



Piston compressor

Scroll compressor

Hermetic condensing unit

## ABOUT US

Zhejiang Ankang Refrigeration Equipment Co.,Ltd establish in 2001.We are specialize in producing hermetic piston compressor (2HP-7HP), scroll compressor (7HP-15HP)and condensing unit. The production extensively used on commerce refrigerating equipment, like the central air conditioning, cold storage, the freezer, etc. We had imported professional equipment, testing equipment, technology and production line from Germany and Italy. The annual production come up to 100000pcs.

We have professional team with rich experi-

ence. We could keep a foothold in refrigeration area due to our strict scientific management. We are constantly committed to innovative products and improve technology.

We have RoHS, TUV, CE, CCC, ISO9001:2000 certificates. We gained high praise from all of our clients for the past years.

The company spirit is quality first, customer first, credibility first.We will keep working hard on the forward way.



CE

RoHS

TUV

ISO9001:2000



## NAME OF MODELS



Piston compressor

- Name:QR\*\*\*
- Screw thread connection
- Refrigerant: R22,R404a,R407c
- Medium-High Temperature



Piston compressor

- Name:QR\*\*\*A
- Copper connection
- Refrigerant: R22,R404a,R407c
- Medium-High Temperature



Piston compressor

- Name:QL\*\*\*
- Screw thread connection
- Refrigerant: R404a
- Low Temperature



Piston compressor

- Name:QL\*\*\*A
- Copper connection
- Refrigerant: R404a
- Low Temperature



Scroll compressor

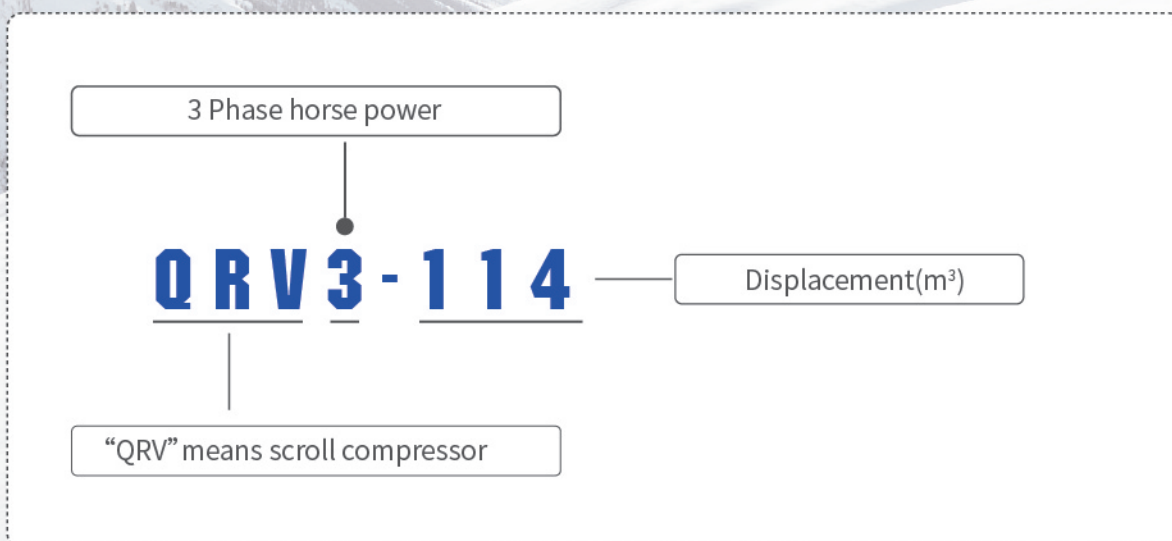
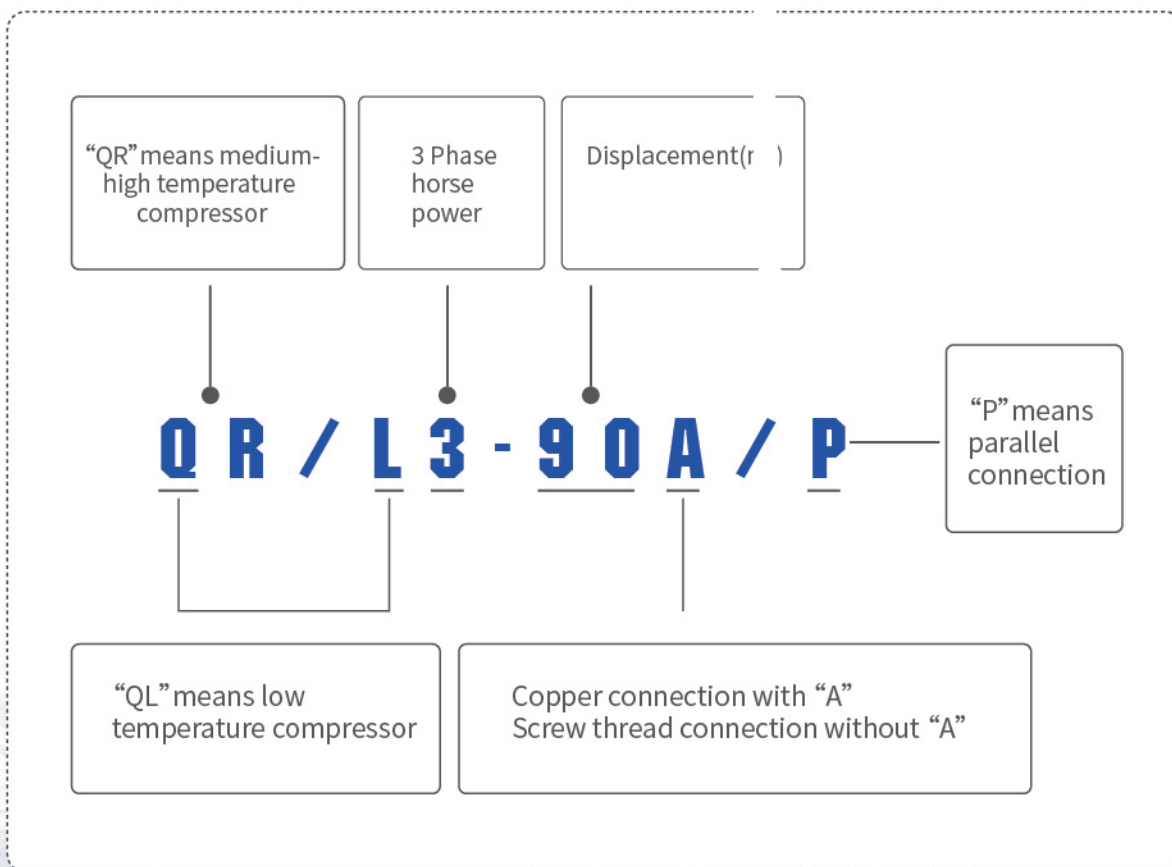
- Name:QRV\*\*\*
- Copper connection
- Refrigerant: R22,R404a,R407c
- Medium-High Temperature



