

MARINE ELECTRIC MOTOR

YBT-H Totally-Enclosed/Fan-Cooled /Three-Phase Marine Flameproof Motors

ISO9001 Supplier

Class Certificate

Export Supply

Introduction YBT-H Marine Flameproof Motors are designed and manufactured according to National Standard GB3836.1 “Electric apparatus for explosive gas atmosphere- part 1: general requirement” and GB3836.2 “El...



Key Highlights

|               |                                                                                   |
|---------------|-----------------------------------------------------------------------------------|
| Category      | Marine Electric Motor                                                             |
| Standard      | DIN                                                                               |
| Weight / Size | 55 1.5 1.4 1390 1710<br>YBT225M-6-H 30.0 61.1 53.1<br>985 1187 YBT80M2-4-H 0.7... |
| Certificate   | CCS/LR/DNV/KR                                                                     |

We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.

## Technical Specifications

| Category | Marine Electric Motor | Model / SKU | YBT-H-Totally-Enclosed-Fan-Cooled-Three-Phase-Marine-Flameproof-Motors |
|----------|-----------------------|-------------|------------------------------------------------------------------------|
|          |                       |             |                                                                        |

| Standard | DIN | Weight / Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |     | 55 1.5 1.4 1390 1710 YBT225M-6-H 30.0 61.1 53.1 985 1187                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|          |     | YBT80M2-4-H 0.75 2.1 1.8 1390 1710 YBT250M-6-H 37.0 71.0 61.3 980 1180 YBT90S-4-H 1.1 2.7 2.4 1400 1710 YBT132S-8-H 2.2 5.8 5.2 710 860 YBT90L-4-H 1.5 3.6 3.2 1400 1710 YBT132M-8-H 3.0 7.6 6.8 710 860 YBT100L1-4-H 2.2 5.0 4.5 1420 1730 YBT160M1-8-H 4.0 10.5 9.1 720 870 YBT100L2-4-H 3.0 6.8 5.9 1420 1730 YBT160M2-8-H 5.5 13.4 11.5 720 870 YBT112M-4-H 4.0 8.8 7.7 1440 1750 YBT160L-8-H 7.5 17.7 15.5 720 870 YBT132S-4-H 5.5 11.7 10.0 1440 1750 YBT180L-8-H 11.0 25.6 22.2 730 880 YBT132M-4-H 7.5 15.4 13.2 1440 1750 YBT200L-8-H 15.0 33.3 29.2 729 882 YBT160M-4-H 11.0 22.6 19.5 1460 1760 YBT225M-8-H 22.0 47.4 41.7 734 886 YBT160L-4-H 15.0 30.5 26.3 1460 1760 YBT250M-8-H 30.0 64.7 57.1 730 890 YBT180M-4-H 18.5 35.9 30.8 1470 1770 Mounting And Overall Dimension Frame size mounting and overall dimension B C D E F G H I H2 e L L I L2 d d I g f M×t M Depth h 801 36 58±2 19 40 6 15.5 176 175 28 330 100 90 60 13.8 12 5 M16×1.5 M8 Depth 14 802 36 58±2 201 175 28 330 100 90 60 13.8 12 5 M16×1.5 M8 Depth 14 90S 36 62±2 24 50 8 20 280 190 28 340 100 90 60 15.8 14 5 M18×1.5 M8 Depth 14 90L 36 62±2 226 190 28 375 125 90 60 15.8 14 5 M18×1.5 M8 Depth 14 IOOL1 40 68±2 28 60 24 280/330/380 220 28 410 140 93 60 17.8 16 5 M20×1.5 M10 Depth 17 100L2 40 68±2 280/380 220 28 410 140 93 60 17.8 16 5 M20×1.5 M10 Depth 17 112M 40 76±2 280/380/410 245 28 430 140 102 60 17.8 16 5 M20×1.5 M10 Depth 17 132S1 40 89±2 38 80 10 33 280/435 285 32 450 140 120 60 21.8 20 5 M24×1.5 M10 Depth 17 132M 40 89±2 410/435/485 285 32 |

