



**INVOTECH**  
YM/YSM Series Scroll Compressors  
**Special Design For  
Medium Temperature Application**  
**Diseño Especial Para Aplicaciones  
De Temperatura Media**  
**60Hz**





## Suzhou Invotech Scroll Technologies Co., Ltd.

is a high-tech company.

Our company is founded by a group of engineers who formerly worked for the world's largest manufacturer of scroll compressors. We are a team of passionate and highly qualified professionals with more than 15 years of experience in this industry. Our company's products in addition to impressive sales performance in the domestic market, also sales to Asia, Africa, Europe, South America North America and other more than 30 countries and regions.

Our company provides specialized scroll compressors and related technical consulting services for heat pump water heaters, refrigeration and air conditioning, chillers and other applications. We are willing to provide our customers with jointly developed or Turn-Key solutions to meet their needs.

Our vision: to become a global first class solution provider by providing innovative products for the climate and energy industries.

**For more information please visit:**

*Para más información, visite nuestro sitio web:*

**[www.invotech.cn](http://www.invotech.cn)**

*es una compañía de alta tecnología.*

*Nuestra empresa es fundada por un grupo de ingenieros quienes trabajaron para las más grandes empresas manufactureras de compresores Scroll . Somos un equipo de apasionados profesionales y profesionales altamente calificados, con más de 15 años de experiencia en esta industria. Nuestros productos además de impresionante rendimiento de ventas en el mercado, también son distribuidos en Asia, África, Europa, Sudamérica Norteamérica y otros 30 países.*

*Nuestra compañía provee Compresores Scroll especializados y servicios de consulta técnicos relacionada para calentadores de agua de bomba de calor, Refrigeración y Aire Acondicionado, Chillers y otras aplicaciones. Nos complace proveer a nuestros clientes en forma conjunta soluciones para cumplirsus necesidades.*

*Nuestra visión: Ser un proveedor de soluciones de clase mundial brindando productos innovadores para el ambiente e industrias energéticas.*



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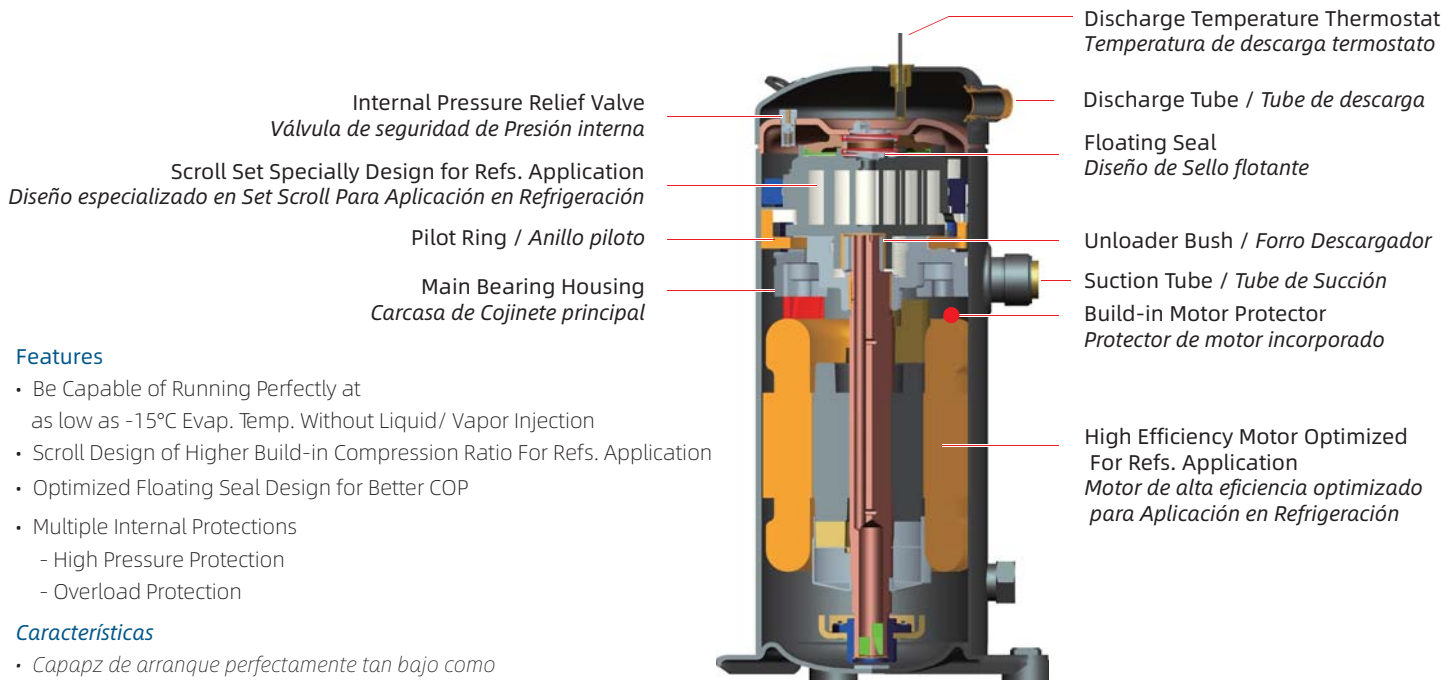
*Dimensiones*



# YM Series

## Product Features / Características del producto

- Specific Design for Refs. Application, Not Only the Scroll Set But Also The Unit, Precise Product-Definition Based On Customer's Need
- Both Build-in Radius and Axial Compliance Design, Improved Floating Seal Design for Better Energy Efficiency
- Excellent Discharge Temperature Management to Stretch Operation Envelope
- Accurate Calculation of Load and Sealing Force for Running Sound Optimization
- High Efficiency Motor Design
- *Diseño específico para aplicación de media temp, no solamente el set de Compresor Scroll sino también la unidad, la Definición del producto es precisa basada en las necesidades del cliente.*
- *Ambos incorporados en el diseño radial y axial cumplimiento de diseño, mejora de diseño en estanquidad flotante para mejorar la eficacia energética.*
- *Excelente descarga en gestión de temperatura para alcance de operación de estiramiento.*
- *Cálculo preciso de carga y fuerza de sellado para optimización de sonido de la marcha.*
- *Diseño de motor de alta eficiencia.*



### Features

- Be Capable of Running Perfectly at as low as -15°C Evap. Temp. Without Liquid/ Vapor Injection
- Scroll Design of Higher Build-in Compression Ratio For Refs. Application
- Optimized Floating Seal Design for Better COP
- Multiple Internal Protections
  - High Pressure Protection
  - Overload Protection

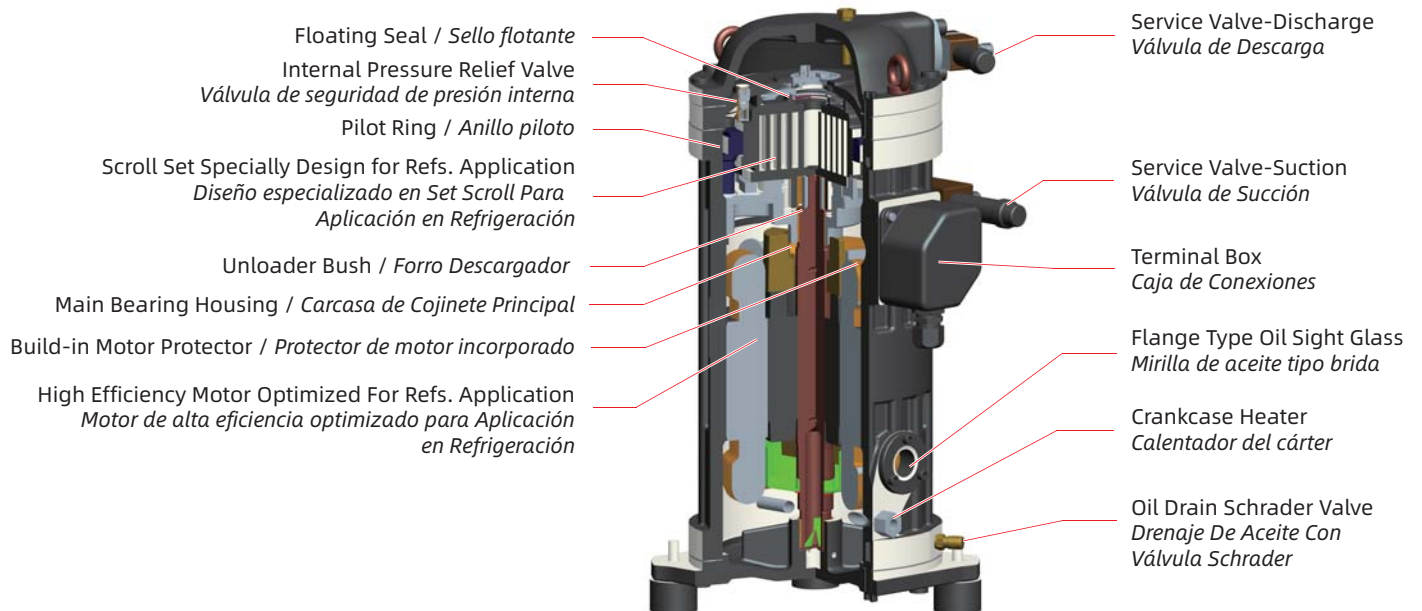
### Características

- Capaz de arranque perfectamente tan bajo como -15°C Temp. de Evap. Sin líquido / inyección de vapor
- Diseño específico scroll para aplicación de refrigeración.
- Diseño flotante optimizado para un mayor COP
- Protecciones internas múltiples
  - Protección de alta precisión
  - Protección de sobrecarga