Hermetic condensing unit

- Name:QR\*\*\*H
- Refrigerant: R22, R404a,R407c
- Medium-High Temperature

## NAMEPLATE DESCRIPTION



# PRODUCT PARAMETERS

## Medium/High Back Pressure Compressor R404a



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp : $45^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR44	2	44	220-240V/1PH /50Hz 208-230V/1PH /60Hz	54.5°C/50Hz	5977	3	$\leq 62$	1379*	1850	2580	4370	5977	8110
QR52	2.5	52			7146	3	$\leq 64$	1508*	2260	3240	5400	7146	9320
QR58	3	58.2			7967	3.1	$\leq 65$	1635*	2390	3310	5720	7967	10240
QR62	3	62.7			8613	3.1	$\leq 65$	1998*	2970	3960	6420	8613	11540

### Application parameter

Model	Motor input(W)	RLA(A)	LRA(A)	Motor data							Refrigerant Oil Charge (C)	Refrigerator Oil Grade
				Insulation Level	Revolutions (rev/min)	Start Winding Resistance $\Omega$ (25°C)	Run Winding Resistance $\Omega$ (25°C)	Start Capacity	Run Capacity	Start Potential Relay		
QR44	2300	10.2	65	F	$\geq 2860$	2.88	1.01	156-186 $\mu\text{F}$ /330V	35 $\mu\text{F}$ /450V	180-195V Pick Up at:180-195V 40-105V Drop Out at:40-105V	1500	EMKARATE RL32H
QR52	2700	12.5	65			2.88	1.01					
QR58	3080	13.5	70			2.68	0.69					
QR62	3310	14.5	70			2.68	0.69					



## Medium/High Back Pressure Compressor R404a



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp :  $45^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR3-44	2	44	220V/3PH /60Hz  380V/3PH /50Hz  380V/3PH /60Hz  460V/3PH /60Hz	54.5°C/50Hz	5977	2.9	$\leq 62$	1379*	1850	2580	4370	5977	8110
QR3-52	2.5	52			7146	2.9	$\leq 64$	1508*	2260	3240	5400	7146	9320
QR3-58	3	58.2			7967	3	$\leq 65$	1635*	2390	3310	5720	7967	10240
QR3-62	3	62.7			8613	3	$\leq 65$	1998*	2970	3960	6420	8613	11540
QR3-74	3.5	74.2			9984	2.9	$\leq 65$	3078*	2805	4296	7276	9814	13056
QR3-90	4	90.2			11300	2.9	$\leq 65$	1510	3388	4425	7956	11300	15719
QR3-112	5	112.5			14780	2.8	$\leq 66$	3965	4360	5890	10450	14780	20230
QR3-124	6	124.4			16650	2.8	$\leq 67$	5146	5320	7080	11970	16650	22760
QR3-134	7	134.8			18230	2.8	$\leq 69$	5453	5780	7710	13120	18230	24806

### Application parameter

Motor data							Refrigerator Oil Charge(CC)	Refrigerator Oil Grade
Model	Motor input(W)	RLA(A)	LRA(A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QR3-44	2300	3.8	30	F	$\geq 2860$	6.8	1500	EMKARATE RL32H
QR3-52	2700	4.7	30			6.8		
QR3-58	3080	5	39			4		
QR3-62	3310	5.4	39			4		
QR3-74	4250	6.7	39			3.4		
QR3-90	4600	7.3	55			3.6	2000	
QR3-112	6100	9.6	70			2.2		
QR3-124	6800	10.6	70			2.2		
QR3-134	7400	11.7	70			2		

