



InvoTech

YM/YF series Scroll Compressors

**Special Design For
Mid Temp. and Lower Temp.
Application**

*It is the outstanding engineering capability
that builds the incomparable reliability*



Invotech Scroll Technologies Co., Ltd.

is a high-tech company.

We design and manufacture 3-15 HP scroll Compressors for refrigerated warehouse, cold room, freezer, A/C & chiller, heat pump etc.

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. In addition, we have received investments from several leading venture capital firms in series A funding rounds.

We are dedicated to providing our clients with world-class products and high standard of services.

For more information, please go to our website:

www.invotech.cn



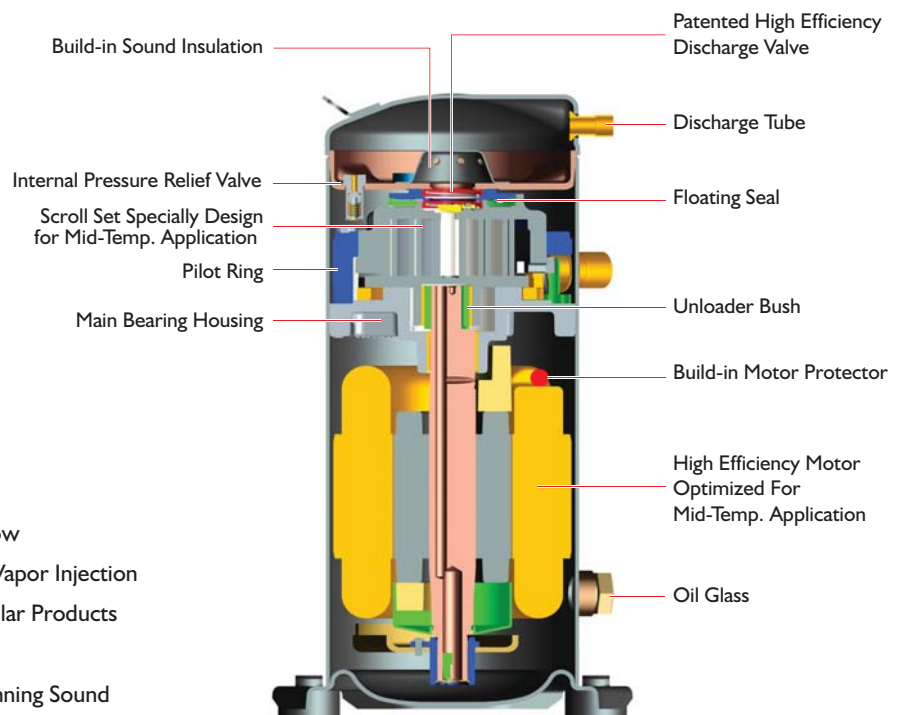
| | | |
|---------------------------------|-------|----|
| <i>Product Features</i> | | 1 |
| <hr/> | | |
| <i>Models</i> | | 3 |
| <hr/> | | |
| <i>Nomenclature</i> | | 4 |
| <hr/> | | |
| <i>Technical Specifications</i> | | |
| YM | R22 | 5 |
| | R404A | 7 |
| <hr/> | | |
| YF | R22 | 9 |
| | R404A | 10 |
| <hr/> | | |
| <i>Operating Envelope</i> | | 11 |
| <hr/> | | |
| <i>Capacity</i> | | |
| YM | R22 | 13 |
| | R404A | 16 |
| <hr/> | | |
| YF | R22 | 19 |
| | R404A | 20 |
| <hr/> | | |
| <i>Dimensions</i> | | 21 |

*It is the outstanding engineering capability
that builds the incomparable reliability*

YM Series

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

- 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 Compliances 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



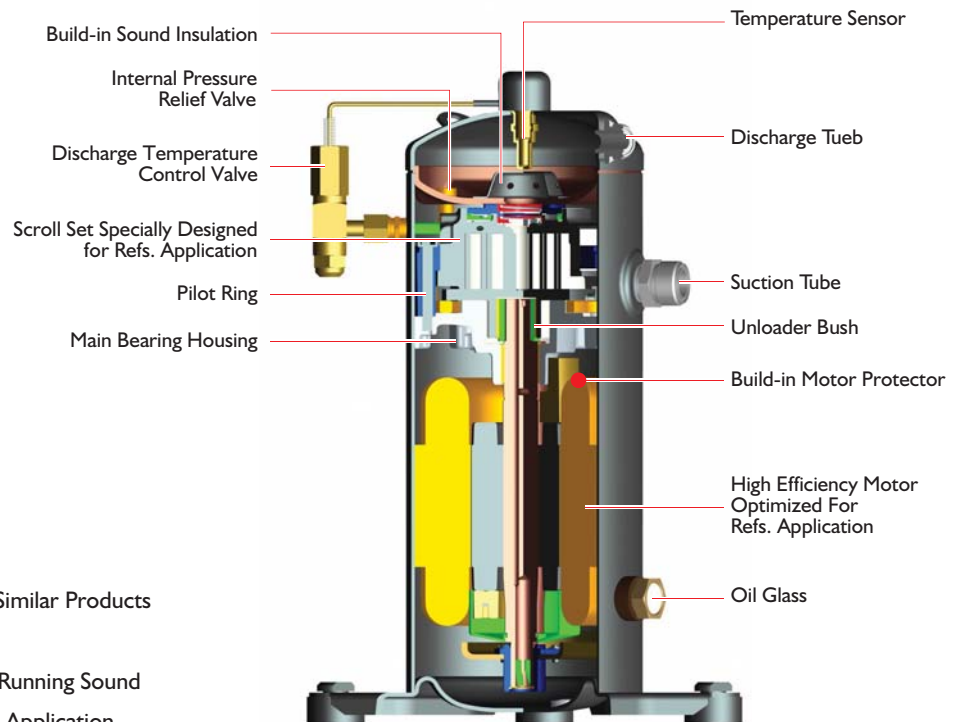
Features

- Be Capable of Running Perfectly at as low as -15°C Evap. Temp. Without Liquid / Vapor Injection
- 15% Better in terms of COP Than Similar Products in The Market
- Build-in Sound Insulation to Reduce Running Sound
- 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

YF Series

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

- 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 Compliances 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

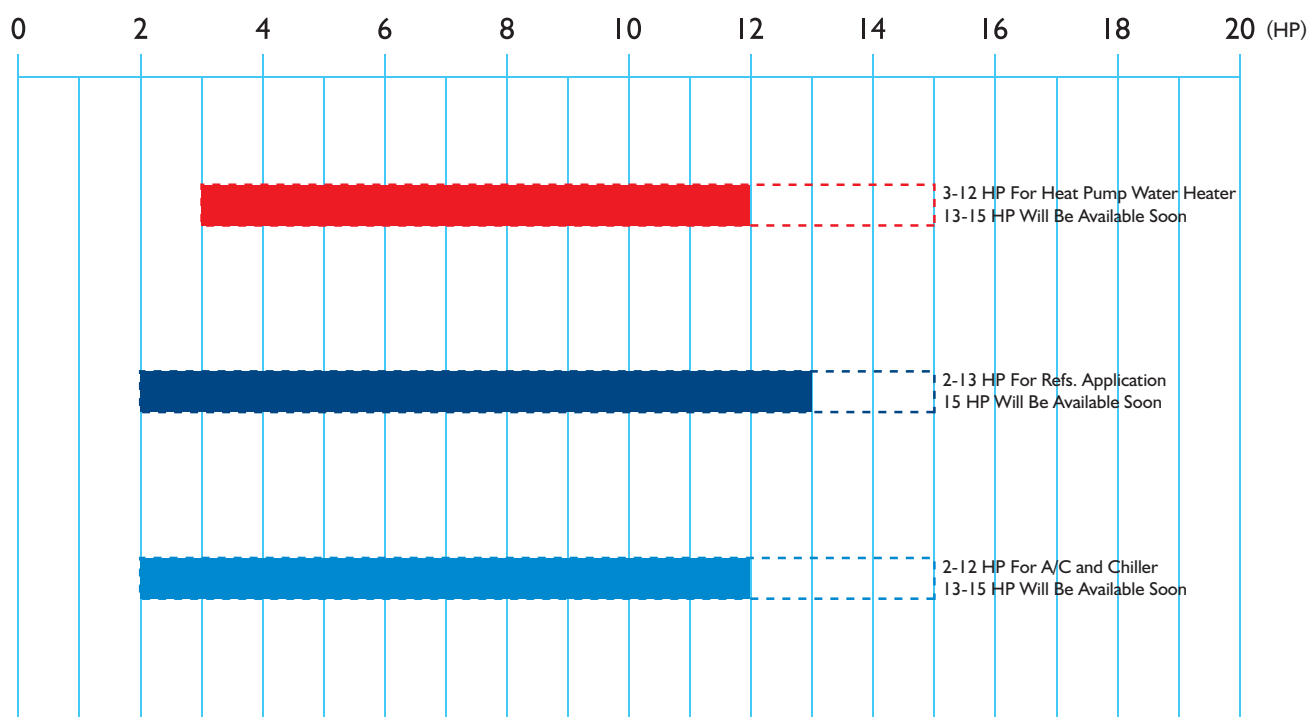


Features

- 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
- Build-in Sound Insulation to Reduce Running Sound
- Truly Specific Scroll Design For Refs. Application
- Optimized Floating Seal Design for Better COP
- Multiple Internal Protections
 - High Pressure Protection
 - Overload Protection