|             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |
|-------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
|             |               | 495 178 120 60 21.8 20 5<br>M24×1.5 M10 Depth 17 160M 46<br>114±3 42 110 12 37 435/485/535<br>345 32 596 210 162 60 24.8 23 5<br>M27×1.5 M14 Depth 17 160L 46<br>114±3 485/535/585 345 32 646<br>254 162 60 24.8 23 5 M27×1.5<br>M14 Depth 17 180M 54 126±3 48<br>14 42.5 485/585 380 32 702 241<br>174 60 27.8 26 5 M30×1.5 M14<br>Depth 22 180L 54 126±3<br>535/585/642 380 32 740 279 174<br>60 27.8 26 5 M30×1.5 M14 Depth<br>22 200L1 60 133±3 55 16 49<br>585/642 430 32 740 305 186 60<br>30.8 29 6 M33×1.5 M16 Depth 26<br>200L2 60 133±3 742 430 32 740<br>305 186 60 30.8 29 6 M33×1.5<br>M16 Depth 26 225M 70 149±4 60<br>140 18 53 642/735/742 480 32<br>870 311 196 76 33.8 32 6 M36×1.5<br>M18 Depth 30 250M 70 168±4 65<br>140 18 58 740 526 40 1000 340<br>196 76 38 38 8 M42×1.5 M16<br>Depth 24 Note: |                                      |
| Certificate | CCS/LR/DNV/KR | Warranty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12 Months unless specified otherwise |
| Origin      | China         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |

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## Introduction

**YBT-H Marine Flameproof Motors** are designed and manufactured according to National Standard GB3836.1 “Electric apparatus for explosive gas atmosphere-part 1: general requirement” and GB3836.2 “Electric apparatus for explosive gas atmosphere –part2: flameproof enclosure “d”. It has the feature of high efficiency. Big rotation moment. low noise and convenient protection. The protection type of the motor is Exd IIBT4, temperature class from T1 to T4. It can be used on the mixture air of easy-ignition or steam and atmosphere that can be brought on explosion. This series can be worked with CBZ- II flameproof ventilator on board ship. Rated voltage: 380V/440V Rated frequency: 50HZ/60HZ, Protection class: IP56, Insulation class: F , Duty: S1, Connection : Y connection (power below 3KW), the others are △ connection.

## Operation Condition

Ambient temperature: -20°C ~ 45°C ;

Altitude: 0m;

Relative Humidity: ≤ 95% ;

shock、Vibration、Dew、Salt mist. 、Oil mist、Fungus, exists;

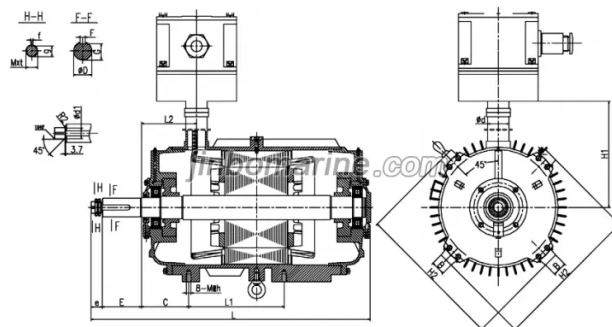
Inclination and swing:±22.5°

Main Technical Data

| Type          | Output (kW) | Current (A)  |              | Speed (r/min) |              | Type          | Output (kW) | Current (A)  |              | Speed (r/min) |              |
|---------------|-------------|--------------|--------------|---------------|--------------|---------------|-------------|--------------|--------------|---------------|--------------|
|               |             | 380V<br>50Hz | 440V<br>60Hz | 380V<br>50Hz  | 440V<br>60Hz |               |             | 380V<br>50Hz | 440V<br>60Hz | 380V<br>50Hz  | 440V<br>60Hz |
| YBT80M 1-2-H  | 0.75        | 1.8          | 1.6          | 2820          | 3460         | YBT180L-4-H   | 22.0        | 42.2         | 36.9         | 1470          | 1770         |
| YBT80M 2-2-H  | 1.1         | 2.6          | 2.2          | 2820          | 3460         | YBT200L-4-H   | 30.0        | 57.3         | 49.8         | 1476          | 1779         |
| YBT90S-2-H    | 1.5         | 3.5          | 3.1          | 2840          | 3470         | YBT225M-4-H   | 45.0        | 84.0         | 73.4         | 1480          | 1783         |
| YBT90L-2-H    | 2.2         | 4.9          | 4.3          | 2840          | 3470         | YBT250M-4-H   | 55.0        | 103.8        | 88.6         | 1480          | 1780         |
| YBT100L-2-H   | 3.0         | 6.2          | 5.4          | 2880          | 3490         | YBT90S-6-H    | 0.75        | 2.2          | 2.0          | 910           | 1130         |
| YBT112 M-2-H  | 4.0         | 8.2          | 7.1          | 2890          | 3500         | YBT90L-6-H    | 1.1         | 3.2          | 2.9          | 910           | 1130         |
| YBT132S 1-2-H | 5.5         | 11.0         | 9.6          | 2900          | 3520         | YBT100L-6-H   | 1.5         | 4.0          | 3.5          | 940           | 1150         |
| YBT132S 2-2-H | 7.5         | 14.6         | 12.9         | 2900          | 3520         | YBT112M-6-H   | 2.2         | 5.6          | 4.9          | 940           | 1150         |
| YBT160 M1-2-H | 11.0        | 21.6         | 18.7         | 2930          | 3540         | YBT132S-6-H   | 3.0         | 7.2          | 6.4          | 960           | 1170         |
| YBT160 M2-2-H | 15.0        | 28.9         | 25.1         | 2930          | 3540         | YBT132M 1-6-H | 4.0         | 9.5          | 8.2          | 960           | 1170         |
| YBT160L-2-H   | 18.5        | 35.7         | 30.3         | 2930          | 3540         | YBT132M 2-6-H | 5.5         | 12.5         | 10.7         | 960           | 1170         |
| YBT180 M-2-H  | 22.0        | 42.2         | 36.9         | 2940          | 3550         | YBT160M-6-H   | 7.5         | 17.1         | 14.8         | 970           | 1170         |
| YBT200L 1-2-H | 30.0        | 57.9         | 50.3         | 2935          | 3560         | YBT160L-6-H   | 11.0        | 25.0         | 21.7         | 970           | 1170         |

