | 139 | 109 | 87 | 65 | 52 | 44 | 34 | 27 | 20 |
| 4x40 | EXIDE XP12V3400 | 4 | 274 | 228 | 161 | 121 | 102 | 82 | 63 | 53 | 40 | 30 | 24 |
| 5x40 | EXIDE XP12V3400 | 5 | 351 | 284 | 210 | 161 | 121 | 105 | 90 | 75 | 53 | 42 | 33 |
| 6x40 | EXIDE XP12V3400 | 6 | 427 | 351 | 259 | 198 | 154 | 121 | 108 | 95 | 70 | 53 | 42 |
| Power factor **0.9** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | EXIDE XP12V3000 | 1 | 39 | 30 | 20 | 14 | 9 | 6 | - | - | - | - | - |
| 1x40 | EXIDE XP12V3400 | 1 | 45 | 36 | 24 | 17 | 11 | 8 | 6 | 4 | - | - | - |
| 2x40 | EXIDE XP12V3000 | 2 | 98 | 78 | 50 | 39 | 29 | 23 | 18 | 14 | 9 | 6 | - |
| 2x40 | EXIDE XP12V3400 | 2 | 111 | 94 | 60 | 45 | 34 | 26 | 21 | 17 | 11 | 8 | 5 |
| 3x40 | EXIDE XP12V3000 | 3 | 152 | 118 | 91 | 65 | 47 | 39 | 31 | 27 | 19 | 14 | 10 |
| 3x40 | EXIDE XP12V3400 | 3 | 171 | 141 | 105 | 82 | 57 | 45 | 38 | 30 | 22 | 17 | 12 |
| 4x40 | EXIDE XP12V3000 | 4 | 218 | 170 | 118 | 98 | 73 | 55 | 44 | 39 | 29 | 23 | 17 |
| 4x40 | EXIDE XP12V3400 | 4 | 246 | 194 | 141 | 111 | 90 | 68 | 54 | 45 | 34 | 26 | 20 |
| 5x40 | EXIDE XP12V3400 | 5 | 298 | 256 | 177 | 141 | 111 | 94 | 77 | 60 | 45 | 36 | 28 |
| 6x40 | EXIDE XP12V3400 | 6 | 379 | 298 | 228 | 171 | 134 | 111 | 97 | 82 | 57 | 45 | 36 |
| Power factor **1.0** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | EXIDE XP12V3000 | 1 | 34 | 27 | 17 | 12 | 7 | - | - | - | - | - | - |
| 1x40 | EXIDE XP12V3400 | 1 | 40 | 30 | 20 | 14 | 9 | 6 | 4 | - | - | - | - |
| 2x40 | EXIDE XP12V3000 | 2 | 87 | 65 | 44 | 34 | 25 | 19 | 15 | 12 | 7 | - | - |
| 2x40 | EXIDE XP12V3400 | 2 | 102 | 82 | 53 | 40 | 29 | 22 | 18 | 14 | 9 | 6 | 4 |
| 3x40 | EXIDE XP12V3000 | 3 | 131 | 109 | 80 | 56 | 42 | 34 | 28 | 23 | 16 | 12 | 8 |
| 3x40 | EXIDE XP12V3400 | 3 | 154 | 121 | 95 | 70 | 50 | 40 | 32 | 27 | 19 | 14 | 10 |
| 4x40 | EXIDE XP12V3000 | 4 | 185 | 152 | 109 | 87 | 60 | 47 | 40 | 34 | 25 | 19 | 14 |
| 4x40 | EXIDE XP12V3400 | 4 | 217 | 171 | 121 | 102 | 78 | 57 | 47 | 40 | 29 | 22 | 17 |
| 5x40 | EXIDE XP12V3400 | 5 | 274 | 228 | 161 | 121 | 102 | 82 | 63 | 53 | 40 | 30 | 24 |
| 6x40 | EXIDE XP12V3400 | 6 | 332 | 274 | 198 | 154 | 117 | 102 | 86 | 70 | 50 | 40 | 30 |