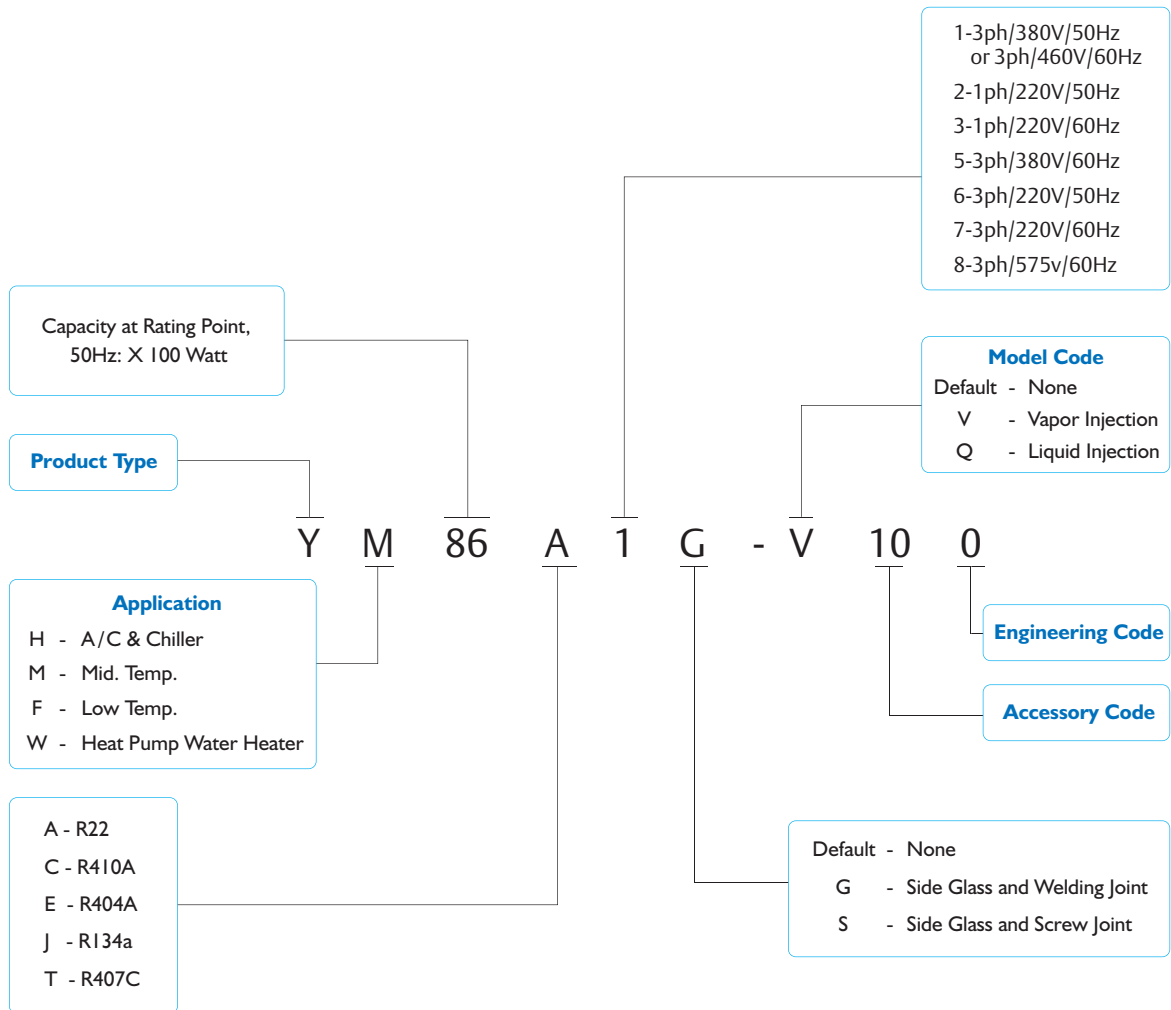
YM/YF Series

Models



YM/YF Series

Nomenclature



| Model | YM34A 2G-100 | YM43A 2G-100 | YM49A 2G-100 | YM70A 2G-100 | YM34A 1G-100 | YM43A 1G-100 | YM49A 1G-100 | YM70A 1G-100 | YM86A 1G-100 | YM102A 1G-100 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Electricity | 220V/50Hz/1P | | | | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 |
| Displacement (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 |
| Refrigerant | R22 | | | | | | | | | |
| Capacity (W) | 3600 | 4300 | 4900 | 7000 | 3400 | 4300 | 4900 | 7000 | 8600 | 10200 |
| Power in Watt (W) | 1860 | 2130 | 2300 | 3180 | 1620 | 2030 | 2250 | 3120 | 3750 | 4430 |
| Running Current (A) | 8.6 | 10.1 | 10.6 | 15.1 | 4.0 | 4.7 | 4.9 | 6.1 | 7.6 | 8.5 |
| COP (W/W) | 1.98 | 2.02 | 2.13 | 2.21 | 2.10 | 2.12 | 2.18 | 2.25 | 2.29 | 2.30 |
| LRA (A) | 76 | 76 | 85 | 109 | 22 | 45 | 45 | 60 | 60 | 65 |
| MOC (A) | 15.2 | 16.2 | 18 | 26.5 | 4.9 | 6.1 | 8.3 | 9.7 | 11.5 | 13.5 |
| Crankcase Heater (W) | 70 | | | | | | | | | |
| Fitting Dimensions (Inch) | | | | | | | | | | |
| Discharge Tube (OD) | 1/2 | | | | | | | | | |
| Suction Tube (OD) | 7/8 | | | | | | | | | |
| Product Dimensions(MM) | | | | | | | | | | |
| Length (L) | 239 | | | | | | | | | |
| Width (W) | 239 | | | | | | | | | |
| Height (H) | 418 | | | | | | | | | |
| Feet Dimensions (Hole) | 190X190(8.5) | | | | | | | | | |
| Oil Type | 3GS | | | | | | | | | |
| Initial Charge Volume(L) | 1.4 | | | | | | | | | |
| Recharge Volume(L) | 1.25 | | | | | | | | | |
| Max Operating Pressure(MPa) | | | | | | | | | | |
| High Side | 3.0 | | | | | | | | | |
| Low Side | 2.0 | | | | | | | | | |
| Weight(kg) | 31 | 31 | 31 | 33 | 29 | 29 | 30 | 31 | 31 | 33 |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No Subcooling

| Model | YM125A1G-00 | YM132A1G-100 | YM158A1G-100 | YM182A1G-100 | YM200A1G-100 | YM210A1G-100 |
|----------------------------------|-----------------|--------------|--------------|--------------|--------------|--------------|
| Electricity | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 7 | 8 | 9 | 10 | 12 | 13 |
| Displacement (M ³ /H) | 20.1 | 21.4 | 25.3 | 29.1 | 32.9 | 34.3 |
| Refrigerant | R22 | | | | | |
| Capacity (W) | 12500 | 13200 | 15800 | 18200 | 20000 | 21000 |
| Power in Watt (W) | 5430 | 5690 | 6810 | 7745 | 8510 | 8860 |
| Running Current (A) | 11.0 | 11.2 | 12.7 | 13.8 | 15.2 | 15.7 |
| COP (W/W) | 2.30 | 2.32 | 2.32 | 2.35 | 2.35 | 2.37 |
| LRA (A) | 117 | 117 | 117 | 121 | 121 | 121 |
| MOC (A) | 16.3 | 17.4 | 19.8 | 22.3 | 25.0 | 26.0 |
| Crankcase Heater (W) | 90 | | | | | |
| Fitting Dimensions (Inch) | | | | | | |
| Discharge Tube (OD) | 7/8 | | | | | |
| Suction Tube (OD) | 1 1/8 | | | | | |
| Product Dimensions(MM) | | | | | | |
| Length (L) | 260 | | | | | |
| Width (W) | 244 | | | | | |
| Height (H) | 508 | | | | | |
| Feet Dimensions (Hole) | 190 X 190 (8.5) | | | | | |
| Oil Type | 3GS | | | | | |
| Initial Charge Volume(L) | 2.7 | | | | | |
| Recharge Volume(L) | 2.6 | | | | | |
| Max Operating Pressure(MPa) | | | | | | |
| High Side | 3.0 | | | | | |
| Low Side | 2.0 | | | | | |
| Weight(kg) | 53 | 53 | 53 | 54 | 54 | 54 |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No Subcooling

