



InvoTech

YF/YSF series Scroll Compressors

**Special Design For
Lower Temp. Application**

**Diseño especial para Aplicación
de baja temperatura**

50Hz

It is the outstanding engineering capability that builds the incomparable reliability
Es la capacidad de ingeniería excepcional La que construye la confiabilidad incomparable



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 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.

es una Compañía de alta tecnología

Nuestra empresa es fundada por un grupo de ingenieros quienes trabajaron para las mas grandes empresas manufactureras de compresores Scroll en el mundo. Somos un equipo de apasionados 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 y otros 30 países.

Nuestra compañía provee Compresores Scroll especializados y servicios de consultoría técnica 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 cumplir sus necesidades.

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



For more information please visit:
Para más información, visite nuestro sitio web:

www.invotech.cn



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It is the outstanding engineering capability that builds the incomparable reliability
Es la capacidad de ingeniería excepcional La que construye la confiabilidad incomparable

YF Series

Scroll Compressors With Dual-Compliance For Low. Temp. Application

Compresores Scroll con conformidad dual Para aplicación de baja temperatura

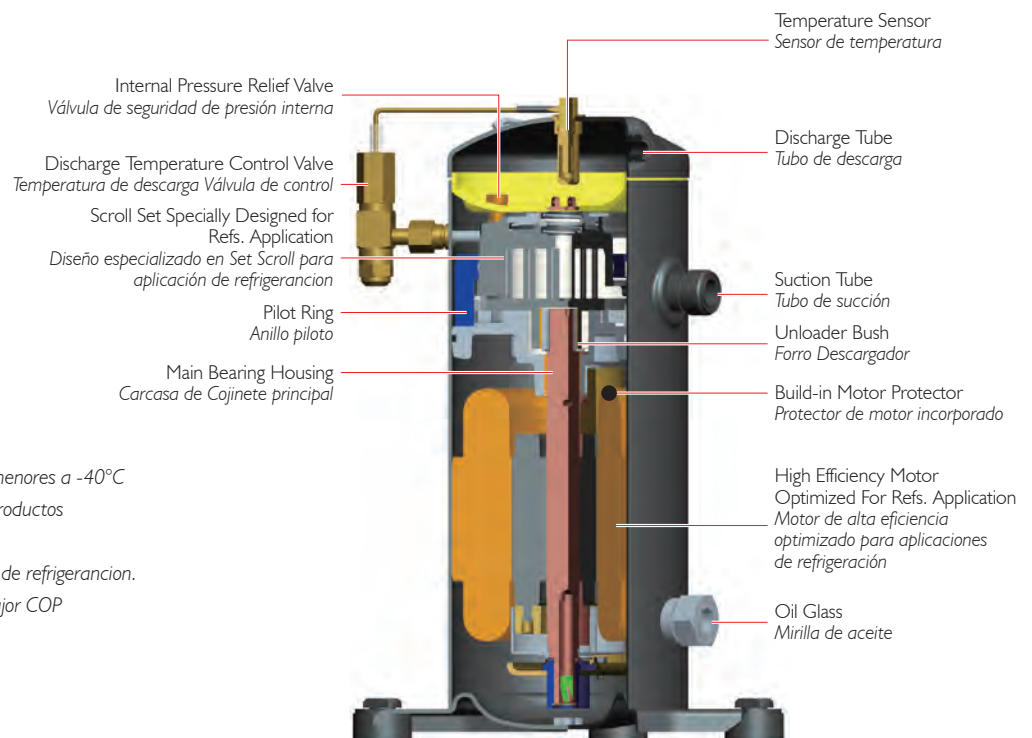
- Specific Design for Refs. Application, Not Only the Scroll Set But Also the Unit, Precise Product-Definition Based on Customer's Need
- Both Build-in Radius and Axial Compliance Design, Improved Floating Seal Design for Better Energy Efficiency
- Excellent Discharge Temperature Management to Stretch Operation Envelope
- Accurate Calculation of Load and Sealing Force for Running Sound Optimization
- High Efficiency Motor Design
- Diseño específico para aplicación de 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.

Features

- Be Capable of Running Perfectly at as low as -40°C Evap. Temp.
- 20% Better in Terms of COP Than Similar Products in The Market
- Truly Specific Scroll Design For Refs. Application
- Optimized Floating Seal Design for Better COP
- Multiple Internal Protections
 - High Pressure Protection
 - Overload Protection

Características

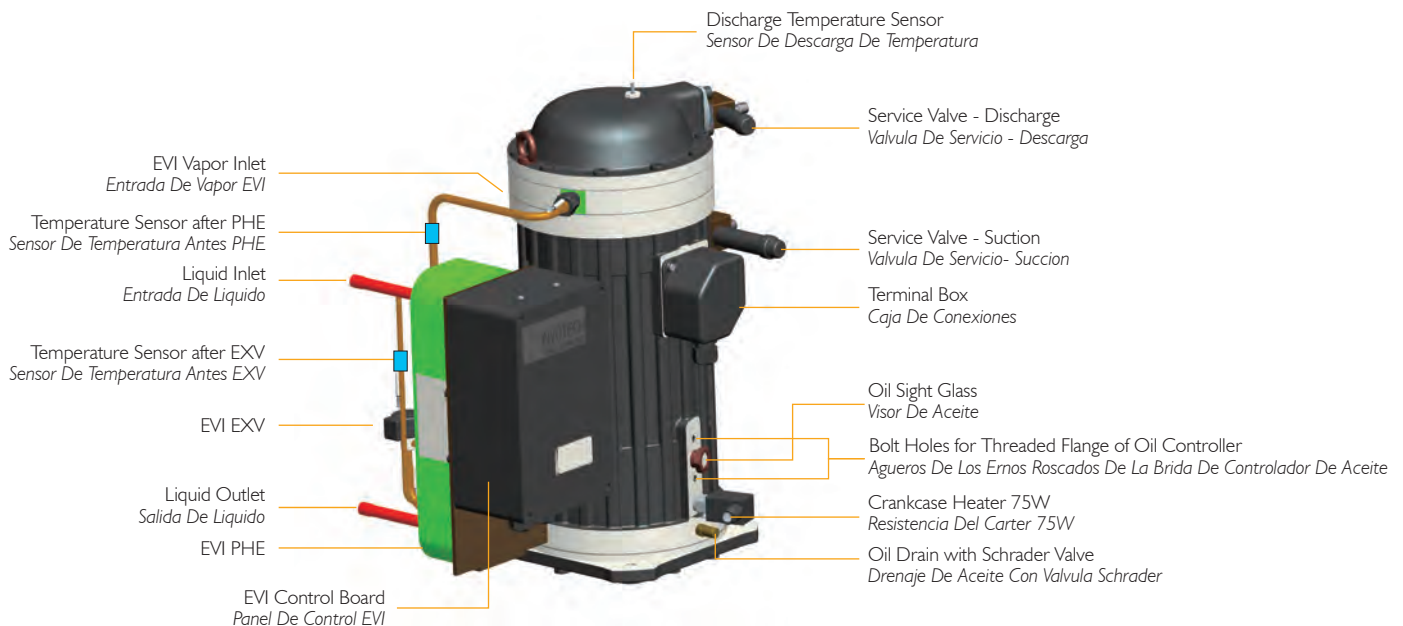
- Capaz de funcionar a temperaturas menores a -40°C
- 20% mejor en terminos de COP que productos similares en el mercado.
- Diseño específico scroll para aplicación de refrigeración.
- Diseño flotante optimizado para un mayor COP
- Protecciones internas múltiples
 - Protección de alta precisión
 - Protección de sobrecarga



YSF Series

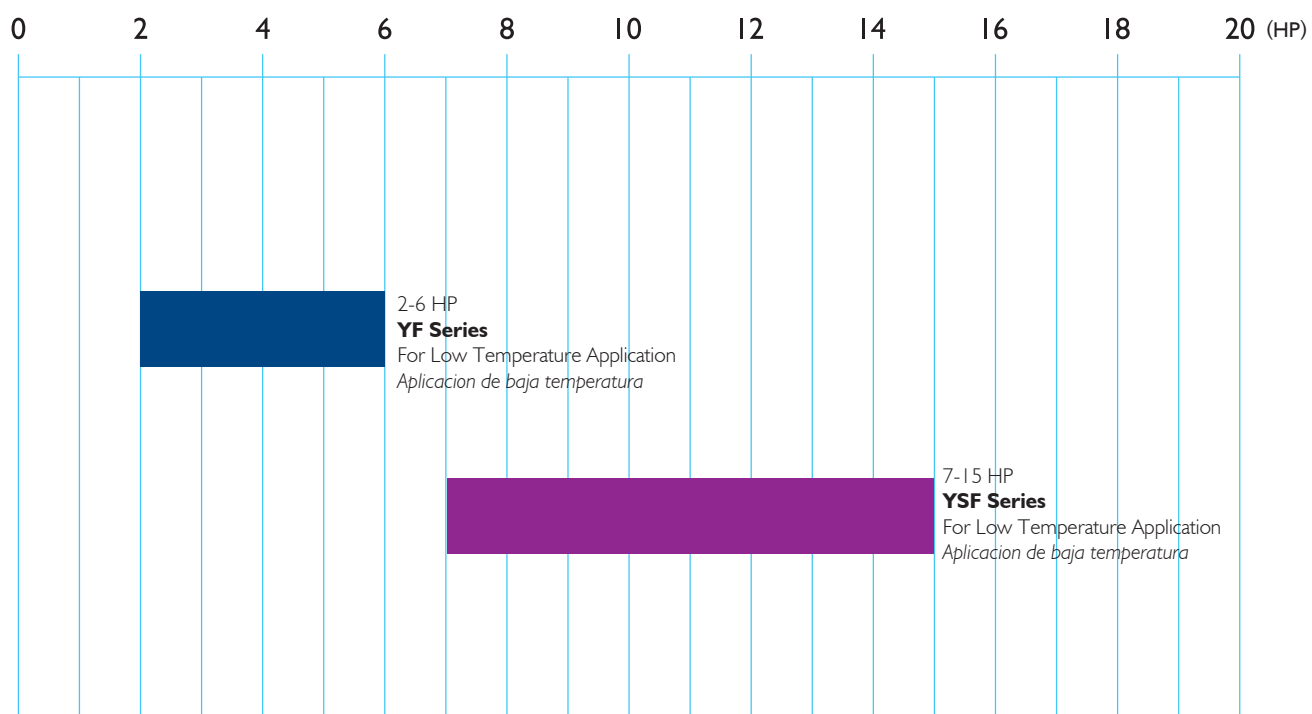
Semi-Hermetic Refrigeration Scroll Compressor Compresor Scroll Semi Hermético Para Refrigeración

- 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
- Integrated Vapor Injection and Controller
- Evaporating Temperature can be Lower to -40°C
- 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.*
- *Integrado control e inyección de vapor.*
- *Temperatura de evaporización puede ser menor a -40°C*
- *Reparable*



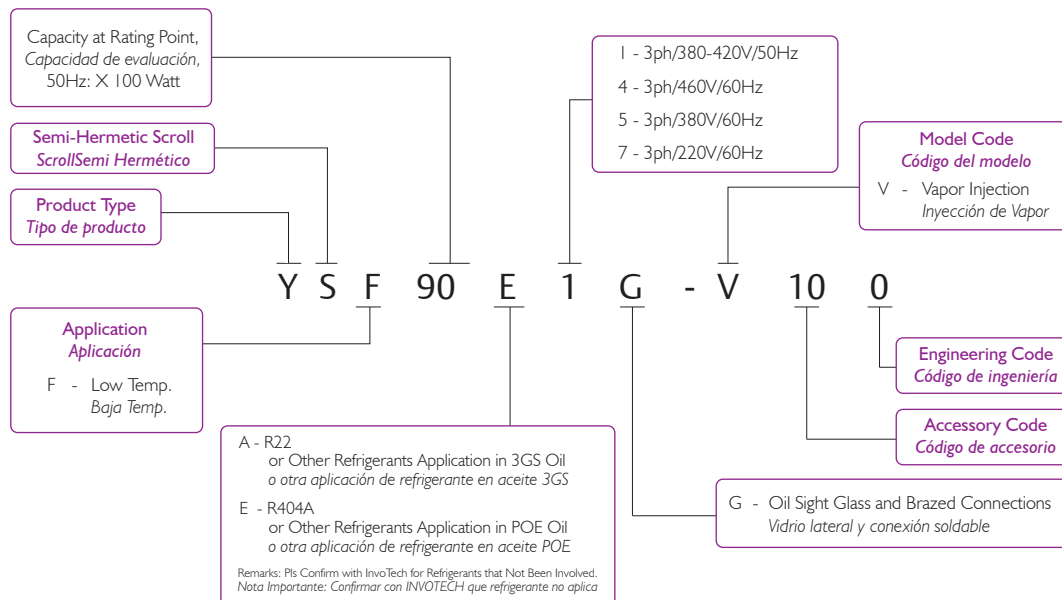
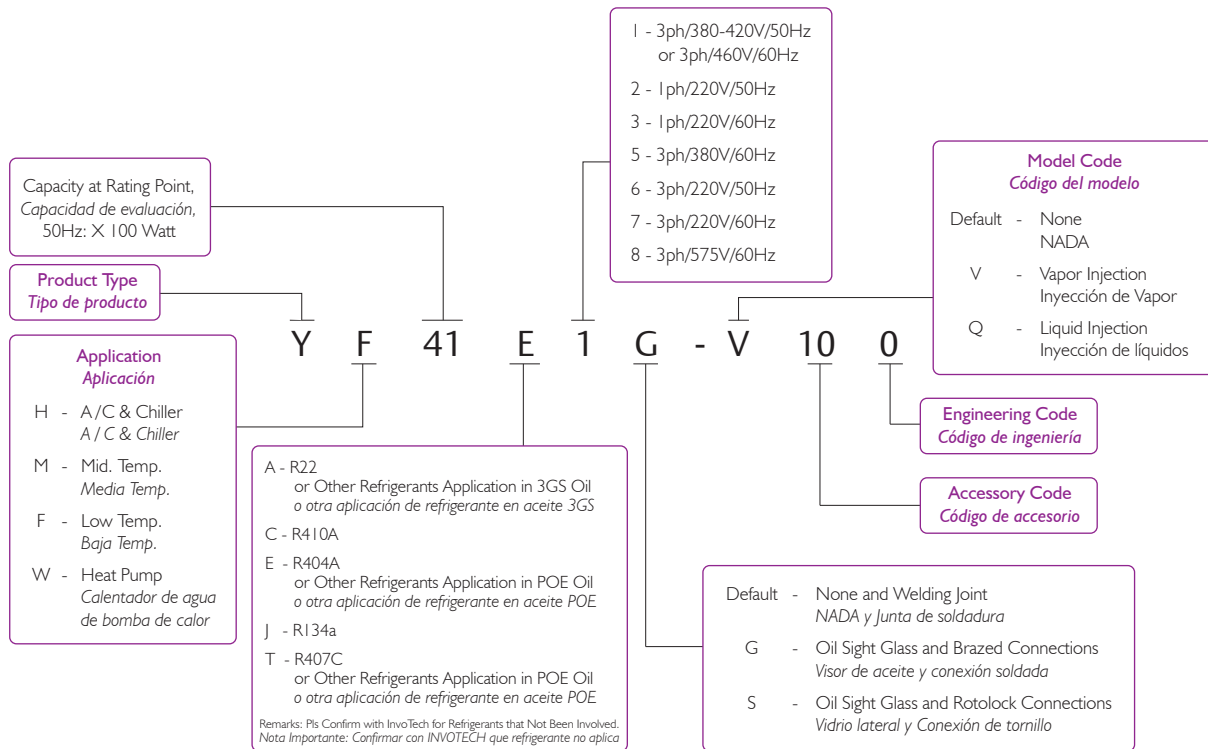
YF/YSF Series