***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## FIAMM batteries

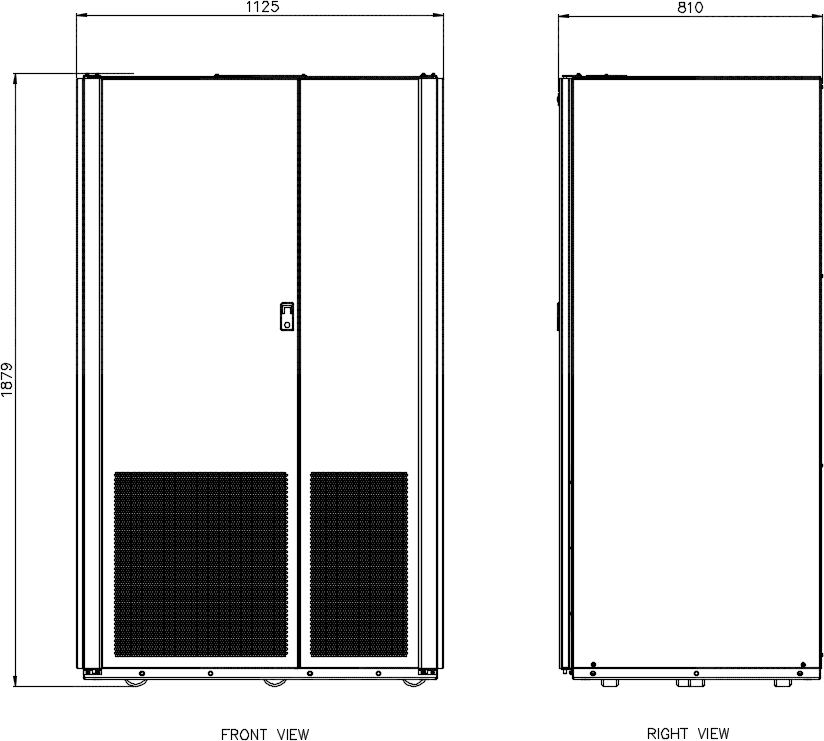
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Power factor **0.8** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | FIAMM 12FLB350P | 1 | 41 | 33 | 22 | 16 | 11 | 8 | 6 | 4 | - | - | - |
| 1x40 | FIAMM 12FLB540P | 1 | 65 | 52 | 37 | 27 | 19 | 14 | 10 | 8 | 4 | - | - |
| 2x40 | FIAMM 12FLB350P | 2 | 89 | 76 | 54 | 41 | 30 | 24 | 20 | 16 | 11 | 8 | 5 |
| 2x40 | FIAMM 12FLB540P | 2 | 147 | 115 | 83 | 65 | 50 | 40 | 32 | 27 | 19 | 14 | 10 |
| 3x40 | FIAMM 12FLB350P | 3 | 147 | 117 | 85 | 68 | 51 | 41 | 34 | 28 | 21 | 16 | 12 |
| 3x40 | FIAMM 12FLB540P | 3 | 227 | 183 | 135 | 102 | 80 | 65 | 54 | 46 | 35 | 27 | 20 |
| 4x40 | FIAMM 12FLB350P | 4 | 195 | 163 | 117 | 89 | 73 | 58 | 48 | 41 | 30 | 24 | 19 |
| 4x40 | FIAMM 12FLB540P | 4 | 315 | 255 | 183 | 147 | 110 | 88 | 77 | 65 | 50 | 40 | 31 |
| 5x40 | FIAMM 12FLB540P | 5 | 437 | 330 | 236 | 183 | 147 | 115 | 96 | 83 | 65 | 52 | 42 |
| 6x40 | FIAMM 12FLB540P | 6 | 567 | 437 | 292 | 227 | 176 | 147 | 119 | 102 | 80 | 65 | 52 |
| Power factor **0.9** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | FIAMM 12FLB350P | 1 | 36 | 28 | 19 | 14 | 9 | 6 | 4 | 2 | - | - | - |
| 1x40 | FIAMM 12FLB540P | 1 | 56 | 45 | 31 | 22 | 16 | 11 | 8 | 6 | 2 | - | - |
| 2x40 | FIAMM 12FLB350P | 2 | 81 | 66 | 46 | 36 | 26 | 21 | 17 | 14 | 9 | 6 | 3 |
| 2x40 | FIAMM 12FLB540P | 2 | 125 | 101 | 74 | 56 | 43 | 34 | 27 | 22 | 16 | 11 | 8 |
| 3x40 | FIAMM 12FLB350P | 3 | 126 | 103 | 76 | 58 | 44 | 36 | 29 | 24 | 18 | 14 | 10 |
| 3x40 | FIAMM 12FLB540P | 3 | 200 | 164 | 115 | 88 | 71 | 56 | 47 | 40 | 29 | 22 | 17 |
| 4x40 | FIAMM 12FLB350P | 4 | 172 | 145 | 103 | 81 | 63 | 50 | 42 | 36 | 26 | 21 | 16 |
| 4x40 | FIAMM 12FLB540P | 4 | 276 | 224 | 164 | 125 | 95 | 79 | 66 | 56 | 43 | 34 | 26 |
| 5x40 | FIAMM 12FLB540P | 5 | 354 | 288 | 210 | 164 | 125 | 101 | 85 | 74 | 56 | 45 | 36 |
| 6x40 | FIAMM 12FLB540P | 6 | 482 | 354 | 255 | 200 | 158 | 125 | 104 | 88 | 71 | 56 | 45 |
| Power factor **1.0** on different load levels | | | | | | | | | | | | | |
|  |  | **kVA**  Strings | **50** | **60** | **80** | **100** | **125** | **150** | **175** | **200** | **250** | **300** | **360** |
| **Quantity** | **Battery type** |  |  |  |  |  |  |  |  |  |  |  |
| 1x40 | FIAMM 12FLB350P | 1 | 30 | 24 | 16 | 11 | 8 | 5 | 2 | - | - | - | - |
| 1x40 | FIAMM 12FLB540P | 1 | 50 | 40 | 27 | 19 | 13 | 9 | 6 | 4 | - | - | - |
| 2x40 | FIAMM 12FLB350P | 2 | 73 | 58 | 41 | 30 | 23 | 18 | 14 | 11 | 8 | 5 | 2 |
| 2x40 | FIAMM 12FLB540P | 2 | 110 | 88 | 65 | 50 | 38 | 29 | 23 | 19 | 13 | 9 | 6 |
| 3x40 | FIAMM 12FLB350P | 3 | 112 | 89 | 68 | 51 | 39 | 30 | 25 | 21 | 15 | 11 | 8 |
| 3x40 | FIAMM 12FLB540P | 3 | 176 | 147 | 102 | 80 | 61 | 50 | 41 | 35 | 25 | 19 | 14 |
| 4x40 | FIAMM 12FLB350P | 4 | 157 | 126 | 89 | 73 | 55 | 44 | 37 | 30 | 23 | 18 | 14 |
| 4x40 | FIAMM 12FLB540P | 4 | 241 | 200 | 147 | 110 | 85 | 71 | 58 | 50 | 38 | 29 | 22 |
| 5x40 | FIAMM 12FLB540P | 5 | 315 | 255 | 183 | 147 | 110 | 88 | 77 | 65 | 50 | 40 | 31 |
| 6x40 | FIAMM 12FLB540P | 6 | 407 | 315 | 227 | 176 | 139 | 110 | 90 | 80 | 61 | 50 | 40 |