|                  |      |       |      |      |      |                  |      |      |      |     |      |
|------------------|------|-------|------|------|------|------------------|------|------|------|-----|------|
| YBT200L<br>2-2-H | 37.0 | 69.4  | 60.3 | 2960 | 3565 | YBT180L-<br>6-H  | 15.0 | 33.0 | 29.3 | 970 | 1180 |
| YBT225<br>M-2-H  | 45.0 | 85.9  | 76.3 | 2969 | 3572 | YBT200L1<br>-6-H | 18.5 | 37.6 | 32.7 | 980 | 1183 |
| YBT250<br>M-2-H  | 55.0 | 103.2 | 91.7 | 2970 | 3570 | YBT200L2<br>-6-H | 22.0 | 44.7 | 38.9 | 980 | 1182 |
| YBT80M<br>1-4-H  | 0.55 | 1.5   | 1.4  | 1390 | 1710 | YBT225M<br>-6-H  | 30.0 | 61.1 | 53.1 | 985 | 1187 |
| YBT80M<br>2-4-H  | 0.75 | 2.1   | 1.8  | 1390 | 1710 | YBT250M<br>-6-H  | 37.0 | 71.0 | 61.3 | 980 | 1180 |
| YBT90S-<br>4-H   | 1.1  | 2.7   | 2.4  | 1400 | 1710 | YBT132S-<br>8-H  | 2.2  | 5.8  | 5.2  | 710 | 860  |
| YBT90L-<br>4-H   | 1.5  | 3.6   | 3.2  | 1400 | 1710 | YBT132M<br>-8-H  | 3.0  | 7.6  | 6.8  | 710 | 860  |
| YBT100L<br>1-4-H | 2.2  | 5.0   | 4.5  | 1420 | 1730 | YBT160M<br>1-8-H | 4.0  | 10.5 | 9.1  | 720 | 870  |
| YBT100L<br>2-4-H | 3.0  | 6.8   | 5.9  | 1420 | 1730 | YBT160M<br>2-8-H | 5.5  | 13.4 | 11.5 | 720 | 870  |
| YBT112<br>M-4-H  | 4.0  | 8.8   | 7.7  | 1440 | 1750 | YBT160L-<br>8-H  | 7.5  | 17.7 | 15.5 | 720 | 870  |
| YBT132S<br>-4-H  | 5.5  | 11.7  | 10.0 | 1440 | 1750 | YBT180L-<br>8-H  | 11.0 | 25.6 | 22.2 | 730 | 880  |
| YBT132<br>M-4-H  | 7.5  | 15.4  | 13.2 | 1440 | 1750 | YBT200L-<br>8-H  | 15.0 | 33.3 | 29.2 | 729 | 882  |
| YBT160<br>M-4-H  | 11.0 | 22.6  | 19.5 | 1460 | 1760 | YBT225M<br>-8-H  | 22.0 | 47.4 | 41.7 | 734 | 886  |
| YBT160L<br>-4-H  | 15.0 | 30.5  | 26.3 | 1460 | 1760 | YBT250M<br>-8-H  | 30.0 | 64.7 | 57.1 | 730 | 890  |
| YBT180<br>M-4-H  | 18.5 | 35.9  | 30.8 | 1470 | 1770 |                  |      |      |      |     |      |