Models / Modelos



YF/YSF Series

Nomenclature / Nomenclatura



YF/YSF Series

Specifications / Especificaciones

R22

| Model / Modelo | YF13A2G -Q102 | YF17A2G -Q102 | YF20A2G -Q102 | YF29A2G -Q100 | YF13A1G -Q100 | YF17A1G -Q100 | YF20A1G -Q100 | YF29A1G -Q100 | YF35A1G -Q100 | YF41A1G -Q100 |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Electricity / Electricidad | 220V/50Hz/1P | | | | 380-420V/50Hz/3P | | | | | |
| | Single Phase | | | | 3 Phase | | | | | |
| Power in Horse Power(HP) Potencia en caballos de fuerza (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 |
| Displacement (M ³ /H) Desplazamiento (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 |
| Refrigerant / Gas Refrigerante | R22 | | | | | | | | | |
| Capacity / Capacidad (W) | 1300 | 1660 | 1950 | 2950 | 1300 | 1660 | 1950 | 2950 | 3500 | 4100 |
| Power in Watt (W) Potencia en Watt (W) | 1170 | 1500 | 1750 | 2410 | 1160 | 1470 | 1710 | 2360 | 2710 | 3150 |
| Running Current (A) Corriente de operación (A) | 5.5 | 7.1 | 8.3 | 11.4 | 2.3 | 2.7 | 4.3 | 5.0 | 6.3 | 6.5 |
| COP (W/W) | 1.10 | 1.11 | 1.11 | 1.22 | 1.12 | 1.13 | 1.14 | 1.25 | 1.29 | 1.30 |
| LRA (A) | 76 | 76 | 76 | 109 | 22 | 22 | 45 | 60 | 60 | 60 |
| MOC (A) | 12.6 | 13.4 | 15.3 | 22.0 | 3.6 | 4.2 | 5.5 | 8.4 | 9.8 | 11.5 |
| Crankcase Heater (W) Calentador del cárter (W) | 70 | | | | | | | | | |
| Fitting Dimensions (Inch) Medidas de montaje (Pulgadas) | | | | | | | | | | |
| Discharge Tube / Tubo de descarga (OD) | 1/2 | | | | | | | | | |
| Suction Tube / Tubo de succión (OD) | 7/8 | | | | | | | | | |
| Product Dimensions (MM) Dimensiones del producto (MM) | | | | | | | | | | |
| Length / Largo (L) | 239 | | | | | | | | | |
| Width / Ancho (W) | 239 | | | | | | | | | |
| Height / Peso (H) | 418 | | | | | | | | | 463 |
| Feet Dimensions (Hole) Dimensiones en pies (agujero) | 190X190(8.5) | | | | | | | | | |
| Oil Type / Tipo de aceite | 3GS | | | | | | | | | |
| Initial Charge Volume (L) Carga de volumen inicial (L) | 1.4 | | | | | | | | | 1.6 |
| Recharge Volume (L) Volumen de recarga (L) | 1.25 | | | | | | | | | 1.45 |
| Max Operating Pressure (MPa) Presión operativa máxima (MPa) | | | | | | | | | | |
| High Side / Máximo | 3.0 | | | | | | | | | |
| Low Side / Mínimo | 2.0 | | | | | | | | | |
| Weight / Peso (kg) | 31 | 31 | 31 | 33 | 30 | 30 | 30 | 32 | 32 | 40 |

E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No Subcooling / No Subenfriamiento

YF/YSF Series

Specifications / Especificaciones

R22

| Model / Modelo | YSF60A1G -V100 | YSF65A1G -V100 | YSF75A1G -V100 | YSF85A1G -V100 | YSF90A1G -V100 | YSF100A1G -V100 | YSF125A1G -V100 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| Electricity / Electricidad | 380-420V/50Hz/3P | | | | | | |
| Displacement (M ³ /H) Desplazamiento (M ³ /H) | 20 | 21.4 | 25.3 | 29 | 32.9 | 34.3 | 42.4 |
| Refrigerant / Gas Refrigerante | R22 | | | | | | |
| Capacity / Capacidad (W) | 6000 | 6400 | 7400 | 8480 | 9500 | 10000 | 12200 |
| Power in Watt (W) Potencia en Watt (W) | 4170 | 4450 | 5070 | 5800 | 6420 | 6760 | 8714 |
| COP (W/W) | 1.44 | 1.44 | 1.46 | 1.46 | 1.48 | 1.48 | 1.40 |
| Running Current (A) Corriente de operación (A) | 9.2 | 9.6 | 10.4 | 11.2 | 12.1 | 12.6 | 16.7 |
| LRA (A) | 117 | 117 | 117 | 117 | 117 | 117 | 148.5 |
| MOC (A) | 17.6 | 19.0 | 22.0 | 25.0 | 28.0 | 24.7 | 30.4 |
| Crankcase Heater (W) Calentador del cárter (W) | 75 | | | | | | |
| Fitting Dimensions (Inch) Medidas de montaje (Pulgadas) | | | | | | | |
| Discharge Tube/Tubo de descarga(OD) | 7/8 | | | | | | |
| Suction Tube / Tubo de succión(OD) | 1 1/8 | | | | | | 1 3/8 |
| O.D. of liquid inlet (outlet) O.D. entrada de líquido (salida) | 1/2 | | | | | | 3/4 |
| Product Dimensions (MM) Dimensiones del producto (MM) | | | | | | | |
| Length / Largo (L) | 488 | | | | | | |
| Width / Ancho (W) | 360 | | | | | | 381 |
| Height / Peso (H) | 562 | | | | | | 569 |
| Feet Dimensions (Hole) Dimensiones en pies (agujero) | 190 X 190(8.5) | | | | | | |
| Oil Type / Tipo de aceite | 3GS | | | | | | |
| Initial Charge Volume (L) Carga de volumen inicial (L) | 2.7 | | | | | | |
| Recharge Volume (L) Volumen de recarga (L) | 2.6 | | | | | | |
| Max Operating Pressure (MPa) Presión operativa máxima (MPa) | | | | | | | |
| High Side / Máximo | 3.0 | | | | | | |
| Low Side / Mínimo | 2.0 | | | | | | |
| Weight / Peso (kg) | 90 | 90 | 91 | 91 | 91 | 91 | 93 |

E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No sub-cooling at the inlet of economizer / NO - Sobre enfriamiento en la entrada del economizador.

YF/YSF Series

Specifications / Especificaciones

R404A

| Model / Modelo | YF13E2G -Q102 | YF17E2G -Q102 | YF20E2G -Q102 | YF29E2G -Q100 | YF13E1G -Q100 | YF17E1G -Q100 | YF20E1G -Q100 | YF29E1G -Q100 | YF35E1G -Q100 | YF41E1G -Q100 | |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Electricity / Electricidad | 220V/50Hz/1P | | | | 380-420V/50Hz/3P | | | | | | |
| | Single Phase | | | | 3 Phase | | | | | | |
| Power in Horse Power(HP) Potencia en caballos de fuerza (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 | |
| Displacement (M ³ /H) Desplazamiento (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 | |
| Refrigerant / Gas Refrigerante | R404A | | | | | | | | | | |
| Capacity / Capacidad (W) | 1540 | 1970 | 2330 | 3510 | 1540 | 1970 | 2330 | 3510 | 4110 | 4960 | |
| Power in Watt (W) Potencia en Watt (W) | 1290 | 1650 | 1920 | 2650 | 1280 | 1620 | 1880 | 2600 | 2980 | 3470 | |
| Running Current (A) Corriente de operación (A) | 6.1 | 7.8 | 9.1 | 12.5 | 2.5 | 2.9 | 4.5 | 5.3 | 6.6 | 7.0 | |
| COP (W/W) | 1.18 | 1.19 | 1.21 | 1.32 | 1.20 | 1.22 | 1.24 | 1.35 | 1.38 | 1.43 | |
| LRA (A) | 76 | 76 | 76 | 109 | 22 | 22 | 45 | 60 | 60 | 60 | |
| MOC (A) | 13.4 | 14.2 | 16.2 | 23.3 | 3.8 | 4.4 | 5.8 | 8.8 | 10.3 | 12.1 | |
| Crankcase Heater (W) Calentador del cárter (W) | 70 | | | | | | | | | | |
| Fitting Dimensions (Inch) Medidas de montaje (Pulgadas) | | | | | | | | | | | |
| Discharge Tube / Tubo de descarga (OD) | 1/2 | | | | | | | | | | |
| Suction Tube / Tubo de succión (OD) | 7/8 | | | | | | | | | | |
| Product Dimensions (MM) Dimensiones del producto (MM) | | | | | | | | | | | |
| Length / Largo (L) | 239 | | | | | | | | | | |
| Width / Ancho (W) | 239 | | | | | | | | | | |
| Height / Peso (H) | 418 | | | | | | | | | 463 | |
| Feet Dimensions (Hole) Dimensiones en pies (agujero) | 190X190(8.5) | | | | | | | | | | |
| Oil Type / Tipo de aceite | POE | | | | | | | | | | |
| Initial Charge Volume (L) Carga de volumen inicial (L) | 1.4 | | | | | | | | | 1.6 | |
| Recharge Volume (L) Volumen de recarga (L) | 1.25 | | | | | | | | | 1.45 | |
| Max Operating Pressure (MPa) Presión operativa máxima (MPa) | | | | | | | | | | | |
| High Side / Máximo | 3.2 | | | | | | | | | | |
| Low Side / Mínimo | 2.0 | | | | | | | | | | |
| Weight / Peso (kg) | 31 | 31 | 31 | 33 | 30 | 30 | 30 | 32 | 32 | 40 | |

E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No Subcooling / No Subenfriamiento

YF/YSF Series

Specifications / Especificaciones

R404A

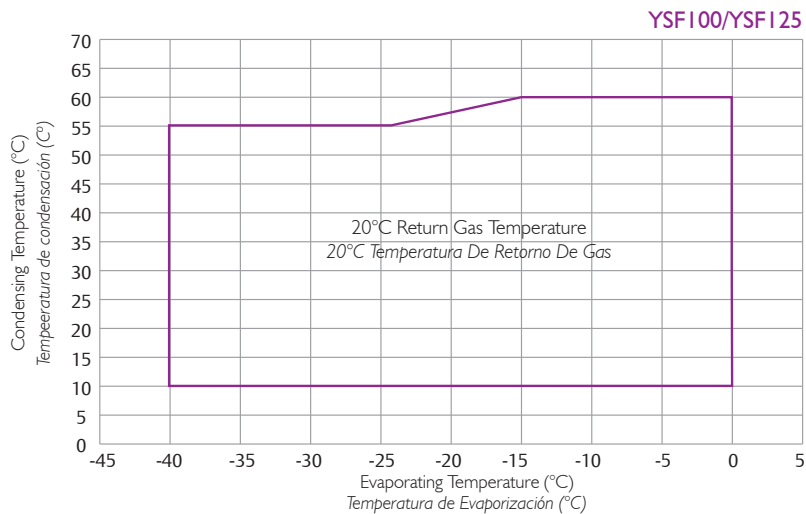
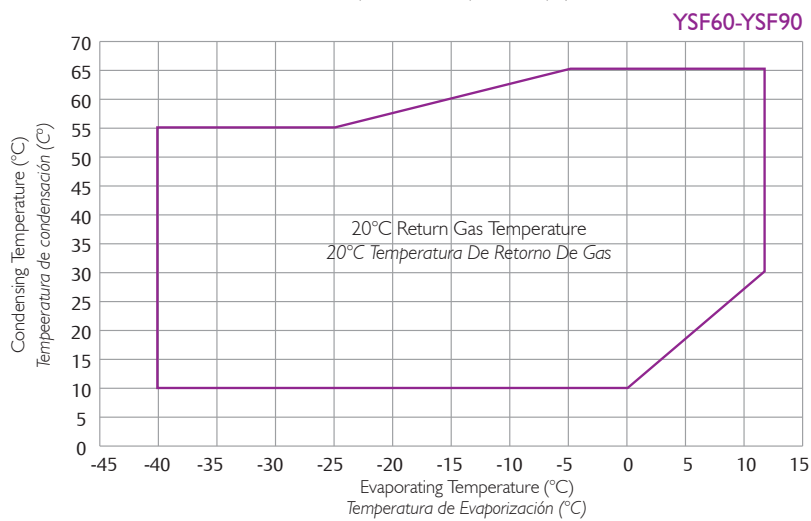
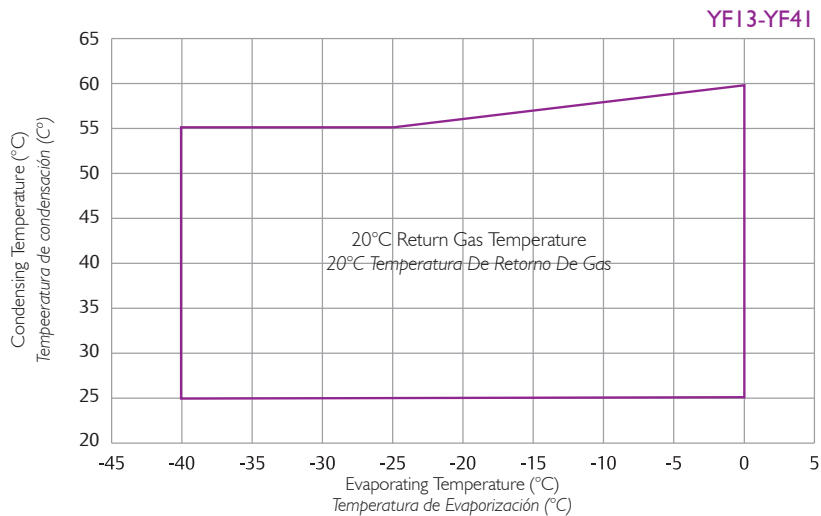
| Model / Modelo | YSF60E1G -V100 | YSF65E1G -V100 | YSF75E1G -V100 | YSF85E1G -V100 | YSF90E1G -V100 | YSF100E1G -V100 | YSF125E1G -V100 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| Electricity / Electricidad | 380-420V/50Hz/3P | | | | | | |
| Displacement (M ³ /H) Desplazamiento (M ³ /H) | 20.1 | 21.4 | 25.3 | 29.1 | 32.9 | 34.3 | 42.4 |
| Refrigerant / Gas Refrigerante | R404A | | | | | | |
| Capacity / Capacidad (W) | 6910 | 7360 | 8704 | 10010 | 11320 | 11800 | 13500 |
| Power in Watt (W) Potencia en Watt (W) | 4369 | 4660 | 5440 | 6256 | 6988 | 7284 | 9507 |
| COP (W/W) | 1.58 | 1.58 | 1.60 | 1.60 | 1.62 | 1.62 | 1.42 |
| Running Current (A) Corriente de operación (A) | 9.5 | 10.0 | 10.8 | 11.9 | 12.9 | 13.3 | 18.0 |
| LRA (A) | 117 | 117 | 117 | 117 | 117 | 117 | 148.5 |
| MOC (A) | 17.9 | 19.1 | 22.3 | 25.7 | 28.8 | 27.0 | 33.4 |
| Crankcase Heater (W) Calentador del cárter (W) | 75 | | | | | | |
| Fitting Dimensions (Inch) Medidas de montaje (Pulgadas) | | | | | | | |
| Discharge Tube / Tubo de descarga (OD) | 7/8 | | | | | | |
| Suction Tube / Tubo de succión (OD) | 1 1/8 | | | | | | 1 3/8 |
| O.D. of liquid inlet (outlet) O.D. entrada de liquido (salida) | 1/2 | | | | | | 3/4 |
| Product Dimensions (MM) Dimensiones del producto (MM) | | | | | | | |
| Length / Largo (L) | 488 | | | | | | |
| Width / Ancho (W) | 360 | | | | | | 381 |
| Height / Peso (H) | 562 | | | | | | 569 |
| Feet Dimensions (Hole) Dimensiones en pies (agujero) | 190 X 190(8.5) | | | | | | |
| Oil Type / Tipo de aceite | POE | | | | | | |
| Initial Charge Volume (L) Carga de volumen inicial (L) | 2.7 | | | | | | |
| Recharge Volume (L) Volumen de recarga (L) | 2.6 | | | | | | |
| Max Operating Pressure (MPa) Presión operativa máxima (MPa) | | | | | | | |
| High Side / Máximo | 3.2 | | | | | | |
| Low Side / Mínimo | 2.0 | | | | | | |
| Weight / Peso (kg) | 90 | 90 | 91 | 91 | 91 | 91 | 93 |

E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No sub-cooling at the inlet of economizer / NO - Sobre enfriamiento en la entrada del economizador.

