



a

No.: a

Date: 03-SEP-2015

Customer : a

TECHNICAL PROPOSAL

Three-phase induction motor - Squirrel cage rotor

Product line : W22 - Cast Iron Frame - Super Premium Efficiency - IE4

Catalog Number :

List Price : \$

Notes:

Performed by:

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Checked:

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## DATA SHEET

### Three-phase induction motor - Squirrel cage rotor

Customer : a  
Product line : W22 - Cast Iron Frame - Super Premium Efficiency - IE4

Frame : 315S/M  
Output : 110 kW  
Frequency : 50 Hz  
Poles : 2  
Full load speed : 2980  
Slip : 0.67 %  
Voltage : 380/660 V  
Rated current : 195/112 A  
Locked rotor current : 1520/875 A  
Locked rotor current (I<sub>L</sub>/I<sub>n</sub>) : 7.8  
No-load current : 62.7/36.1 A  
Full load torque : 353 Nm  
Locked rotor torque : 230 %  
Breakdown torque : 300 %  
Design : ---  
Insulation class : F  
Temperature rise : 80 K  
Locked rotor time : 42 s (hot)  
Service factor : 1.00  
Duty cycle : S1  
Ambient temperature : -20°C - +40°C  
Altitude : 1000  
Degree of Protection : IP55  
Approximate weight : 992 kg  
Moment of inertia : 2.3195 kgm<sup>2</sup>  
Noise level : 76 dB(A)

|                     | D.E.    | N.D.E.  |
|---------------------|---------|---------|
| Bearings            | 6314 C3 | 6314 C3 |
| Regreasing interval | 5000 h  | 5000 h  |
| Grease amount       | 27 g    | 27 g    |

| Load | Power factor | Efficiency (%) |
|------|--------------|----------------|
| 100% | 0.89         | 96.5           |
| 75%  | 0.86         | 95.9           |
| 50%  | 0.79         | 94.9           |

Notes:

Efficiencies according to the indirect method of IEC 60034-2-1:2007 with stray load losses determined from measurement.

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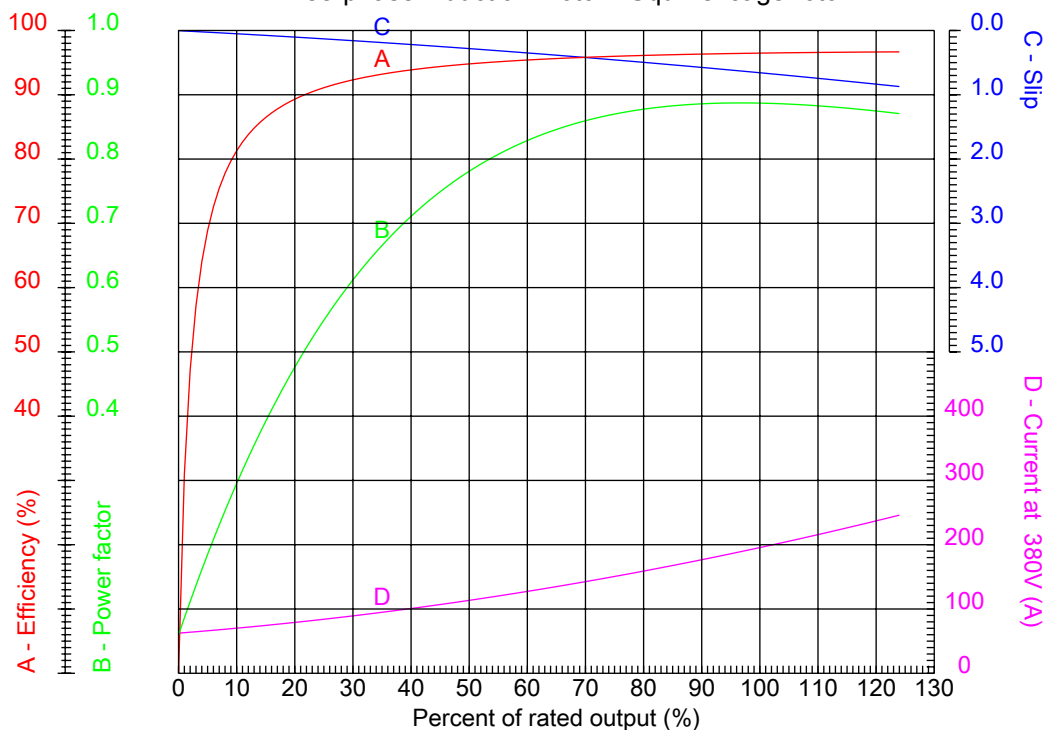
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# PERFORMANCE CURVES RELATED TO RATED OUTPUT