| Model | YM34E 2G-100 | YM43E 2G-100 | YM49E 2G-100 | YM70E 2G-100 | YM34E 1G-100 | YM43E 1G-100 | YM49E 1G-100 | YM70E 1G-100 | YM86E 1G-100 | YM102E 1G-100 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Electricity | 220V/50Hz/1P | | | | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 |
| Displacement (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 |
| Refrigerant | R404A | | | | | | | | | |
| Capacity (W) | 3670 | 4380 | 5000 | 7140 | 3470 | 4380 | 5000 | 7140 | 8750 | 10380 |
| Power in Watt (W) | 2060 | 2380 | 2500 | 3570 | 1820 | 2280 | 2450 | 3500 | 4230 | 4940 |
| Running Current (A) | 9.8 | 11.3 | 11.7 | 16.6 | 4.4 | 4.8 | 5.1 | 6.6 | 8.0 | 9.4 |
| COP (W/W) | 1.78 | 1.84 | 2.00 | 2.00 | 1.90 | 1.92 | 2.04 | 2.04 | 2.07 | 2.10 |
| LRA (A) | 76 | 76 | 85 | 109 | 22 | 45 | 45 | 60 | 60 | 65 |
| MOC (A) | 16.2 | 17.2 | 19 | 28.1 | 5.2 | 6.6 | 9.0 | 10.0 | 12.8 | 14.5 |
| Crankcase Heater (W) | 70 | | | | | | | | | |
| Fitting Dimensions (Inch) | | | | | | | | | | |
| Discharge Tube (OD) | 1/2 | | | | | | | | | |
| Suction Tube (OD) | 7/8 | | | | | | | | | |
| Product Dimensions(MM) | | | | | | | | | | |
| Length (L) | 239 | | | | | | | | | |
| Width (W) | 239 | | | | | | | | | |
| Height (H) | 418 | | | | | | | | | |
| Feet Dimensions (Hole) | 190X190(8.5) | | | | | | | | | |
| Oil Type | POE | | | | | | | | | |
| Initial Charge Volume(L) | 1.4 | | | | | | | | | |
| Recharge Volume(L) | 1.25 | | | | | | | | | |
| Max Operating Pressure(MPa) | | | | | | | | | | |
| High Side | 3.0 | | | | | | | | | |
| Low Side | 2.0 | | | | | | | | | |
| Weight(kg) | 31 | 31 | 31 | 33 | 29 | 29 | 30 | 31 | 31 | 31 |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No Subcooling

| Model | YM125E1G-100 | YM132E1G-100 | YM158E1G-100 | YM182E1G-100 | YM200E1G-100 | YM210E1G-100 |
|----------------------------------|----------------|--------------|--------------|--------------|--------------|--------------|
| Electricity | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 7 | 8 | 9 | 10 | 12 | 13 |
| Displacement (M ³ /H) | 20.1 | 21.4 | 25.3 | 29.1 | 32.9 | 34.3 |
| Refrigerant | R404A | | | | | |
| Capacity (W) | 12750 | 13430 | 16100 | 18600 | 20350 | 21400 |
| Power in Watt (W) | 6070 | 6330 | 7590 | 8691 | 9510 | 9950 |
| Running Current (A) | 11.8 | 12.1 | 13.6 | 15.5 | 17.0 | 17.4 |
| COP (W/W) | 2.10 | 2.12 | 2.12 | 2.14 | 2.14 | 2.15 |
| LRA (A) | 117 | 117 | 117 | 121 | 121 | 121 |
| MOC (A) | 17.3 | 18.4 | 21.0 | 23.6 | 26.5 | 27.6 |
| Crankcase Heater (W) | 90 | | | | | |
| Fitting Dimensions (Inch) | | | | | | |
| Discharge Tube (OD) | 7/8 | | | | | |
| Suction Tube (OD) | 1 1/8 | | | | | |
| Product Dimensions(MM) | | | | | | |
| Length (L) | 260 | | | | | |
| Width (W) | 244 | | | | | |
| Height (H) | 508 | | | | | |
| Feet Dimensions (Hole) | 190 X 190(8.5) | | | | | |
| Oil Type | POE | | | | | |
| Initial Charge Volume(L) | 2.7 | | | | | |
| Recharge Volume(L) | 2.6 | | | | | |
| Max Operating Pressure(MPa) | | | | | | |
| High Side | 3.0 | | | | | |
| Low Side | 2.0 | | | | | |
| Weight(kg) | 53 | 53 | 53 | 54 | 54 | 54 |

E.T. -6.7°C, C.T. 48.9°C, R.G. 4.4°C, No Subcooling

YF Series

Specifications

R22

| Model | YF13A2G -Q100 | YF17A2G -Q100 | YF20A2G -Q100 | YF29A2G -Q100 | YF13A1G -Q100 | YF17A1G -Q100 | YF20A1G -Q100 | YF29A1G -Q100 | YF35A1G -Q100 | YF41A1G -Q100 |
|----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Electricity | 220V/50Hz/1P | | | | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 |
| Displacement (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 |
| Refrigerant | R22 | | | | | | | | | |
| Capacity (W) | 1300 | 1660 | 1950 | 2950 | 1300 | 1660 | 1950 | 2900 | 3500 | 4100 |
| Power in Watt (W) | 1180 | 1500 | 1740 | 2410 | 1160 | 1470 | 1710 | 2200 | 2550 | 2930 |
| Running Current (A) | 5.6 | 7.1 | 8.1 | 11.4 | 2.3 | 2.7 | 4.3 | 4.8 | 5.9 | 6.4 |
| COP (W/W) | 1.10 | 1.11 | 1.12 | 1.22 | 1.12 | 1.13 | 1.14 | 1.32 | 1.37 | 1.40 |
| LRA (A) | 76 | 76 | 85 | 109 | 22 | 22 | 45 | 60 | 60 | 65 |
| MOC (A) | 12.6 | 13.4 | 15.3 | 22 | 3.6 | 4.8 | 5.5 | 8.4 | 9.8 | 11.5 |
| Crankcase Heater (W) | 70 | | | | | | | | | |
| Fitting Dimensions (Inch) | | | | | | | | | | |
| Discharge Tube (OD) | 1/2 | | | | | | | | | |
| Suction Tube (OD) | 7/8 | | | | | | | | | |
| Product Dimensions(MM) | | | | | | | | | | |
| Length (L) | 239 | | | | | | | | | |
| Width (W) | 239 | | | | | | | | | |
| Height (H) | 418 | | | | | | | | | |
| Feet Dimensions (Hole) | 190X190(8.5) | | | | | | | | | |
| Oil Type | 3GS | | | | | | | | | |
| Initial Charge Volume(L) | 1.4 | | | | | | | | | |
| Recharge Volume(L) | 1.25 | | | | | | | | | |
| Max Operating Pressure(MPa) | | | | | | | | | | |
| High Side | 3.0 | | | | | | | | | |
| Low Side | 2.0 | | | | | | | | | |
| Weight(kg) | 31 | 31 | 31 | 33 | 30 | 30 | 30 | 32 | 32 | 33 |

