

AC INDUCTION MOTOR DATA SHEET

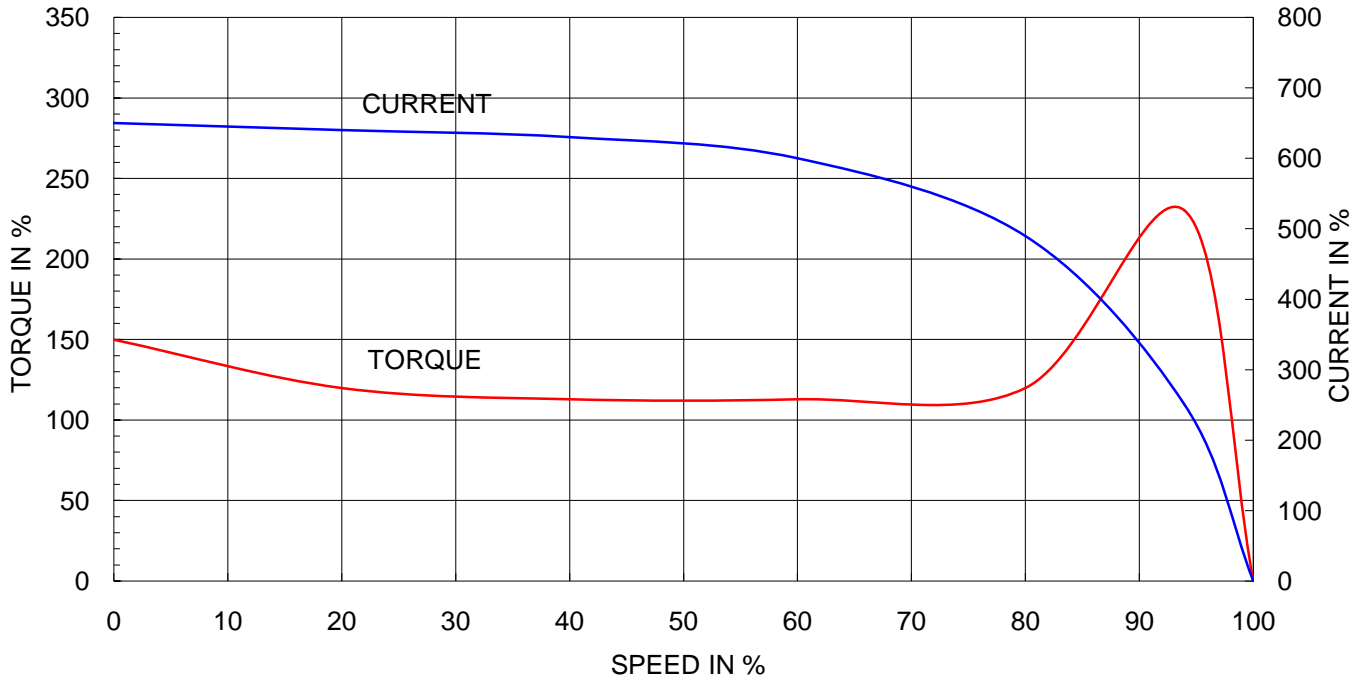
| Model No.or RFQ No. | | Item No. | | Rev. No. [0] | | | |
|--|---|--|--|---|----------------------------------|----------|-----------|
| Project Name | | Project No. | | Quantity sets | | | |
| GENERAL SPECIFICATION | | | PERFORMANCE DATA | | | | |
| Frame Size | 250M | | Rated Output | 75 kW 100 HP | | | |
| Type | HS-75/6 | | Number of Poles | 6 | | | |
| Enclosure(Protection) | Explosion Proof (IP55) | | Rotor Type | Squirrel Cage | | | |
| Method of Cooling | IC411(FC) | | Starting Method* | <input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y- Δ | | | |
| Rated Frequency | 60 Hz | | Rated Voltage | 440 V | 380 V 220 V | | |
| Number of Phases | 3 | | Current | Full Load | 123.0 A 142.5 A 246.1 A | | |
| Insulation Class | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H | | Locked-rotor** | 650 % 650 % 650 % | | | |
| Temp. Rise at full load (by resistance method) | | | Efficiency | | | | |
| at 1.0 S.F 80 deg. C | | | 50% Load 93.9 % | | | | |
| Motor Location <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor | | | 75% Load 94.2 % | | | | |
| Altitude Less than 1000 meter | | | 100% Load 94.1 % | | | | |
| Relative Humidity Less than 80 % | | | Power Factor(p.u) | | | | |
| Ambient Temp. 40 deg. C (Max.) | | | 50% Load 0.768 | | | | |
| Duty Type Continuous (S1) | | | 75% Load 0.831 | | | | |
| Service Factor 1.00 | | | 100% Load 0.850 | | | | |
| Mounting <input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5 | | | Speed at Full Load 1185 r.p.m | | | | |
| Bearing | Type | Anti-Friction | | Torque | | | |
| | DE/N-DE | 6316C3 / 6313C3 | | Full Load 61.6 kg·m | | | |
| | Lubricant | Grease(Gadus S2 V 100 2) | | Locked-rotor** 150 % | | | |
| External Thrust Not applicable | | | Breakdown** 230 % | | Moment of Inertia (J) | | |
| Coupling Method <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt | | | Load(Max.) 126.775 kg·m ² | | Motor 2.758 kg·m ² | | |
| Shaft Extension <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double | | | Sound Pressure Level (No-load & mean value at 1m from motor) | | | | |
| Terminal Box | Main | <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron | | 75 dB(A) | | | |
| | Aux. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Vibration 2.2 mm/sec (r.m.s) | | | |
| | Location | Refer to Outline Drawing | | Permissible number of consecutive starts | | | |
| Application | | | Cold 3 times | | Hot 2 times | | |
| Area classification Hazardous | | | Paint Munsell No. 4.0PB5.4/5.5(VL-451) | | | | |
| Type of Ex-Protection Ex d II T4 | | | SUBMITTAL DRAWING | | | | |
| Applicable Standard KS,IEC | | | | | | | |
| ACCESSORIES | | | SUBMITTAL DRAWING | | | | |
| | | | Outline Dimension Drawing \ Motor Weight(Approx.) | | | | |
| | | | B3 | GJ5MAP02 | 830 kg | | |
| | | | B5 | 0 | 0 kg | | |
| | | | V1 | | kg | | |
| | | | B3/B5 | 0 | 0 kg | | |
| | | | Main T-Box Ass'y | 3M-036962 | | | |
| SPARE PARTS | | | REMARK | | | | |
| | | | High Efficiency | | | | |
| | | | Date | DSND | CHKD | CHKD | APPD |
| | | | 2010-05-28 | R.G. KIM | O.J. KIM | J.H. KIM | K.J. KANG |

Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed Motor, performance data is based on sine wave tests.
 ** Data is based on when the motor is supplied at rated voltage & frequency, and the data is expressed as a percentage of full-load value.

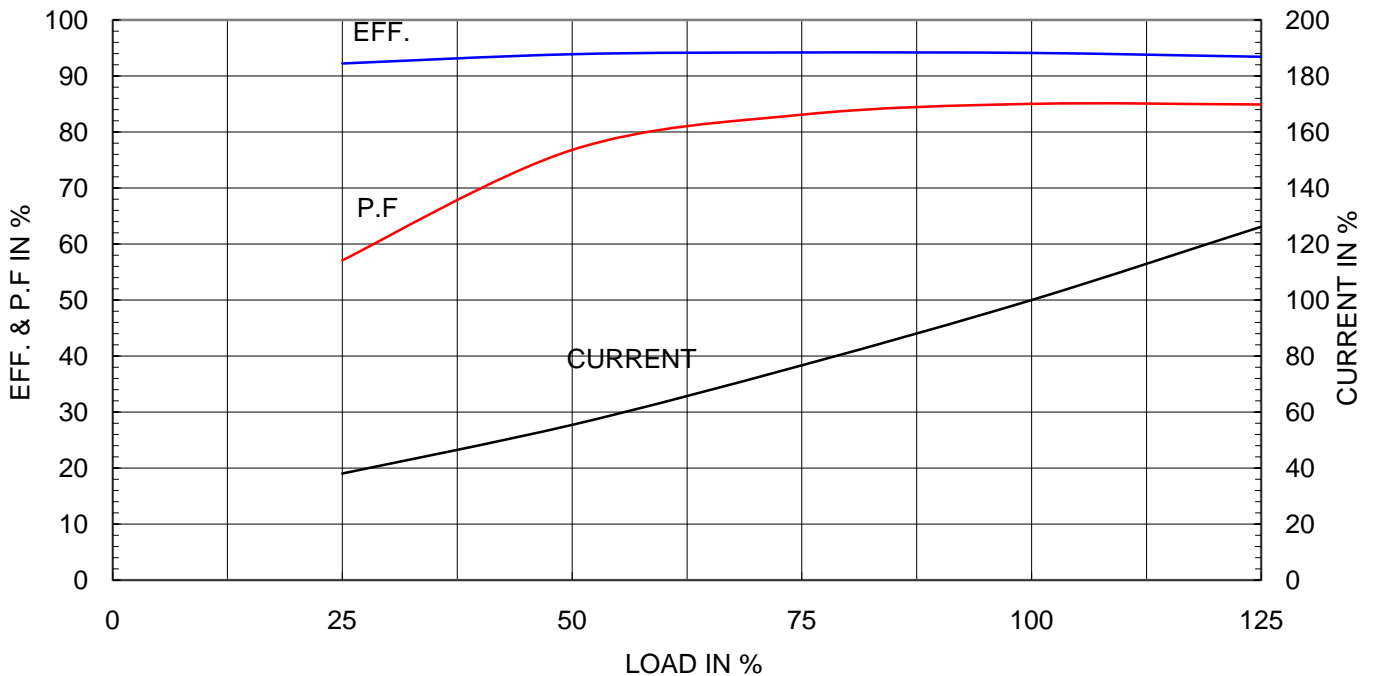
| | |
|-----------------------------|-----------------------------|
| Type | : GHB250M |
| Full Load Torque | : 61.6 Kg.m |
| Motor moment of Inertia (J) | : 2.758 Kg.m ² |
| Load moment of Inertia (J) | : 126.775 Kg.m ² |