YF/YSF Series

Operating Envelope / Desarrollo de Operación

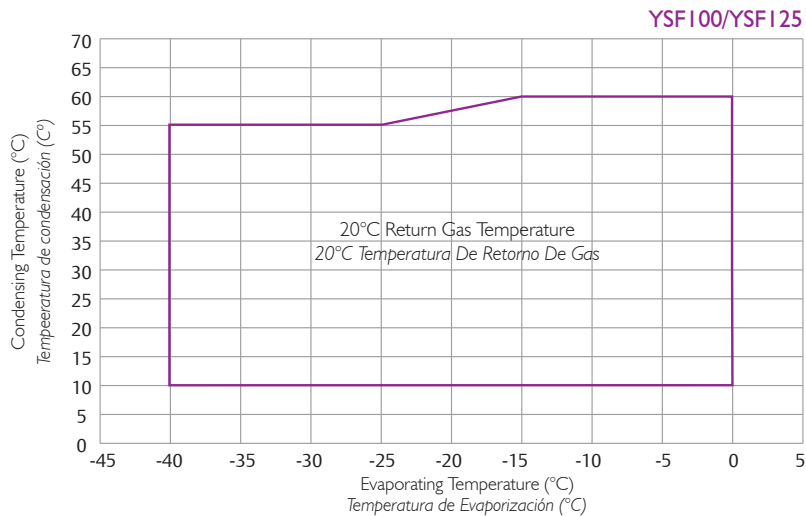
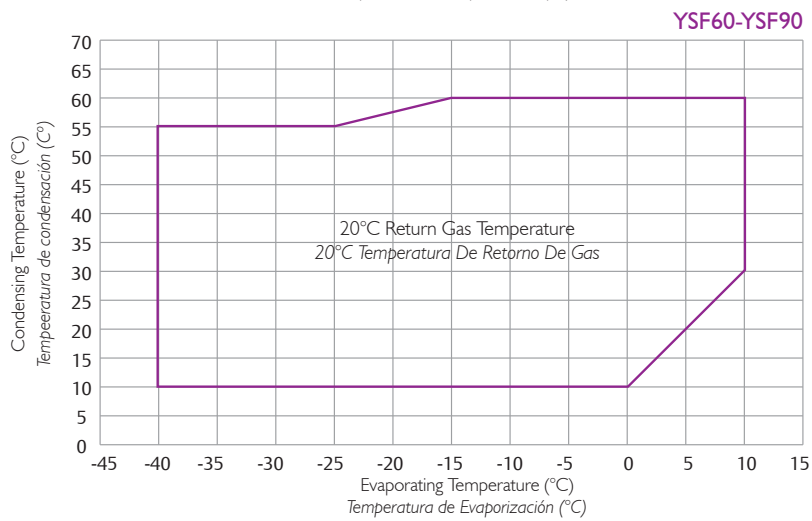
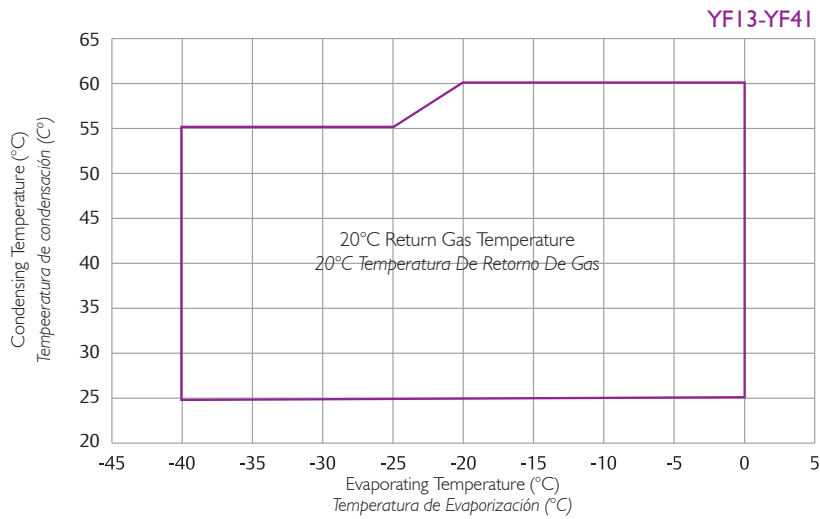
R22



YF/YSF Series

Operating Envelope / Desarrollo de Operación

R404A



YF/YSF Series

Capacity / Capacidad

R22

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|--------------|----------|------|------|------|------|------|------|------|------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13A2G-Q102 | Cap (W) | 50 | 972 | 1234 | 1520 | 1910 | 2335 | 2845 | 3411 | 4035 | 4761 |
| | | 40 | 1073 | 1359 | 1687 | 2099 | 2566 | 3119 | 3748 | 4433 | 5243 |
| | | 30 | 1164 | 1464 | 1833 | 2267 | 2798 | 3372 | 4064 | 4788 | 5621 |
| | Power (W) | 50 | 1424 | 1466 | 1504 | 1554 | 1601 | 1660 | 1714 | 1782 | 1844 |
| | | 40 | 1217 | 1251 | 1285 | 1331 | 1374 | 1428 | 1479 | 1542 | 1601 |
| | | 30 | 1040 | 1066 | 1096 | 1137 | 1185 | 1243 | 1298 | 1369 | 1441 |
| YF17A2G-Q102 | Cap (W) | 50 | 1162 | 1474 | 1816 | 2282 | 2789 | 3399 | 4074 | 4820 | 5686 |
| | | 40 | 1281 | 1623 | 2015 | 2508 | 3065 | 3726 | 4477 | 5295 | 6263 |
| | | 30 | 1391 | 1748 | 2189 | 2708 | 3342 | 4028 | 4854 | 5719 | 6713 |
| | Power (W) | 50 | 1685 | 1735 | 1780 | 1840 | 1895 | 1965 | 2029 | 2109 | 2183 |
| | | 40 | 1441 | 1481 | 1522 | 1576 | 1626 | 1690 | 1751 | 1825 | 1895 |
| | | 30 | 1232 | 1262 | 1298 | 1346 | 1402 | 1471 | 1537 | 1621 | 1706 |
| YF20A2G-Q102 | Cap (W) | 50 | 1278 | 1621 | 1997 | 2510 | 3068 | 3738 | 4482 | 5302 | 6255 |
| | | 40 | 1409 | 1786 | 2216 | 2758 | 3372 | 4098 | 4924 | 5824 | 6889 |
| | | 30 | 1530 | 1923 | 2408 | 2979 | 3676 | 4431 | 5339 | 6291 | 7385 |
| | Power (W) | 50 | 1921 | 1977 | 2029 | 2097 | 2159 | 2239 | 2312 | 2404 | 2488 |
| | | 40 | 1642 | 1688 | 1734 | 1796 | 1853 | 1926 | 1995 | 2080 | 2159 |
| | | 30 | 1404 | 1438 | 1479 | 1534 | 1598 | 1676 | 1751 | 1847 | 1944 |
| YF29A2G-Q100 | Cap (W) | 50 | 1891 | 2399 | 2956 | 3715 | 4540 | 5533 | 6633 | 7847 | 9257 |
| | | 40 | 2086 | 2643 | 3280 | 4082 | 4990 | 6065 | 7288 | 8619 | 10195 |
| | | 30 | 2264 | 2846 | 3563 | 4409 | 5440 | 6557 | 7902 | 9310 | 10929 |
| | Power (W) | 50 | 2597 | 2674 | 2743 | 2835 | 2919 | 3027 | 3126 | 3250 | 3364 |
| | | 40 | 2220 | 2282 | 2345 | 2428 | 2506 | 2605 | 2697 | 2812 | 2919 |
| | | 30 | 1898 | 1944 | 2000 | 2074 | 2161 | 2266 | 2368 | 2497 | 2628 |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid Injection
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento, Inyección de líquido

YF/YSF Series

Capacity / Capacidad

R22

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|--------------|----------|------|------|------|------|------|------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13AIG-Q100 | Cap (W) | 50 | 972 | 1234 | 1520 | 1910 | 2335 | 2845 | 3411 | 4035 | 4761 |
| | | 40 | 1073 | 1359 | 1687 | 2099 | 2566 | 3119 | 3748 | 4433 | 5243 |
| | | 30 | 1164 | 1464 | 1833 | 2267 | 2798 | 3372 | 4064 | 4788 | 5621 |
| | Power (W) | 50 | 1396 | 1437 | 1474 | 1524 | 1569 | 1627 | 1680 | 1747 | 1808 |
| | | 40 | 1193 | 1226 | 1260 | 1305 | 1347 | 1400 | 1450 | 1511 | 1569 |
| | | 30 | 1020 | 1045 | 1075 | 1115 | 1161 | 1218 | 1273 | 1342 | 1413 |
| YF17AIG-Q100 | Cap (W) | 50 | 1162 | 1474 | 1816 | 2282 | 2789 | 3399 | 4074 | 4820 | 5686 |
| | | 40 | 1281 | 1623 | 2015 | 2508 | 3065 | 3726 | 4477 | 5295 | 6263 |
| | | 30 | 1391 | 1748 | 2189 | 2708 | 3342 | 4028 | 4854 | 5719 | 6713 |
| | Power (W) | 50 | 1652 | 1701 | 1746 | 1804 | 1858 | 1926 | 1989 | 2068 | 2140 |
| | | 40 | 1413 | 1452 | 1492 | 1545 | 1594 | 1657 | 1716 | 1789 | 1858 |
| | | 30 | 1208 | 1237 | 1273 | 1320 | 1375 | 1442 | 1507 | 1589 | 1672 |
| YF20AIG-Q100 | Cap (W) | 50 | 1278 | 1621 | 1997 | 2510 | 3068 | 3738 | 4482 | 5302 | 6255 |
| | | 40 | 1409 | 1786 | 2216 | 2758 | 3372 | 4098 | 4924 | 5824 | 6889 |
| | | 30 | 1530 | 1923 | 2408 | 2979 | 3676 | 4431 | 5339 | 6291 | 7385 |
| | Power (W) | 50 | 1886 | 1942 | 1993 | 2059 | 2121 | 2199 | 2271 | 2361 | 2444 |
| | | 40 | 1613 | 1658 | 1703 | 1764 | 1820 | 1892 | 1959 | 2043 | 2121 |
| | | 30 | 1379 | 1412 | 1453 | 1507 | 1570 | 1646 | 1720 | 1814 | 1909 |
| YF29AIG-Q100 | Cap (W) | 50 | 1914 | 2428 | 2992 | 3760 | 4595 | 5600 | 6713 | 7942 | 9370 |
| | | 40 | 2111 | 2675 | 3320 | 4132 | 5051 | 6139 | 7376 | 8724 | 10319 |
| | | 30 | 2292 | 2881 | 3607 | 4462 | 5506 | 6637 | 7998 | 9424 | 11062 |
| | Power (W) | 50 | 2544 | 2619 | 2687 | 2777 | 2860 | 2965 | 3062 | 3183 | 3295 |
| | | 40 | 2175 | 2235 | 2297 | 2378 | 2454 | 2551 | 2642 | 2754 | 2860 |
| | | 30 | 1859 | 1904 | 1959 | 2032 | 2117 | 2220 | 2319 | 2446 | 2574 |
| YF35AIG-Q100 | Cap (W) | 50 | 2323 | 2947 | 3632 | 4564 | 5578 | 6797 | 8149 | 9640 | 11373 |
| | | 40 | 2562 | 3247 | 4030 | 5015 | 6131 | 7452 | 8953 | 10589 | 12525 |
| | | 30 | 2782 | 3497 | 4378 | 5416 | 6683 | 8056 | 9708 | 11439 | 13427 |
| | Power (W) | 50 | 3010 | 3099 | 3179 | 3286 | 3384 | 3508 | 3623 | 3767 | 3899 |
| | | 40 | 2573 | 2645 | 2718 | 2814 | 2904 | 3019 | 3126 | 3259 | 3384 |
| | | 30 | 2199 | 2253 | 2318 | 2404 | 2504 | 2627 | 2744 | 2894 | 3046 |
| YF41AIG-Q100 | Cap (W) | 50 | 2783 | 3530 | 4350 | 5467 | 6682 | 8142 | 9761 | 11548 | 13623 |
| | | 40 | 3069 | 3889 | 4827 | 6008 | 7344 | 8927 | 10725 | 12685 | 15004 |
| | | 30 | 3332 | 4188 | 5244 | 6488 | 8006 | 9650 | 11629 | 13702 | 16084 |
| | Power (W) | 50 | 3498 | 3602 | 3695 | 3819 | 3933 | 4078 | 4212 | 4378 | 4532 |
| | | 40 | 2991 | 3074 | 3159 | 3271 | 3375 | 3509 | 3634 | 3788 | 3933 |
| | | 30 | 2556 | 2619 | 2694 | 2795 | 2911 | 3053 | 3190 | 3364 | 3541 |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid Injection
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento, Inyección de líquido



YF/YSF Series

Capacity / Capacidad

R22

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|----------------|--------------|----------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| YSF60A1G-VI00 | 65 | | | | | | | | 12864 | 15127 | 17390 | 19652 |
| | 60 | | | | | | 9340 | 11108 | 13121 | 15398 | 17674 | 19950 |
| | 55 | 3518 | 4380 | 5397 | 6585 | 7961 | 9541 | 11342 | 13379 | 15668 | 17958 | 20248 |
| | 50 | 3607 | 4545 | 5629 | 6875 | 8299 | 9916 | 11744 | 13799 | 16096 | 18394 | 20691 |
| | 45 | 3822 | 4832 | 5977 | 7275 | 8740 | 10389 | 12239 | 14305 | 16604 | 18904 | 21203 |
| | 40 | 4087 | 5163 | 6364 | 7707 | 9208 | 10883 | 12749 | 14821 | 17117 | 19412 | 21708 |
| | 35 | 4326 | 5462 | 6713 | 8096 | 9627 | 11322 | 13198 | 15271 | 17556 | 19842 | 22128 |
| | 30 | 4462 | 5652 | 6947 | 8364 | 9920 | 11629 | 13510 | 15577 | 17848 | 20118 | 22389 |
| | 25 | 4420 | 5657 | 6991 | 8437 | 10010 | 11729 | 13608 | 15664 | 17913 | 20163 | 22412 |
| | 65 | | | | | | | | 8095 | 8528 | 8961 | 9395 |
| | 60 | | | | | | 6879 | 7143 | 7460 | 7866 | 8271 | 8676 |
| | 55 | 5033 | 5444 | 5744 | 5970 | 6156 | 6338 | 6549 | 6826 | 7203 | 7580 | 7957 |
| | 50 | 4705 | 5024 | 5245 | 5404 | 5536 | 5675 | 5856 | 6115 | 6486 | 6856 | 7227 |
| | 45 | 4235 | 4485 | 4650 | 4764 | 4863 | 4982 | 5155 | 5418 | 5805 | 6192 | 6579 |
| 40 | 3716 | 3919 | 4049 | 4142 | 4230 | 4351 | 4538 | 4827 | 5253 | 5678 | 6103 | |
| 35 | 3239 | 3418 | 3536 | 3628 | 3729 | 3873 | 4097 | 4434 | 4920 | 5406 | 5892 | |
| 30 | 2896 | 3073 | 3201 | 3315 | 3450 | 3641 | 3923 | 4331 | 4900 | 5469 | 6038 | |
| 25 | 2780 | 2976 | 3136 | 3294 | 3486 | 3746 | 4109 | 4610 | 5284 | 5958 | 6632 | |
| YSF65A1G-VI00 | 65 | | | | | | | | 13696 | 16105 | 18514 | 20924 |
| | 60 | | | | | | 9945 | 11826 | 13970 | 16393 | 18817 | 21241 |
| | 55 | 3745 | 4663 | 5746 | 7011 | 8476 | 10158 | 12075 | 14244 | 16682 | 19120 | 21558 |
| | 50 | 3840 | 4839 | 5994 | 7320 | 8835 | 10558 | 12504 | 14691 | 17137 | 19583 | 22029 |
| | 45 | 4069 | 5144 | 6364 | 7745 | 9305 | 11061 | 13030 | 15230 | 17678 | 20126 | 22574 |
| | 40 | 4351 | 5497 | 6776 | 8205 | 9803 | 11587 | 13573 | 15780 | 18224 | 20668 | 23112 |
| | 35 | 4606 | 5815 | 7147 | 8619 | 10249 | 12054 | 14051 | 16258 | 18692 | 21126 | 23559 |
| | 30 | 4751 | 6017 | 7396 | 8905 | 10561 | 12381 | 14383 | 16584 | 19002 | 21419 | 23837 |
| | 25 | 4705 | 6023 | 7443 | 8982 | 10658 | 12487 | 14488 | 16677 | 19072 | 21467 | 23862 |
| | 65 | | | | | | | | 8618 | 9079 | 9541 | 10002 |
| | 60 | | | | | | 7324 | 7605 | 7943 | 8374 | 8806 | 9237 |
| | 55 | 5359 | 5796 | 6116 | 6356 | 6555 | 6748 | 6973 | 7268 | 7669 | 8070 | 8471 |
| | 50 | 5009 | 5349 | 5585 | 5754 | 5894 | 6042 | 6235 | 6510 | 6905 | 7300 | 7695 |
| | 45 | 4509 | 4775 | 4951 | 5072 | 5178 | 5304 | 5489 | 5768 | 6180 | 6592 | 7004 |
| 40 | 3956 | 4173 | 4311 | 4409 | 4504 | 4632 | 4832 | 5139 | 5592 | 6045 | 6498 | |
| 35 | 3449 | 3639 | 3765 | 3862 | 3970 | 4124 | 4362 | 4721 | 5239 | 5756 | 6274 | |
| 30 | 3084 | 3272 | 3408 | 3529 | 3673 | 3877 | 4177 | 4611 | 5217 | 5823 | 6429 | |
| 25 | 2959 | 3169 | 3339 | 3507 | 3711 | 3988 | 4374 | 4908 | 5625 | 6343 | 7061 | |
| YSF75A1G-VI00 | 65 | | | | | | | | 16192 | 19040 | 21888 | 24737 |
| | 60 | | | | | | 11757 | 13981 | 16516 | 19381 | 22246 | 25111 |
| | 55 | 4428 | 5513 | 6793 | 8288 | 10021 | 12010 | 14276 | 16840 | 19722 | 22604 | 25486 |
| | 50 | 4540 | 5721 | 7086 | 8654 | 10445 | 12482 | 14782 | 17368 | 20260 | 23152 | 26044 |
| | 45 | 4810 | 6082 | 7524 | 9157 | 11001 | 13077 | 15405 | 18006 | 20900 | 23794 | 26688 |
| | 40 | 5144 | 6498 | 8010 | 9701 | 11590 | 13698 | 16047 | 18655 | 21545 | 24434 | 27324 |
| | 35 | 5445 | 6875 | 8449 | 10190 | 12117 | 14251 | 16612 | 19221 | 22098 | 24976 | 27853 |
| | 30 | 5617 | 7114 | 8744 | 10528 | 12486 | 14638 | 17005 | 19607 | 22465 | 25323 | 28181 |
| | 25 | 5563 | 7121 | 8800 | 10619 | 12600 | 14763 | 17128 | 19716 | 22548 | 25379 | 28211 |
| | 65 | | | | | | | | 10088 | 10628 | 11168 | 11708 |
| | 60 | | | | | | 8573 | 8902 | 9297 | 9802 | 10307 | 10812 |
| | 55 | 6273 | 6784 | 7159 | 7440 | 7672 | 7898 | 8162 | 8507 | 8977 | 9446 | 9916 |
| | 50 | 5863 | 6261 | 6537 | 6735 | 6899 | 7072 | 7298 | 7621 | 8083 | 8545 | 9007 |
| | 45 | 5278 | 5589 | 5795 | 5938 | 6061 | 6209 | 6425 | 6752 | 7234 | 7717 | 8199 |
| 40 | 4631 | 4884 | 5047 | 5161 | 5272 | 5422 | 5656 | 6016 | 6546 | 7076 | 7606 | |
| 35 | 4037 | 4260 | 4407 | 4521 | 4647 | 4827 | 5106 | 5526 | 6132 | 6738 | 7343 | |
| 30 | 3610 | 3830 | 3989 | 4131 | 4299 | 4538 | 4889 | 5398 | 6107 | 6816 | 7525 | |
| 25 | 3464 | 3709 | 3908 | 4106 | 4344 | 4668 | 5120 | 5745 | 6585 | 7425 | 8265 | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento en la entrada del economizador