# YSM Series

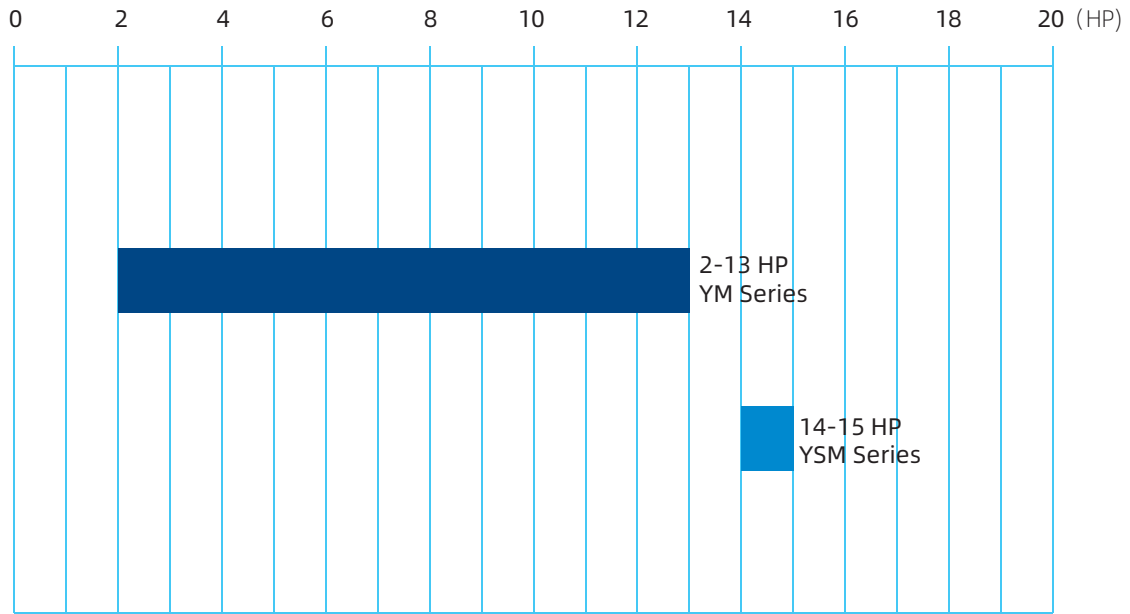
## Product Features / Características del producto

- Specific Design for Refs. Application, Not Only the Scroll Set But Also the Unit, Precise Product-Definition Based on Customer's Need
- Both Build-in Radius and Axial Compliance Design, Improved Floating Seal Design for Better Energy Efficiency
- Excellent Discharge Temperature Management to Stretch Operation Envelope
- Accurate Calculation of Load and Sealing Force for Running Sound Optimization
- High Efficiency Motor Design
- Repairable
- *Diseño específico para aplicación de baja temp, no solamente el set de Compresor Scroll sino también la unidad, la definición del producto es precisa basada en las necesidades del cliente.*
- *Ambos, construido radial y diseño de cumplimiento axial, diseño mejorado en sello flotante para mejor eficiencia de energía.*
- *Excelente descarga en gestión de temperatura para alcance de operación de estiramiento.*
- *Calculo preciso de carga y fuerza de sellado para optimización de sonido de la marcha.*
- *Diseño de motor de alta eficiencia.*
- *Reparable*

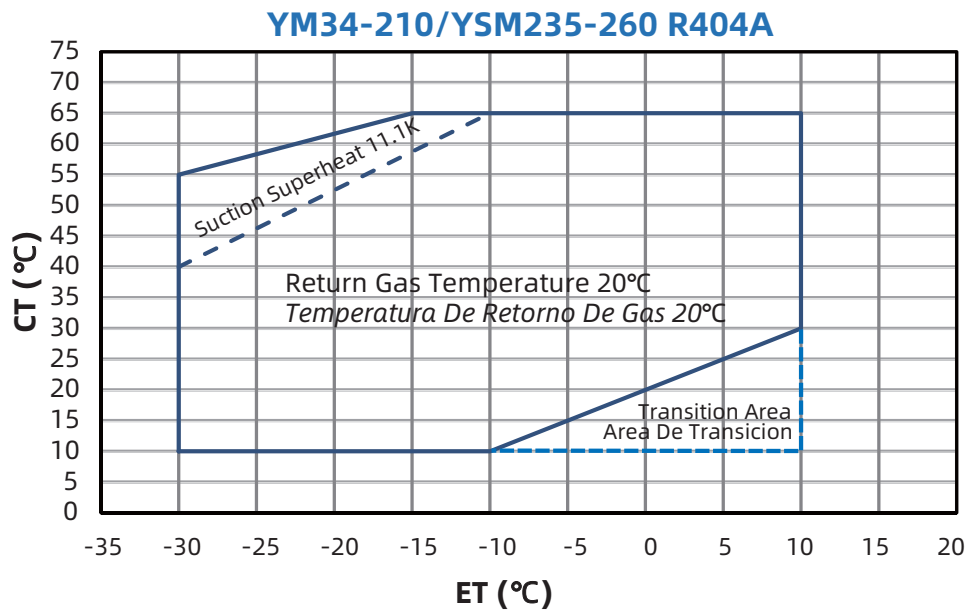


# YM/YSM Series

Models / Modelos

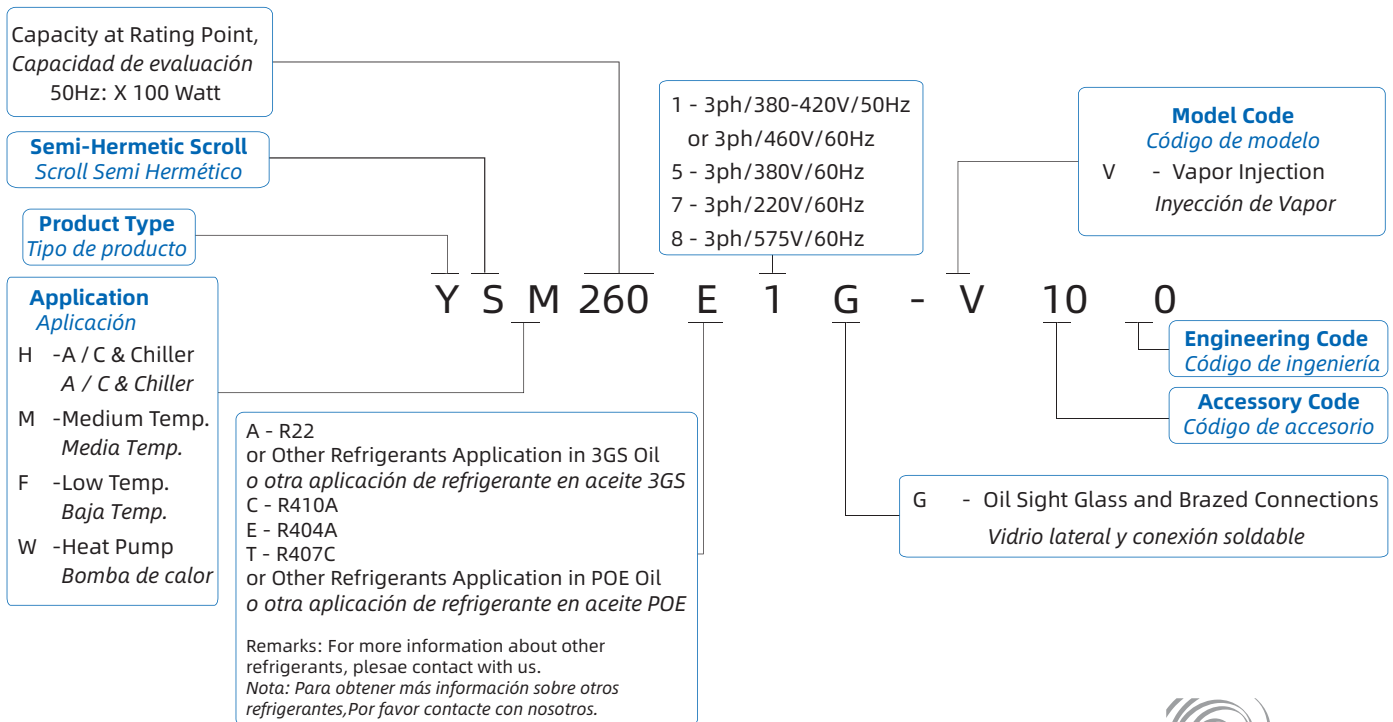
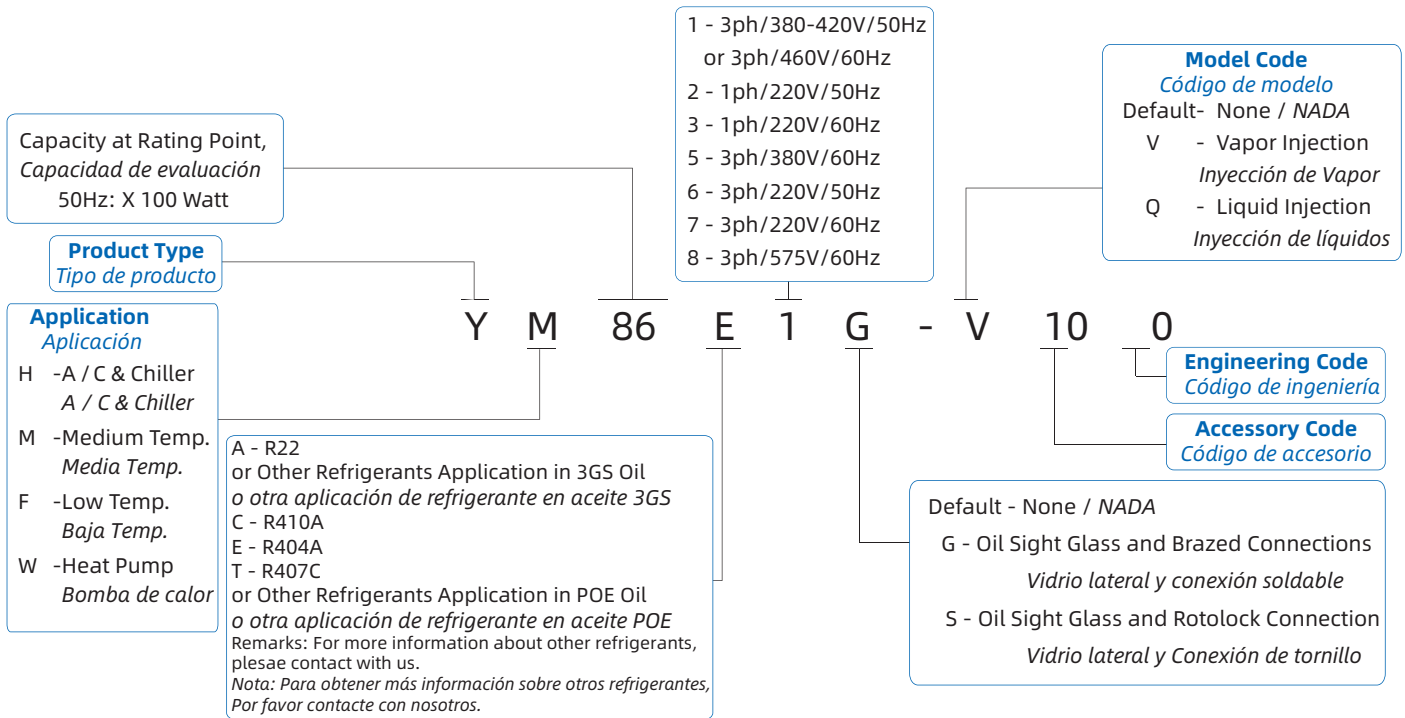