## Medium/High Back Pressure Compressor R22



Condensing Temp Range  $\leq 65^{\circ}\text{C}$

Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve

To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2

\*Condensing Temp :  $45^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	NoisedB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR44	2	44	220-240V /1PH/50Hz 208-230V /1PH/60Hz	54.5°C/50Hz	5770	3	$\leq 62$	1320*	1960	2480	4300	5770	7830
QR52	2.5	52			7050	3	$\leq 64$	1610*	2370	3180	5300	7050	9200
QR58	3	58.2			7900	3.1	$\leq 65$	1820*	2720	3680	5950	7900	10300
QR62	3	62.7			8500	3.1	$\leq 65$	1950*	2890	3830	6300	8500	11450

### Application parameter

Motor data												
Model	Motor input (W)	RLA (A)	LRA (A)	Insulation Level	Revolutions rev/min	Start Winding Resistance $\Omega$ (25°C)	Run Winding Resistance $\Omega$ (25°C)	Start Capacity	Run Capacity	Start Potential Relay	Refrigerant Oil Charge (C)	Refrigerator Oil Grade
QR44	2060	10.2	65	F	$\geq 2860$	2.88	1.01	156~186 $\mu\text{F}$ /330V	35 $\mu\text{F}$ /450V	180-195V Pick Up at: 180-195V 40-105V Drop Out at: 40-105V	1500	SUNISO 3GS
QR52	2420	12.5	65			2.88	1.01					
QR58	2680	13.5	70			2.68	0.69					
QR62	2930	14.5	70			2.68	0.69					



## Medium/High Back Pressure Compressor R22



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp :45°C

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP(W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR3-44	2	44	220V/3PH /60Hz 380V/3PH /50Hz 380V/3PH /60Hz 460V/3PH /60Hz	54.5°C/50Hz	5770	2.9	$\leq 62$	1320*	1960	2480	4300	5770	7830
QR3-52	2.5	52			7050	2.9	$\leq 64$	1610*	2370	3180	5300	7050	9200
QR3-58	3	58.2			7900	3	$\leq 65$	1820*	2720	3680	5950	7900	10300
QR3-62	3	62.7			8500	3	$\leq 65$	1950*	2890	3830	6300	8500	11450
QR3-74	3.5	74.2			9860	2.9	$\leq 65$	2038*	3000	4300	7330	9860	12900
QR3-90	4	90.2			11250	2.9	$\leq 65$	1330	3100	4370	7840	11250	16000
QR3-112	5	112.5			14900	2.8	$\leq 66$	2060	4470	6130	10600	14900	20660
QR3-124	6	124.4			16640	2.8	$\leq 67$	2500	5160	6970	11860	16640	23360
QR3-134	7	134.8			17800	2.75	$\leq 69$	2800	5630	7500	12630	17800	25200

### Application parameter

Model	Motor data						Refrigerator Oil Charge $\Omega$ (25°C)	Refrigerator Oil Grade
	Motor input(W)	RLA(A)	LRA(A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QR3-44	2060	3.8	30	F	$\geq 2860$	6.8	1500	SUNISO 3GS
QR3-52	2420	4.7	30			6.8		
QR3-58	2680	5	39			4		
QR3-62	2930	5.4	39			4		
QR3-74	3660	6.7	39			3.4	2000	SUNISO 4GS
QR3-90	3980	7.3	55			3.6		
QR3-112	5250	9.6	70			2.2		
QR3-124	5860	10.6	70			2.2		
QR3-134	6300	11.7	70			2		

## Medium/High Back Pressure Parallel/Double inspiratory Compressor R404a



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp :  $45^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP(W)	NoisedB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR3-44P	2	44	220V/3PH /60Hz  380V/3PH /50Hz  380V/3PH /60Hz  460V/3PH /60Hz	54.5°C/50Hz	5977	2.9	$\leq 62$	1379*	1850	2580	4370	5977	8110
QR3-52P	2.5	52			7146	2.9	$\leq 64$	1508*	2260	3240	5400	7146	9320
QR3-58P	3	58.2			7967	3	$\leq 65$	1635*	2390	3310	5720	7967	10240
QR3-62P	3	62.7			8613	3	$\leq 65$	1998*	2970	3960	6420	8613	11540
QR3-74P	3.5	74.2			9984	2.9	$\leq 65$	3078*	2805	4296	7276	9814	13056
QR3-90P	4	90.2			11300	2.9	$\leq 65$	1510	3388	4425	7956	11300	15719
QR3-112P	5	112.5			14780	2.8	$\leq 66$	3965	4360	5890	10450	14780	20230
QR3-124P	6	124.4			16650	2.8	$\leq 67$	5146	5320	7080	11970	16650	22760
QR3-134P	7	134.8			18230	2.8	$\leq 69$	5453	5780	7710	13120	18230	24806

### Application parameter

Motor data							Refrigerator Oil Charge CC	Refrigerator Oil Grade
Model	Motor inputd(B)(W)	RLAdB(A)	LRAdB(A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QR3-44P	2300	3.8	30	F	$\geq 2860$	6.8	1500	EMKARATE RL32H
QR3-52P	2700	4.7	30			6.8		
QR3-58P	3080	5	39			4		
QR3-62P	3310	5.4	39			4		
QR3-74P	4250	6.7	39			3.4		
QR3-90P	4600	7.3	55			3.6	2000	
QR3-112P	6100	9.6	70			2.2		
QR3-124P	6800	10.6	70			2.2		
QR3-134P	7400	11.7	70			2		