YF/YSF Series

Capacity / Capacidad

R22

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|----------------|--------------|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| YSF85AIG-VI00 | 65 | | | | | | | | 18624 | 21900 | 25176 | 28452 |
| | 60 | | | | | | 13523 | 16081 | 18996 | 22292 | 25588 | 28883 |
| | 55 | 5093 | 6341 | 7813 | 9533 | 11526 | 13813 | 16420 | 19369 | 22684 | 25999 | 29314 |
| | 50 | 5221 | 6581 | 8150 | 9954 | 12014 | 14356 | 17003 | 19977 | 23303 | 26630 | 29956 |
| | 45 | 5533 | 6995 | 8654 | 10532 | 12653 | 15041 | 17718 | 20710 | 24039 | 27368 | 30697 |
| | 40 | 5917 | 7474 | 9213 | 11158 | 13331 | 15756 | 18457 | 21457 | 24781 | 28104 | 31427 |
| | 35 | 6263 | 7907 | 9718 | 11720 | 13937 | 16391 | 19107 | 22108 | 25418 | 28727 | 32037 |
| | 30 | 6460 | 8183 | 10058 | 12109 | 14361 | 16836 | 19559 | 22552 | 25839 | 29126 | 32413 |
| | 25 | 6398 | 8191 | 10121 | 12214 | 14493 | 16981 | 19701 | 22678 | 25934 | 29191 | 32448 |
| | 65 | | | | | | | | 11603 | 12224 | 12845 | 13467 |
| | 60 | | | | | | 9860 | 10239 | 10694 | 11275 | 11855 | 12436 |
| | 55 | 7215 | 7803 | 8234 | 8558 | 8825 | 9085 | 9388 | 9785 | 10325 | 10865 | 11405 |
| | 50 | 6744 | 7201 | 7519 | 7747 | 7935 | 8135 | 8394 | 8765 | 9297 | 9828 | 10360 |
| | 45 | 6071 | 6429 | 6665 | 6829 | 6971 | 7141 | 7390 | 7766 | 8321 | 8876 | 9430 |
| 40 | 5326 | 5618 | 5805 | 5937 | 6064 | 6237 | 6505 | 6919 | 7529 | 8139 | 8749 | |
| 35 | 4643 | 4899 | 5068 | 5200 | 5345 | 5552 | 5873 | 6356 | 7053 | 7750 | 8446 | |
| 30 | 4152 | 4405 | 4588 | 4752 | 4945 | 5219 | 5624 | 6209 | 7024 | 7840 | 8655 | |
| 25 | 3984 | 4266 | 4495 | 4722 | 4997 | 5369 | 5889 | 6608 | 7574 | 8540 | 9506 | |
| YSF90AIG-VI00 | 65 | | | | | | | | 21056 | 24760 | 28463 | 32167 |
| | 60 | | | | | | 15289 | 18181 | 21477 | 25203 | 28929 | 32655 |
| | 55 | 5758 | 7169 | 8833 | 10778 | 13031 | 15617 | 18564 | 21898 | 25646 | 29394 | 33142 |
| | 50 | 5903 | 7440 | 9214 | 11253 | 13583 | 16231 | 19223 | 22586 | 26346 | 30107 | 33867 |
| | 45 | 6255 | 7909 | 9784 | 11907 | 14305 | 17005 | 20032 | 23415 | 27178 | 30942 | 34706 |
| | 40 | 6690 | 8450 | 10417 | 12615 | 15071 | 17813 | 20867 | 24259 | 28017 | 31774 | 35531 |
| | 35 | 7081 | 8940 | 10987 | 13251 | 15757 | 18532 | 21602 | 24995 | 28737 | 32478 | 36220 |
| | 30 | 7304 | 9251 | 11371 | 13691 | 16237 | 19035 | 22113 | 25497 | 29213 | 32930 | 36646 |
| | 25 | 7234 | 9260 | 11443 | 13809 | 16385 | 19198 | 22274 | 25639 | 29321 | 33003 | 36685 |
| | 65 | | | | | | | | 12988 | 13684 | 14379 | 15074 |
| | 60 | | | | | | 11038 | 11462 | 11971 | 12621 | 13271 | 13921 |
| | 55 | 8076 | 8735 | 9217 | 9579 | 9878 | 10169 | 10509 | 10953 | 11558 | 12163 | 12767 |
| | 50 | 7549 | 8061 | 8417 | 8672 | 8883 | 9106 | 9397 | 9812 | 10407 | 11002 | 11597 |
| | 45 | 6795 | 7197 | 7461 | 7645 | 7804 | 7994 | 8272 | 8693 | 9314 | 9935 | 10556 |
| 40 | 5962 | 6289 | 6498 | 6645 | 6788 | 6981 | 7282 | 7745 | 8428 | 9111 | 9793 | |
| 35 | 5197 | 5484 | 5674 | 5821 | 5983 | 6215 | 6574 | 7115 | 7895 | 8675 | 9455 | |
| 30 | 4647 | 4931 | 5136 | 5319 | 5536 | 5842 | 6295 | 6950 | 7863 | 8776 | 9688 | |
| 25 | 4460 | 4775 | 5032 | 5286 | 5593 | 6010 | 6593 | 7396 | 8478 | 9559 | 10641 | |
| YSF100AIG-VI00 | 65 | | | | | | | | | | | |
| | 60 | | | | | | 15939 | 18955 | 22391 | 26275 | | |
| | 55 | 6003 | 7474 | 9209 | 11237 | 13585 | 16282 | 19354 | 22830 | 26738 | | |
| | 50 | 6154 | 7756 | 9606 | 11732 | 14161 | 16922 | 20041 | 23547 | 27468 | | |
| | 45 | 6522 | 8245 | 10200 | 12414 | 14914 | 17728 | 20885 | 24411 | 28335 | | |
| | 40 | 6974 | 8810 | 10860 | 13151 | 15713 | 18571 | 21755 | 25292 | 29209 | | |
| | 35 | 7382 | 9320 | 11455 | 13815 | 16427 | 19320 | 22522 | 26059 | 29960 | | |
| | 30 | 7615 | 9645 | 11855 | 14273 | 16927 | 19845 | 23054 | 26582 | 30456 | | |
| | 25 | 7542 | 9654 | 11930 | 14397 | 17083 | 20015 | 23221 | 26730 | 30569 | | |
| | 65 | | | | | | | | | | | |
| | 60 | | | | | | 11507 | 11949 | 12480 | 13158 | | |
| | 55 | 8420 | 9106 | 9609 | 9987 | 10299 | 10602 | 10956 | 11419 | 12050 | | |
| | 50 | 7870 | 8404 | 8775 | 9041 | 9261 | 9493 | 9797 | 10229 | 10849 | | |
| | 45 | 7084 | 7503 | 7779 | 7970 | 8136 | 8334 | 8624 | 9063 | 9711 | | |
| 40 | 6216 | 6556 | 6774 | 6928 | 7077 | 7279 | 7592 | 8075 | 8787 | | | |
| 35 | 5418 | 5718 | 5915 | 6069 | 6237 | 6480 | 6854 | 7418 | 8231 | | | |
| 30 | 4845 | 5141 | 5354 | 5545 | 5771 | 6091 | 6563 | 7245 | 8197 | | | |
| 25 | 4650 | 4979 | 5246 | 5511 | 5831 | 6266 | 6873 | 7711 | 8839 | | | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento en la entrada del economizador

YF/YSF Series

Capacity / Capacidad

R22

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | | |
|----------------|--------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|---|----|--|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | |
| YSF125AIG-VI00 | 65 | | | | | | | | | | | | |
| | 60 | | | | | | 19709 | 23438 | 27687 | 32490 | | | |
| | 55 | 7423 | 9241 | 11387 | 13895 | 16799 | 20133 | 23932 | 28230 | 33062 | | | |
| | 50 | 7610 | 9591 | 11879 | 14507 | 17511 | 20924 | 24781 | 29117 | 33964 | | | |
| | 45 | 8064 | 10196 | 12613 | 15350 | 18441 | 21921 | 25825 | 30185 | 35037 | | | |
| | 40 | 8624 | 10894 | 13428 | 16262 | 19429 | 22964 | 26901 | 31274 | 36118 | | | |
| | 35 | 9128 | 11524 | 14164 | 17082 | 20313 | 23890 | 27848 | 32222 | 37046 | | | |
| | 30 | 9416 | 11926 | 14659 | 17649 | 20931 | 24539 | 28507 | 32869 | 37660 | | | |
| | 25 | 9704 | 11938 | 14752 | 17802 | 21123 | 24749 | 28714 | 33053 | 37799 | | | |
| | 65 | | | | | | | | | | | | |
| | 60 | | | | | | 14229 | 14776 | 15432 | 16270 | | | |
| | 55 | 10412 | 11260 | 11882 | 12349 | 12735 | 13110 | 13548 | 14120 | 14900 | | | |
| | 50 | 9732 | 10392 | 10850 | 11179 | 11451 | 11739 | 12114 | 12649 | 13416 | | | |
| | 45 | 8760 | 9277 | 9618 | 9855 | 10060 | 10306 | 10664 | 11207 | 12007 | | | |
| 40 | 7686 | 8107 | 8376 | 8567 | 8751 | 9000 | 9387 | 9985 | 10865 | | | | |
| 35 | 6700 | 7070 | 7314 | 7504 | 7713 | 8012 | 8475 | 9172 | 10178 | | | | |
| 30 | 5991 | 6357 | 6621 | 6857 | 7136 | 7532 | 8115 | 8959 | 10136 | | | | |
| 25 | 5749 | 6156 | 6487 | 6815 | 6933 | 7051 | 7756 | 8746 | 10094 | | | | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento en la entrada del economizador

YF/YSF Series

Capacity / Capacidad

R404A

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|--------------|----------|------|------|------|------|------|------|------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13E2G-Q102 | Cap (W) | 50 | 969 | 1219 | 1531 | 1865 | 2258 | 2713 | 3210 | 3781 | 4404 |
| | | 40 | 1132 | 1429 | 1783 | 2200 | 2697 | 3276 | 3940 | 4700 | 5558 |
| | | 30 | 1279 | 1639 | 2034 | 2535 | 3095 | 3714 | 4399 | 5159 | 5998 |
| | Power (W) | 50 | 1548 | 1634 | 1715 | 1787 | 1863 | 1942 | 2021 | 2100 | 2179 |
| | | 40 | 1285 | 1352 | 1414 | 1476 | 1543 | 1608 | 1672 | 1737 | 1801 |
| | | 30 | 1065 | 1118 | 1166 | 1223 | 1290 | 1362 | 1438 | 1519 | 1605 |
| YF17E2G-Q100 | Cap (W) | 50 | 1157 | 1456 | 1829 | 2227 | 2697 | 3240 | 3835 | 4516 | 5261 |
| | | 40 | 1353 | 1707 | 2129 | 2628 | 3222 | 3913 | 4706 | 5614 | 6638 |
| | | 30 | 1528 | 1958 | 2430 | 3028 | 3696 | 4437 | 5254 | 6163 | 7164 |
| | Power (W) | 50 | 1888 | 1993 | 2092 | 2180 | 2273 | 2369 | 2465 | 2561 | 2658 |
| | | 40 | 1568 | 1649 | 1725 | 1801 | 1882 | 1961 | 2040 | 2118 | 2197 |
| | | 30 | 1300 | 1364 | 1422 | 1492 | 1574 | 1661 | 1754 | 1853 | 1958 |
| YF20E2G-Q100 | Cap (W) | 50 | 1273 | 1601 | 2012 | 2450 | 2967 | 3564 | 4218 | 4968 | 5787 |
| | | 40 | 1488 | 1877 | 2342 | 2890 | 3544 | 4305 | 5177 | 6175 | 7302 |
| | | 30 | 1681 | 2154 | 2673 | 3331 | 4066 | 4880 | 5779 | 6779 | 7881 |
| | Power (W) | 50 | 2003 | 2114 | 2219 | 2312 | 2411 | 2513 | 2615 | 2717 | 2819 |
| | | 40 | 1663 | 1749 | 1830 | 1910 | 1997 | 2080 | 2163 | 2247 | 2330 |
| | | 30 | 1378 | 1446 | 1508 | 1582 | 1669 | 1762 | 1861 | 1966 | 2077 |
| YF29E2G-Q100 | Cap (W) | 50 | 1918 | 2412 | 3030 | 3691 | 4470 | 5370 | 6354 | 7484 | 8717 |
| | | 40 | 2242 | 2828 | 3528 | 4354 | 5339 | 6485 | 7799 | 9303 | 11001 |
| | | 30 | 2532 | 3244 | 4027 | 5018 | 6125 | 7352 | 8706 | 10212 | 11872 |
| | Power (W) | 50 | 2820 | 2977 | 3124 | 3255 | 3394 | 3538 | 3682 | 3825 | 3969 |
| | | 40 | 2341 | 2463 | 2576 | 2689 | 2811 | 2929 | 3046 | 3164 | 3281 |
| | | 30 | 1941 | 2037 | 2124 | 2228 | 2350 | 2480 | 2620 | 2768 | 2924 |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid Injection
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento, Inyección de líquido