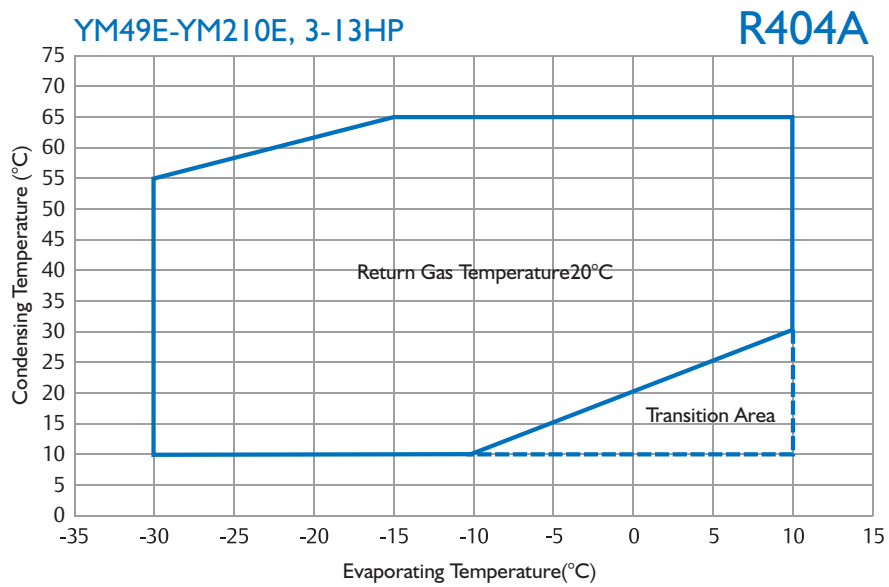
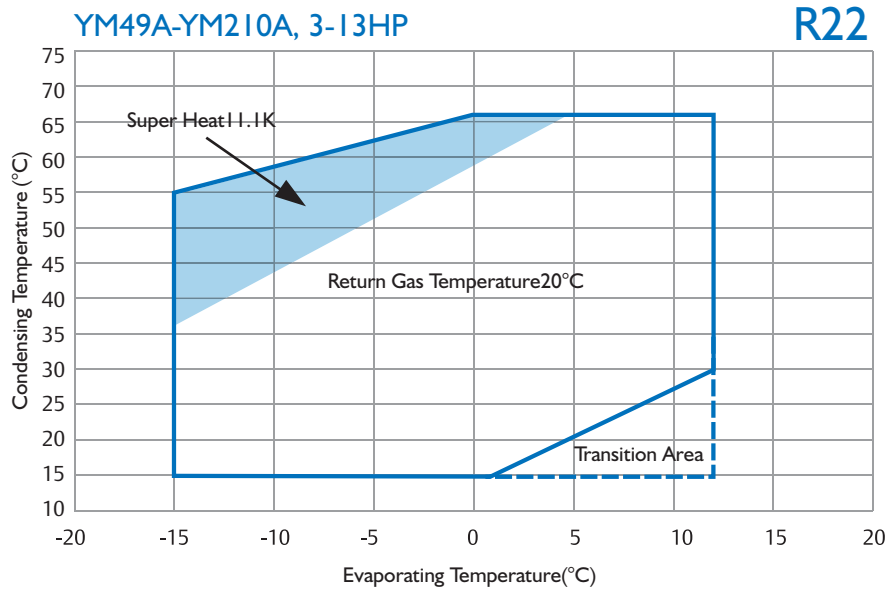
E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No Subcooling

| Model | YF13E2G -Q100 | YF17E2G -Q100 | YF20E2G -Q100 | YF29E2G -Q100 | YF13E1G -Q100 | YF17E1G -Q100 | YF20E1G -Q100 | YF29E1G -Q100 | YF35E1G -Q100 | YF41E1G -Q100 |
|----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Electricity | 220V/50Hz/1P | | | | 380V/50Hz/3P | | | | | |
| Power in Horse Power (HP) | 2 | 2.5 | 3 | 4 | 2 | 2.5 | 3 | 4 | 5 | 6 |
| Displacement (M ³ /H) | 5.8 | 7.3 | 8.1 | 11.8 | 5.8 | 7.3 | 8.1 | 11.8 | 14.5 | 17.1 |
| Refrigerant | R404A | | | | | | | | | |
| Capacity (W) | 1540 | 1970 | 2320 | 3510 | 1540 | 1970 | 2330 | 3420 | 3700 | 4300 |
| Power in Watt (W) | 1300 | 1650 | 1920 | 2650 | 1280 | 1620 | 1880 | 2440 | 2800 | 3160 |
| Running Current (A) | 6.2 | 7.8 | 9.1 | 12.5 | 2.5 | 4.1 | 4.5 | 5.1 | 6.2 | 7.0 |
| COP (W/W) | 1.18 | 1.19 | 1.21 | 1.32 | 1.21 | 1.22 | 1.24 | 1.40 | 1.32 | 1.36 |
| LRA (A) | 76 | 76 | 85 | 109 | 22 | 22 | 45 | 60 | 60 | 65 |
| MOC (A) | 13.4 | 14.2 | 16.2 | 23.3 | 4 | 5.2 | 5.8 | 8.8 | 10.3 | 12.1 |
| Crankcase Heater (W) | 70 | | | | | | | | | |
| Fitting Dimensions (Inch) | | | | | | | | | | |
| Discharge Tube (OD) | 1/2 | | | | | | | | | |
| Suction Tube (OD) | 7/8 | | | | | | | | | |
| Product Dimensions(MM) | | | | | | | | | | |
| Length (L) | 239 | | | | | | | | | |
| Width (W) | 239 | | | | | | | | | |
| Height (H) | 418 | | | | | | | | | |
| Feet Dimensions (Hole) | 190X190(8.5) | | | | | | | | | |
| Oil Type | POE | | | | | | | | | |
| Initial Charge Volume(L) | 1.4 | | | | | | | | | |
| Recharge Volume(L) | 1.25 | | | | | | | | | |
| Max Operating Pressure(MPa) | | | | | | | | | | |
| High Side | 3.0 | | | | | | | | | |
| Low Side | 2.0 | | | | | | | | | |
| Weight(kg) | 31 | 31 | 31 | 33 | 30 | 30 | 30 | 32 | 32 | 33 |

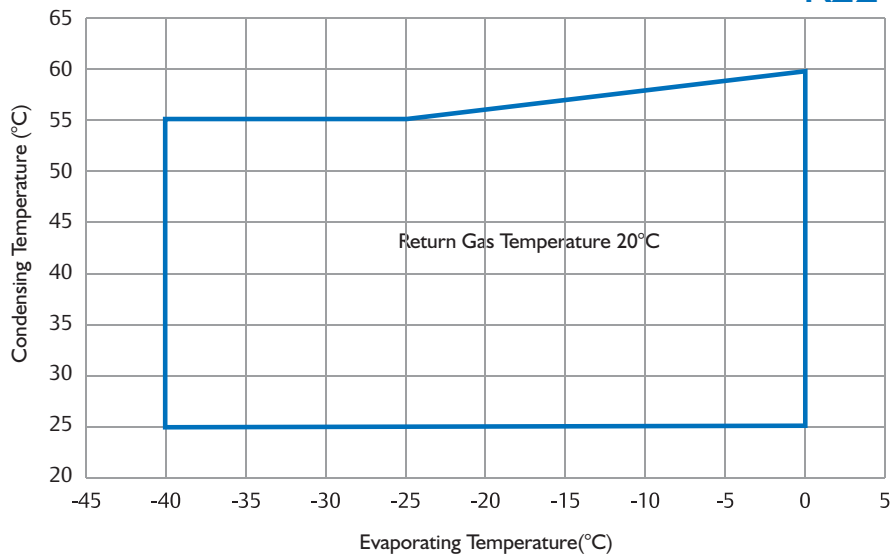
E.T. -31.6°C, C.T. 40.6°C, R.G. 4.4°C, No Subcooling