***Note!*** *The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.* The specifications are subject to change without a notice.

## EBC-E battery cabinet details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reference | Breaker | Net Weight | Battery type | Design life | Blocks1 |
| P-105000081-401 | 400 A | 412 | EMPTY  M6 cables² | - | Up to 40 |
| P-105000081-402 | 400 A | 412 | EMPTY  M8 cables² | - | Up to 40 |
| P-105000038-001 | 400 A | 1444 | CSB HRL12280W | 10 years | 40 |
| P-105000038-002 | 400 A | 1596 | CSB HRL12330W | 10 years | 40 |
| P-105000038-003 | 400 A | 2168 | CSB HRL12540W | 10 years | 40 |
| P-105000081-412 | 400 A | 1724 | Exide XP12V3000 | 10 years | 40 |
| P-105000081-411 | 400 A | 1612 | FIAMM 12FLB350P | 10 years | 40 |
| P-105000081-413 | 400 A | 2212 | FIAMM 12FLB540P | 10 years | 40 |
| P-105000081-415 | 400 A | 1851 | Exide XP12V3400 | 10 years | 40 |

1 Amount of battery blocks that are provided with the cabinet or can be installed in the battery cabinet (if empty). 2M6 cables are used for e.g. CSB 280W and Exide XP12V3400 batteries. M8 cables are for e.g. FIAMM 12FLB540P batteries. For other battery types, please see the battery datasheet.



Eaton EBC-E battery cabinet - Dimension in millimetres.