## Operating Envelope / Desarrollo De Operación



# YM/YSM Series

## Nomenclature / Nomenclatura



# YM/YSM Series

## Specifications / Specifications

# 60Hz

# R404A

| Model / Modelo  |   | YM34E | YM43E | YM49E | YM60E | YM70E | YM86E | YM102E | YM115E |  |
|---|---|-------|-------|-------|-------|-------|-------|--------|--------|--|
| Power in Horse Power / Potencia en caballos de fuerza(HP) |   | 2     | 2.5   | 3     | 3.5   | 4     | 5     | 6      | 7      |  |
| Displacement / Desplazamiento(m³/h)                       |   | 7     | 8.8   | 9.7   | 12.2  | 14.2  | 17.4  | 20.5   | 22.7   |  |
| 220V/60Hz/1Ph   | Capacity / Capacidad(BTU/Hr)                | 14576 | 17401 | 19817 | 24983 | 28334 | 34803 |        |        |  |
|   | Power in Watt / Potencia en Watt(W)         | 2373  | 2833  | 3227  | 4030  | 4489  | 5514  |        |        |  |
|   | EER (BTU/Wh)                                | 6.14  | 6.14  | 6.14  | 6.20  | 6.31  | 6.31  |        |        |  |
| 220V&380V&460V&575V<br>60Hz/3Ph                           | Capacity / Capacidad(BTU/Hr)                | 14819 | 17691 | 20147 | 24983 | 28806 | 35161 | 42043  | 46396  |  |
|   | Power in Watt / Potencia en Watt(W)         | 2482  | 2803  | 3108  | 3864  | 4397  | 5153  | 6161   | 6473   |  |
|   | EER (BTU/Wh)                                | 5.97  | 6.31  | 6.48  | 6.47  | 6.55  | 6.82  | 6.82   | 7.17   |  |
| Electricity/Electricidad                                  |   |       |       |       |       |       |       |        |        |  |
| 220V/60Hz/1Ph   | Running Current / Corriente de operaci6n(A) | 11.2  | 13.4  | 15.3  | 16.8  | 21.5  | 26.4  |        |        |  |
|   | MOC(A)                                      | 19.5  | 20.7  | 21.8  | 29.4  | 34    | 40.1  |        |        |  |
|   | LRA (A)                                     | 76    | 76    | 76    | 109   | 140   | 140   |        |        |  |
| 220V/60Hz/3Ph   | Running Current / Corriente de operaci6n(A) | 9.1   | 10    | 10.4  | 12.3  | 14.3  | 16.6  | 19.3   |        |  |
|   | MOC(A)                                      | 10.8  | 13.3  | 14.3  | 18.7  | 21.8  | 25.2  | 29.4   |        |  |
|   | LRA(A)                                      | 99    | 99    | 99    | 136   | 136   | 136   | 167    |        |  |
| 380V/60Hz/3Ph   | Running Current / Corriente de operaci6n(A) | 4.9   | 5.4   | 5.7   | 7.8   | 8.2   | 9.6   | 11     |        |  |
|   | MOC(A)                                      | 6.3   | 7.7   | 8.3   | 9.2   | 12.6  | 14.6  | 17     |        |  |
|   | LRA (A)                                     | 51    | 51    | 51    | 69    | 69    | 69    | 94     |        |  |
| 460V/60Hz/3Ph   | Running Current / Corriente de operaci6n(A) | 3.5   | 4.8   | 5.1   | 6.5   | 7     | 8     | 9.4    | 11.2   |  |
|   | MOC (A)                                     | 5.2   | 6.4   | 6.9   | 8.5   | 10.5  | 12.2  | 14.3   | 17.1   |  |
|   | LRA (A)                                     | 22    | 45    | 45    | 60    | 60    | 60    | 65     | 85     |  |
| 575V/60Hz/3Ph   | Running Current / Corriente de operaci6n(A) | 3.2   | 3.5   | 3.8   |       | 5.4   | 6.3   | 7.3    |        |  |
|   | MOC(A)                                      | 4.2   | 5.1   | 5.5   |       | 8.3   | 9.6   | 11.2   |        |  |
|   | LRA(A)                                      | 38    | 38    | 38    |       | 43    | 43    | 53     |        |  |
| Crankcase Heater / Calentador del c6rter(W)               |   | 70    |       |       |       |       |       |        |        |  |
| Fitting Dimensions / Medidas de montaje(Inch)             |   |       |       |       |       |       |       |        |        |  |
| Discharge Tube / Tubo de descarga(OD)                     |   | 1/2   |       |       |       |       |       |        |        |  |
| Suction Tube / Tubo de succi6n(OD)                        |   | 7/8   |       |       |       |       |       |        |        |  |
| Product Dimensions / Dimensiones del producto(MM)         |   |       |       |       |       |       |       |        |        |  |
| Length / Largo(L)   |   | 239   |       |       |       |       |       |        |        |  |
| Width / Ancho(W)  |   | 239   |       |       |       |       |       |        |        |  |
| Height / Alto(H)  | 1 Phase/Fase                                | 418   |       |       |       |       | 463   |        |        |  |
|   | 3 Phase/Fase                                | 418   |       |       |       |       |       | 463    |        |  |
| Oil Type / Tipo de aceite                                 |   | POE   |       |       |       |       |       |        |        |  |
| Initial Charge Volume / Carga de volumen inicial(L)       | 1 Phase/Fase                                | 1.4   |       |       |       | 1.6   |       |        |        |  |
|   | 3 Phase/Fase                                | 1.4   |       |       |       | 1.6   |       |        |        |  |
| Recharge Volume / Volumen de recarga(L)                   | 1 Phase/Fase                                | 1.25  |       |       |       | 1.45  |       |        |        |  |
|   | 3 Phase/Fase                                | 1.25  |       |       |       | 1.45  |       |        |        |  |
| Max Pressure / Presi6n m6xima(MPa)                        |   |       |       |       |       |       |       |        |        |  |
| High Side / M6ximo  |   | 3.0   |       |       |       |       |       |        |        |  |
| Low Side / M6nimo   |   | 2.0   |       |       |       |       |       |        |        |  |
| Weight / Peso(kg)   | 1 Phase/Fase                                | 31    | 31    | 32    | 33    | 35    | 35    |        |        |  |
|   | 3 Phase/Fase                                | 31    | 31    | 32    | 31    | 33    | 33    | 35     | 38     |  |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No sub-cooling / No Subenfriamiento