YM Series

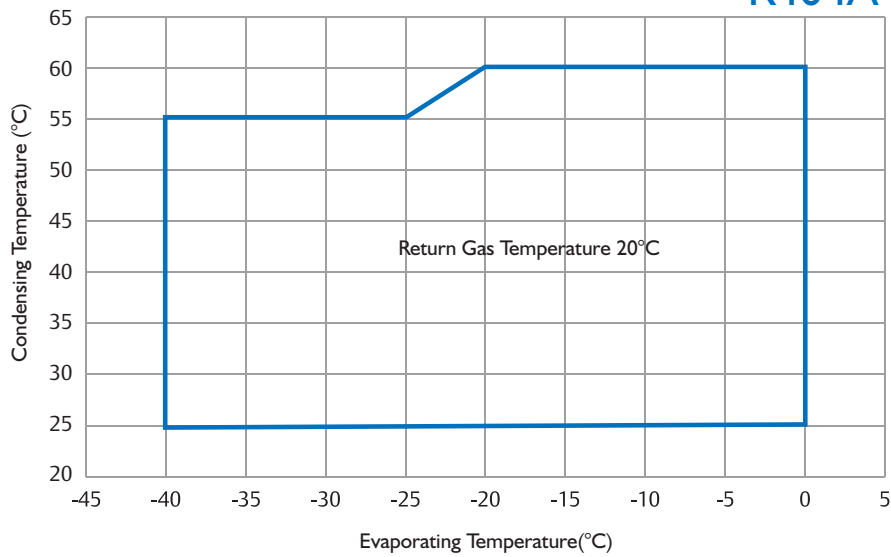
Operating Envelope



R22



R404A



| Model | C.T. (°C) | E.T.(°C) | | | | | | | |
|-------------|-----------------|-----------------|------|------|-------|-------|-------|-------|-------|
| | | -15 | -10 | -5 | 0 | 5 | 10 | | |
| YM34AIG | Capacity (W) | 60 | 3061 | 3663 | 4170 | 5062 | 6041 | | |
| | | 50 | 2788 | 3252 | 3931 | 4737 | 5694 | 6704 | |
| | | 40 | 3010 | 3532 | 4352 | 5237 | 6201 | 7300 | |
| | Watt (W) | 60 | 3045 | 3772 | 4754 | 5706 | 6668 | 7512 | |
| | | 50 | 1858 | 1924 | 1994 | 2055 | 2146 | 2146 | |
| | | 40 | 1487 | 1542 | 1645 | 1715 | 1762 | 1839 | |
| | YM43AIG | Capacity (W) | 60 | 3887 | 4652 | 5295 | 6428 | 7671 | |
| | | | 50 | 3541 | 4130 | 4992 | 6016 | 7230 | 8513 |
| | | | 40 | 3822 | 4485 | 5526 | 6650 | 7875 | 9269 |
| Watt (W) | | 60 | 3866 | 4790 | 6037 | 7246 | 8468 | 9539 | |
| | | 50 | 2327 | 2410 | 2498 | 2573 | 2688 | 2688 | |
| | | 40 | 1862 | 1932 | 2060 | 2149 | 2207 | 2304 | |
| YM49AIG | | Capacity (W) | 60 | 4447 | 5322 | 6058 | 7354 | 8777 | |
| | | | 50 | 4051 | 4725 | 5712 | 6883 | 8273 | 9740 |
| | | | 40 | 4373 | 5131 | 6323 | 7609 | 9010 | 10606 |
| | Watt (W) | 60 | 4424 | 5481 | 6907 | 8291 | 9689 | 10914 | |
| | | 50 | 2574 | 2667 | 2764 | 2847 | 2974 | 2974 | |
| | | 40 | 2060 | 2137 | 2279 | 2377 | 2442 | 2548 | |
| | YM70AIG | Capacity (W) | 60 | 6365 | 7618 | 8671 | 10526 | 12563 | |
| | | | 50 | 5799 | 6763 | 8175 | 9852 | 11841 | 13942 |
| | | | 40 | 6259 | 7345 | 9050 | 10890 | 12897 | 15180 |
| Watt (W) | | 60 | 6332 | 7845 | 9886 | 11867 | 13867 | 15622 | |
| | | 50 | 3668 | 3800 | 3938 | 4057 | 4238 | 4238 | |
| | | 40 | 2936 | 3045 | 3247 | 3387 | 3479 | 3631 | |
| YM86AIG | | Capacity (W) | 60 | 7802 | 9337 | 10629 | 12902 | 15399 | |
| | | | 50 | 7107 | 8289 | 10021 | 12076 | 14513 | 17088 |
| | | | 40 | 7672 | 9003 | 11092 | 13348 | 15808 | 18607 |
| | Watt (W) | 60 | 7761 | 9616 | 12118 | 14545 | 16997 | 19148 | |
| | | 50 | 4418 | 4577 | 4743 | 4886 | 5104 | 5104 | |
| | | 40 | 3536 | 3668 | 3911 | 4080 | 4191 | 4374 | |
| | | 60 | 3037 | 3254 | 3456 | 3526 | 3597 | 3818 | |
| | | 30 | 2641 | 2838 | 3035 | 3098 | 3183 | 3349 | |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling

Capacity @ 11.1K Super Heat, No Sub Cooling

| Model | C.T. (°C) | E.T.(°C) | | | | | | |
|----------|-----------------|----------|-------|-------|-------|-------|-------|-------|
| | | -15 | -10 | -5 | 0 | 5 | 10 | |
| YMI02AIG | Capacity (W) | 60 | 9253 | 11074 | 12606 | 15303 | 18264 | |
| | | 50 | 8430 | 9832 | 11885 | 14322 | 20268 | |
| | | 40 | 9099 | 10677 | 13156 | 15832 | 18748 | 22069 |
| | | 30 | 9205 | 11405 | 14372 | 17251 | 20160 | 22710 |
| | Watt (W) | 60 | 5240 | 5428 | 5626 | 5795 | 6054 | |
| | | 50 | 4194 | 4350 | 4639 | 4839 | 4970 | 5188 |
| | | 40 | 3603 | 3859 | 4099 | 4182 | 4266 | 4528 |
| | | 30 | 3133 | 3366 | 3600 | 3674 | 3776 | |
| YMI25AIG | Capacity (W) | 60 | 10520 | 11942 | 14727 | 17441 | 20684 | |
| | | 50 | 9329 | 11585 | 13738 | 16627 | 19673 | 23266 |
| | | 40 | 10286 | 12836 | 15324 | 18424 | 21766 | 25708 |
| | | 30 | 11868 | 14273 | 16698 | 20115 | 23719 | 28010 |
| | Watt (W) | 60 | 6497 | 6730 | 6976 | 7186 | 7506 | |
| | | 50 | 5150 | 5342 | 5696 | 5941 | 6103 | 6370 |
| | | 40 | 4554 | 4878 | 5181 | 5287 | 5392 | 5723 |
| | | 30 | 3847 | 4134 | 4421 | 4512 | 4636 | 4878 |
| YMI32AIG | Capacity (W) | 60 | 11201 | 12714 | 15679 | 18569 | 22022 | |
| | | 50 | 9932 | 12334 | 14627 | 17702 | 20946 | 24771 |
| | | 40 | 10951 | 13666 | 16315 | 19615 | 23174 | 27370 |
| | | 30 | 12635 | 15196 | 17777 | 21415 | 25253 | 29821 |
| | Watt (W) | 60 | 6783 | 7026 | 7283 | 7502 | 7836 | |
| | | 50 | 5376 | 5577 | 5947 | 6203 | 6372 | 6650 |
| | | 40 | 4754 | 5092 | 5409 | 5519 | 5629 | 5975 |
| | | 30 | 4016 | 4316 | 4615 | 4710 | 4840 | 5093 |
| YMI58AIG | Capacity (W) | 60 | 13242 | 15031 | 18537 | 21953 | 26036 | |
| | | 50 | 11742 | 14582 | 17293 | 20929 | 24763 | 29285 |
| | | 40 | 12947 | 16156 | 19288 | 23190 | 27397 | 32358 |
| | | 30 | 14938 | 17966 | 21017 | 25318 | 29856 | 35256 |
| | Watt (W) | 60 | 8019 | 8307 | 8610 | 8869 | 9265 | |
| | | 50 | 6356 | 6593 | 7031 | 7333 | 7533 | 7862 |
| | | 40 | 5620 | 6021 | 6395 | 6525 | 6655 | 7064 |
| | | 30 | 4748 | 5102 | 5456 | 5569 | 5722 | 6021 |
| YMI82AIG | Capacity (W) | 60 | 15231 | 17289 | 21321 | 25250 | 29946 | |
| | | 50 | 13506 | 16772 | 19890 | 24072 | 28482 | 33684 |
| | | 40 | 14892 | 18583 | 22185 | 26673 | 31512 | 37219 |
| | | 30 | 17182 | 20664 | 24174 | 29121 | 34340 | 40552 |
| | Watt (W) | 60 | 9133 | 9460 | 9805 | 10100 | 10551 | |
| | | 50 | 7238 | 7508 | 8007 | 8351 | 8579 | 8953 |
| | | 40 | 6401 | 6856 | 7283 | 7431 | 7579 | 8045 |
| | | 30 | 5407 | 5810 | 6214 | 6342 | 6516 | 6856 |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling

Capacity @ 11.1K Super Heat, No Sub Cooling

YM Series

Capacity

R22

| Model | C.T. (°C) | E.T.(°C) | | | | | | | |
|-----------------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|
| | | -15 | -10 | -5 | 0 | 5 | 10 | | |
| YM200AIG | Capacity (W) | 60 | | 17219 | 19547 | 24105 | 28547 | 33856 | |
| | | 50 | 15269 | 18963 | 22487 | 27215 | 32201 | 38082 | |
| | | 40 | 16836 | 21010 | 25082 | 30156 | 35627 | 42079 | |
| | | 30 | 19425 | 23362 | 27331 | 32924 | 38824 | 45847 | |
| | Watt (W) | 60 | | 10325 | 10695 | 11086 | 11419 | 11928 | |
| | | 50 | 8184 | 8489 | 9052 | 9442 | 9699 | 10123 | |
| | | 40 | 7236 | 7752 | 8234 | 8401 | 8568 | 9095 | |
| | | 30 | 6113 | 6569 | 7025 | 7170 | 7367 | 7752 | |
| | YM210AIG | Capacity (W) | 60 | | 17952 | 20378 | 25131 | 29762 | 35297 |
| | | | 50 | 15919 | 19769 | 23444 | 28374 | 33572 | 39703 |
| | | | 40 | 17553 | 21904 | 26149 | 31439 | 37143 | 43869 |
| | | | 30 | 20252 | 24357 | 28494 | 34325 | 40476 | 47798 |
| Watt (W) | | 60 | | 10657 | 11039 | 11442 | 11786 | 12312 | |
| | | 50 | 8446 | 8762 | 9343 | 9745 | 10011 | 10448 | |
| | | 40 | 7469 | 8001 | 8498 | 8671 | 8844 | 9388 | |
| | | 30 | 6309 | 6780 | 7251 | 7400 | 7604 | 8001 | |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling

Capacity @ 11.1K Super Heat, No Sub Cooling

| Model | C.T. (°C) | E.T.(°C) | | | | | | | | | | |
|-----------------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | 10 | | |
| YM200EIG | Capacity (W) | 60 | | | 9793 | 11708 | 14602 | 17613 | 21212 | 25412 | 29611 | |
| | | 50 | 6659 | 9465 | 12271 | 14869 | 18253 | 21957 | 26251 | 31294 | 36337 | |
| | | 40 | 9089 | 11919 | 14748 | 18030 | 21903 | 26302 | 31290 | 37176 | 43062 | |
| | Watt (W) | 60 | | | 12682 | 12714 | 12733 | 12764 | 12833 | 12847 | 12852 | |
| | | 50 | 10280 | 10346 | 10412 | 10423 | 10428 | 10467 | 10380 | 10479 | 10574 | |
| | | 40 | 8268 | 8326 | 8374 | 8383 | 8398 | 8414 | 8457 | 8509 | 8579 | |
| | | 30 | 6588 | 6638 | 6682 | 6689 | 6761 | 6863 | 6906 | 6998 | 7123 | |
| | YM210EIG | Capacity (W) | 60 | | | 10210 | 12206 | 15224 | 18362 | 22114 | 26493 | 30871 |
| | | | 50 | 6943 | 9868 | 12793 | 15502 | 19029 | 22892 | 27368 | 32625 | 37883 |
| 40 | | | 9476 | 12426 | 15376 | 18797 | 22835 | 27421 | 32622 | 38758 | 44894 | |
| Watt (W) | | 60 | | | 13090 | 13123 | 13142 | 13174 | 13245 | 13259 | 13265 | |
| | | 50 | 10610 | 10678 | 10746 | 10758 | 10763 | 10804 | 10713 | 10816 | 10914 | |
| | | 40 | 8534 | 8593 | 8643 | 8653 | 8668 | 8684 | 8728 | 8782 | 8854 | |
| | | 30 | 6800 | 6852 | 6896 | 6903 | 6978 | 7083 | 7127 | 7223 | 7352 | |

Capacity @ 20°C Return Gas Temperature, No Sub Cooling

YF Series

Capacity

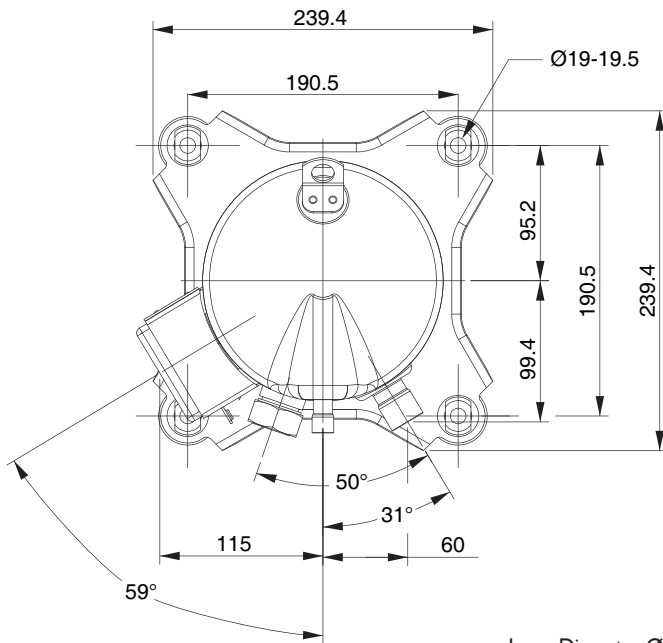
R22

| Model | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|-----------------|----------|------|------|------|------|------|------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13AIG-Q100 | Capacity (W) | 50 | 852 | 1081 | 1332 | 1673 | 2045 | 2492 | 2988 | 3535 | 4170 |
| | | 40 | 940 | 1190 | 1478 | 1839 | 2281 | 2732 | 3283 | 3883 | 4593 |
| | | 30 | 1020 | 1282 | 1605 | 1986 | 2451 | 2954 | 3560 | 4194 | 4923 |
| | Watt (W) | 50 | 1167 | 1201 | 1232 | 1273 | 1311 | 1359 | 1403 | 1458 | 1509 |
| | | 40 | 997 | 1025 | 1053 | 1090 | 1124 | 1168 | 1210 | 1261 | 1309 |
| | | 30 | 851 | 872 | 897 | 930 | 969 | 1016 | 1061 | 1118 | 1177 |
| YF17AIG-Q100 | Capacity (W) | 50 | 1107 | 1407 | 1735 | 2180 | 2667 | 3252 | 3900 | 4615 | 5446 |
| | | 40 | 1223 | 1550 | 1927 | 2399 | 2976 | 3566 | 4286 | 5072 | 6000 |
| | | 30 | 1328 | 1671 | 2093 | 2590 | 3199 | 3856 | 4649 | 5478 | 6432 |
| | Watt (W) | 50 | 1510 | 1556 | 1595 | 1649 | 1698 | 1793 | 1816 | 1887 | 1954 |
| | | 40 | 1291 | 1327 | 1364 | 1412 | 1456 | 1512 | 1567 | 1633 | 1694 |
| | | 30 | 1102 | 1129 | 1161 | 1204 | 1255 | 1316 | 1374 | 1448 | 1525 |
| YF20AIG-Q100 | Capacity (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 |
| | Watt (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 | Capacity (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 |
| | Watt (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 | Capacity (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 |
| | Watt (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 | Capacity (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 |
| | Watt (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 |

