

**MOTOR MAC QI 160 L**

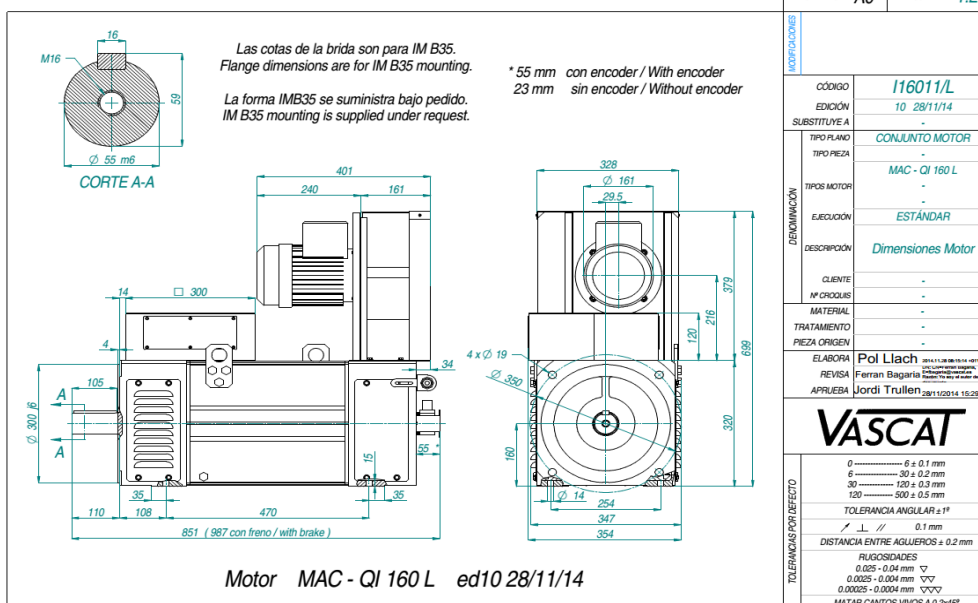
- Hoja de Datos Técnicos -  
- Technical Datasheet -

Código DT-QI160L  
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|                                                                        |           |                                              |                                            |                                                 |                                                                                 |                             |                                                           |                              |
|------------------------------------------------------------------------|-----------|----------------------------------------------|--------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------|------------------------------|
| <b>Ventilador / Fan</b>                                                |           |                                              | Rodamientos<br><i>Bearings</i>             |                                                 | Delantero<br><i>Drive End</i>                                                   | 6312 ZZ C3                  | Trasero<br><i>Non Drive End</i>                           | 6310 ZZ C3                   |
| Tensión / <i>Voltage</i>                                               | 230/400 V | 460 V                                        | Momento de inercia<br><i>Rotor Inertia</i> |                                                 |                                                                                 | J = 0,352 Kg m <sup>2</sup> | Peso Motor<br><i>Motor Weight</i>                         | 301 Kg                       |
| Frec. / <i>Frequency</i>                                               | 50 Hz     | 60 Hz                                        | Protección<br><i>Protection Degree</i>     |                                                 |                                                                                 | IP 23                       | Construcción<br><i>Mounting</i>                           | IM B3 / B35                  |
| Potencia / <i>Power</i>                                                | 0,75 KW   | 0,86 KW                                      | Refrigeración<br><i>Cooling</i>            |                                                 |                                                                                 | IC06                        |                                                           |                              |
| Velocidad / <i>Speed</i>                                               | 2850 rpm  | 3350 rpm                                     | Nivel de ruido<br><i>Noise Level</i>       |                                                 |                                                                                 | < 80 dB                     | Velocidad máxima mecánica<br><i>Max. Mechanical Speed</i> |                              |
| Caudal / <i>Air flow</i>                                               | 1200 m3/h |                                              |                                            |                                                 |                                                                                 | 5000 rpm                    |                                                           |                              |
| Presión / <i>Pressure</i>                                              | 800 Pa    |                                              |                                            |                                                 |                                                                                 |                             |                                                           |                              |
| Equilibrado grado<br><i>Balancing degree</i>                           | A         | Aislamiento Clase<br><i>Insulation Class</i> | F                                          | Protección Térmica<br><i>Thermal Protection</i> |                                                                                 |                             | PTC 140 °C                                                | Ambiente<br><i>Ambient</i>   |
|                                                                        |           |                                              |                                            |                                                 |                                                                                 | < 40 °C < 1000 m            |                                                           |                              |
| <b>Freno de Bloqueo (opcional)<br/><i>Holding Brake (optional)</i></b> |           |                                              | 300 Nm                                     | 24 Vdc                                          | 2.5 A                                                                           | 60 W                        | 18 Kg                                                     | J = 0.0017 Kg m <sup>2</sup> |
| Tensión de Base del Motor<br><i>Motor Base Voltage</i>                 |           |                                              | Vb                                         | 400 V                                           | Tensión Máxima de Salida del Convertidor<br><i>Inverter max. Output Voltage</i> |                             |                                                           |                              |
|                                                                        |           |                                              | Vc                                         | 400 V                                           |                                                                                 |                             |                                                           |                              |