Three-phase induction motor - Squirrel cage rotor



Customer : a  
Product line : W22 - Cast Iron Frame - Super Premium Efficiency - IE4

|                  |             |  |         |
|------------------|-------------|--|---------|
| Frame            | : 315S/M    | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) | : 7.8   |
| Output           | : 110 kW    | Duty cycle   | : S1    |
| Frequency        | : 50 Hz     | Service factor   | : 1.00  |
| Full load speed  | : 2980      | Design   | : ---   |
| Voltage          | : 380/660 V | Locked rotor torque                                    | : 230 % |
| Rated current    | : 195/112 A | Breakdown torque                                       | : 300 % |
| Insulation class | : F         |  |         |

Notes:

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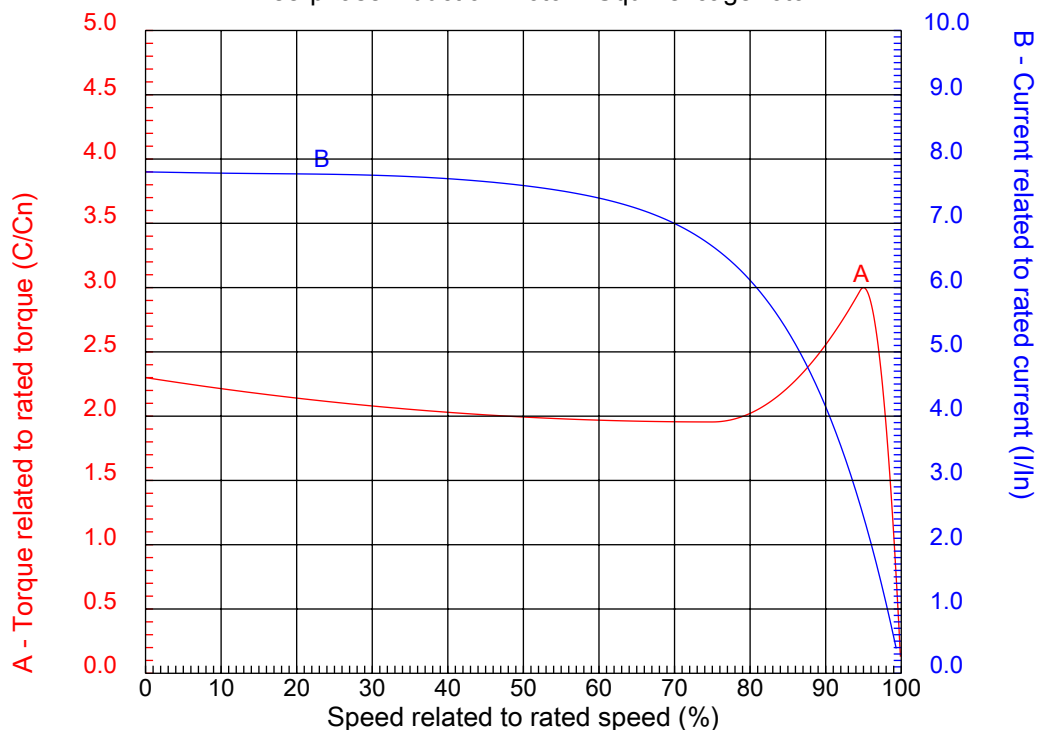
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### CHARACTERISTIC CURVES RELATED TO SPEED