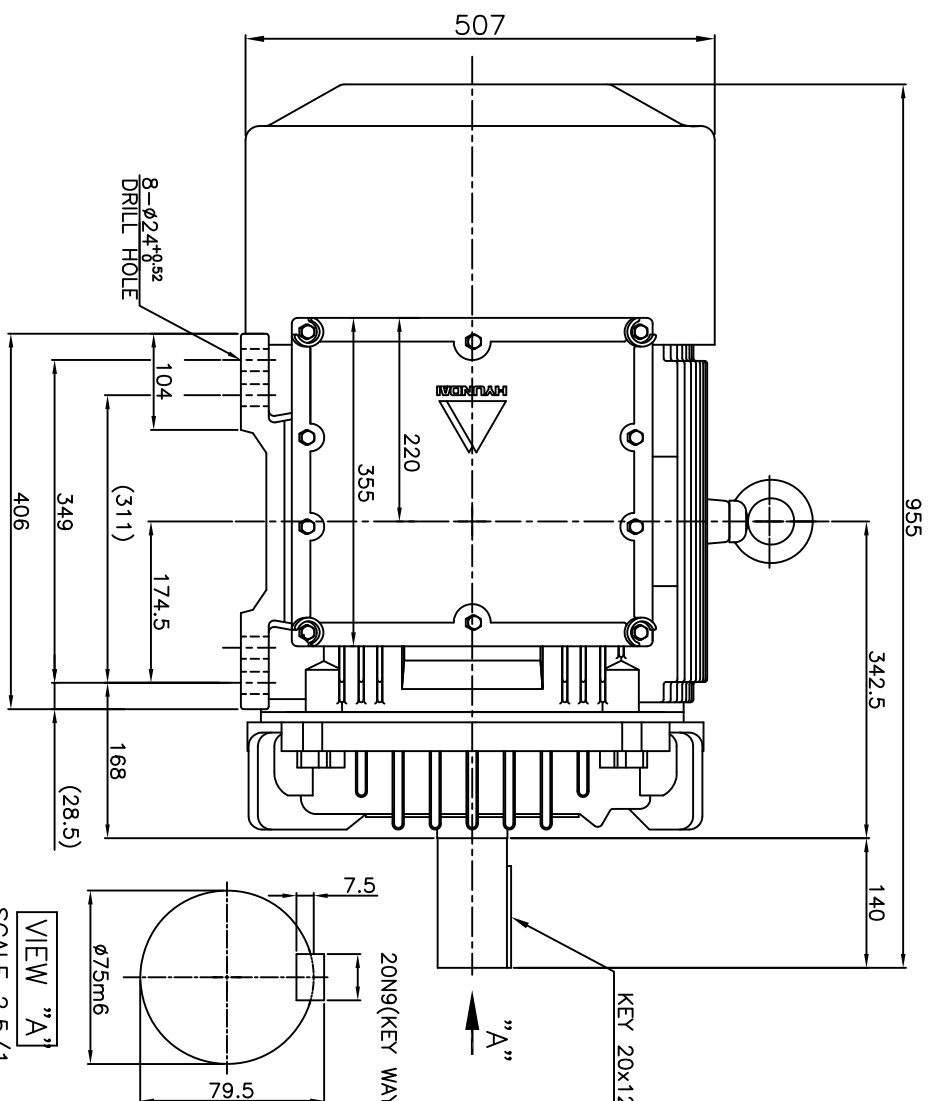
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|----------------------|--------|----------|--------|
| 75 kW | 6 P | 60 Hz | |
| Speed at Full Load : | | 1185 RPM | |