**Medium/high Back Pressure Parallel/  
Double Inspiratory Compressor R22**



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp :45°C

**Performance parameter**

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	NoisedB(A) (SPL)	The Evaporating Temperature (W)					
								-25°C -12°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QR3-44P	2	44	220V/3PH /60Hz 380V/3PH /50Hz 380V/3PH /60Hz 460V/3PH /60Hz	54.5°C/50Hz	5770	2.9	$\leq 62$	1320*	1960	2480	4300	5770	7830
QR3-52P	2.5	52			7050	2.9	$\leq 64$	1610*	2370	3180	5300	7050	9200
QR3-58P	3	58.2			7900	3	$\leq 65$	1820*	2720	3680	5950	7900	10300
QR3-62P	3	62.7			8500	3	$\leq 65$	1950*	2890	3830	6300	8500	11450
QR3-74P	3.5	74.2			9860	2.9	$\leq 65$	2038*	3000	4300	7330	9860	12900
QR3-90P	4	90.2			11250	2.9	$\leq 65$	1330	3100	4370	7840	11250	16000
QR3-112P	5	112.5			14900	2.8	$\leq 66$	2060	4470	6130	10600	14900	20660
QR3-124P	6	124.4			16640	2.8	$\leq 67$	2500	5160	6970	11860	16640	23360
QR3-134P	7	134.8			17800	2.75	$\leq 69$	2800	5630	7500	12630	17800	25200

**Application parameter**

Motor data							Refrigerator Oil Charge CC	Refrigerator Oil Grade
Model	Motorinput(W)	RLA(A)	LRA(A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QR3-44P	2060	3.8	30	F	$\geq 2860$	6.8	1500	SUNISO 3GS
QR3-52P	2420	4.7	30			6.8		
QR3-58P	2680	5	39			4		
QR3-62P	2930	5.4	39			4		
QR3-74P	3660	6.7	39			3.4		
QR3-90P	3980	7.3	55			3.6	2000	SUNISO 4GS
QR3-112P	5250	9.6	70			2.2		
QR3-124P	5860	10.6	70			2.2		
QR3-134P	6300	11.7	70			2		

## Low Back Pressure Compressor R404a2



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- Compressor Internal Protectors: Internal Motor Protector and Pressure Relief Valve
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp : $50^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	NoisedB(A) (SPL)	The Evaporating Temperature (W)						
								-40°C -40°F	-35°C -31°F	-30°C -22°F	-23.3°C -9.9°F	-20°C -4°F	-10°C +14°F	0°C +32°F
QL52	2.5	52	220-240V/1PH /50Hz	54.5°C/50Hz	2180	1.5	$\leq 64$	420*	730	1310	2189	2660	4410	6100
QL62	3	62.7	208-230V/1PH /60Hz		2760	1.5	$\leq 65$	720*	1040	1728	2765	2930	5421	7900
QL3-52	2.5	52	220V/3PH/60Hz 380V/3PH/50Hz 380V/3PH/60Hz 460V/3PH/60Hz		2180	1.5	$\leq 64$	420*	730	1310	2180	2660	4410	6100
QL3-74	3.5	74.2			3135	1.5	$\leq 65$	1200*	1380	2016	3135	3796	6220	8644
QL3-112	5	112.5			4350	1.5	$\leq 66$	1407*	1743	2704	4350	5335	9038	12740
QL3-134	7	134.8			5520	1.5	$\leq 66$	2012*	2378	3540	5520	6688	11060	15430

### Application parameter

Model	Motor data						Refrigerator Oil Charge CC	Refrigerator Oil Grade
	Motor input(W)	RLA(A)	LRA(A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
Q52	1380	6.8	63	F	$\geq 2860$	6.8	1500	EMKARATE RL32H
QL62	1800	11.1	74					
QL3-52	1380	2.5	28					
QL3-74	2060	3.2	36			3.3	2000	
QL3-112	2830	5	68					
QL3-134	3620	6.3	68				2	

## Scroll Compressor R404a



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2
- \*Condensing Temp :40°C

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)					
								-20°C -4°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QRV3-114	7	114.5	380V/3PH /50Hz  460V/3PH /60Hz	54.5°C/50Hz	19300	3.15	$\leq 73$	6700*	8700*	9000	14200	19300	25800
QRV3-127	8	127.2			21600	3.15	$\leq 73$	7600*	9800*	10100	15900	21600	28700
QRV3-144	9	144.2			24600	3.17	$\leq 77$	8700*	11300*	11600	18100	24600	32700
QRV3-166	10	166.6			28600	3.18	$\leq 77$	10200*	13200*	13500	21000	28600	37800
QRV3-199	12	199			35100	3.19	$\leq 79$	11600*	15000*	15200	23700	31500	42500
QRV3-216	13	216.6			37900	3.21	$\leq 80.5$	13600*	17600*	18100	28200	37900	50300
QRV3-233	14	233			40100	3.17	$\leq 81$	14400*	18600*	19000	27800	40100	53000
QRV3-250	15	249.9			43100	3.16	$\leq 81$	15500*	20000*	20600	32000	43100	56900