Three-phase induction motor - Squirrel cage rotor



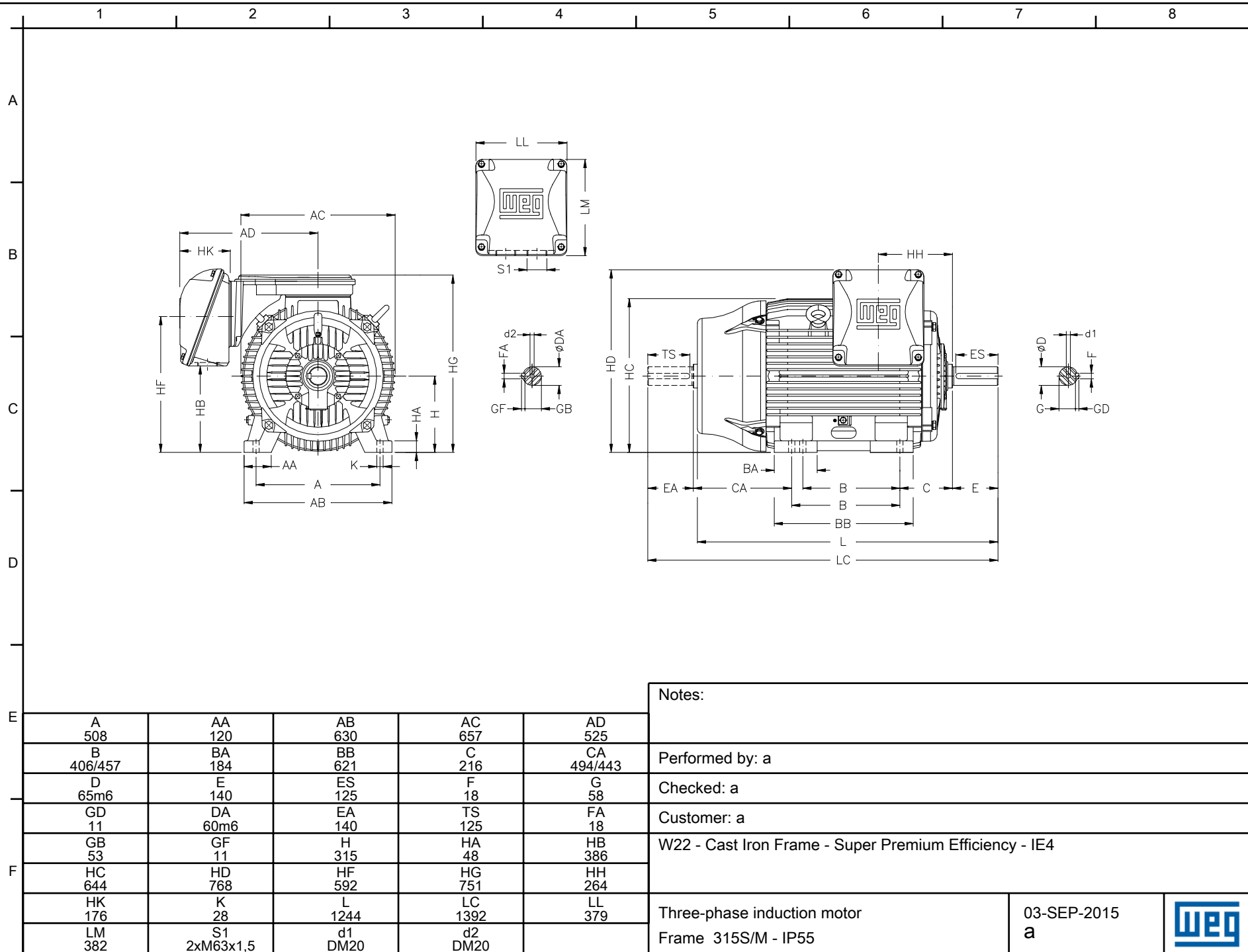
Customer : a  
Product line : W22 - Cast Iron Frame - Super Premium Efficiency - IE4

|                  |             |  |         |
|------------------|-------------|--|---------|
| Frame            | : 315S/M    | Locked rotor current (I <sub>L</sub> /I <sub>n</sub> ) | : 7.8   |
| Output           | : 110 kW    | Duty cycle   | : S1    |
| Frequency        | : 50 Hz     | Service factor   | : 1.00  |
| Full load speed  | : 2980      | Design   | : ---   |
| Voltage          | : 380/660 V | Locked rotor torque                                    | : 230 % |
| Rated current    | : 195/112 A | Breakdown torque                                       | : 300 % |
| Insulation class | : F         |  |         |

Notes:

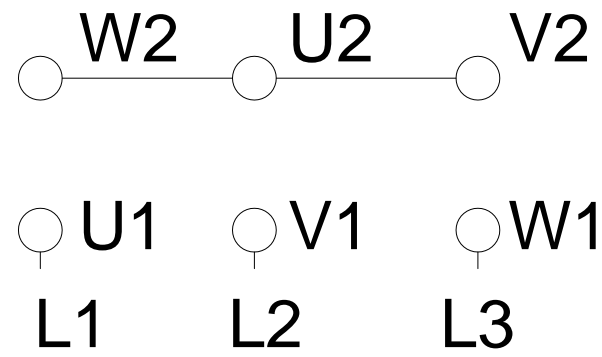
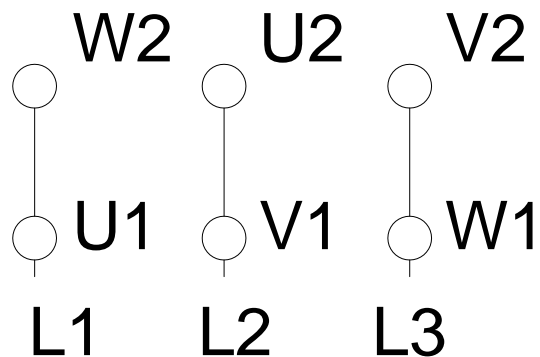
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# LOW VOLTAGE

# HIGH VOLTAGE



|  |                  |  |
|--|------------------|--|
| Notes:   |                  |  |
| Performed by: a  |                  |  |
| Checked: a   |                  |  |
| Customer: a  |                  |  |
| W22 - Cast Iron Frame - Super Premium Efficiency - IE4 |                  |  |
| Three-phase induction motor<br>Frame 315S/M - IP55     | 03-SEP-2015<br>a |  |