YF/YSF Series

Capacity / Capacidad

R404A

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|--------------|----------|------|------|------|------|------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13EIG-Q100 | Cap (W) | 50 | 969 | 1219 | 1531 | 1865 | 2258 | 2713 | 3210 | 3781 | 4404 |
| | | 40 | 1132 | 1429 | 1783 | 2200 | 2697 | 3276 | 3940 | 4700 | 5558 |
| | | 30 | 1279 | 1639 | 2034 | 2535 | 3095 | 3714 | 4399 | 5159 | 5998 |
| | Power (W) | 50 | 1515 | 1599 | 1678 | 1748 | 1823 | 1900 | 1977 | 2055 | 2132 |
| | | 40 | 1258 | 1323 | 1384 | 1445 | 1510 | 1573 | 1636 | 1699 | 1762 |
| | | 30 | 1042 | 1094 | 1141 | 1197 | 1262 | 1332 | 1407 | 1487 | 1571 |
| YF17EIG-Q100 | Cap (W) | 50 | 1157 | 1456 | 1829 | 2227 | 2697 | 3240 | 3835 | 4516 | 5261 |
| | | 40 | 1353 | 1707 | 2129 | 2628 | 3222 | 3913 | 4706 | 5614 | 6638 |
| | | 30 | 1528 | 1958 | 2430 | 3028 | 3696 | 4437 | 5254 | 6163 | 7164 |
| | Power (W) | 50 | 1798 | 1898 | 1993 | 2076 | 2165 | 2256 | 2348 | 2439 | 2531 |
| | | 40 | 1493 | 1571 | 1643 | 1715 | 1793 | 1868 | 1943 | 2018 | 2093 |
| | | 30 | 1238 | 1299 | 1354 | 1421 | 1499 | 1582 | 1671 | 1765 | 1865 |
| YF20EIG-Q100 | Cap (W) | 50 | 1273 | 1601 | 2012 | 2450 | 2967 | 3564 | 4218 | 4968 | 5787 |
| | | 40 | 1488 | 1877 | 2342 | 2890 | 3544 | 4305 | 5177 | 6175 | 7302 |
| | | 30 | 1681 | 2154 | 2673 | 3331 | 4066 | 4880 | 5861 | 7026 | 8322 |
| | Power (W) | 50 | 1963 | 2073 | 2176 | 2266 | 2363 | 2463 | 2563 | 2663 | 2763 |
| | | 40 | 1630 | 1715 | 1794 | 1873 | 1957 | 2039 | 2121 | 2203 | 2285 |
| | | 30 | 1351 | 1418 | 1479 | 1551 | 1636 | 1727 | 1824 | 1927 | 2036 |
| YF29EIG-Q100 | Cap (W) | 50 | 1918 | 2412 | 3030 | 3691 | 4470 | 5370 | 6354 | 7484 | 8717 |
| | | 40 | 2242 | 2828 | 3528 | 4354 | 5339 | 6485 | 7799 | 9303 | 11001 |
| | | 30 | 2532 | 3244 | 4027 | 5018 | 6125 | 7352 | 8830 | 10585 | 12536 |
| | Power (W) | 50 | 2766 | 2919 | 3064 | 3192 | 3329 | 3470 | 3611 | 3752 | 3892 |
| | | 40 | 2296 | 2416 | 2527 | 2638 | 2757 | 2872 | 2988 | 3103 | 3218 |
| | | 30 | 1904 | 1997 | 2083 | 2185 | 2305 | 2433 | 2569 | 2714 | 2868 |
| YF35EIG-Q100 | Cap (W) | 50 | 2315 | 2912 | 3657 | 4454 | 5395 | 6481 | 7669 | 9032 | 10521 |
| | | 40 | 2705 | 3414 | 4259 | 5255 | 6444 | 7826 | 9412 | 11228 | 13277 |
| | | 30 | 3056 | 3916 | 4860 | 6056 | 7393 | 8873 | 10657 | 12774 | 15130 |
| | Power (W) | 50 | 3272 | 3454 | 3626 | 3777 | 3939 | 4106 | 4272 | 4439 | 4606 |
| | | 40 | 2717 | 2858 | 2990 | 3121 | 3262 | 3399 | 3535 | 3671 | 3808 |
| | | 30 | 2252 | 2363 | 2464 | 2586 | 2727 | 2879 | 3040 | 3212 | 3394 |
| YF41EIG-Q100 | Cap (W) | 50 | 2773 | 3488 | 4381 | 5336 | 6462 | 7763 | 9187 | 10819 | 12603 |
| | | 40 | 3241 | 4089 | 5101 | 6295 | 7719 | 9375 | 11275 | 13450 | 15904 |
| | | 30 | 3661 | 4691 | 5821 | 7255 | 8856 | 10629 | 12766 | 15303 | 18125 |
| | Power (W) | 50 | 3804 | 4015 | 4214 | 4391 | 4578 | 4772 | 4966 | 5160 | 5353 |
| | | 40 | 3158 | 3322 | 3475 | 3628 | 3792 | 3950 | 4109 | 4267 | 4426 |
| | | 30 | 2618 | 2747 | 2864 | 3005 | 3170 | 3346 | 3534 | 3733 | 3944 |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid Injection
 Capacidad @ 20°C temperatura de retorno de gas, No Sub enfriamiento, Inyección de líquido

YF/YSF Series

Capacity / Capacidad

R404A

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|----------------------|--------------|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| YSF60EIG-VI00 | 60 | | | | | | 9170 | 10722 | 12473 | 14453 | 16434 | 18415 |
| | 55 | 3684 | 4772 | 5914 | 7144 | 8494 | 9997 | 11684 | 13588 | 15742 | 17896 | 20050 |
| | 50 | 4084 | 5211 | 6411 | 7719 | 9165 | 10783 | 12604 | 14663 | 16990 | 19317 | 21644 |
| | 45 | 4448 | 5613 | 6872 | 8256 | 9799 | 11532 | 13488 | 15699 | 18199 | 20699 | 23198 |
| | 40 | 4779 | 5983 | 7299 | 8760 | 10398 | 12246 | 14336 | 16701 | 19373 | 22045 | 24717 |
| | 35 | 5080 | 6321 | 7695 | 9232 | 10966 | 12928 | 15152 | 17670 | 20514 | 23358 | 26202 |
| | 30 | 5353 | 6632 | 8062 | 9676 | 11505 | 13581 | 15939 | 18609 | 21625 | 24640 | 27656 |
| | 25 | 5601 | 6918 | 8405 | 10094 | 12017 | 14208 | 16699 | 19521 | 22708 | 25895 | 29082 |
| | 60 | | | | | | 7378 | 7726 | 8135 | 8609 | 9083 | 9556 |
| | 55 | 5898 | 5973 | 6088 | 6244 | 6446 | 6695 | 6996 | 7350 | 7761 | 8172 | 8583 |
| | 50 | 5295 | 5367 | 5470 | 5608 | 5783 | 5999 | 6258 | 6564 | 6919 | 7274 | 7629 |
| | 45 | 4687 | 4762 | 4861 | 4987 | 5143 | 5332 | 5557 | 5822 | 6128 | 6434 | 6740 |
| | 40 | 4118 | 4203 | 4304 | 4425 | 4569 | 4738 | 4936 | 5166 | 5430 | 5694 | 5958 |
| | 35 | 3631 | 3732 | 3843 | 3966 | 4105 | 4261 | 4439 | 4641 | 4869 | 5098 | 5327 |
| 30 | 3269 | 3395 | 3522 | 3654 | 3794 | 3944 | 4109 | 4290 | 4490 | 4691 | 4891 | |
| 25 | 3077 | 3233 | 3384 | 3532 | 3680 | 3832 | 3989 | 4156 | 4336 | 4515 | 4694 | |
| YSF65EIG-VI00 | 60 | | | | | | 9764 | 11416 | 13279 | 15388 | 17497 | 19606 |
| | 55 | 3922 | 5080 | 6297 | 7606 | 9044 | 10643 | 12439 | 14467 | 16760 | 19053 | 21347 |
| | 50 | 4348 | 5548 | 6826 | 8218 | 9758 | 11480 | 13420 | 15611 | 18088 | 20566 | 23043 |
| | 45 | 4736 | 5976 | 7316 | 8790 | 10432 | 12277 | 14360 | 16715 | 19376 | 22037 | 24699 |
| | 40 | 5088 | 6370 | 7771 | 9326 | 11070 | 13038 | 15263 | 17781 | 20626 | 23471 | 26315 |
| | 35 | 5408 | 6730 | 8192 | 9829 | 11675 | 13764 | 16132 | 18813 | 21841 | 24869 | 27896 |
| | 30 | 5699 | 7061 | 8584 | 10302 | 12249 | 14460 | 16970 | 19813 | 23023 | 26234 | 29445 |
| | 25 | 5963 | 7365 | 8948 | 10746 | 12794 | 15127 | 17779 | 20784 | 24177 | 27570 | 30963 |
| | 60 | | | | | | 7855 | 8226 | 8662 | 9166 | 9670 | 10175 |
| | 55 | 6280 | 6360 | 6482 | 6648 | 6863 | 7128 | 7448 | 7825 | 8263 | 8700 | 9138 |
| | 50 | 5638 | 5714 | 5824 | 5971 | 6157 | 6387 | 6663 | 6989 | 7367 | 7745 | 8122 |
| | 45 | 4991 | 5070 | 5175 | 5309 | 5476 | 5677 | 5917 | 6198 | 6524 | 6850 | 7175 |
| | 40 | 4384 | 4474 | 4582 | 4711 | 4864 | 5045 | 5256 | 5500 | 5781 | 6062 | 6343 |
| | 35 | 3866 | 3974 | 4092 | 4223 | 4370 | 4537 | 4726 | 4941 | 5184 | 5428 | 5672 |
| 30 | 3481 | 3614 | 3750 | 3890 | 4039 | 4200 | 4374 | 4567 | 4781 | 4994 | 5208 | |
| 25 | 3276 | 3442 | 3602 | 3760 | 3918 | 4079 | 4247 | 4425 | 4616 | 4807 | 4997 | |
| YSF75EIG-VI00 | 60 | | | | | | 11543 | 13496 | 15699 | 18193 | 20686 | 23179 |
| | 55 | 4637 | 6006 | 7444 | 8993 | 10692 | 12583 | 14706 | 17103 | 19815 | 22526 | 25237 |
| | 50 | 5140 | 6559 | 8070 | 9715 | 11536 | 13572 | 15865 | 18456 | 21385 | 24314 | 27243 |
| | 45 | 5599 | 7066 | 8650 | 10392 | 12334 | 14515 | 16977 | 19761 | 22907 | 26054 | 29200 |
| | 40 | 6015 | 7530 | 9187 | 11026 | 13088 | 15414 | 18045 | 21022 | 24385 | 27748 | 31111 |
| | 35 | 6394 | 7957 | 9685 | 11620 | 13803 | 16273 | 19072 | 22241 | 25821 | 29401 | 32980 |
| | 30 | 6738 | 8348 | 10148 | 12179 | 14481 | 17095 | 20062 | 23423 | 27219 | 31015 | 34811 |
| | 25 | 7050 | 8708 | 10579 | 12705 | 15126 | 17884 | 21019 | 24571 | 28583 | 32595 | 36606 |
| | 60 | | | | | | 9194 | 9628 | 10139 | 10729 | 11319 | 11910 |
| | 55 | 7351 | 7444 | 7587 | 7782 | 8033 | 8344 | 8718 | 9160 | 9672 | 10184 | 10696 |
| | 50 | 6599 | 6688 | 6817 | 6989 | 7207 | 7476 | 7800 | 8180 | 8623 | 9065 | 9508 |
| | 45 | 5842 | 5935 | 6058 | 6215 | 6409 | 6645 | 6926 | 7255 | 7636 | 8018 | 8399 |
| | 40 | 5132 | 5238 | 5364 | 5515 | 5694 | 5905 | 6152 | 6438 | 6767 | 7096 | 7425 |
| | 35 | 4525 | 4651 | 4789 | 4943 | 5115 | 5311 | 5532 | 5783 | 6069 | 6354 | 6639 |
| 30 | 4074 | 4230 | 4389 | 4554 | 4728 | 4916 | 5121 | 5346 | 5596 | 5846 | 6096 | |
| 25 | 3835 | 4029 | 4217 | 4401 | 4586 | 4775 | 4972 | 5180 | 5403 | 5626 | 5850 | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento
 en la entrada del economizador

YF/YSF Series

Capacity / Capacidad

R404A

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|-----------------------|--------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| YSF85EIG-VI00 | 60 | | | | | | 13277 | 15524 | 18057 | 20925 | 23793 | 26660 |
| | 55 | 5334 | 6908 | 8563 | 10343 | 12298 | 14473 | 16915 | 19672 | 22791 | 25909 | 29028 |
| | 50 | 5913 | 7544 | 9282 | 11175 | 13269 | 15611 | 18248 | 21228 | 24597 | 27966 | 31335 |
| | 45 | 6440 | 8127 | 9949 | 11953 | 14186 | 16695 | 19527 | 22729 | 26348 | 29967 | 33586 |
| | 40 | 6919 | 8662 | 10567 | 12682 | 15054 | 17729 | 20755 | 24179 | 28047 | 31916 | 35784 |
| | 35 | 7354 | 9152 | 11140 | 13366 | 15876 | 18717 | 21937 | 25582 | 29699 | 33817 | 37934 |
| | 30 | 7750 | 9602 | 11672 | 14008 | 16656 | 19663 | 23076 | 26941 | 31307 | 35673 | 40039 |
| | 25 | 8109 | 10015 | 12168 | 14613 | 17398 | 20570 | 24176 | 28262 | 32876 | 37490 | 42104 |
| | 60 | | | | | | 10575 | 11074 | 11661 | 12340 | 13019 | 13699 |
| | 55 | 8455 | 8563 | 8727 | 8951 | 9240 | 9597 | 10028 | 10536 | 11125 | 11714 | 12303 |
| | 50 | 7591 | 7693 | 7841 | 8038 | 8290 | 8599 | 8971 | 9409 | 9918 | 10427 | 10936 |
| | 45 | 6719 | 6826 | 6968 | 7148 | 7372 | 7643 | 7966 | 8345 | 8783 | 9222 | 9661 |
| | 40 | 5903 | 6024 | 6169 | 6343 | 6549 | 6792 | 7076 | 7405 | 7783 | 8162 | 8540 |
| | 35 | 5204 | 5350 | 5509 | 5685 | 5884 | 6108 | 6363 | 6652 | 6980 | 7308 | 7636 |
| 30 | 4686 | 4866 | 5048 | 5238 | 5438 | 5654 | 5890 | 6149 | 6436 | 6724 | 7011 | |
| 25 | 4411 | 4634 | 4850 | 5062 | 5275 | 5492 | 5718 | 5958 | 6215 | 6472 | 6728 | |
| YSF90EIG-VI00 | 60 | | | | | | 15010 | 17551 | 20415 | 23658 | 26900 | 30142 |
| | 55 | 6030 | 7810 | 9681 | 11694 | 13904 | 16363 | 19124 | 22241 | 25767 | 29292 | 32818 |
| | 50 | 6685 | 8529 | 10494 | 12634 | 15001 | 17649 | 20631 | 24000 | 27809 | 31618 | 35427 |
| | 45 | 7281 | 9188 | 11248 | 13514 | 16038 | 18875 | 22077 | 25697 | 29788 | 33880 | 37971 |
| | 40 | 7822 | 9793 | 11947 | 14338 | 17019 | 20044 | 23465 | 27336 | 31710 | 36083 | 40457 |
| | 35 | 8315 | 10347 | 12595 | 15111 | 17949 | 21161 | 24801 | 28922 | 33577 | 38233 | 42888 |
| | 30 | 8762 | 10856 | 13197 | 15837 | 18831 | 22230 | 26089 | 30460 | 35396 | 40332 | 45268 |
| | 25 | 9168 | 11323 | 13757 | 16521 | 19670 | 23256 | 27332 | 31952 | 37169 | 42386 | 47602 |
| | 60 | | | | | | 11838 | 12397 | 13054 | 13814 | 14574 | 15334 |
| | 55 | 9464 | 9585 | 9768 | 10020 | 10343 | 10743 | 11225 | 11793 | 12453 | 13112 | 13771 |
| | 50 | 8497 | 8611 | 8777 | 8998 | 9280 | 9626 | 10042 | 10533 | 11102 | 11672 | 12241 |
| | 45 | 7521 | 7641 | 7800 | 8002 | 8252 | 8556 | 8917 | 9341 | 9832 | 10323 | 10814 |
| | 40 | 6608 | 6743 | 6906 | 7100 | 7331 | 7603 | 7921 | 8289 | 8712 | 9136 | 9559 |
| | 35 | 5826 | 5989 | 6167 | 6364 | 6586 | 6837 | 7123 | 7446 | 7813 | 8180 | 8547 |
| 30 | 5246 | 5447 | 5651 | 5863 | 6087 | 6329 | 6593 | 6883 | 7205 | 7527 | 7848 | |
| 25 | 4937 | 5188 | 5429 | 5667 | 5905 | 6148 | 6401 | 6669 | 6957 | 7244 | 7532 | |
| YSFI00EIG-VI00 | 60 | | | | | | 15649 | 18298 | 21284 | 24664 | | |
| | 55 | 6287 | 8143 | 10093 | 12192 | 14495 | 17059 | 19938 | 23187 | 26863 | | |
| | 50 | 6969 | 8892 | 10941 | 13172 | 15640 | 18400 | 21509 | 25021 | 28992 | | |
| | 45 | 7590 | 9579 | 11727 | 14089 | 16721 | 19678 | 23016 | 26790 | 31056 | | |
| | 40 | 8155 | 10209 | 12455 | 14948 | 17744 | 20897 | 24464 | 28500 | 33059 | | |
| | 35 | 8668 | 10787 | 13131 | 15754 | 18713 | 22062 | 25857 | 30153 | 35006 | | |
| | 30 | 9134 | 11318 | 13758 | 16511 | 19632 | 23176 | 27199 | 31756 | 36902 | | |
| | 25 | 9558 | 11805 | 14342 | 17224 | 20507 | 24246 | 28496 | 33312 | 38751 | | |
| | 60 | | | | | | 12342 | 12924 | 13609 | 14402 | | |
| | 55 | 9867 | 9993 | 10184 | 10446 | 10783 | 11200 | 11703 | 12295 | 12983 | | |
| | 50 | 8858 | 8978 | 9151 | 9381 | 9674 | 10036 | 10469 | 10981 | 11575 | | |
| | 45 | 7841 | 7966 | 8131 | 8342 | 8603 | 8920 | 9297 | 9739 | 10250 | | |
| | 40 | 6889 | 7030 | 7200 | 7403 | 7643 | 7927 | 8258 | 8642 | 9083 | | |
| | 35 | 6074 | 6243 | 6429 | 6635 | 6866 | 7128 | 7426 | 7763 | 8146 | | |
| 30 | 5469 | 5679 | 5891 | 6112 | 6346 | 6598 | 6873 | 7176 | 7511 | | | |
| 25 | 5148 | 5408 | 5660 | 5908 | 6156 | 6410 | 6674 | 6953 | 7253 | | | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento
 en la entrada del economizador