# YM/YSM Series

## Specifications / Specifications

# 60Hz R404A

| Model / Modelo  |  | YM125E | YM132E | YM158E | YM82E | YM200E | YM210E | YSM235E | YSM260E |
|---|--|--------|--------|--------|-------|--------|--------|---------|---------|
| Power in Horse Power / Potencia en caballos de fuerza(HP) |  | 7      | 8      | 9      | 10    | 12     | 13     | 14      | 15      |
| Displacement / Desplazamiento(m³/h)                       |  | 24.1   | 25.7   | 30.4   | 34.9  | 39.5   | 41.2   | 45.2    | 51      |
| 220V/60Hz/1Ph   | Capacity / Capacidad(BTU/Hr)               |        |        |        |       |        |        |         |         |
|   | Power in Watt / Potencia en Watt(W)        |        |        |        |       |        |        |         |         |
|   | EER (BTU/Wh)                               |        |        |        |       |        |        |         |         |
| 220V&380V&<br>460V&575V<br>60Hz/3Ph                       | Capacity / Capacidad(BTU/Hr)               | 50951  | 53670  | 65945  | 74329 | 81322  | 85518  | 95065   | 105178  |
|   | Power in Watt / Potencia en Watt(W)        | 7345   | 7659   | 9396   | 10517 | 11507  | 12040  | 14280   | 15780   |
|   | EER (BTU/Wh)                               | 6.94   | 7.01   | 7.02   | 7.07  | 7.07   | 7.1    | 6.66    | 27.6    |
| Electricity / Electricidad                                |  |        |        |        |       |        |        |         |         |
| 220V/60Hz/1Ph   | Running Current / Corriente de operació(A) |        |        |        |       |        |        |         |         |
|   | MOC(A)                                     |        |        |        |       |        |        |         |         |
|   | LRA (A)                                    |        |        |        |       |        |        |         |         |
| 220V/60Hz/3Ph   | Running Current / Corriente de operació(A) | 24.7   | 25.3   | 28.4   | 32.5  | 35.5   | 36.4   |         |         |
|   | MOC(A)                                     | 36.2   | 38.5   | 43.9   | 49.3  | 55.4   | 57.7   |         |         |
|   | LRA(A)                                     | 241    | 241    | 241    | 290   | 290    | 290    |         |         |
| 380V/60Hz/3Ph   | Running Current / Corriente de operació(A) | 14.3   | 14.6   | 16.5   | 18.8  | 20.6   | 21.1   | 25.8    | 27.6    |
|   | MOC(A)                                     | 20.9   | 22.3   | 25.4   | 28.6  | 32.1   | 33.4   | 34.7    | 39.4    |
|   | LRA (A)                                    | 135    | 135    | 135    | 163   | 163    | 163    | 180     | 180     |
| 460V/60Hz/3Ph   | Running Current / Corriente de operació(A) | 11.8   | 12.1   | 13.6   | 15.5  | 16.3   | 16.9   | 21.5    | 23      |
|   | MOC (A)                                    | 17.5   | 18.4   | 21     | 23.6  | 26.5   | 27.6   | 28.9    | 32.8    |
|   | LRA (A)                                    | 117    | 117    | 117    | 121   | 121    | 121    | 148.5   | 148.5   |
| 575V/60Hz/3Ph   | Running Current / Corriente de operació(A) | 9.4    | 9.7    | 10.9   | 12.4  | 13.6   | 13.9   | 17.1    | 18.2    |
|   | MOC(A)                                     | 13.8   | 14.7   | 16.8   | 18.9  | 21.2   | 22.1   | 22.9    | 26      |
|   | LRA(A)                                     | 80     | 80     | 80     | 95    | 95     | 95     | 115     | 115     |
| Crankcase Heater / Calentador del cárter(W)               |  | 90     |        |        |       |        |        | 75      |         |
| Fitting Dimensions / Medidas de montaje(Inch)             |  |        |        |        |       |        |        |         |         |
| Discharge Tube / Tubo de descarga(OD)                     |  | 7/8    |        |        |       |        |        |         |         |
| Suction Tube / Tubo de succión(OD)                        |  | 1 1/8  |        |        |       |        |        | 1 3/8   |         |
| Product Dimensions / Dimensiones del producto(MM)         |  |        |        |        |       |        |        |         |         |
| Length / Largo(L)   |  | 260    |        |        |       |        |        | 318     |         |
| Width / Ancho(W)  |  | 244    |        |        |       |        |        | 309     |         |
| Height / Peso(H)  | 1 Phase/Fase                               |        |        |        |       |        |        |         |         |
|   | 3 Phase/Fase                               | 508    |        |        |       |        |        | 584     |         |
| Oil Type / Tipo de aceite                                 |  |        |        |        |       |        |        |         |         |
| Initial Charge Volume / Carga de volumen inicial(L)       | 1 Phase/Fase                               |        |        |        |       |        |        |         |         |
|   | 3 Phase/Fase                               | 2.7    |        |        |       | 3.0    |        | 3.4     |         |
| Recharge Volume / Volumen de recarga(L)                   | 1 Phase/Fase                               |        |        |        |       |        |        |         |         |
|   | 3 Phase/Fase                               | 2.6    |        |        |       | 2.85   |        | 3.25    |         |
| Max Pressure / Presión máxima(MPa)                        |  |        |        |        |       |        |        |         |         |
| High Side / Máximo  |  | 3.0    |        |        |       |        |        |         |         |
| Low Side / Mínimo   |  | 2.0    |        |        |       |        |        |         |         |
| Weight / Peso(kg)   | 1 Phase/Fase                               |        |        |        |       |        |        |         |         |
|   | 3 Phase/Fase                               | 53     | 53     | 53     | 54    | 54     | 54     | 90      | 90      |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No sub-cooling / No Subenfriamiento

# YM/YSM Series

## Capacity / Capacidad

# R404A

## 60Hz 1 Phase / Fase

| Model / Modelo | C.T.<br>(°C)   | E.T. (°C)      |       |       |       |       |       |       |       |       |       |       |
|----------------|----------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                | -30            | -25   | -20   | -15   | -10   | -5    | 0     | 5     | 10    |       |       |
| YM34E3         | Cap<br>(BTU/H) | 60             |       |       | 7521  | 9193  | 11070 | 13217 | 15698 | 18580 | 21926 |       |
|                |                | 50             | 6102  | 7728  | 9520  | 11544 | 13864 | 16546 | 19653 | 23253 | 27409 |       |
|                |                | 40             | 7275  | 9070  | 11123 | 13498 | 16261 | 19477 | 23211 | 27528 | 32493 |       |
|                | Power<br>(W)   | 60             | 8269  | 10232 | 12544 | 15270 | 18476 | 22227 | 26587 | 31621 | 37395 |       |
|                |                | 50             | 2046  | 2160  | 2270  | 2378  | 2481  | 2579  | 2671  | 2755  | 2832  |       |
|                |                | 40             | 1737  | 1828  | 1919  | 2009  | 2098  | 2184  | 2268  | 2347  | 2420  |       |
|                |                |                | 30    | 1482  | 1553  | 1628  | 1705  | 1784  | 1862  | 1941  | 2018  | 2092  |
|                | YM43E3         | Cap<br>(BTU/H) | 60    |       |       | 8984  | 10981 | 13223 | 15787 | 18751 | 22192 | 26190 |
|                |                |                | 50    | 7288  | 9230  | 11371 | 13788 | 16560 | 19763 | 23475 | 27774 | 32738 |
| 40             |                |                | 8690  | 10834 | 13285 | 16122 | 19423 | 23264 | 27725 | 32881 | 38812 |       |
| Power<br>(W)   |                | 60             | 9877  | 12221 | 14983 | 18240 | 22069 | 26549 | 31756 | 37770 | 44666 |       |
|                |                | 50             | 2389  | 2521  | 2650  | 2776  | 2896  | 3010  | 3117  | 3216  | 3306  |       |
|                |                | 40             | 2028  | 2134  | 2240  | 2345  | 2449  | 2550  | 2647  | 2739  | 2825  |       |
|                |                |                | 30    | 1730  | 1813  | 1901  | 1991  | 2082  | 2174  | 2265  | 2355  | 2442  |
| YM49E3         |                | Cap<br>(BTU/H) | 60    |       |       | 10238 | 12513 | 15068 | 17989 | 21367 | 25289 | 29844 |
|                |                |                | 50    | 8305  | 10518 | 12958 | 15712 | 18870 | 22520 | 26751 | 31650 | 37306 |
|                | 40             |                | 9903  | 12345 | 15139 | 18372 | 22133 | 26511 | 31593 | 37469 | 44227 |       |
|                | Power<br>(W)   | 60             | 11255 | 13927 | 17074 | 20785 | 25148 | 30253 | 36187 | 43040 | 50899 |       |
|                |                | 50             | 2661  | 2809  | 2953  | 3093  | 3227  | 3354  | 3473  | 3584  | 3684  |       |
|                |                | 40             | 2259  | 2377  | 2496  | 2613  | 2729  | 2841  | 2949  | 3052  | 3148  |       |
|                |                |                | 30    | 1927  | 2020  | 2118  | 2218  | 2320  | 2422  | 2524  | 2624  | 2721  |
|                | YM60E3         | Cap<br>(BTU/H) | 60    |       |       | 12539 | 15326 | 18455 | 22033 | 26170 | 30974 | 36553 |
|                |                |                | 50    | 10172 | 12883 | 15871 | 19244 | 23112 | 27583 | 32764 | 38764 | 45693 |
| 40             |                |                | 12129 | 15121 | 18542 | 22502 | 27109 | 32470 | 38695 | 45892 | 54169 |       |
| Power<br>(W)   |                | 60             | 13785 | 17057 | 20912 | 25457 | 30802 | 37054 | 44322 | 52715 | 62340 |       |
|                |                | 50             | 3082  | 3250  | 3415  | 3575  | 3728  | 3873  | 4010  | 4136  | 4250  |       |
|                |                | 40             | 2622  | 2757  | 2892  | 3027  | 3159  | 3287  | 3411  | 3528  | 3638  |       |
|                |                |                | 30    | 2243  | 2349  | 2461  | 2575  | 2692  | 2809  | 2925  | 3039  | 3150  |
| YM70E3         |                | Cap<br>(BTU/H) | 60    |       |       | 14625 | 17876 | 21525 | 25699 | 30524 | 36127 | 42634 |
|                |                |                | 50    | 11864 | 15026 | 18511 | 22446 | 26958 | 32172 | 38215 | 45214 | 53295 |
|                | 40             |                | 14147 | 17636 | 21627 | 26246 | 31619 | 37872 | 45133 | 53527 | 63182 |       |
|                | Power<br>(W)   | 60             | 16078 | 19895 | 24391 | 29693 | 35926 | 43219 | 51696 | 61485 | 72712 |       |
|                |                | 50             | 3548  | 3745  | 3937  | 4123  | 4302  | 4472  | 4631  | 4778  | 4911  |       |
|                |                | 40             | 3012  | 3169  | 3327  | 3484  | 3638  | 3788  | 3932  | 4069  | 4197  |       |
|                |                |                | 30    | 2569  | 2694  | 2823  | 2957  | 3093  | 3229  | 3365  | 3498  | 3628  |
|                | YM86E3         | Cap<br>(BTU/H) | 60    |       |       | 17968 | 21962 | 26445 | 31573 | 37501 | 44385 | 52379 |
|                |                |                | 50    | 14576 | 18460 | 22742 | 27577 | 33119 | 39525 | 46950 | 55549 | 65476 |
| 40             |                |                | 17380 | 21667 | 26571 | 32245 | 38846 | 46529 | 55449 | 65762 | 77623 |       |
| Power<br>(W)   |                | 60             | 19754 | 24442 | 29966 | 36479 | 44138 | 53097 | 63513 | 75539 | 89332 |       |
|                |                | 50             | 4379  | 4622  | 4859  | 5089  | 5309  | 5519  | 5715  | 5897  | 6061  |       |
|                |                | 40             | 3718  | 3912  | 4106  | 4299  | 4490  | 4675  | 4853  | 5022  | 5180  |       |
|                |                |                | 30    | 3171  | 3324  | 3485  | 3649  | 3817  | 3986  | 4153  | 4318  | 4477  |

