



FHP 12-33

DIMENSIONAL FEATURES

| | | | |
|-------------------------------|-----------------------------|--------------|--|
| Nominal Voltage | 12V | | Tecnology:AGM VRLA Alloy: Lead-Calcium Tipology plates: flat Working Temperature: from -10°C to +50°C Battery sealed no maintenance Safety valves VRLA (one per each cell) Box in ABS against the flames according UL94:V0 IEC 707 Design Life >10-12 anni (at 20°C) HP High Performance Standards: IEC CEI EN 60896 Parte 21 and 22 |
| Nominal Capacity (20 hours) | 33Ah (Vfin 1,8Vpc at 20°C) | | |
| Dimensions | Length | 196 ±2mm | |
| | Width | 132 ±2mm | |
| | Box height | 170 ±2mm | |
| | Total height | 181 ±2mm | |
| Technical drawing n° 400333-0 | Weight | 11,2 Kg ± 5% | |
| Standard Terminal (brass) | Screw female terminals : M6 | | |
| | | | <p>Bolt-and-nut terminal Bolt Type:M6</p> <p>(in mm)</p> |

ELECTRIC FEATURES

| Characteristics | | | Discharge Curves (20°C) |
|---------------------------------------|--|---|-------------------------|
| Capacity | 20 hours (1,8Vfin pc at 20°C) 10hours (1,8Vfin pc at 20°C) 5 hours (1,7Vfin pc at 20°C) 3 hours (1,7Vfin pc at 20°C) 1 hour (1,6Vfin pc at 20°C) | 33,00Ah 27,00Ah 24,70Ah 23,10Ah 21,85Ah | |
| Temperature influence on the capacity | 40°C 20°C 0°C | 102% 100% 85% | |
| Internal Resistance | 9 mΩ±10% | SCC 1100 A ±10% | |
| Charging Voltage | Cyclic use | Initial Current less of 8,2A Voltage 14.70 ~ 15.00V at 20°C Temperature coefficient -30 mV/°C | |
| | Standby use | No limit on the initial charging current Voltage 13.60 ~ 13.80V at 20°C Temperature coefficient -20 mV/°C | |

Table of discharge at constant current (Amp) and constant power (Watt/cell) at 20°C

| V finale/Time | | 5min | 10min | 15min | 20min | 30min | 45min | 60min | 90min | 2hours | 3hours |
|---------------|---|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|
| 9.90V | A | 115,42 | 75,87 | 57,22 | 40,29 | 33,74 | 25,33 | 20,29 | 11,17 | 10,64 | 7,99 |
| | W | 230,14 | 155,62 | 127,38 | 102,55 | 71,53 | 56,29 | 44,41 | 31,98 | 27,14 | 16,65 |
| 10.2V | A | 107,53 | 70,14 | 53,85 | 38,26 | 32,60 | 24,06 | 19,42 | 10,78 | 10,26 | 7,70 |
| | W | 219,38 | 148,42 | 125,36 | 100,92 | 69,68 | 54,83 | 43,58 | 31,38 | 26,64 | 16,46 |
| 10.8V | A | 98,65 | 63,76 | 48,08 | 33,86 | 28,35 | 21,29 | 17,34 | 9,80 | 9,50 | 7,26 |
| | W | 206,03 | 139,07 | 119,05 | 95,85 | 66,23 | 52,12 | 41,31 | 29,75 | 25,25 | 16,20 |