| Rated Voltage | 440V | 380V | 220V |
| Full Load Current | 123.0A | 142.5A | 246.1A |

SPEED VS TORQUE & CURRENT CURVE

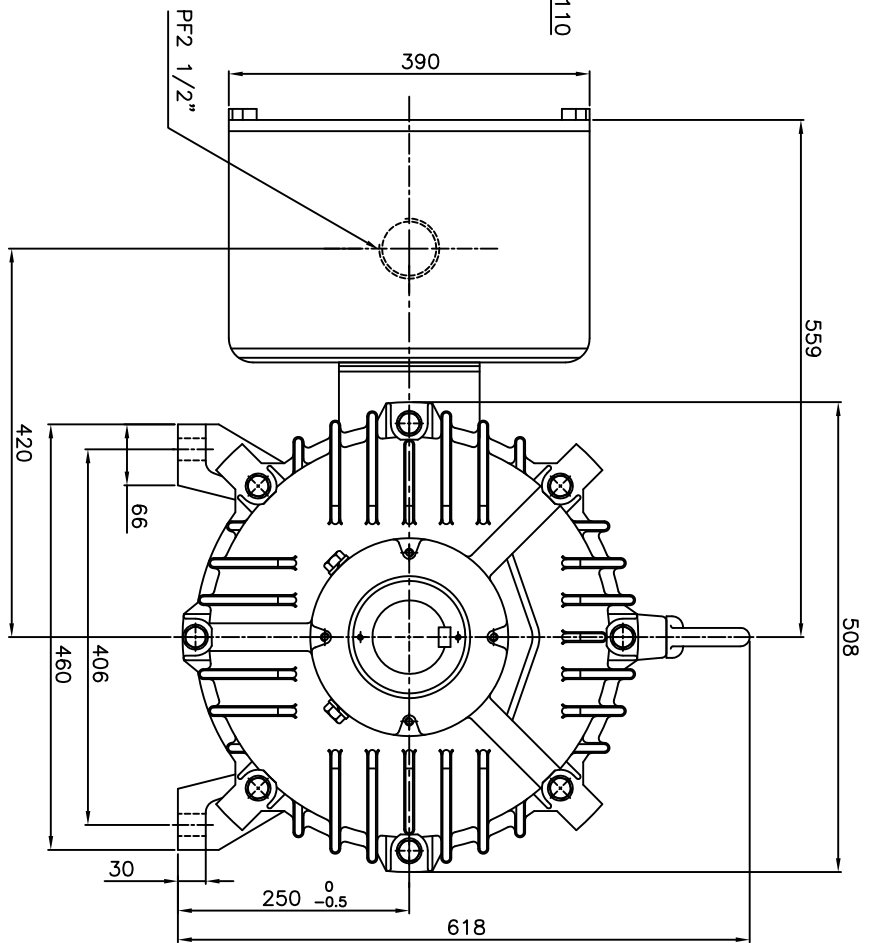
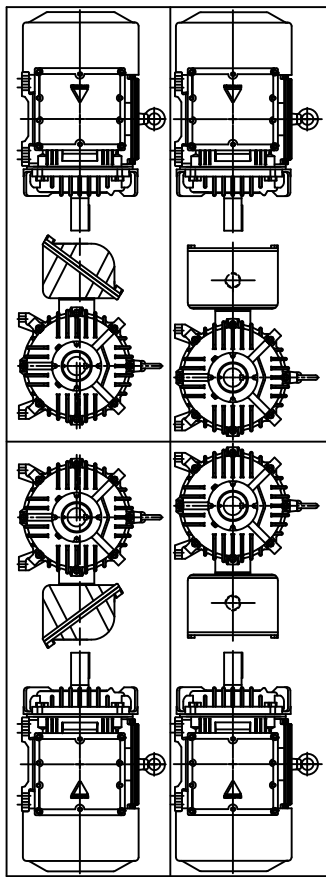