Capacity @ 20°C Return Gas Temperature, No Subcooling  
 Capacity @ 11.1°C Super Heat, No Subcooling  
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento  
 Capacidad @ 11°C Supercalentamiento, No Sub enfriamiento

# YM/YSM Series

# R404A

## Capacity / Capacidad

60Hz  
3 Phase / Fase

| Model / Modelo | C.T.<br>(°C)   | E.T. (°C)      |       |       |       |       |       |       |       |       |       |       |
|----------------|----------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                | -30            | -25   | -20   | -15   | -10   | -5    | 0     | 5     | 10    |       |       |
| YM34E*         | Cap<br>(BTU/H) | 60             |       |       | 7521  | 9193  | 11070 | 13217 | 15698 | 18580 | 21926 |       |
|                |                | 50             | 6102  | 7728  | 9520  | 11544 | 13864 | 16546 | 19653 | 23253 | 27409 |       |
|                |                | 40             | 7275  | 9070  | 11123 | 13498 | 16261 | 19477 | 23211 | 27528 | 32493 |       |
|                | Power<br>(W)   | 30             | 8269  | 10232 | 12544 | 15270 | 18476 | 22227 | 26587 | 31621 | 37395 |       |
|                |                | 60             |       |       | 2657  | 2788  | 2912  | 3028  | 3135  | 3232  | 3317  |       |
|                |                | 50             | 1996  | 2112  | 2226  | 2336  | 2441  | 2542  | 2636  | 2722  | 2801  |       |
|                |                | 40             | 1680  | 1773  | 1866  | 1958  | 2049  | 2138  | 2223  | 2304  | 2380  |       |
|                |                | 30             | 1418  | 1492  | 1569  | 1647  | 1728  | 1808  | 1888  | 1967  | 2044  |       |
|                |                | 60             |       |       | 8984  | 10981 | 13223 | 15787 | 18751 | 22192 | 26190 |       |
| YM43E*         | Cap<br>(BTU/H) | 50             | 7288  | 9230  | 11371 | 13788 | 16560 | 19763 | 23475 | 27774 | 32738 |       |
|                |                | 40             | 8690  | 10834 | 13285 | 16122 | 19423 | 23264 | 27725 | 32881 | 38812 |       |
|                |                | 30             | 9877  | 12221 | 14983 | 18240 | 22069 | 26549 | 31756 | 37770 | 44666 |       |
|                | Power<br>(W)   | 60             |       |       | 3002  | 3151  | 3291  | 3422  | 3542  | 3651  | 3748  |       |
|                |                | 50             | 2256  | 2387  | 2515  | 2639  | 2758  | 2872  | 2978  | 3076  | 3165  |       |
|                |                | 40             | 1898  | 2003  | 2108  | 2213  | 2315  | 2416  | 2512  | 2603  | 2689  |       |
|                |                | 30             | 1603  | 1686  | 1772  | 1861  | 1952  | 2043  | 2134  | 2223  | 2309  |       |
|                |                | 60             |       |       | 10238 | 12513 | 15068 | 17989 | 21367 | 25289 | 29844 |       |
|                |                | 50             | 8305  | 10518 | 12958 | 15712 | 18870 | 22520 | 26751 | 31650 | 37306 |       |
| YM49E*         | Cap<br>(BTU/H) | 40             | 9903  | 12345 | 15139 | 18372 | 22133 | 26511 | 31593 | 37469 | 44227 |       |
|                |                | 30             | 11255 | 13927 | 17074 | 20785 | 25148 | 30253 | 36187 | 43040 | 50899 |       |
|                |                | 60             |       |       | 3331  | 3496  | 3651  | 3796  | 3930  | 4051  | 4159  |       |
|                | Power<br>(W)   | 50             | 2503  | 2648  | 2790  | 2928  | 3061  | 3186  | 3304  | 3413  | 3512  |       |
|                |                | 40             | 2106  | 2222  | 2339  | 2455  | 2569  | 2680  | 2787  | 2888  | 2983  |       |
|                |                | 30             | 1778  | 1870  | 1966  | 2065  | 2166  | 2267  | 2367  | 2466  | 2562  |       |
|                | YM60E*         | Cap<br>(BTU/H) | 60    |       |       | 12591 | 15301 | 18425 | 21997 | 26127 | 30923 | 36493 |
|                |                |                | 50    | 10155 | 12862 | 15845 | 19213 | 23074 | 27537 | 32710 | 38701 | 45617 |
|                |                |                | 40    | 12109 | 15096 | 18512 | 22465 | 27064 | 32417 | 38631 | 45816 | 54080 |
| Power<br>(W)   |                | 30             | 13762 | 17029 | 20877 | 25415 | 30751 | 36993 | 44249 | 52628 | 62237 |       |
|                |                | 60             |       |       | 4094  | 4296  | 4487  | 4666  | 4830  | 4979  | 5111  |       |
|                |                | 50             | 3076  | 3254  | 3429  | 3599  | 3761  | 3916  | 4061  | 4194  | 4316  |       |
|                |                | 40             | 2588  | 2731  | 2875  | 3017  | 3157  | 3294  | 3425  | 3550  | 3666  |       |
|                |                | 30             | 2185  | 2299  | 2417  | 2538  | 2662  | 2786  | 2909  | 3031  | 3148  |       |
|                |                | 60             |       |       | 14625 | 17876 | 21525 | 25699 | 30524 | 36127 | 42634 |       |
| YM70E*         | Cap<br>(BTU/H) | 50             | 11864 | 15026 | 18511 | 22446 | 26958 | 32172 | 38215 | 45214 | 53295 |       |
|                |                | 40             | 14147 | 17636 | 21627 | 26246 | 31619 | 37872 | 45133 | 53527 | 63182 |       |
|                |                | 30             | 16078 | 19895 | 24391 | 29693 | 35926 | 43219 | 51696 | 61485 | 72712 |       |
|                | Power<br>(W)   | 60             |       |       | 4621  | 4850  | 5065  | 5267  | 5452  | 5620  | 5770  |       |
|                |                | 50             | 3472  | 3674  | 3871  | 4062  | 4246  | 4420  | 4584  | 4735  | 4872  |       |
|                |                | 40             | 2922  | 3083  | 3245  | 3406  | 3564  | 3718  | 3866  | 4007  | 4138  |       |
|                |                | 30             | 2467  | 2595  | 2728  | 2865  | 3005  | 3145  | 3284  | 3421  | 3554  |       |
|                |                | 60             |       |       | 17968 | 21962 | 26445 | 31573 | 37501 | 44385 | 52379 |       |
|                |                | 50             | 14576 | 18460 | 22742 | 27577 | 33119 | 39525 | 46950 | 55549 | 65476 |       |
| YM86E*         | Cap<br>(BTU/H) | 40             | 17380 | 21667 | 26571 | 32245 | 38846 | 46529 | 55449 | 65762 | 77623 |       |
|                |                | 30             | 19754 | 24442 | 29966 | 36479 | 44138 | 53097 | 63513 | 75539 | 89332 |       |
|                |                | 60             |       |       | 5554  | 5828  | 6088  | 6330  | 6553  | 6755  | 6934  |       |
|                | Power<br>(W)   | 50             | 4173  | 4415  | 4652  | 4882  | 5103  | 5313  | 5509  | 5691  | 5855  |       |
|                |                | 40             | 3511  | 3705  | 3900  | 4093  | 4284  | 4469  | 4647  | 4816  | 4974  |       |
|                |                | 30             | 2965  | 3118  | 3279  | 3444  | 3611  | 3780  | 3947  | 4112  | 4272  |       |