YF/YSF Series

Capacity / Capacidad

R404A

| Model / Modelo | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|-----------------------|--------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|---|----|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 |
| YSFI25EIG-V100 | 60 | | | | | | 19367 | 22645 | 26342 | 30525 | | |
| | 55 | 7781 | 10078 | 12491 | 15088 | 17939 | 21112 | 24675 | 28697 | 33246 | | |
| | 50 | 8625 | 11004 | 13540 | 16301 | 19356 | 22773 | 26620 | 30967 | 35881 | | |
| | 45 | 9394 | 11855 | 14513 | 17436 | 20694 | 24354 | 28485 | 33156 | 38435 | | |
| | 40 | 10093 | 12635 | 15415 | 18500 | 21960 | 25863 | 30277 | 35271 | 40914 | | |
| | 35 | 10728 | 13351 | 16251 | 19497 | 23159 | 27304 | 32000 | 37318 | 43324 | | |
| | 30 | 11305 | 14007 | 17027 | 20435 | 24297 | 28683 | 33662 | 39301 | 45670 | | |
| | 25 | 11829 | 14610 | 17750 | 21317 | 25380 | 30007 | 35266 | 41227 | 47958 | | |
| | 60 | | | | | | 15274 | 15995 | 16843 | 17824 | | |
| | 55 | 12211 | 12367 | 12604 | 12928 | 13345 | 13862 | 14483 | 15217 | 16067 | | |
| 50 | 10963 | 11111 | 11325 | 11610 | 11973 | 12420 | 12957 | 13590 | 14325 | | | |
| 45 | 9705 | 9859 | 10064 | 10324 | 10648 | 11039 | 11506 | 12053 | 12686 | | | |
| 40 | 8526 | 8701 | 8911 | 9161 | 9459 | 9810 | 10220 | 10695 | 11241 | | | |
| 35 | 7517 | 7727 | 7956 | 8211 | 8498 | 8822 | 9190 | 9608 | 10081 | | | |
| 30 | 6768 | 7028 | 7291 | 7565 | 7854 | 8166 | 8506 | 8881 | 9296 | | | |
| 25 | 6371 | 6694 | 7005 | 7312 | 7619 | 7932 | 8259 | 8605 | 8976 | | | |

Capacity @ 20°C Return Gas Temperature, No Sub-cooling at the Inlet of Economizer
 Capacidad @ 20°C temperatura de retorno de gas, NO - Sobre enfriamiento en la entrada del economizador

YF Series

Dimensions / Dimensiones

2-4HP (1PH), 2-5HP (3PH)

Rotolock connection for liquid injection

Srew Tread: 1 1/16"-16 UN

Thickness of Copper /

Grueso de cobre: 0.04 - 0.08

Connection is optional:

Copper plated steel injection fitting

Coneccion Rotolock para Aplicaciones

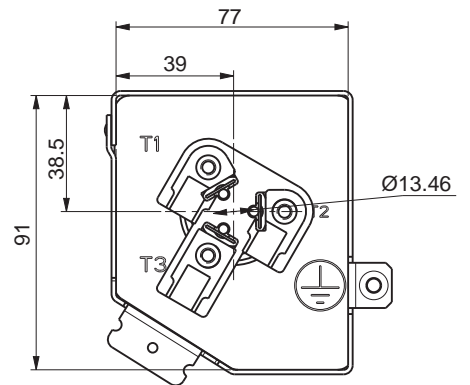
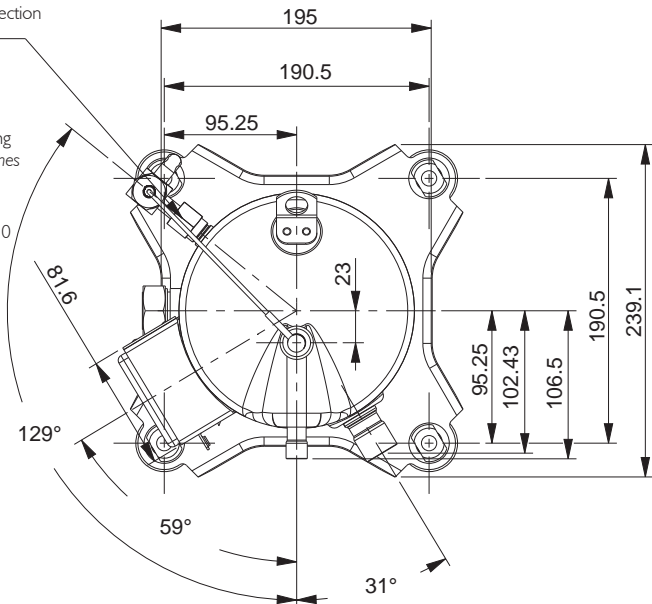
de inyeccion de Lliquido.

ID: Ø12.97;

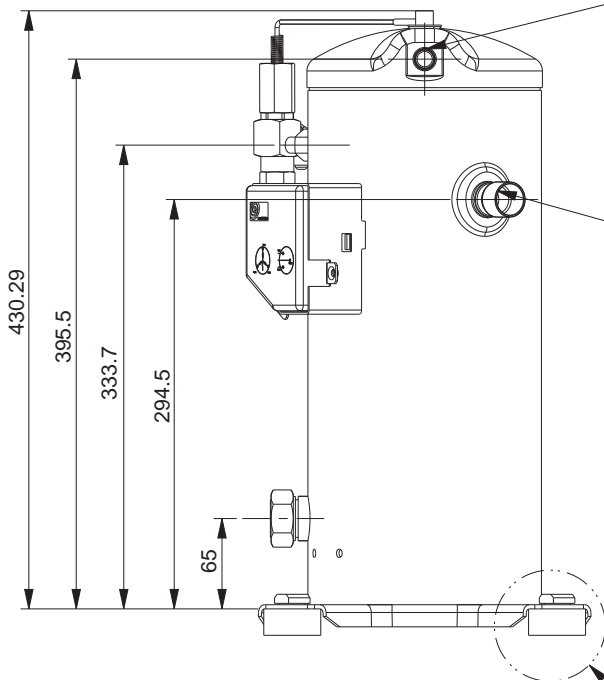
Min.Depth / Min. Profundidad: 10.0

Thickness of Copper /

Grueso de cobre: 0.04 - 0.08



Terminal Box
Diseño De Caja De Conexiones



ID Ø12.87 - 12.97

Min.Depth / Min. Profundidad: 10.6

Discharge Tube / Tubo de descarga,

Steel Tube with Copper Plating

Tubo de acero con revestimiento de cobre

Thickness of Copper / Grueso de cobre: 0.04 - 0.08

(Srew Tread: 3/4"-16 UNF 2A

ID Ø9.0)

ID Ø22.35 - 22.45

Min.Depth / Min. Profundidad: 17.3

Suction Tube / Tubo de succión,

Steel Tube with Copper Plating

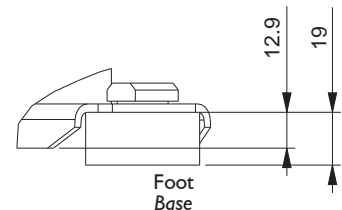
Tubo de acero con revestimiento de cobre

Thickness of Copper /

Grueso de cobre: 0.04 - 0.08

(Srew Tread: 1 1/4"-12 UNF 2A

ID Ø19.2)



Foot
Base

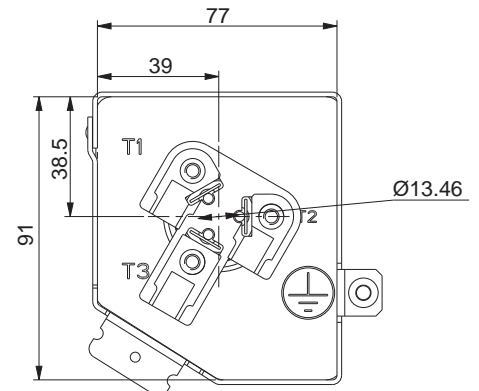
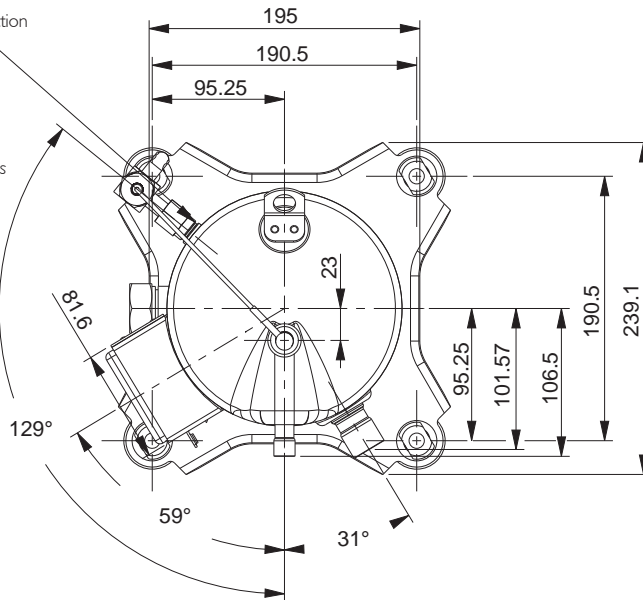
See Details in View of Foot
Ver detalles en la base

YF Series

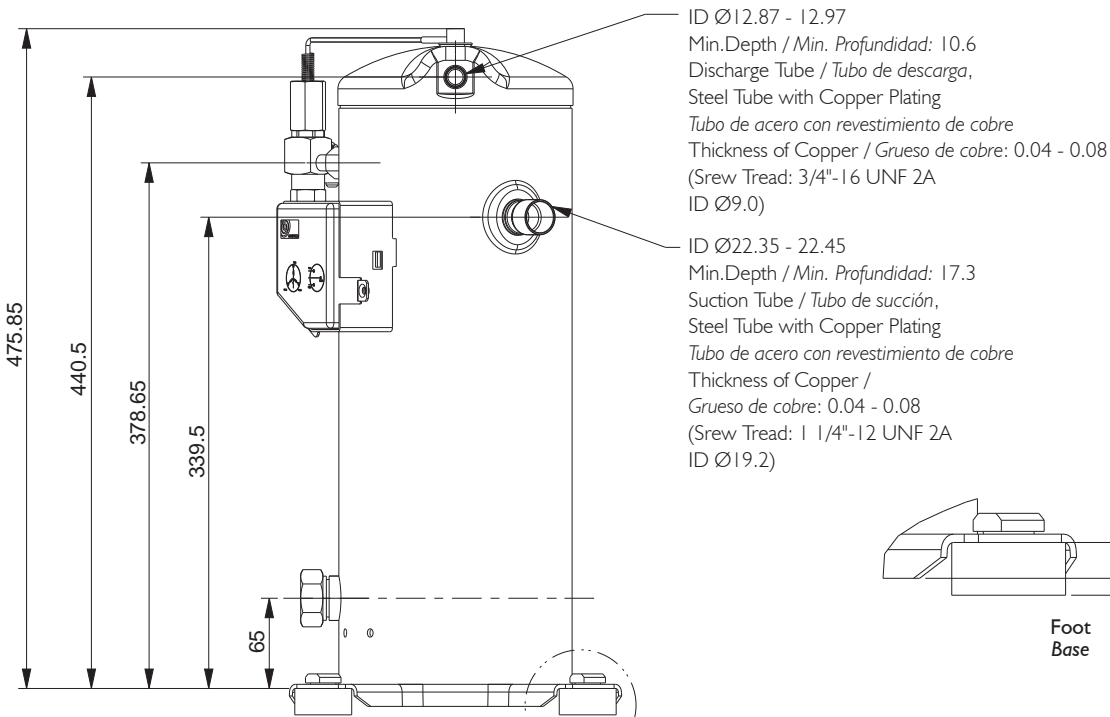
Dimensions / Dimensiones

5HP (1PH), 6-6.5HP (3PH)

Rotolock connection for liquid injection
 Srew Tread: 1 1/16"-16 UN
 Thickness of Copper /
 Grueso de cobre: 0.04 - 0.08
 Connection is optional:
 Copper plated steel injection fitting
 Conexión Rotolock para Aplicaciones
 de inyección de Líquido.
 ID: Ø12.97;
 Min.Depth / Min. Profundidad: 10.0
 Thickness of Copper /
 Grueso de cobre: 0.04 - 0.08

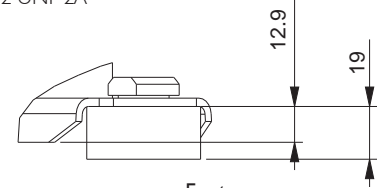


Terminal Box
 Diseño De Caja De Conexiones



ID Ø12.87 - 12.97
 Min.Depth / Min. Profundidad: 10.6
 Discharge Tube / Tubo de descarga,
 Steel Tube with Copper Plating
 Tubo de acero con revestimiento de cobre
 Thickness of Copper / Grueso de cobre: 0.04 - 0.08
 (Srew Tread: 3/4"-16 UNF 2A
 ID Ø9.0)

ID Ø22.35 - 22.45
 Min.Depth / Min. Profundidad: 17.3
 Suction Tube / Tubo de succión,
 Steel Tube with Copper Plating
 Tubo de acero con revestimiento de cobre
 Thickness of Copper /
 Grueso de cobre: 0.04 - 0.08
 (Srew Tread: 1 1/4"-12 UNF 2A
 ID Ø19.2)