| Servicio / Service S1 |     |     |       |      |     |                                                     | Servicio / Service S6 - 40% |     |       |      |     |                                                     |                                              |
|-----------------------|-----|-----|-------|------|-----|-----------------------------------------------------|-----------------------------|-----|-------|------|-----|-----------------------------------------------------|----------------------------------------------|
| Bobinado<br>Winding   | Nm  | A   | KW    | rpm  | Hz  | Velocidad a Pot.Cte<br>Const. Power Speed.<br>(rpm) | Nm                          | A   | KW    | rpm  | Hz  | Velocidad a Pot.Cte<br>Const. Power Speed.<br>(rpm) | Corriente en vacío<br>No Load Current<br>(A) |
| A41                   | 510 | 50  | 25.8  | 484  | 17  | 1400                                                | 757                         | 71  | 38.4  | 484  | 17  | 1030                                                | 20                                           |
| B41                   | 510 | 58  | 30.7  | 574  | 20  | 1660                                                | 757                         | 83  | 45.5  | 574  | 20  | 1220                                                | 23                                           |
| C41                   | 510 | 70  | 37.1  | 695  | 24  | 2010                                                | 756                         | 98  | 55.0  | 695  | 24  | 1480                                                | 29                                           |
| D41                   | 510 | 87  | 48.3  | 904  | 31  | 2620                                                | 758                         | 124 | 71.7  | 904  | 31  | 1930                                                | 32                                           |
| E41                   | 510 | 104 | 57.9  | 1084 | 37  | 3140                                                | 758                         | 147 | 85.9  | 1084 | 37  | 2310                                                | 40                                           |
| F41                   | 510 | 115 | 64.3  | 1204 | 41  | 3490                                                | 757                         | 163 | 95.4  | 1204 | 41  | 2570                                                | 46                                           |
| G41                   | 510 | 130 | 72.4  | 1355 | 46  | 3920                                                | 756                         | 183 | 107.3 | 1355 | 46  | 2890                                                | 53                                           |
| H41                   | 510 | 148 | 83.5  | 1564 | 53  | 4530                                                | 757                         | 209 | 123.9 | 1564 | 53  | 3340                                                | 59                                           |
| I41                   | 510 | 172 | 97.9  | 1834 | 62  | 5000                                                | 757                         | 244 | 145.3 | 1834 | 62  | 3910                                                | 69                                           |
| F42                   | 510 | 198 | 114.0 | 2134 | 72  | 5000                                                | 757                         | 282 | 169.1 | 2134 | 72  | 4540                                                | 78                                           |
| G42                   | 500 | 221 | 124.4 | 2375 | 80  | 5000                                                | 741                         | 310 | 184.1 | 2375 | 80  | 5000                                                | 95                                           |
| H42                   | 490 | 248 | 140.4 | 2736 | 92  | 5000                                                | 726                         | 348 | 207.9 | 2736 | 92  | 5000                                                | 106                                          |
| I42                   | 480 | 285 | 160.1 | 3186 | 107 | 5000                                                | 710                         | 398 | 236.8 | 3186 | 107 | 5000                                                | 127                                          |