### Application parameter

Motor data							Refrigerator Oil Charge CC	Refrigerator Oil Grade
Model	Motorinput (W)	RLA(A)	LRA (A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QRV3-114	6130	11.1	86	F	$\geq 2860$	1.74	3250	EMKARATE RL32H
QRV3-127	6840	12.3	98			1.48		
QRV3-144	7760	14.1	130			1.05		
QRV3-166	8980	16.4	130			1.05	3300	
QRV3-199	10990	19	145			0.94		
QRV3-216	11830	20.4	145			0.94	6600	
QRV3-233	12670	22.3	175			0.77		
QRV3-250	13620	24.1	175			0.77		

## Scroll Compressor R22/R407C



- Condensing Temp Range  $\leq 65^{\circ}\text{C}$
- To obtain refrigeration capacity at 60Hz , multiply its values at 50Hz by 1.2
- \*Condensing Temp : $40^{\circ}\text{C}$

### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	COP (W)	NoisedB(A) (SPL)	The Evaporating Temperature (W)					
								-20°C -4°F	-15°C +5°F	-10°C +14°F	0°C +32°F	+7.2°C +45°F	+15°C +59°F
QRV3-114	7	114.5	380V/3PH /50Hz  460V/3PH /60Hz	54.5°C/50Hz	20400	3.33	$\leq 70$	7100*	9300*	9200	15000	20400	26900
QRV3-127	8	127.2			23100	3.33	$\leq 70$	8500*	10900*	11200	17400	23100	30200
QRV3-144	9	144.2			25900	3.32	$\leq 75$	9500*	12200*	12700	19600	25900	33700
QRV3-166	10	166.6			30100	3.36	$\leq 75$	11100*	14300*	14600	22800	30100	38900
QRV3-199	12	199			36100	3.34	$\leq 79$	13100*	16700*	16700	25400	36100	43400
QRV3-216	13	216.6			39000	3.37	$\leq 79.5$	14700*	19600*	19600	29700	39000	50600
QRV3-233	14	233			42000	3.37	$\leq 80$	16000*	25200*	21000	32000	42000	54400
QRV3-250	15	249.9			45500	3.34	$\leq 80$	17300*	21900*	22600	34600	45500	58900

### Application parameter

Model	Motor data						Refrigerator Oil Charge CC	Refrigerator Oil Grade
	Motorinput (W)	RLA (A)	LRA (A)	Insulation Level	Revolutions rev/min	Line to Line Resistance $\Omega$ (25°C)		
QRV3-114	6120	11	86	F	$\geq 2860$	1.74	3250	SUNISO 3GS
QRV3-127	6960	12.8	98			1.48		
QRV3-144	7820	14.4	130			1.05		
QRV3-166	8960	16.5	130			1.05	3300	
QRV3-199	10800	19.2	145			0.94		
QRV3-216	11590	20.6	145			0.94	6600	
QRV3-233	12460	22.3	175			0.77		
QRV3-250	13620	24.4	175			0.77		

## Medium/High Temperature Condensing Unit R404a

- To obtain refrigeration capacity at 60Hz, multiply its values at 50Hz by 1.2



### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)							
							-25°C -12°F	-15°C +5°F	-10°C +14°F	-5°C +23°F	0°C +32°F	+5°C +41°F	+7.2°C +45°F	+15°C +59°F
QR44H	2	44	220-240V /1PH/50Hz 208-230V /1PH/60Hz	35°C/50Hz	3200	≤56	1491	2314	2910	3557	4200	4761	5322	6592
QR58H	3	58.2			5000	≤57	2224	3611	4360	5261	6163	6880	7597	9277
QR3-44H	2	44	380V/3PH/50Hz 460V/3PH/60Hz		3200	≤57	1491	2314	2910	3557	4200	4761	5332	6592
QR3-58H	3	58.2			5000	≤57	2224	3611	4360	5261	6163	6880	7597	9277
QR3-74H	3.5	74			6000	≤57	2892	4157	5137	6287	7438	8316	9194	11300
QR3-90H	4	90.2			7000	≤58	3010	4486	5569	7026	8483	9863	11244	14507
QR3-112H	5	112.5			8000	≤62	4317	5954	7607	9527	11447	12882	14317	17813
QR3-124H	6	124.4			8800	≤63	4020	6579	8566	10662	12759	14490	16221	20116
QR3-134H	7	134.8			9200	≤64	5368	7033	8739	10686	12634	14111	15589	19298

### Application parameter

Motor data							Refrigerator Oil Grade
Model	REFRIGERANT CHARGE(kg)	REFRIGERANT COOL VOLUME(m <sup>3</sup> )	REFRIGERANT EVAPORATING(m <sup>3</sup> )	PIPE(mm)	Fan Size		
QR44H	2~2.5	25	20-25	IN φ16 OUT φ10	1Ad.400mm	RL-32H	
QR58H	2.5-3.5	40	25-30		1Ad.450mm		
QR3-44H	2-2.5	25	20-25		1Ad.400mm		
QR3-58H	2.5-3.5	40	25-30		1Ad.450mm		
QR3-74H	2.5-3.5	45	35	IN φ19 OUT φ12	2Ad.450mm		
QR3-90H	3-4	50	25-35				
QR3-112H	5.5-6.5	70	30-45				
QR3-124H	6-7	80	40-48				
QR3-134H	6.5-7.5	90	40-55				
RATED CONDITION(°C)							
EVAPORATING TEMP	CONDENSING TEMP	LIQUID TEMP	AMBIENT TEMP				
-6.7	48.9	40.6	43				