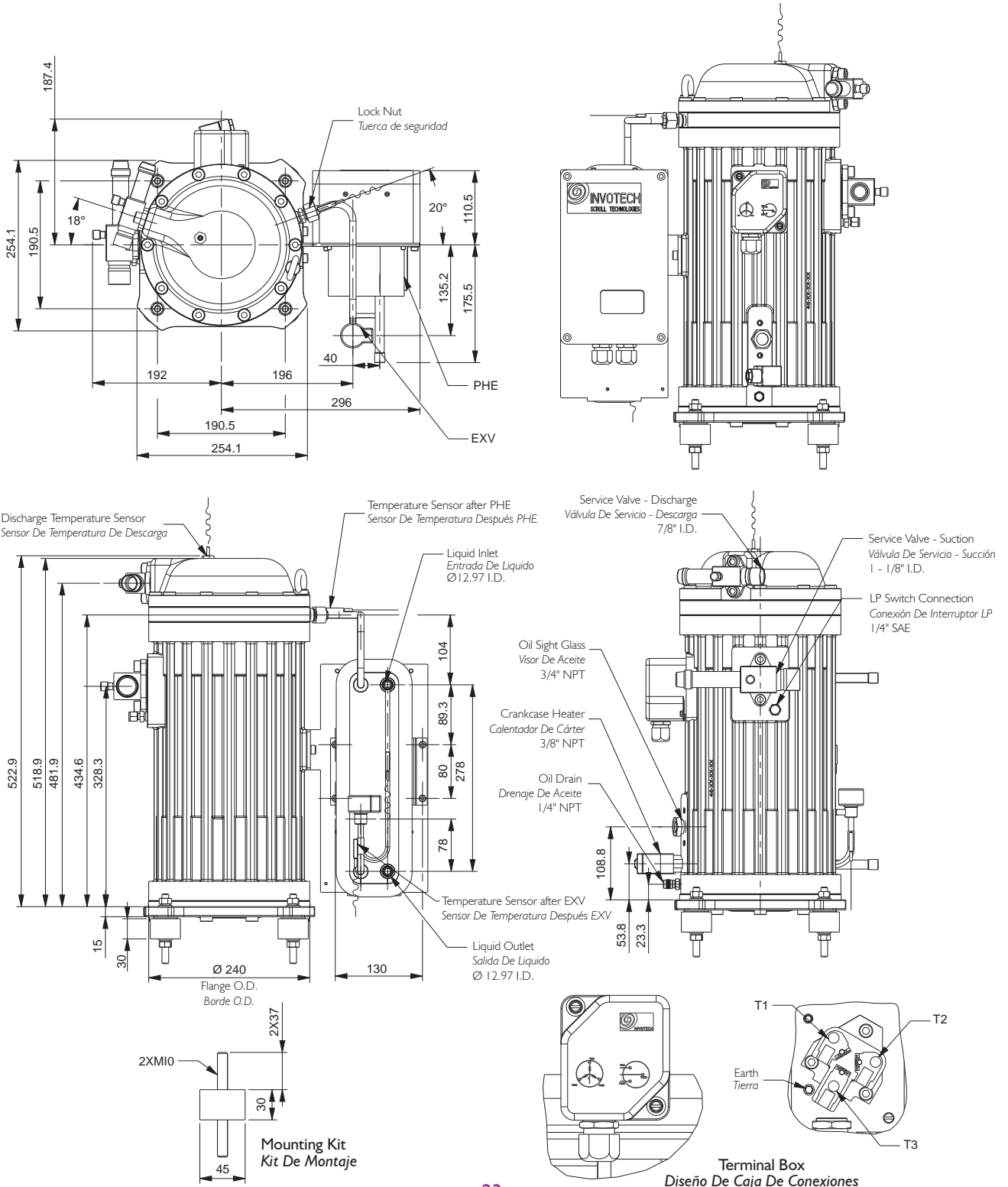
Foot
 Base

See Details in View of Foot
 Ver detalles en la base

YSF Series

Dimensions / Dimensiones

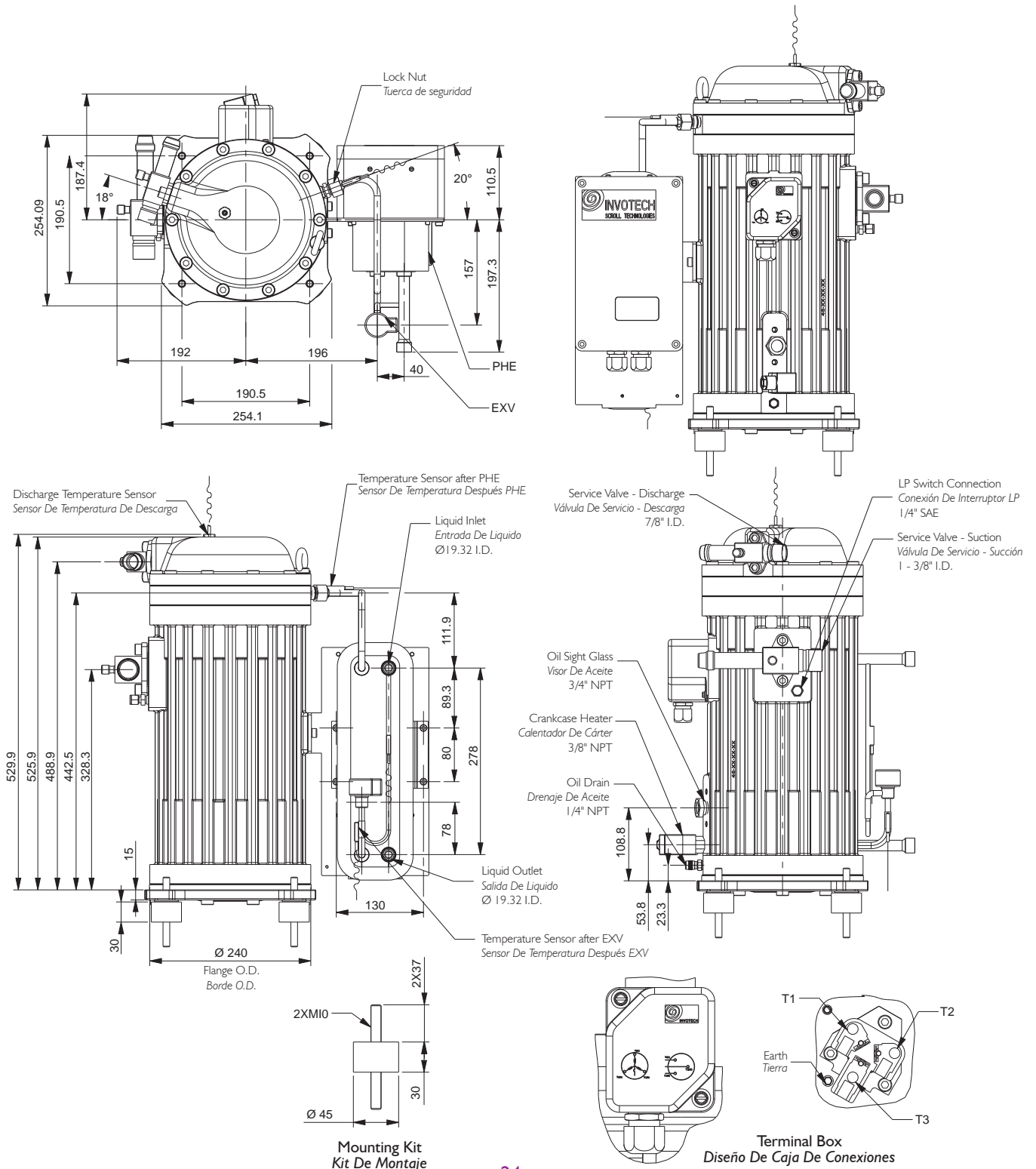
YSF 60-100



YSF Series

Dimensions / Dimensiones

YSFI25



YSF Series

Application Instruction / Instrucciones de Aplicación

Main Features of YSF Series:

- Classic vertical design
- Maintainability
 - Semi-hermetic design, all the parts can be removed and replaced
- Higher reliability
 - Dual compliances design
 - Strong capability to tolerate liquid flood back and impurities
- Less vibration and noise
- Wide operating range
 - Integrated EVI technologies
 - The evaporating temperature can be lower to -40°C
- Higher energy efficiency
 - High compression ratio is specially designed for refrigeration
 - Efficient economizer cycle
- More intelligent design
 - Control of EVI

I. Safety Instructions:

YSF serials Semi-hermetic scroll compressors are produced in strict accordance with international safety standards.

This section focuses on safe use of a user. Before carrying out any operation, this safety instruction should be carefully read. Please reserve it for reference at any time.

The compressor should be installed, tested and maintained by specialized technicians only; electrical connections must be operated by authorized and trained personnel.

Attention:

- Avoid collision and fall down during the transportation
- Lubricant must be correctly chosen and be the same as indicated on the compressor's nameplate
- Ensure that the power supply can satisfy the specific parameter as is shown on the compressor's nameplate
- Release the internal pressure before operating, the compressor is filled with dry nitrogen while leaving the factory

Prohibition:

- Extract vacuum using the scroll compressors
- Run the compressor which is in vacuum status
- Apply power to the compressor which doesn't connect to system
- Run the compressor without charging refrigerant
- Run the compressor outside of the published envelope
- Discharge refrigerant directly into environment
- Hi-pot test in vacuum status

Principales características de las Series YSF:

- Diseño vertical clásico
- Mantenibilidad
 - Diseño Semi-Hermetico, todas las partes pueden ser removidas y remplazadas.
- Mayor confiabilidad
 - Diseño de doble cumplimiento
 - Alta capacidad de toleración de reflujo de líquido e impurezas
- Menos vibración y ruido
- Amplio rango de operación
 - tecnologías EVI integradas
 - La temperatura de evaporización puede ser a -40°C
- Alta eficiencia energética
 - Alta compresión de ratio diseñada especialmente para refrigeración
 - Ciclo economizador eficiente
- Mejor diseño inteligente
 - Control de EVI
 - Controlador de Sistema de refrigeración (tablero de control mejorado)
 - Combinación de regulación de velocidad de ventilador, inicio-alto y diagnostico (tablero de control mejorado)

I. Instrucciones de seguridad:

Las series YSF de Compresores ScrollSemi Herméticos son producidas de acorde a estrictos estándares internacionales de seguridad.

Esta sección se centra en la seguridad del usuario. Antes de llevar a cabo cualquier operación, estas Instrucciones de seguridad deben ser leídas cuidadosamente. Por favor guárdelo para consultarlo en cualquier momento.

El compresor debe ser instalado, probado y mantenido por un técnico especializado solamente; las conexiones eléctricas deben ser operadas por personal capacitado y autorizado.

ATENCIÓN:

- Evitar colisión y caída durante su transportación.
- El lubricante debe ser elegido correctamente y ser el mismo que se indica en la calcomanía del compresor.
- ASEGÚRESE de que la fuente de poder cumpla con las especificaciones de los parámetros que se muestran en la placa del compresor.
- Libere la presión interna antes de su operación, el compresor es llenado con nitrógeno seco mientras deja la fábrica.

PROHIBIDO:

- Extraer vacío usando los compresores Scroll.
- Arrancar el compresor que está en estado de vacío.
- Arrancar el compresor que no está conectado al sistema.
- Arrancar el compresor sin cargar gas refrigerante.
- Arrancar el compresor fuera del sobre publicado.
- Descargar gas refrigerante directamente en el medio ambiente.
- Probar potenciadores en estado de vacío.

YSF Series

Application Instruction / Instrucciones de Aplicación

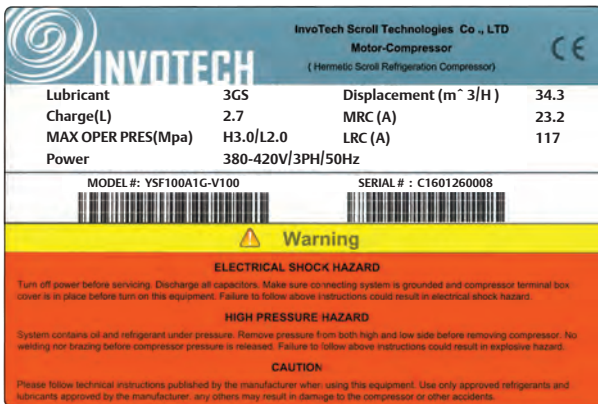
Warning:

- Strictly forbid the excess of pressure marked on the nameplate while running the compressor or checking the leakage of refrigerating system
- Strictly forbid running the compressor with air, for the mixture of air and oil may explore due to great heat contracted in the discharge port. It will cause damages to the compressor
- Completely open the suction and discharge valve before starting the compressor. It is very importance to open the discharge valve fully. If it is closed or partly closed, unacceptable high pressure and temperature will be produced inside the compressor
- Be sure to comply with relevant safety regulations

Avoid electric shock:

- Be sure to cut off power supply before operating
- The compressor can only be used after being connected to earth

2. Nameplate sample



3. Settings of pressure switches:

Attention: It is necessary to use a high pressure switch, the biggest cut out pressure should be below 28 bar(g). In order to protect the system as well as possible, the high pressure switch should possess the function of manual resetting whenever it is cut off. For all of the applications, the cut out set value of low pressure switch should not be lower than 0.1 bar(g). When setting the operating point of the low pressure switch, an accurate pressure gauge should be used because scales on the low pressure switch are for rough setting only. It is absolutely forbidden to run the compressor of YSF series in vacuum. Low pressure switch points must access to the connection port of low pressure switch on the compressor body.

PELIGRO:

- Prohibido estrictamente el exceso de presión marcada en la etiqueta mientras está en funcionamiento el compresor o se esté checando la fuga de gas refrigerante
- Prohibido estrictamente encender el compresor con aire, la mezcla de aire y aceite puede explotar debido al gran calor contraído en el puerto de descarga. Esto podría causar daños en el compresor.
- Abrir completamente la válvula de succión y descarga antes de arrancar el compresor. Es muy importante para abrir la válvula de descarga totalmente. Si es cerrado o parcialmente cerrado, alta presión no aceptable y temperatura no aceptable, serán producidos dentro del compresor.
- Asegúrese de cumplir con las normas de seguridad pertinentes.

Evite descarga eléctrica:

- Asegúrese de cortar la alimentación antes de la operación.
- El compresor solo puede ser utilizado una vez conectado a la tierra.

2. Placa del fabricante



3. Ajustes de los interruptores de presión:

Atención: si es necesario utilizar un interruptor de presión, el mayor corte de presión debe ser menos a 30 bar (g). Con el fin de proteger el Sistema tan bien sea posible; el interruptor de presión debe tener función del reinicio manual para cuando se desee cortar. Para todas las aplicaciones, el corte de valor establecido del interruptor de baja presión no debe ser menor a 0.1 bar (g). Cuando se establezca el punto de operación del interruptor de Baja presión, un medidor de precisión exacta, debería ser usado por escalas en el interruptor de baja presión. Debería ser usado por escalas en el interruptor de baja presión, el interruptor es para uso rudo solamente. Queda absolutamente prohibido arrancar el compresor YSF series en vacío. El interruptor de Baja presión debe tener acceso a la conexión del Puerto de baja presión en el cuerpo del compresor.

YSF Series

Application Instruction / Instrucciones de Aplicación

4. Precaution of refrigerator oil

Don't mix up ester oil, mineral oil or alkyl benzene. The compressor has been filled with lubricant in advance before leaving the factory. Compressors with POE oil are available for R404A. The initial amount of oil is marked on the nameplate and the re-charge amount on the field site can be around 100 ml less than the initial one.

5. Installation

5.1 Shipment

Check packing lists which are attached to cases of each batch of goods carefully to make sure that both accessories and compressors are received. Invotech Company should be immediately informed of missing items in written form.

Standard configurations

- Suction service valve and discharge service valve
- Economizer (PHE)
- Crankcase heater
- Refrigerating oil filling, oil level sight glass
- Electronic expansion valve
- Electronic control board
- Mounting kits

5.1.2 Packing

All the compressors of YSF series are individually packed. Accessories may be installed on the compressors or be placed inside the cases. Packages need keeping dry all the time.

5.1.3 Mounting Kits

Attention: In order to reduce vibration generated during starting and stopping cycle as much as possible, mounting kits should be used while installing the compressor. To maintain sufficient lubrication of moving parts, the compressor should be vertically installed.

4. Precaución de aceite refrigerante

No mezcle el aceite con el éster, aceite mineral o alquilbenceno. El compresor se ha llenado de lubricante por adelantado antes de salir de la fábrica. Los compresores con aceite POE están disponibles para R404A. La cantidad inicial de aceite está marcado en la etiqueta de características y la cantidad de recarga también que puede ser alrededor de 100ml menos que la inicial.

5. Instalación

5.1 Envío

Compruebe que las listas de empaque que están unidos a las etiquetas de cada lote de mercancías, cuidadosamente para asegurarse de que se reciben ambos accesorios y compresores. Invotech debe ser informado inmediatamente de los elementos que falten en forma escrita.

Configuración Standard

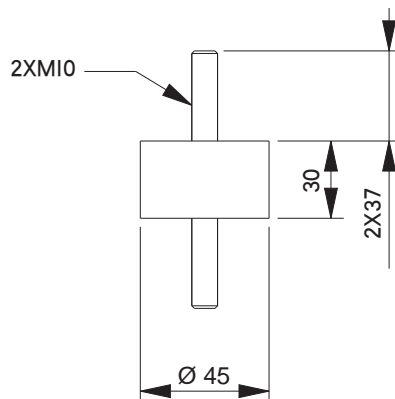
- La válvula de servicio de succión y válvula de servicio de descarga.
- Economizador (PHE)
- Calentador del Carter
- Llenado de aceite refrigerante, visor de nivel de aceite.
- Válvula de expansión electrónica
- Tarjeta de control electrónica
- Kits de montaje

5.1.2 Empaque

Todos los compresores de la serie YSF son empacados individualmente. Los accesorios deben ser instalados en los compresores o ser reemplazados dentro de los paquetes. Los paquetes deben mantenerse secos todo el tiempo.

5.1.3 Kits de montaje

Atención: En orden de reducir la vibración generada durante el ciclo de arranque y parada tanto como sea posible, los kits de montaje deben ser usados mientras se instala el compresor. Para mantener suficiente lubricación de las partes en movimiento, el compresor debe ser instalado verticalmente.