Capacity @ 20°C Return Gas Temperature, No Subcooling

Capacity @ 11.1°C Super Heat, No Subcooling

Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento

Capacidad @ 11°C Supercalentamiento, No Sub enfriamiento



# YM/YSM Series

# R404A

## Capacity / Capacidad

60Hz  
3 Phase / Fase

| Model / Modelo | C.T.<br>(°C)   | E.T. (°C)      |       |       |       |       |       |       |       |        |        |        |
|----------------|----------------|----------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
|                |                | -30            | -25   | -20   | -15   | -10   | -5    | 0     | 5     | 10     |        |        |
| YM102E*        | Cap<br>(BTU/H) | 60             |       |       | 21311 | 26048 | 31365 | 37447 | 44478 | 52643  | 62124  |        |
|                |                | 50             | 17288 | 21895 | 26973 | 32707 | 39281 | 46879 | 55685 | 65883  | 77658  |        |
|                |                | 40             | 20614 | 25699 | 31514 | 38244 | 46073 | 55186 | 65765 | 77997  | 92065  |        |
|                | Power<br>(W)   | 60             |       |       | 6587  | 6913  | 7220  | 7507  | 7772  | 8012   | 8224   |        |
|                |                | 50             | 4949  | 5237  | 5518  | 5791  | 6052  | 6301  | 6534  | 6749   | 6945   |        |
|                |                | 40             | 4165  | 4395  | 4626  | 4855  | 5081  | 5300  | 5511  | 5712   | 5899   |        |
|                | YM115E*        | Cap<br>(BTU/H) | 60    |       |       | 24075 | 29427 | 35434 | 42305 | 50248  | 59472  | 70183  |
|                |                |                | 50    | 19503 | 24735 | 30472 | 36950 | 44377 | 52960 | 62909  | 74430  | 87733  |
|                |                |                | 40    | 23288 | 29032 | 35602 | 43205 | 52050 | 62345 | 74297  | 88116  | 104008 |
| Power<br>(W)   |                | 60             |       |       | 7708  | 8089  | 8449  | 8785  | 9095  | 9375   | 9624   |        |
|                |                | 50             | 5791  | 6128  | 6457  | 6776  | 7082  | 7373  | 7646  | 7989   | 8126   |        |
|                |                | 40             | 4873  | 5143  | 5413  | 5681  | 5945  | 6202  | 6449  | 6684   | 6903   |        |
| YM125E*        |                | Cap<br>(BTU/H) | 60    |       |       | 26116 | 31921 | 38438 | 45891 | 54508  | 64513  | 76132  |
|                |                |                | 50    | 21186 | 26832 | 33056 | 40083 | 48139 | 57450 | 68241  | 80739  | 95169  |
|                |                |                | 40    | 25262 | 31493 | 38620 | 46868 | 56462 | 67629 | 80595  | 95585  | 112824 |
|                | Power<br>(W)   | 60             |       |       | 8073  | 8472  | 8848  | 9200  | 9525  | 9818   | 10079  |        |
|                |                | 50             | 6065  | 6418  | 6762  | 7096  | 7417  | 7722  | 8007  | 8271   | 8511   |        |
|                |                | 40             | 5104  | 5386  | 5669  | 5950  | 6226  | 6495  | 6754  | 7000   | 7230   |        |
|                | YM132E*        | Cap<br>(BTU/H) | 60    |       |       | 27579 | 33709 | 40590 | 48461 | 57560  | 68126  | 80396  |
|                |                |                | 50    | 22372 | 28335 | 34907 | 42327 | 50834 | 60667 | 72063  | 85261  | 100499 |
|                |                |                | 40    | 26677 | 33257 | 40783 | 49492 | 59624 | 71417 | 85108  | 100937 | 119142 |
| Power<br>(W)   |                | 60             |       |       | 8451  | 8869  | 9263  | 9632  | 9971  | 10279  | 10551  |        |
|                |                | 50             | 6349  | 6719  | 7079  | 7429  | 7765  | 8084  | 8383  | 8659   | 8910   |        |
|                |                | 40             | 5343  | 5638  | 5935  | 6229  | 6518  | 6800  | 7071  | 7328   | 7569   |        |
| YM158E*        |                | Cap<br>(BTU/H) | 60    |       |       | 33847 | 41370 | 49816 | 59475 | 70642  | 83609  | 98668  |
|                |                |                | 50    | 27457 | 34774 | 42840 | 51947 | 62388 | 74455 | 88441  | 104638 | 123339 |
|                |                |                | 40    | 32740 | 40815 | 50051 | 60740 | 73175 | 87648 | 104451 | 123878 | 146220 |
|                | Power<br>(W)   | 60             |       |       | 10372 | 10885 | 11369 | 11821 | 12237 | 12615  | 12950  |        |
|                |                | 50             | 7792  | 8245  | 8688  | 9118  | 9530  | 9921  | 10288 | 10627  | 10935  |        |
|                |                | 40             | 6557  | 6920  | 7283  | 7644  | 8000  | 8345  | 8678  | 8993   | 9289   |        |
|                | YM182E*        | Cap<br>(BTU/H) | 60    |       |       | 38025 | 46478 | 55966 | 66818 | 79364  | 93931  | 110849 |
|                |                |                | 50    | 30847 | 39067 | 48129 | 58360 | 70090 | 83647 | 99359  | 117556 | 138567 |
|                |                |                | 40    | 36782 | 45854 | 56231 | 68239 | 82209 | 98468 | 117346 | 139171 | 164272 |
| Power<br>(W)   |                | 60             |       |       | 11504 | 12072 | 12609 | 13111 | 13573 | 13991  | 14363  |        |
|                |                | 50             | 8643  | 9145  | 9636  | 10113 | 10570 | 11004 | 11411 | 11787  | 12128  |        |
|                |                | 40             | 7273  | 7675  | 8078  | 8479  | 8872  | 9256  | 9624  | 9975   | 10302  |        |
|                |                | 30             | 6141  | 6459  | 6791  | 7132  | 7480  | 7829  | 8176  | 8517   | 8848   |        |

Capacity @ 20°C Return Gas Temperature, No Subcooling  
Capacity @ 11.1°C Super Heat, No Subcooling

Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento  
Capacidad @ 11°C Supercalentamiento, No Sub enfriamiento



# YM/YSM Series

# R404A

## Capacity / Capacidad

60Hz

3 Phase / Fase

| Model / Modelo | C.T.<br>(°C)   | E.T. (°C)      |       |       |       |       |        |        |        |        |        |        |
|----------------|----------------|----------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
|                |                | -30            | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 10     |        |        |
| YM200E*        | Cap<br>(BTU/H) | 60             |       |       | 41786 | 51074 | 61501  | 73426  | 87213  | 103221 | 121812 |        |
|                |                | 50             | 33897 | 42931 | 52889 | 64132 | 77022  | 91919  | 109186 | 129183 | 152271 |        |
|                |                | 40             | 40419 | 50389 | 61792 | 74988 | 90339  | 108207 | 128952 | 152935 | 180519 |        |
|                | Power<br>(W)   | 30             | 45939 | 56843 | 69688 | 84836 | 102647 | 123482 | 147704 | 175672 | 207749 |        |
|                |                | 60             |       |       | 12641 | 13266 | 13856  | 14407  | 14915  | 15375  | 15783  |        |
|                |                | 50             | 9497  | 10050 | 10589 | 11113 | 11615  | 12092  | 12539  | 12953  | 13327  |        |
|                |                | 40             | 7992  | 8434  | 8877  | 9317  | 9750   | 10171  | 10576  | 10961  | 11321  |        |
|                |                | 30             | 6749  | 7098  | 7463  | 7838  | 8219   | 8603   | 8984   | 9359   | 9723   |        |
|                |                | 60             |       |       | 43875 | 53628 | 64576  | 77098  | 91573  | 108382 | 127902 |        |
|                | YM210E*        | Cap<br>(BTU/H) | 50    | 35592 | 45078 | 55533 | 67339  | 80873  | 96515  | 114645 | 135642 | 159884 |
|                |                |                | 40    | 42440 | 52909 | 64881 | 78738  | 94856  | 113617 | 135399 | 160582 | 189545 |
|                |                |                | 30    | 48235 | 59685 | 73173 | 89078  | 107779 | 129656 | 155089 | 184456 | 218137 |
| Power<br>(W)   |                | 60             |       |       | 13161 | 13812 | 14426  | 15000  | 15529  | 16008  | 16432  |        |
|                |                | 50             | 9888  | 10463 | 11025 | 11570 | 12093  | 12590  | 13055  | 13485  | 13876  |        |
|                |                | 40             | 8321  | 8781  | 9242  | 9700  | 10151  | 10590  | 11011  | 11412  | 11787  |        |
|                |                | 30             | 7026  | 7390  | 7770  | 8160  | 8558   | 8957   | 9354   | 9744   | 10123  |        |
|                |                | 60             |       |       | 49099 | 60012 | 72263  | 86276  | 102475 | 121284 | 143129 |        |
|                |                | 50             | 39829 | 50444 | 62145 | 75355 | 90501  | 108005 | 128294 | 151790 | 178918 |        |
| YSM235E*       |                | Cap<br>(BTU/H) | 40    | 47493 | 59207 | 72605 | 88111  | 106149 | 127143 | 151518 | 179699 | 212110 |
|                |                |                | 30    | 53978 | 66790 | 81884 | 99682  | 120610 | 145092 | 173552 | 206415 | 244105 |
|                |                |                | 60    |       |       | 15514 | 16281  | 17005  | 17681  | 18304  | 18869  | 19369  |
|                | Power<br>(W)   | 50             | 11656 | 12333 | 12996 | 13638 | 14254  | 14840  | 15389  | 15896  | 16356  |        |
|                |                | 40             | 9808  | 10350 | 10894 | 11434 | 11965  | 12482  | 12979  | 13452  | 13894  |        |
|                |                | 30             | 8282  | 8711  | 9158  | 9619  | 10087  | 10558  | 11026  | 11486  | 11932  |        |
|                | YSM260E*       | Cap<br>(BTU/H) | 60    |       |       | 54322 | 66397  | 79951  | 95454  | 113376 | 134187 | 158355 |
|                |                |                | 50    | 44066 | 55810 | 68756 | 83372  | 100129 | 119495 | 141942 | 167938 | 197952 |
|                |                |                | 40    | 52545 | 65506 | 80329 | 97485  | 117441 | 140669 | 167637 | 198816 | 234674 |
|                |                | Power<br>(W)   | 30    | 59720 | 73896 | 90595 | 110286 | 133441 | 160527 | 192015 | 228374 | 270074 |
|                |                |                | 60    |       |       | 17164 | 18012  | 18814  | 19562  | 20251  | 20876  | 21430  |
|                |                |                | 50    | 12895 | 13645 | 14378 | 15089  | 15771  | 16418  | 17026  | 17587  | 18096  |
|                |                | 40             | 10852 | 11451 | 12053 | 12651 | 13238  | 13810  | 14360  | 14883  | 15372  |        |
|                |                | 30             | 9163  | 9637  | 10132 | 10642 | 11160  | 11681  | 12199  | 12708  | 13201  |        |