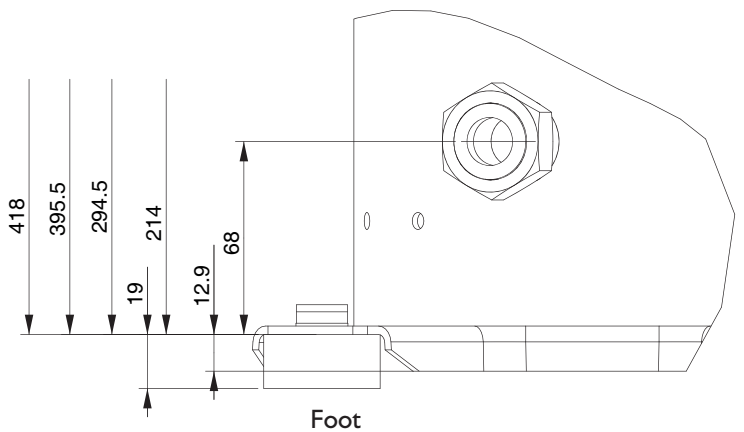
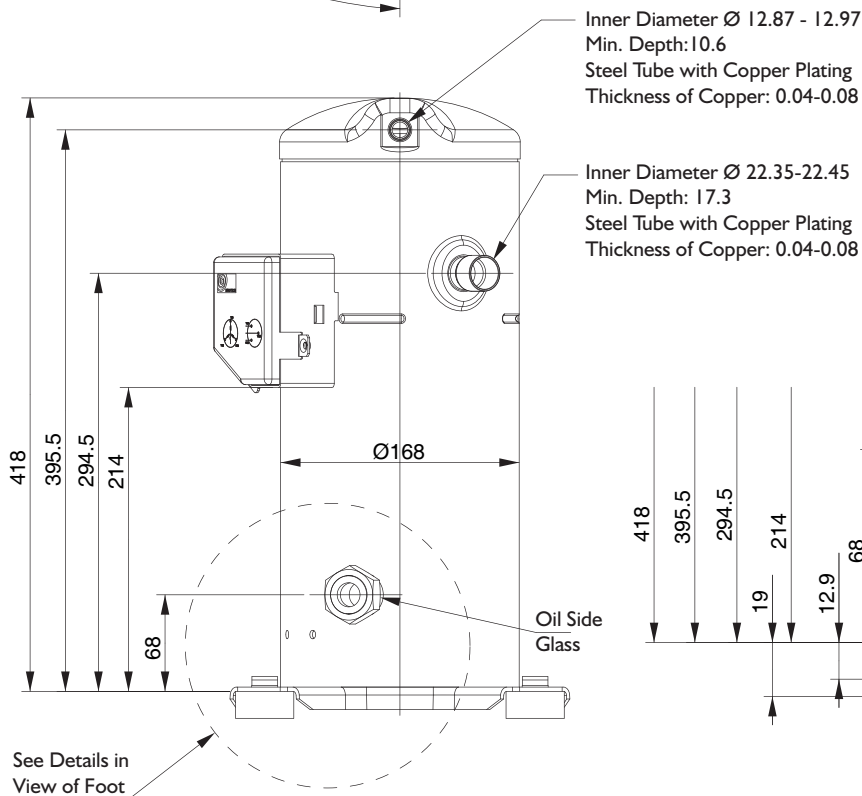
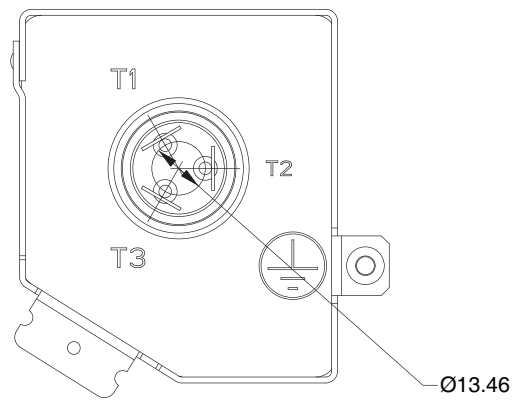
Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid injection

| Model | C.T. (°C) | E.T.(°C) | | | | | | | | | |
|---------------------|-----------------|----------|------|------|------|------|------|-------|-------|-------|-------|
| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
| YF13EIG-Q100 | Capacity (W) | 50 | 848 | 1061 | 1328 | 1613 | 1949 | 2337 | 2762 | 3249 | 3782 |
| | | 40 | 980 | 1233 | 1535 | 1891 | 2316 | 2811 | 3378 | 4026 | 4759 |
| | | 30 | 1109 | 1416 | 1754 | 2182 | 2659 | 3189 | 3773 | 4423 | 5139 |
| | Watt (W) | 50 | 1081 | 1141 | 1199 | 1249 | 1303 | 1359 | 1415 | 1471 | 1526 |
| | | 40 | 895 | 942 | 986 | 1030 | 1077 | 1123 | 1168 | 1214 | 1260 |
| | | 30 | 740 | 777 | 811 | 851 | 898 | 949 | 1003 | 1060 | 1121 |
| YF17EIG-Q100 | Capacity (W) | 50 | 1102 | 1381 | 1730 | 2102 | 2542 | 3050 | 3605 | 4242 | 4939 |
| | | 40 | 1275 | 1606 | 2001 | 2467 | 3022 | 3669 | 4410 | 5259 | 6217 |
| | | 30 | 1444 | 1846 | 2287 | 2846 | 3471 | 4163 | 4927 | 5777 | 6714 |
| | Watt (W) | 50 | 1399 | 1478 | 1552 | 1618 | 1688 | 1760 | 1832 | 1904 | 1976 |
| | | 40 | 1159 | 1220 | 1277 | 1334 | 1395 | 1454 | 1513 | 1572 | 1631 |
| | | 30 | 958 | 1006 | 1050 | 1102 | 1163 | 1229 | 1299 | 1373 | 1452 |
| YF20EIG-Q100 | Capacity (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 |
| | Watt (W) | 50 | 2036 | 2149 | 2256 | 2350 | 2451 | 2555 | 2658 | 2762 | 2866 |
| | | 40 | 1691 | 1778 | 1860 | 1942 | 2030 | 2115 | 2200 | 2284 | 2369 |
| | | 30 | 1401 | 1471 | 1533 | 1609 | 1697 | 1791 | 1892 | 1998 | 2112 |
| YF29EIG-Q100 | Capacity (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 |
| | Watt (W) | 50 | 2436 | 2572 | 2699 | 2812 | 2932 | 3056 | 3181 | 3305 | 3429 |
| | | 40 | 2023 | 2128 | 2226 | 2323 | 2429 | 2530 | 2632 | 2733 | 2835 |
| | | 30 | 1677 | 1759 | 1835 | 1925 | 2030 | 2143 | 2263 | 2391 | 2526 |
| YF35EIG-Q100 | Capacity (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 | 10508 | 12325 | 14329 |
| | Watt (W) | 50 | 2883 | 3043 | 3194 | 3327 | 3470 | 3617 | 3763 | 3910 | 4057 |
| | | 40 | 2393 | 2518 | 2633 | 2749 | 2874 | 2994 | 3114 | 3234 | 3354 |
| | | 30 | 1984 | 2082 | 2171 | 2278 | 2402 | 2536 | 2678 | 2829 | 2989 |
| YF41EIG-Q100 | Capacity (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 | 12587 | 14765 | 17164 |
| | Watt (W) | 50 | 3350 | 3537 | 3712 | 3868 | 4033 | 4204 | 4374 | 4545 | 4715 |
| | | 40 | 2782 | 2926 | 3061 | 3195 | 3340 | 3480 | 3619 | 3759 | 3899 |
| | | 30 | 2306 | 2420 | 2523 | 2647 | 2792 | 2947 | 3113 | 3288 | 3475 |

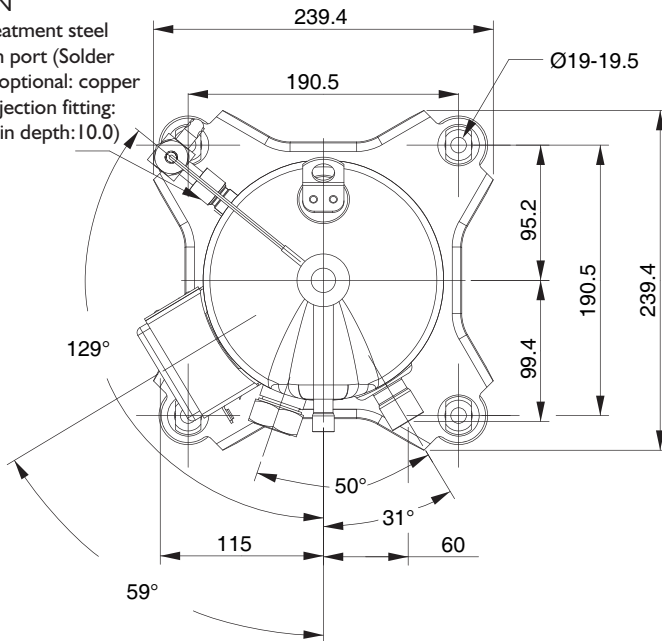
Capacity @ 20°C Return Gas Temperature, No Sub Cooling, Liquid injection