## Mounting And Overall Dimension



| Frame size | mounting and overall dimension |      |    |    |    |      |             |     |    |     |     |     |    |      |    |   |         |              |
|------------|--------------------------------|------|----|----|----|------|-------------|-----|----|-----|-----|-----|----|------|----|---|---------|--------------|
|            | B                              | C    | D  | E  | F  | G    | H1          | H2  | e  | L   | LI  | L2  | d  | dl   | g  | f | M×t     | M Depth h    |
| 801        | 36                             | 58±2 | 19 | 40 | 6  | 15.5 | 176         | 175 | 28 | 330 | 100 | 90  | 60 | 13.8 | 12 | 5 | M16×1.5 | M8 Depth 14  |
| 802        | 36                             | 58±2 |    |    |    |      | 201         | 175 | 28 | 330 | 100 | 90  | 60 | 13.8 | 12 | 5 | M16×1.5 | M8 Depth 14  |
| 90S        | 36                             | 62±2 | 24 | 50 | 8  | 20   | 280         | 190 | 28 | 340 | 100 | 90  | 60 | 15.8 | 14 | 5 | M18×1.5 | M8 Depth 14  |
| 90L        | 36                             | 62±2 |    |    |    |      | 226         | 190 | 28 | 375 | 125 | 90  | 60 | 15.8 | 14 | 5 | M18×1.5 | M8 Depth 14  |
| IOOL1      | 40                             | 68±2 | 28 | 60 |    | 24   | 280/330/380 | 220 | 28 | 410 | 140 | 93  | 60 | 17.8 | 16 | 5 | M20×1.5 | M10 Depth 17 |
| 100L2      | 40                             | 68±2 |    |    |    |      | 280/380     | 220 | 28 | 410 | 140 | 93  | 60 | 17.8 | 16 | 5 | M20×1.5 | M10 Depth 17 |
| 112M       | 40                             | 76±2 |    |    |    |      | 280/380/410 | 245 | 28 | 430 | 140 | 102 | 60 | 17.8 | 16 | 5 | M20×1.5 | M10 Depth 17 |
| 132S1      | 40                             | 89±2 | 38 | 80 | 10 | 33   | 280/435     | 285 | 32 | 450 | 140 | 120 | 60 | 21.8 | 20 | 5 | M24×1.5 | M10 Depth 17 |
| 132M       | 40                             | 89±2 |    |    |    |      | 410/435/485 | 285 | 32 | 495 | 178 | 120 | 60 | 21.8 | 20 | 5 | M24×1.5 | M10 Depth 17 |

|       |    |           |    |         |    |          |                 |         |    |          |         |         |    |          |    |   |             |                    |
|-------|----|-----------|----|---------|----|----------|-----------------|---------|----|----------|---------|---------|----|----------|----|---|-------------|--------------------|
| 160M  | 46 | 114<br>±3 | 42 | 11<br>0 | 12 | 37       | 435/48<br>5/535 | 34<br>5 | 32 | 59<br>6  | 21<br>0 | 16<br>2 | 60 | 24.<br>8 | 23 | 5 | M27×<br>1.5 | M14<br>Depth<br>17 |
| 160L  | 46 | 114<br>±3 |    |         |    |          | 485/53<br>5/585 | 34<br>5 | 32 | 64<br>6  | 25<br>4 | 16<br>2 | 60 | 24.<br>8 | 23 | 5 | M27×<br>1.5 | M14<br>Depth<br>17 |
| 180M  | 54 | 126<br>±3 | 48 |         | 14 | 42.<br>5 | 485/58<br>5     | 38<br>0 | 32 | 70<br>2  | 24<br>1 | 17<br>4 | 60 | 27.<br>8 | 26 | 5 | M30×<br>1.5 | M14<br>Depth<br>22 |
| 180L  | 54 | 126<br>±3 |    |         |    |          | 535/58<br>5/642 | 38<br>0 | 32 | 74<br>0  | 27<br>9 | 17<br>4 | 60 | 27.<br>8 | 26 | 5 | M30×<br>1.5 | M14<br>Depth<br>22 |
| 200L1 | 60 | 133<br>±3 | 55 |         | 16 | 49       | 585/64<br>2     | 43<br>0 | 32 | 74<br>0  | 30<br>5 | 18<br>6 | 60 | 30.<br>8 | 29 | 6 | M33×<br>1.5 | M16<br>Depth<br>26 |
| 200L2 | 60 | 133<br>±3 |    |         |    |          | 742             | 43<br>0 | 32 | 74<br>0  | 30<br>5 | 18<br>6 | 60 | 30.<br>8 | 29 | 6 | M33×<br>1.5 | M16<br>Depth<br>26 |
| 225M  | 70 | 149<br>±4 | 60 | 14<br>0 | 18 | 53       | 642/73<br>5/742 | 48<br>0 | 32 | 87<br>0  | 31<br>1 | 19<br>6 | 76 | 33.<br>8 | 32 | 6 | M36×<br>1.5 | M18<br>Depth<br>30 |
| 250M  | 70 | 168<br>±4 | 65 | 14<br>0 | 18 | 58       | 740             | 52<br>6 | 40 | 10<br>00 | 34<br>0 | 19<br>6 | 76 | 38       | 38 | 8 | M42×<br>1.5 | M16<br>Depth<br>24 |

Note: \* HI as table shown above could be changed according to customer.