## Medium/High Temperature Condensing Unit R22

- To obtain refrigeration capacity at 60Hz , multiply its values at 50Hz by 1.2



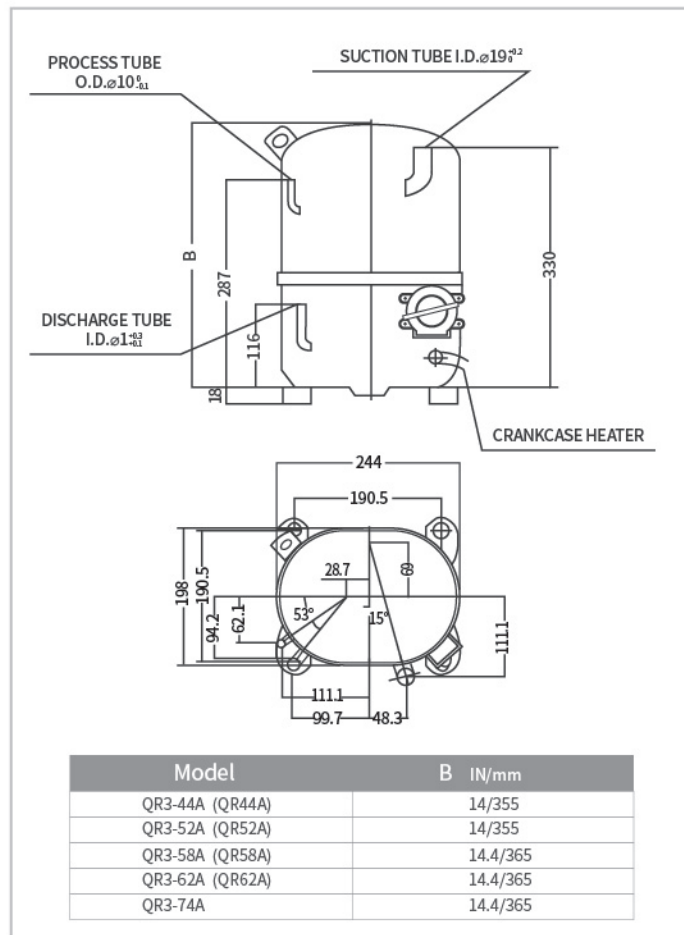
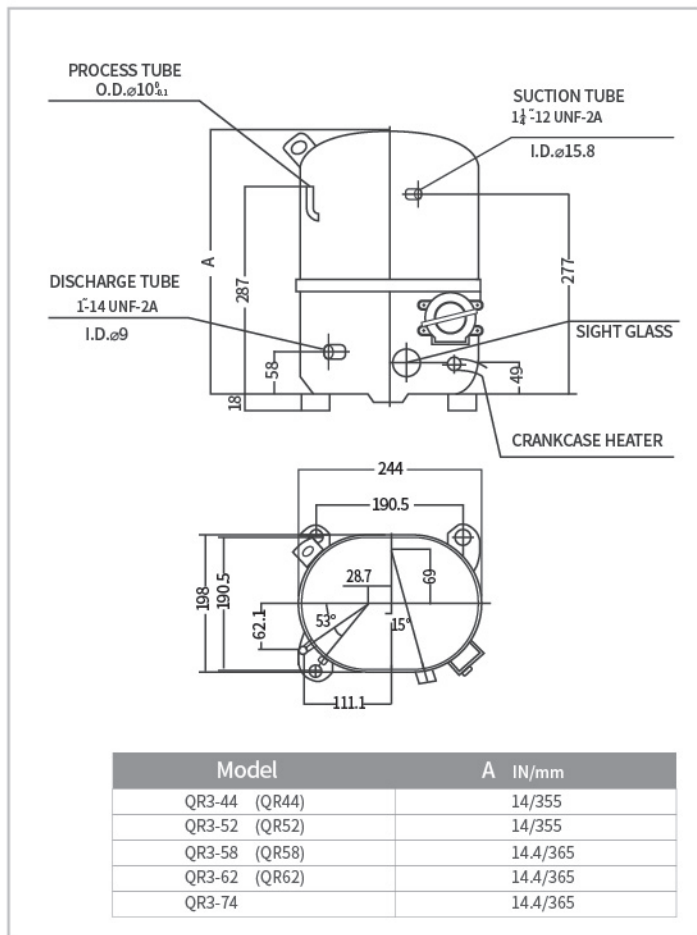
### Performance parameter