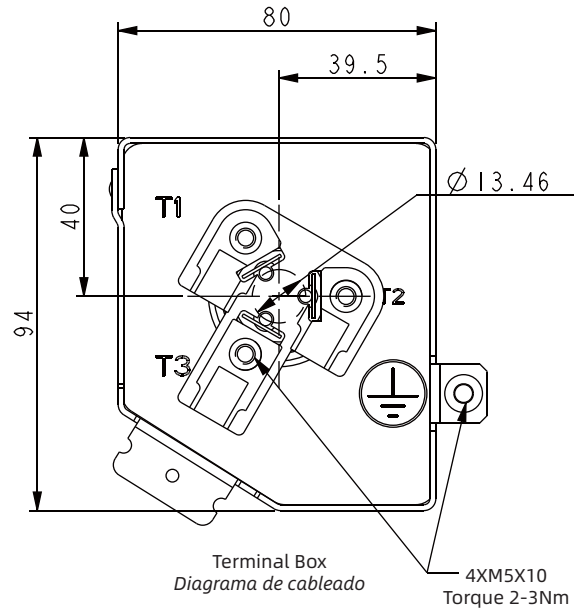
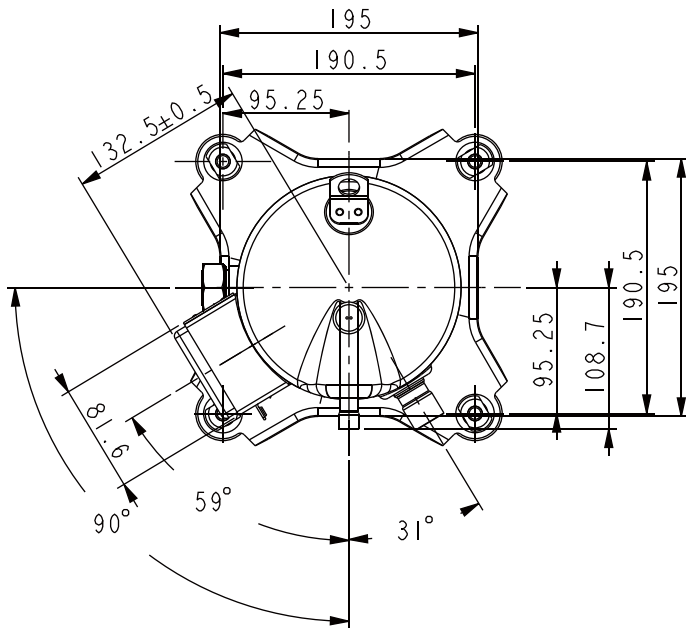
Capacity @ 20°C Return Gas Temperature, No Subcooling  
 Capacity @ 11.1°C Super Heat, No Subcooling  
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento  
 Capacidad @ 11°C Supercalentamiento, No Sub enfriamiento

# YM Series

# 60Hz

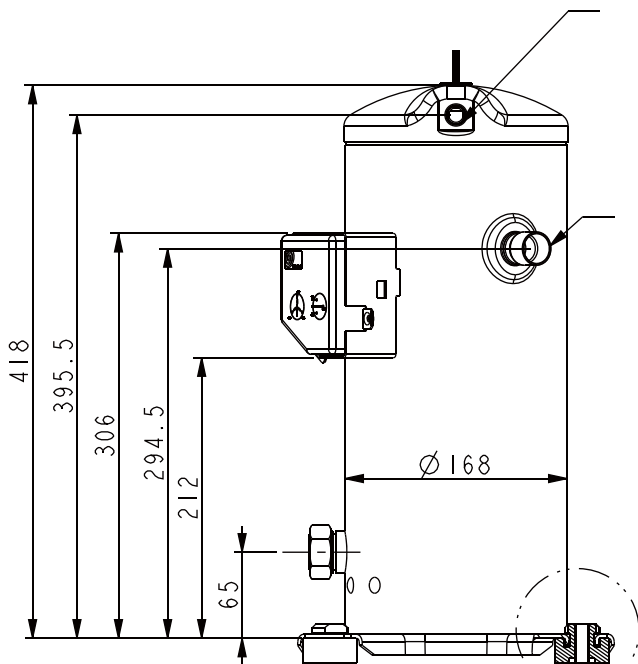
## Dimension / Dimensiones

## 2-4 HP(1Ph), 2-5 HP(3Ph)

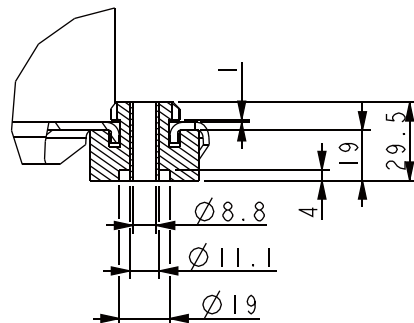


Discharge Tube / *Tubo de descarga*  
 ID:  $\phi 12.87-12.97$   
 Min.Depth / *Min.profundidad*: 10.6  
 Screw Tread / *Rosca Espesor*: (3/4" -16UNF 2A, ID:  $\phi 9.0$ )

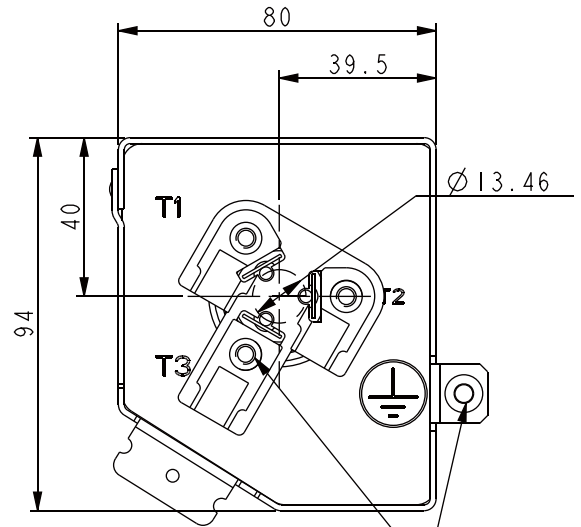
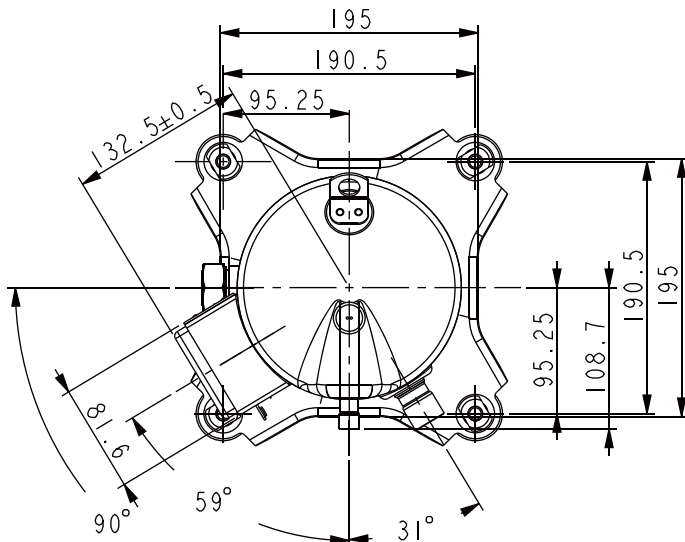
Suction Tube / *Tubo de succión*  
 ID:  $\phi 22.35-22.45$   
 Min.Depth / *Min.profundidad*: 17.3  
 Screw Tread / *Rosca Espesor*: (1 1/4" -16UNF 2A, ID:  $\phi 19.2$ )



See Details in View of Foot  
*Ver detalles a la vista de pie*



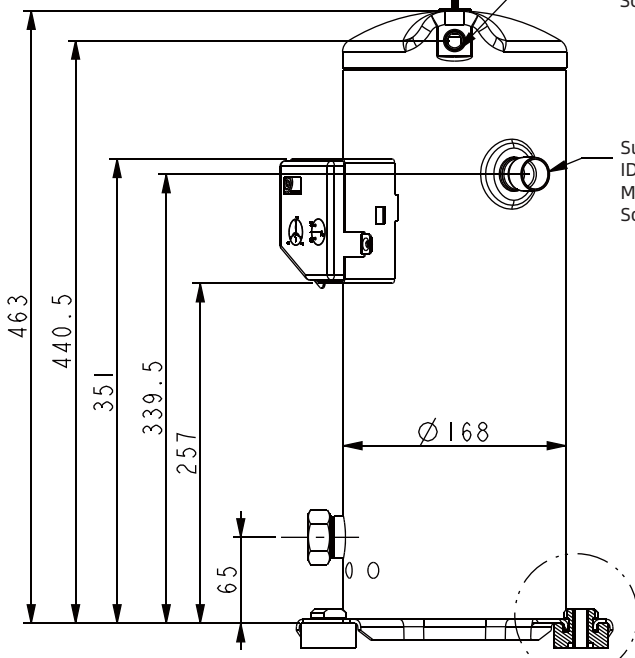
Foot  
 Base



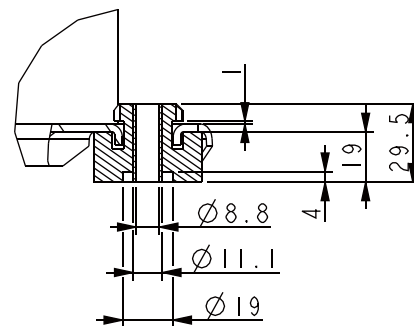
Terminal Box  
Diagrama de cableado  
4XM5X10  
Torque 2-3Nm

Discharge Tube / *Tubo de descarga*  
ID:  $\phi 12.87-12.97$   
Min. Depth / *Min. profundidad*: 10.6  
Screw Tread / *Rosca Espesor*: (3/4" -16UNF 2A, ID:  $\phi 9.0$ )