OUTPUT VS EFF., P.F & CURRENT CURVE





*TERMINAL BOX LOCATION



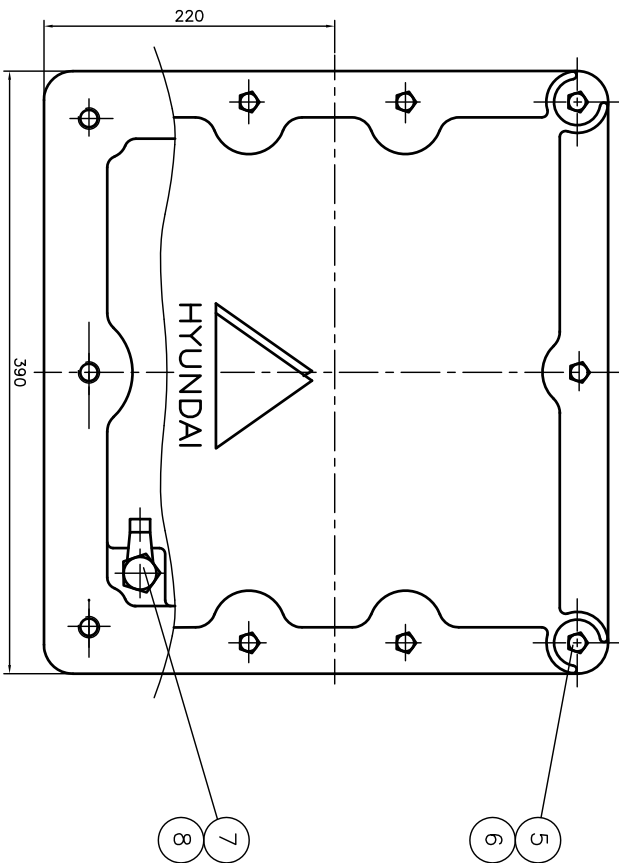
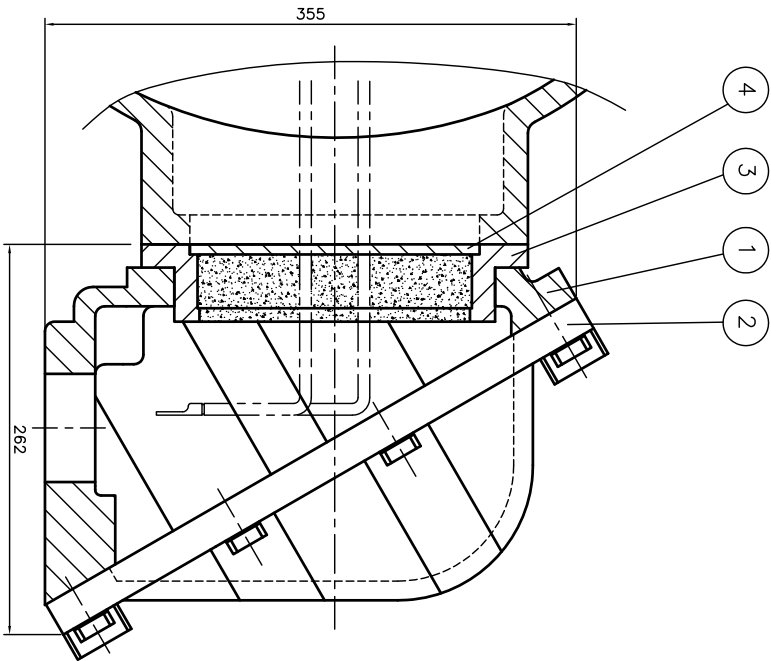
(EXPLOSION CONSTRUCTION & IGNITION GRP)