Model	Horsepower (H.P.)	Displacement (cm <sup>3</sup> )	Power source	The condensing temperature	Nominal Capacity (W)	Noise dB(A) (SPL)	The Evaporating Temperature (W)							
							-25°C -12°F	-15°C +5°F	-10°C +14°F	-5°C +23°F	0°C +32°F	+5°C +41°F	+7.2°C +45°F	+15°C +59°F
QR44H	2	44	220-240V/1PH /50Hz 208-230V/1PH /60Hz	35°C/50Hz	3200	≤56	1282	2314	2910	3536	4200	4761	5322	6592
QR58H	3	58.2			5000	≤57	1699	3051	3838	4675	5580	6880	7597	8658
QR3-44H	2	44	380V/3PH/50Hz 460V/3PH/60Hz		3200	≤57	1282	2314	2910	3536	4200	4761	5332	6592
QR3-58H	3	58.2			5000	≤57	1699	3051	3838	4675	5580	6880	7597	8658
QR3-74H	3.5	74			6000	≤57	1890	3922	4877	6060	7182	8316	9193	10720
QR3-90H	4	90.2			7000	≤58	2347	4486	5569	6998	8483	9813	11244	14507
QR3-112H	5	112.5			8000	≤62	3218	5954	7607	8997	11447	12882	14317	17813
QR3-124H	6	124.4			8800	≤63	3220	6579	8566	10664	12759	14490	16221	20116
QR3-134H	7	134.8			9200	≤64	4613	7033	8739	10543	12634	14111	15589	19298