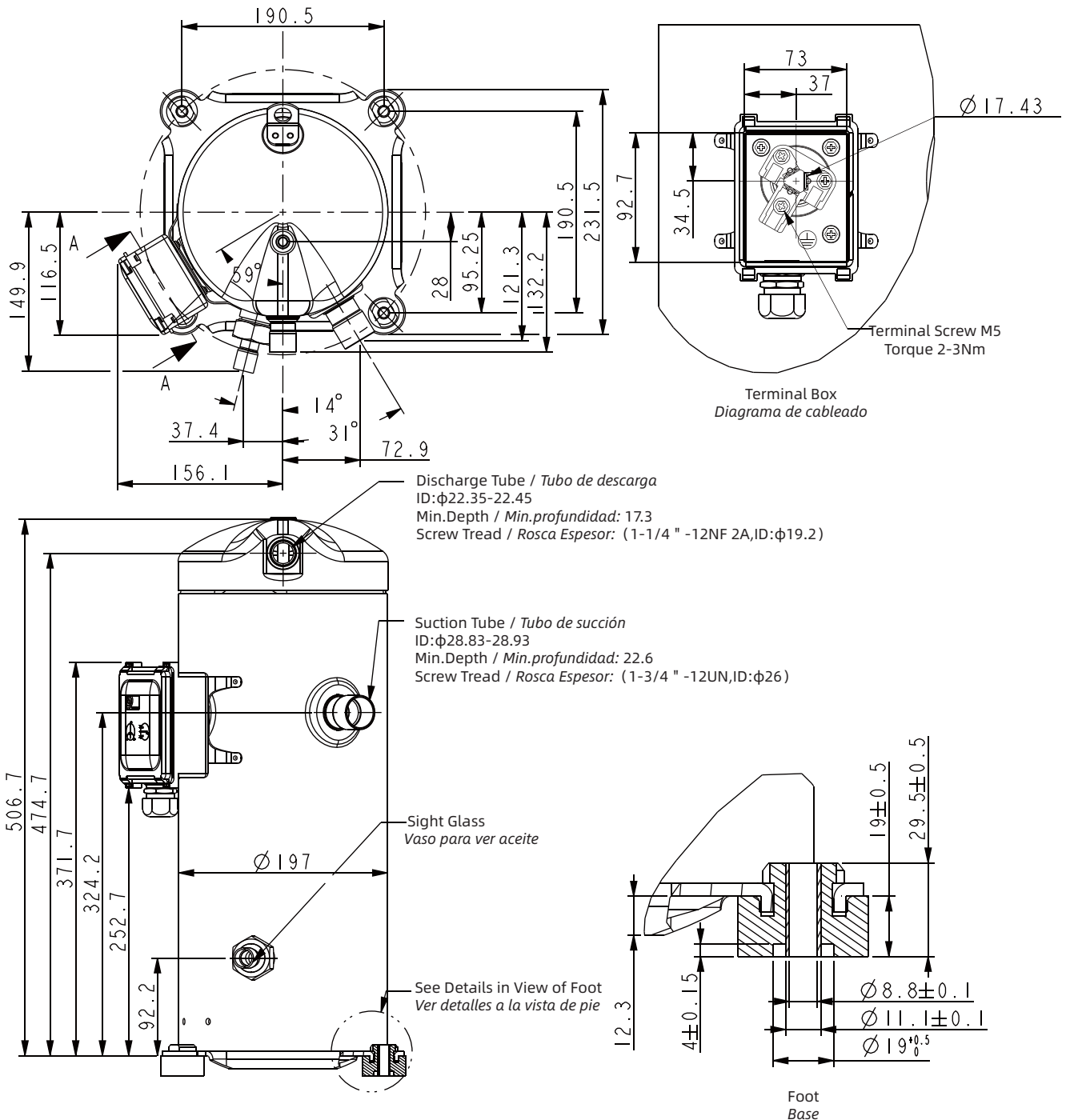
Suction Tube / *Tubo de succión*  
ID:  $\phi 22.35-22.45$   
Min. Depth / *Min. profundidad*: 17.3  
Screw Tread / *Rosca Espesor*: (1 1/4" -16UNF 2A, ID:  $\phi 19.2$ )



See Details in View of Foot  
*Ver detalles a la vista de pie*



Foot  
Base



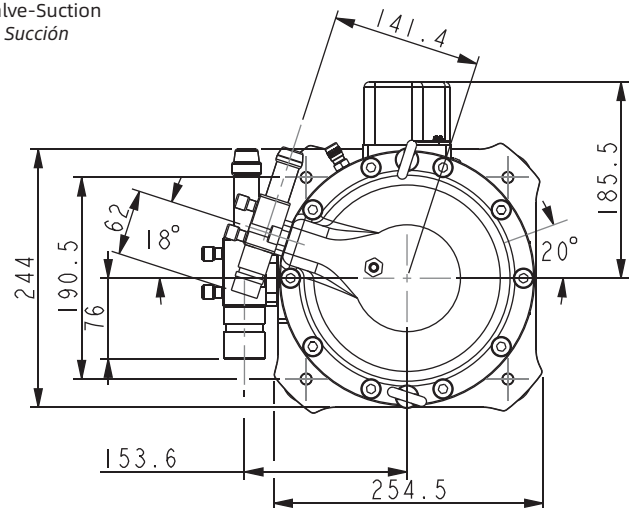
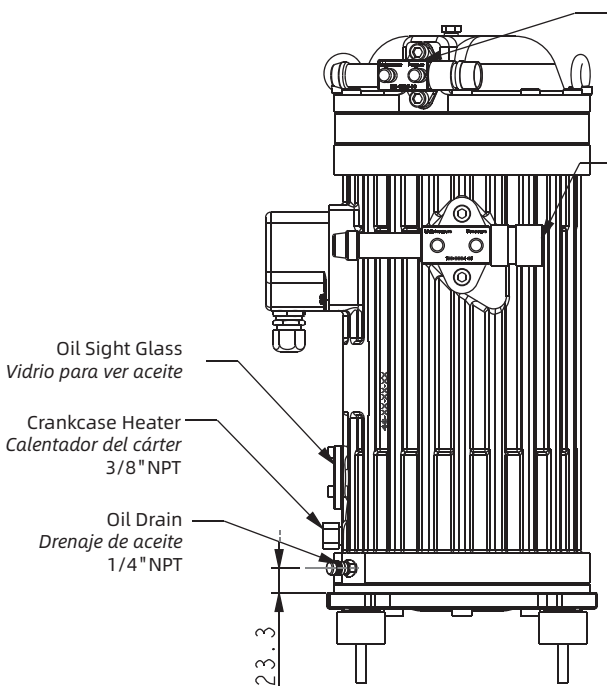
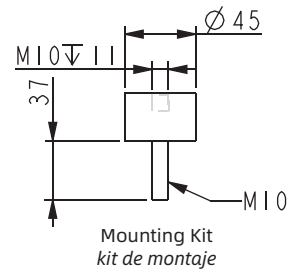
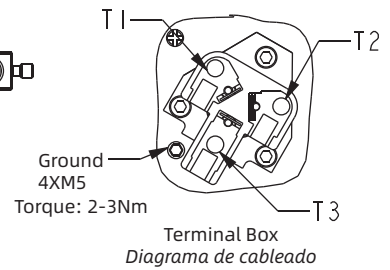
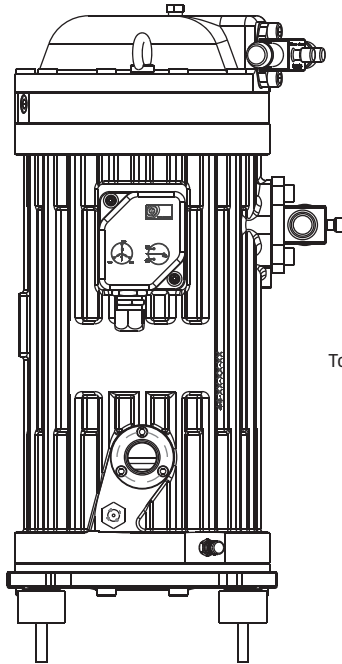
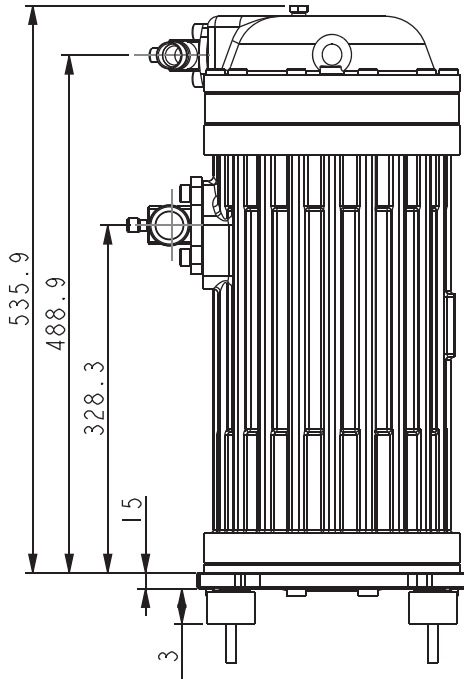


# YSM Series

# 60Hz

## Dimensions / Dimensiones

## YSM235/YSM260





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[www.invotech.cn](http://www.invotech.cn)

Every effort has been made to provide accurate descriptions and data. However, due to the continuing process of product improvement and evolution, all information in this brochure is subject to change without notification.

*Se ha realizado el mayor esfuerzo para proporcionar descripciones y datos precisos. Sin embargo, debido al proceso continuo de mejora del producto y su evolución, la información en este folleto está sujeta a cambios sin previo aviso.*