| | | | | | | | | | | |
|-----|------|----------|-----|----|------|----|------|----|------|----|
| REV | DATE | CONTENTS | REV | BY | CHKD | BY | CHKD | BY | APPD | BY |
| 1 | | | 3 | | | | | | | |
| 2 | | | 4 | | | | | | | |
| 3 | | | 5 | | | | | | | |

| | | | | | | | |
|------|-------------|----------|-----------|------------|-----------------------------|-------------------|-----------------------|
| QTY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
| APPD | BY | ??? | UNIT | MM | 1/6 | SUBJECT | KS FR-250M, PTYPE, EP |
| CHKD | BY | ??? | SCALE | 1/6 | PROJEC'N | 3rd Angle | DATE |
| CHKD | BY | ??? | DATE | 2005.06.07 | TITLE | OUTLINE DIMENSION | |
| DSND | BY | ??? | DATE | 2005.06.07 | THREE-PHASE INDUCTION MOTOR | | |



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|--------------|-----------|-----------|----|
| REF. NO. | DWG NO. | SHEET NO. | OF |
| | GJ5MAP-02 | | |
| Revision No. | | Sheet No. | |
| | | | |



| QTY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
|-----|--------------------|----------|-----------|--------|----------|--------|-----|
| 1 | HEX. BOLT | BRONZE | M10 | | | | 8 |
| 1 | EARTH TERMINAL LUG | STD | | | | | 7 |
| 10 | SPRING WASHER | SUP-3 | | | | | 6 |
| 10 | HEX. BOLT | S45C | M12 | | | | 5 |
| 1 | GUIDE PLATE | E.C.P | | | | | 4 |
| 1 | ADAPTER | FC25 | | | | | 3 |
| 1 | TERMINAL BOX COVER | FC25 | | | | | 2 |
| 1 | TERMINAL BOX BODY | FC25 | | | | | 1 |

| | | | | | | | | |
|---------|---------------|------|----------|-------------------------|-----------|-----------|----------|--------------------|
| APRD BY | UNIT | MM | SUBJECT | H/LAB FR-250,280 (2234) | SCALE | NONE | TITLE | TERMINAL BOX ASS'Y |
| CHK BY | SCALE | NONE | PROJECN | 3-24(3rd Angle) | DATE | 98.10.30 | REF. NO. | |
| DSND BY | KIM JONG SEON | DATE | 98.10.30 | DWG NO. | 3M-036962 | Sheet No. | | |
| | | | | | | | | of |
| | | | | | | | | Revision No. |

| REV | DATE | CONTENTS | REQD BY | CHKD BY | APRD BY |
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| 1 | | | | | |
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