Otras velocidades disponibles bajo consulta a nuestra O.T. / Other speeds available on request



Datos Técnicos sujetos a modificaciones sin previo aviso / Technical data are subject to changes without prior notice

|          |         |          |
|----------|---------|----------|
| Elabora: | Revisa: | Aprueba: |
|----------|---------|----------|

|                     | Servicio / Service S1 |     |       |      |    |                                                     | Servicio / Service S6 - 40% |     |       |      |    |                                                     |                                              |
|---------------------|-----------------------|-----|-------|------|----|-----------------------------------------------------|-----------------------------|-----|-------|------|----|-----------------------------------------------------|----------------------------------------------|
| Bobinado<br>Winding | Nm                    | A   | KW    | rpm  | Hz | Velocidad a Pot.Cte<br>Const. Power Speed.<br>(rpm) | Nm                          | A   | KW    | rpm  | Hz | Velocidad a Pot.Cte<br>Const. Power Speed.<br>(rpm) | Corriente en vacío<br>No Load Current<br>(A) |
| F42                 | 510                   | 198 | 114.0 | 2134 | 72 | 5000                                                | 757                         | 282 | 169.1 | 2134 | 72 | 4540                                                | 78                                           |

**Curva de Par / Torque Diagram**

This diagram illustrates the torque limits for two different services, S6 and S1, plotted against rotational speed (rpm). The y-axis represents torque in Nm, ranging from 0 to 800. The x-axis represents rpm, ranging from 0 to 6000. Both services have a constant torque limit up to 2000 rpm, after which the limit decreases as rpm increases.

| rpm  | Límite Servicio S6 Limit for Service S6 (Nm) | Límite Servicio S1 Limit for Service S1 (Nm) |
|------|----------------------------------------------|----------------------------------------------|
| 0    | 750                                          | 500                                          |
| 1000 | 750                                          | 500                                          |
| 2000 | 750                                          | 500                                          |
| 3000 | 550                                          | 380                                          |
| 4000 | 420                                          | 280                                          |
| 5000 | 280                                          | 210                                          |

Legend:

- Límite Servicio S6 Limit for Service S6 (Thin black line)
- Límite Servicio S1 Limit for Service S1 (Thick black line)
- Carga / Load Nm 1 (Blue line)
- Carga / Load Nm 2 (Red line)

The diagram is a line graph titled "Curva de Potencia / Power Diagram". The vertical axis is labeled "Potencia / Power (KW)" and ranges from 0 to 180 in increments of 20. The horizontal axis is labeled "rpm" and ranges from 0 to 6000 in increments of 1000. There are four data series plotted:

- Limite Servicio S6 Limit for Service S6:** A thin black line that starts at (0,0), increases linearly to (2200, 170), remains constant at 170 KW until approximately 4500 rpm, and then decreases slightly.
- Limite Servicio S1 Limit for Service S1:** A thick black line that starts at (0,0), increases linearly to (2200, 115), remains constant at 115 KW until 5000 rpm, and then ends.
- Carga / Load KW 1:** A blue line that is not visible on the graph, likely representing a load that is zero or below the minimum power shown.
- Carga / Load KW 2:** A red line that is not visible on the graph, likely representing a load that is zero or below the minimum power shown.

The graph shows that the power limit for Service S6 is higher than for Service S1, and both limits are reached at a low rpm (around 2200 rpm) and remain constant for a significant range of higher rpm values.