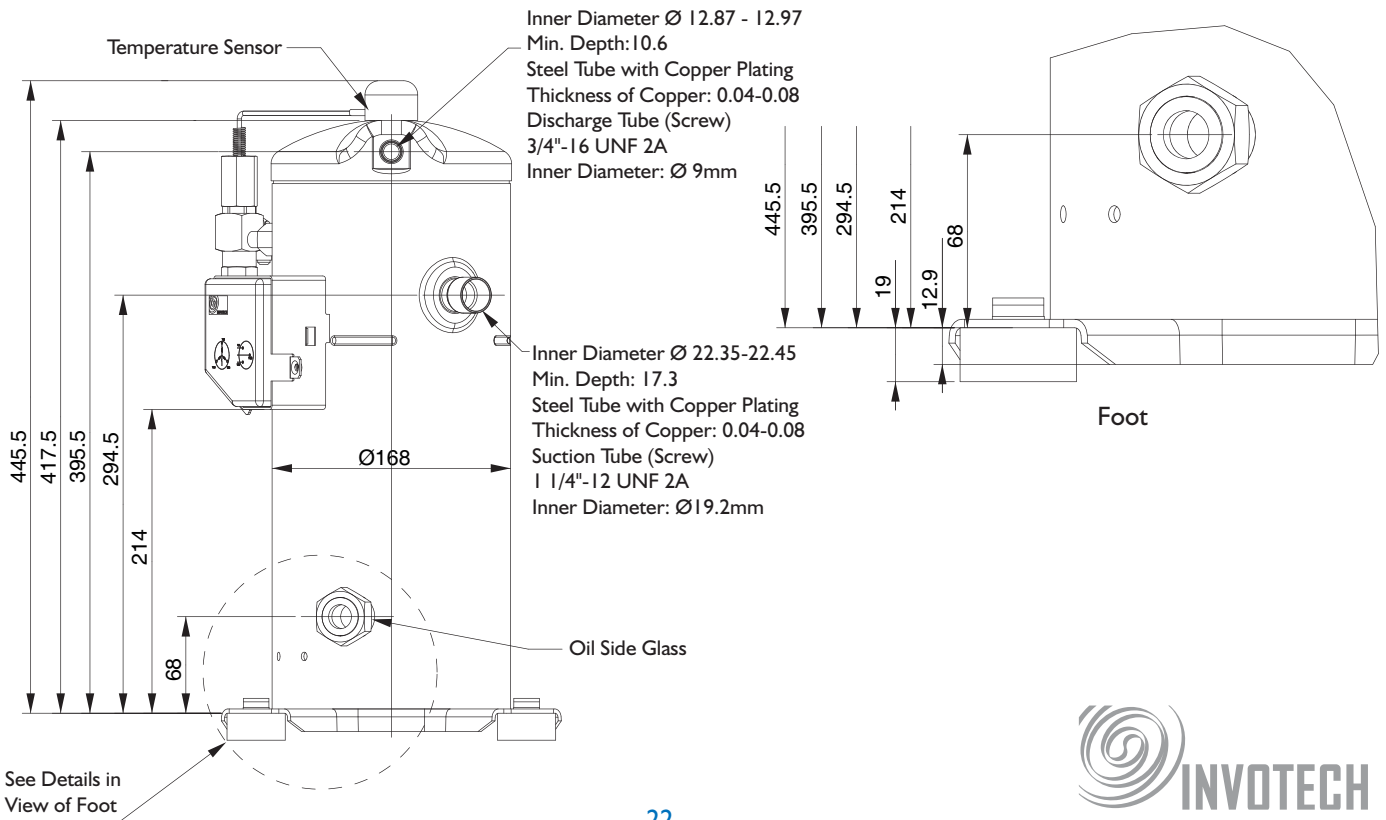
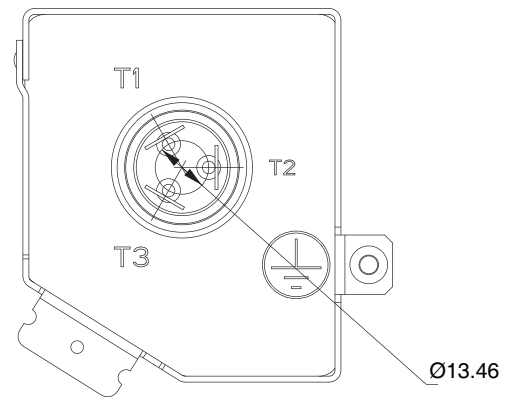
Wiring Diagram

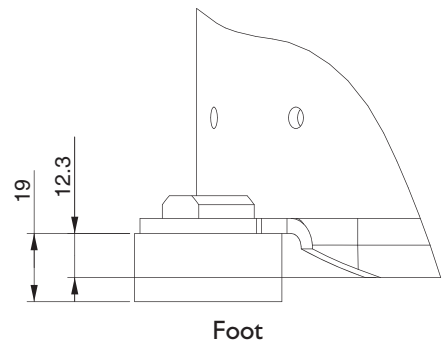
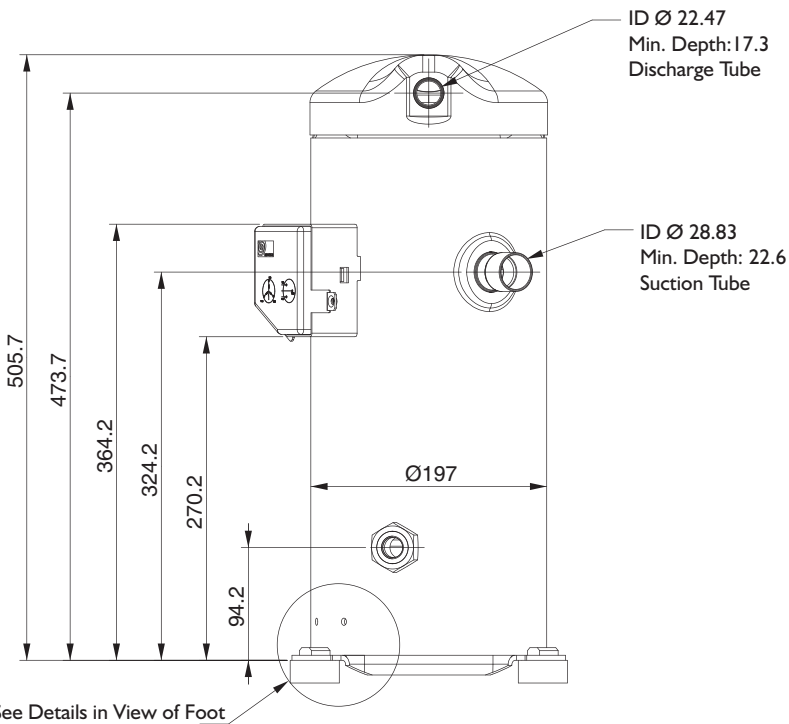
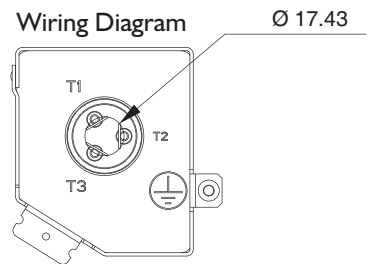
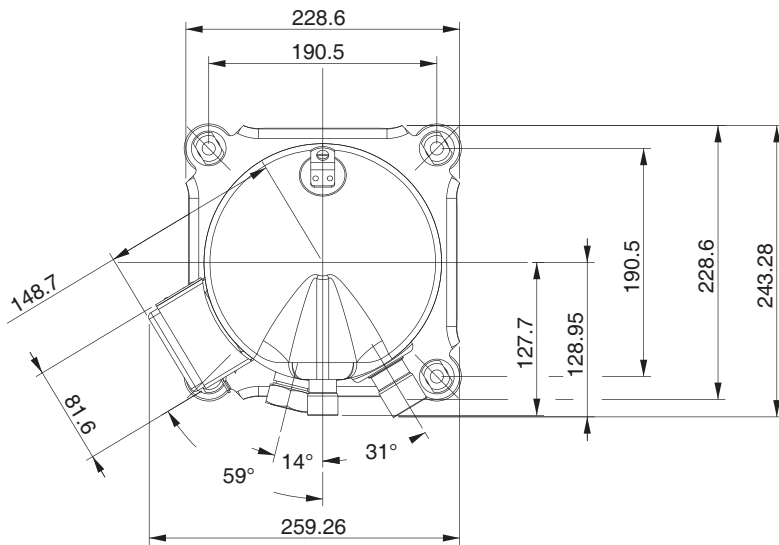


Thread Rotalock connection:
 1 1/16" - 16 UN
 Blackening treatment steel
 liquid injection port (Solder
 connection is optional: copper
 plated steel injection fitting:
 ID:Ø12.97; min depth:10.0)



Wiring Diagram







Invotech Scroll Technologies

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

TEL: +86 512 5290 5990

FAX: +86 512 5290 5996

www.invotech.cn