Mounting Kit / Kit De Montaje

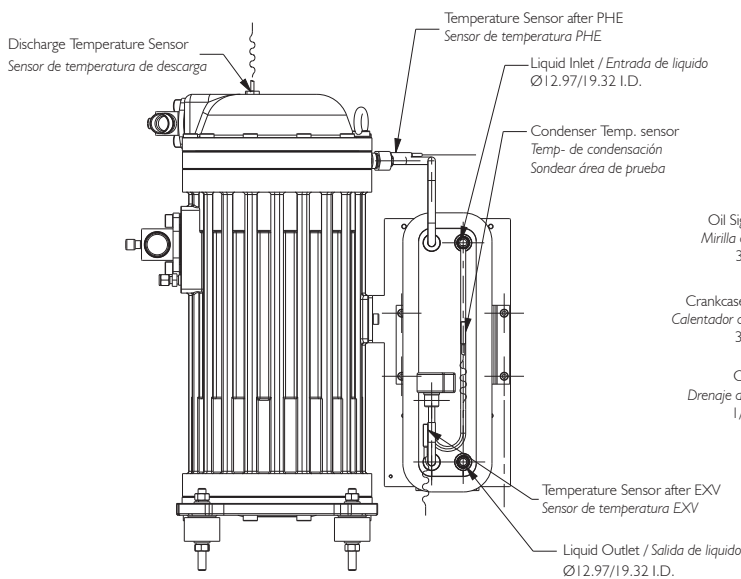
Application Instruction / Instrucciones de Aplicación

5.2 Pipe welding and compressor installation

5.2.1 Welding

- While welding all the joints, be sure to protect the system by charging nitrogen for it can remove oxygen to prevent oxide skin inside the pipe wall.
- Welding material which is recommended: any Cu-Ag alloy can be used, and it is best to contain 45% silver solder
- Wrap the suction and discharge service valves with wet cloth before welding

5.2.2 Connection of the compressor



The liquid inlet of main line: connect to outlet of condenser
The liquid outlet of main line: connect to entrance of expansion valve

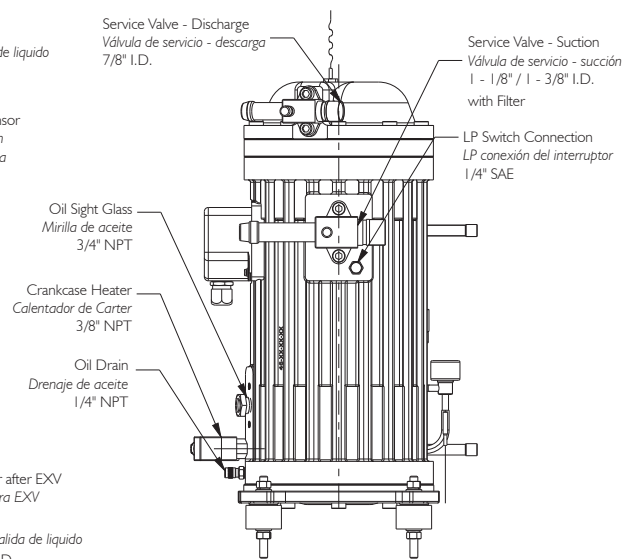
In order to prevent impurities from invading into suction side of the compressors, Invotech specially installs the suction filter at the intake port of semi-hermetic scroll compressors of YSF series, so users must connect the low pressure switch to the connection port on the compressor body.

5.2 Soldadura de tuberías e instalación de compresor

5.2.1 Soldadura

- Mientras solda todas las uniones, asegúrese de proteger el sistema de carga de nitrógeno para remover el oxígeno para prevenir el óxido dentro de la pared del tubo.
- El material de soldadura recomendado es: cualquier aleación Cu-Ag se puede utilizar, y lo mejor es usar soldadura de 45% de plata.
- Ajuste la succión y descarga de las válvulas de servicio con un paño humado antes de aplicar soldadura.

5.2.2 Conexión del compresor.



La entrada de líquido de la línea principal: conectar a la salida del condensador.

La salida de líquido de la línea principal: conectarse a la entrada de la válvula de expansión.

Con el fin de evitar que las impurezas invadan en el lado de succión de los compresores, Invotech instala especialmente el filtro de aspiración en la entrada de Puerto de los compresores Scroll Semi-Hermeticos de serie YSF, por lo que los usuarios deben conectar el interruptor de baja presión al puerto de conexión 13 del compresor.

YSF Series

Application Instruction / Instrucciones de Aplicación

5.2.3 Pipe connection

Compressors of YSF series have significant features of low vibration, so the discharge pipe and the suction pipe do not need extra vibration absorber. The layout of suction pipe and discharge pipe should try to be close to the compressor as possible and parallel to the axis so that torsion generated from starting and stopping of the compressor can be absorbed.

5.2.4 LLSV (Liquid Line Solenoid Valve)

LLSV contributes to separating liquid refrigerant to the low pressure side when the system is off. LLSV should be installed before the main expansion valve and try to approach it so that most of the liquid refrigerant can be reserved at the high pressure side. LLSV can prevent liquid migration on the off cycle. If the migration occurs during the off cycle, liquid is in the crankcase, when the compressor start next time, the explosion of the refrigerant out of the oil is a flood start. It is very dangerous to the compressor.

5.2.5 Insulation of liquid line

In the system of YSF series compressors, the liquid after the economizer is sub-cooled, and the sub-cooling of the liquid contribute to improve refrigerating capacity and efficiency of the system. No matter what makes the temperature of liquid rise, it will lead to the loss of capacity and efficiency of the system. So the liquid pipe after the economizer (PHE) must be well insulated and there is no need insulating the liquid pipe before the economizer.

5.2.3 Conexión de la tubería

Los compresores de la serie YSF tienen características significativas de baja vibración, por lo que el tubo de descarga y el tubo de succión no necesitan amortiguador de vibraciones extra. La disposición de tubería de aspiración y la tubería de descarga deben tratar de estar cerca del compresor tanto como sea posible y paralelo al eje de modo que la torsión generada a partir del arranque y parada del compresor pueda ser absorbido.

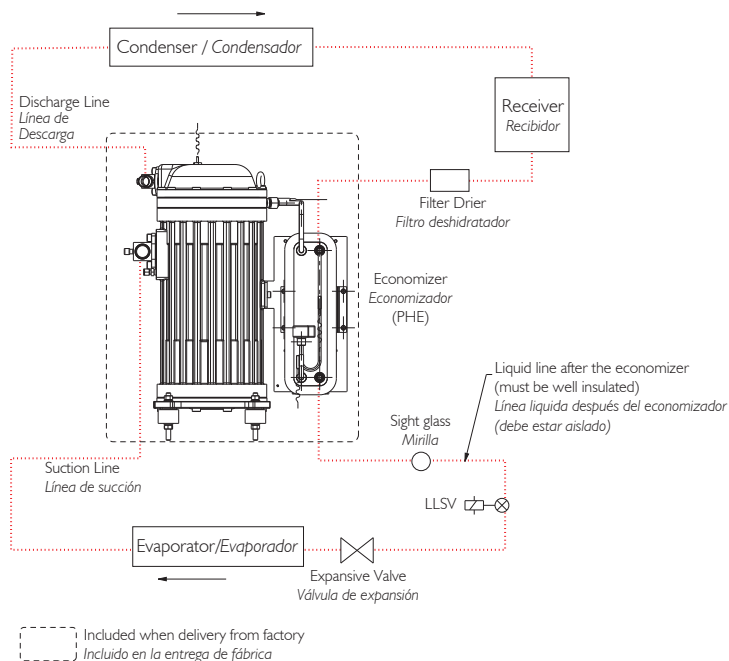
5.2.4 LLSV (Línea Líquida Válvula Solenoide)

LLSV contribuye a la separación de líquido refrigerante al lado de baja presión cuando el sistema está apagado. LLSV debe estar instalado antes de la válvula de expansión principal y tratar de acercarse a ella de modo que la mayor parte del líquido refrigerante se pueda reservar en el lado de la alta presión. LLSV puede evitar la migración de líquido en el ciclo de apagado. Si se produce la migración de líquido en el ciclo de apagado, el líquido que está en el cárter cuando el compresor se inicia la próxima vez, una explosión del refrigerante del aceite es un comienzo de inundación, lo que es muy peligroso para el compresor.

5.2.5 Aislamiento de la línea de líquido

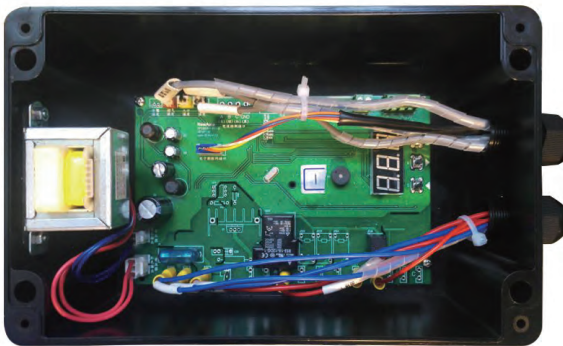
En el sistema de compresores de la serie YSF, el líquido es sub-enfriado después del economizador, y el subenfriamiento del líquido contribuye a mejorar la capacidad de refrigeración y la eficiencia del sistema. No importa lo que hace que la temperatura del líquido aumente, eso dará lugar a la pérdida de la capacidad y eficiencia del sistema. De modo que el tubo de líquido después de que el economizador (PHE) debe estar bien aislado y no es necesario el aislar la tubería de líquido antes del economizador.

6. Casual loop diagram of compressors of YSF series



6. Diagrama Casual de compresores de la serie YSF

7. Electrical connection



7.1 Three-phase motor

All the compressors of YSF series are three-phase, which can be directly start.

7.2 Standard type control board

The control board is a dedicated one for EVI scroll compressors. It is used to detect temperatures and control the operation of both the compressor and electronic expansion valve.

Main technical index:

supply voltage: AC220V \pm 10%,50/60Hz
operating environment: temperature -10°C~50°C, humidity \leq 85%,
no condensation, no corrosion
contact outle capacity: 2A/250VAC (pure resistant load)
thermal sensor: NTC R25=5k Ω , B(25/50)=3470K

Main function:

Control of the compressor:

Start and stop the compressor according to switch signal (passive switching mode contact, no power)

Crankcase heater:

It works when the compressor stops and it ceases heating once the compressor works.

Control of electronic expansion valve for vapor injection

Warning of high discharge temperature:

Give an alarm when discharge temperature goes out of the upper limit and cancel the alarm when the temperature is down and less than the lower limit. If the alarm takes place more than three times in one hour, the compressor will be locked.

Warning output:

When the alarm appears, the control board will output a passive switch signal to warn.

7. Conexión Eléctrica

7.1 Motor Trifásico

Todos los motores de la serie YSF son trifásicos, y se pueden arrancar directamente.

7.2 Tablero de control

De acuerdo a varios requerimientos de los clientes, Invotech desarrolló 2 tipos de tableros de control --- el estándar y el avanzado. El compresor cuyo número termina con la configuración "V100" está equipado con un control estándar. Este tipo de EVI controla solamente y el cableado es simple. Nunca superpone las funciones de la caja de control que normalmente se aplica a los proyectos. El compresor cuyo número termina con la configuración "V200" está equipada con placa de control mejorada. Incluye funciones de control tanto de la unidad de condensación e incluso el sistema de refrigeración.

Índice técnico principal:

Alimentación/voltaje: AC220V \pm 10%,50/60Hz
Entorno de operación: temperatura -10°C~50°C, humedad \leq 85%,
sin condensación, sin corrosión
Capacidad de los contactos de salida: 2A/250VAC (Carga resistiva pura)
Sensor térmico: NTC R25=5k Ω , B(25/50)=3470K

Fuciones

Control del Compresor:

Energize y apague el compresor de acuerdo a las señales (en modo pasivo, no hay power)

Resistencia:

Trabaja únicamente cuando el compresor se para y deja de calentar una vez el compresor este funcionando.

Control Electronico para Valvulas de Inyeccion

Alerta de Alta Temperatura de Descarga:

Emite una señal de alarma cuando la Temp. de Descarga sobre pasa las condiciones de Temperatura y se apaga/cancela una vez la Temperatura baja . Si la alarma se dispara mas de tres veces en un periodo de una hora, el compresor se atrancara.

Advertencia:

Cuando la alarma se dispara, el tablero de control ensenara una señal pasiva de alerta.

YSF Series

Application Instruction / Instrucciones de Aplicación

The first start-up mode:

When the compressor meets starting requirements, it should immediately run for 3 seconds and then stop for 17 seconds; repeat for 3 times and then start the normal operation. Required condition: Reapply power after switching off.

Process of start-up:

1. Apply power: check the signal of start/stop, if it is closed means under the start-up condition
2. Under the start-up condition, delay for 3 minutes, then entry the first start-up mode, and then to start the compressor

Process of shutting down:

Checking the signal of start- up and shutting down if it is open.

Modo de Primer Arranque:

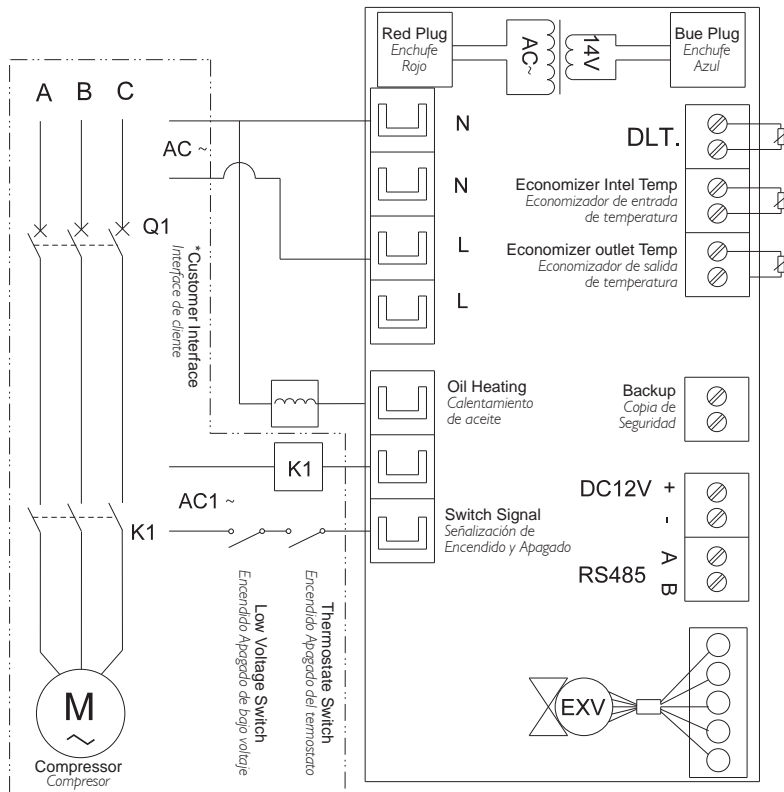
Cuando el compresor esta listo para arrancar, se debe inmediatamente prender en 3 segundos, posterior se debe apagar por 17 segundos, repetir 3 veces para que el compresor arranque en operación normal. Condiciones requeridas: Reaplicar fuente de poder después de apagarlo.

Proceso de Arranque:

1. Aplicar fuente de poder: checar la señal de encendido / apagado , si esta cerrado significa que se relaciona a las condiciones del arranque.
2. Condiciones del arranque, espere por 3 minutos, después de inicio al modo de primer arranque para que de inicio al arranque en operación normal

Proceso de corte de energía:

Checar la señal de encendido y corte la energía si esta abierta.



NOTES / NOTAS:

1. AC~: 1&5&7 220VAC
4 460VAC
2. AC1~:(250V,8A)max
3. K1 is Ac Contactor (Match by customer)
4. Operating Voltage / Operación del voltaje:
1 380V/3PH/50Hz
4 460V/3PH/60Hz
5 380V/3PH/60Hz
7 220V/3PH/60Hz



Warning / Precaución

- Codigo E07 DLT. exceeds the setting. / sobrepaso su programación original .
 Codigo E08 Discharge probe shorts out or disconnects (displaying "SHr" or "OPE") keep working
 El sensor de Descarga hace corto circuito o se desconecta
 Codigo E12 Sensores en cortocircuito o desconectados en la entrada del Economizer (mostrando "SHr" o "OPE")
 Codigo E13 Sensores en cortocircuito o desconectados en la salida del Economizer (mostrando "SHr" o "OPE")



**Only trained and qualified specialist may operate and maintain the described product.
 Solo especialistas entrenados y calificados pueden operar y dar mantenimiento al producto.**



Invotech Scroll Technologies

No. 68, Dongnan Road, Changshu, Jiangsu, PRC.

TEL: +86 512 5290 5990

FAX: +86 512 5290 5996

Email: scroll@invotech.cn

www.invotech.cn



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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 esta sujeta a cambios sin previo aviso.