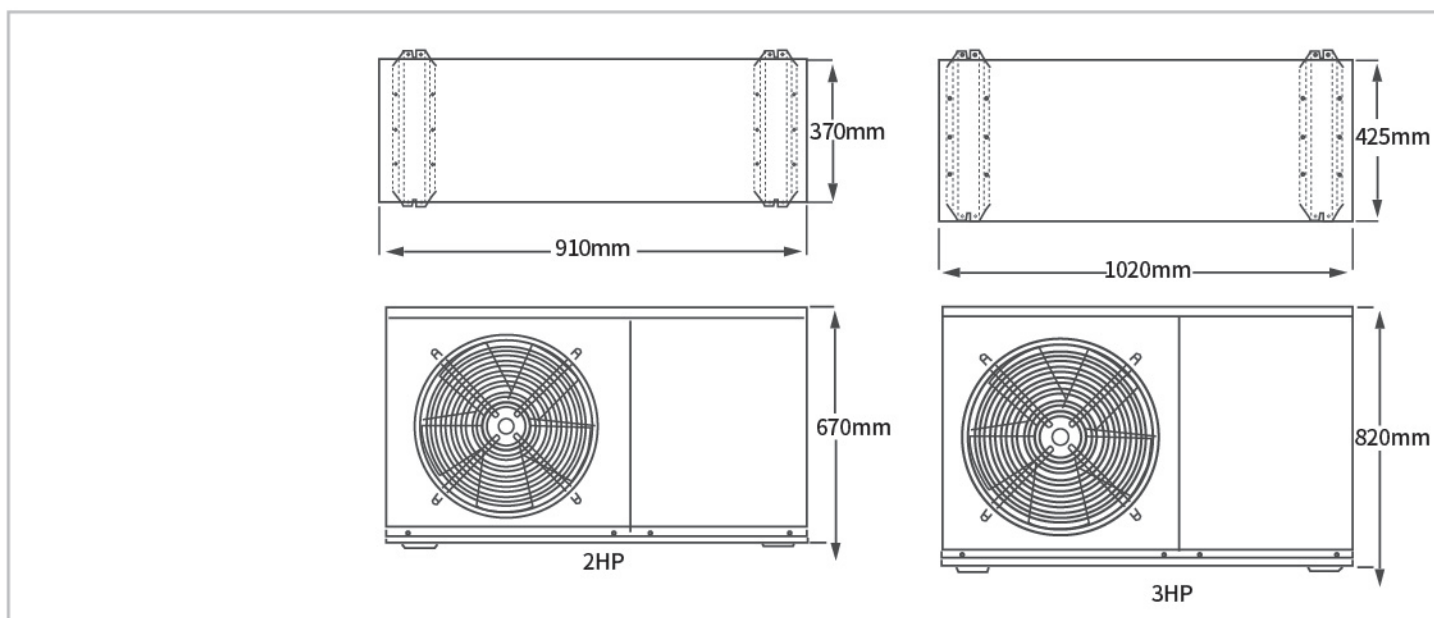
### Application parameter

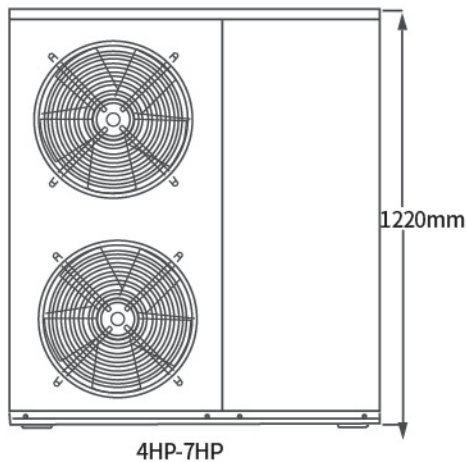
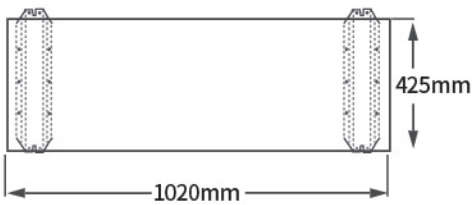
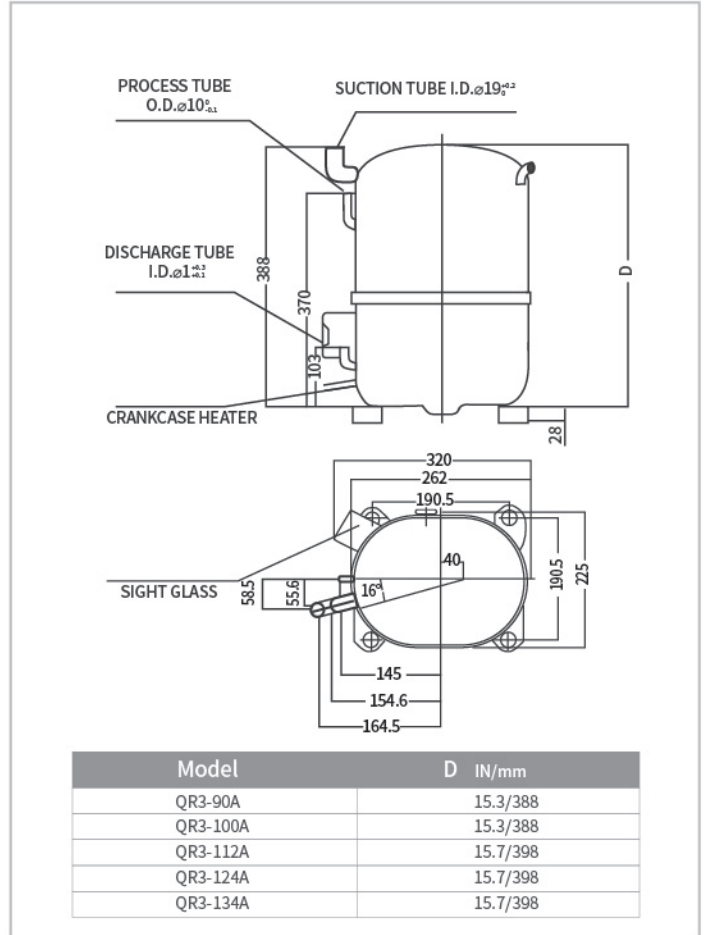
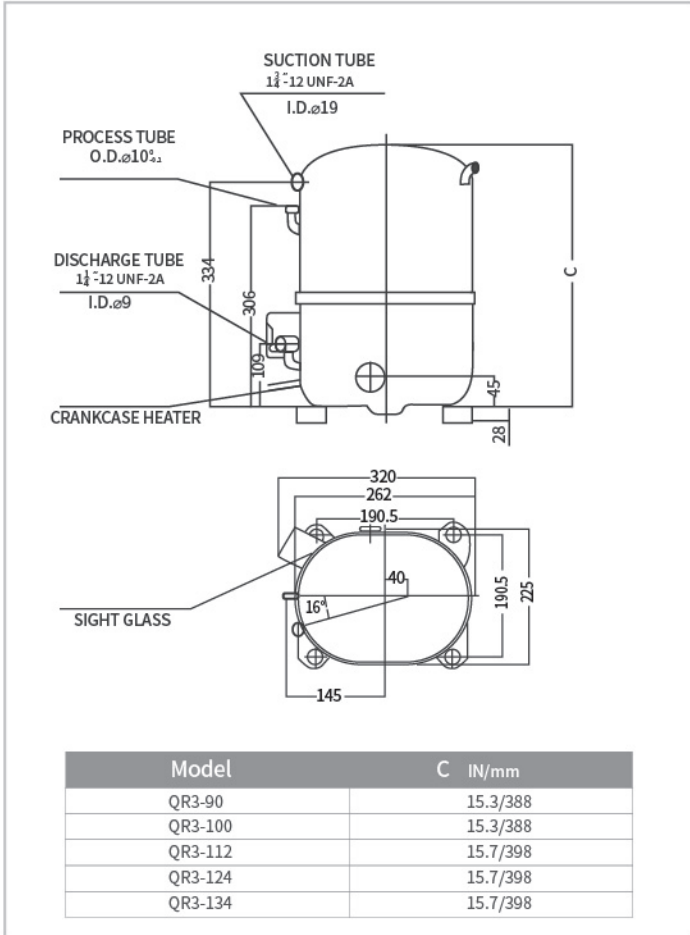
Motor data							Refrigerator Oil Grade
Model	REFRIGERANT CHARGE(kg)	REFRIGERANT COOL VOLUME(m <sup>3</sup> )	REFRIGERANT EVAPORATING(m <sup>3</sup> )	PIPE(mm)	Fan Size		
QR44H	2~2.5	25	20-25	IN φ16 OUTφ10	1Ad.400mm	SUNISO 3GS	
QR58H	2.5-3.5	40	25-30		1Ad.450mm		
QR3-44H	2-2.5	25	20-25		1Ad.400mm		
QR3-58H	2.5-3.5	40	25-30		1Ad.450mm		
QR3-74H	2.5-3.5	45	35	IN φ19 OUTφ12	2Ad.450mm		SUNISO 4GS
QR3-90H	3-4	50	25-35				
QR3-112H	5.5-6.5	70	30-45				
QR3-124H	6-7	80	40-48				
QR3-134H	6.5-7.5	90	40-55				
RATED CONDITION(°C)							
EVAPORATING TEMP	CONDENSING TEMP	LIQUID TEMP	AMBIENT TEMP				
-6.7	48.9	40.6	43				

### PISTON COMPRESSOR Dimensional Drawing

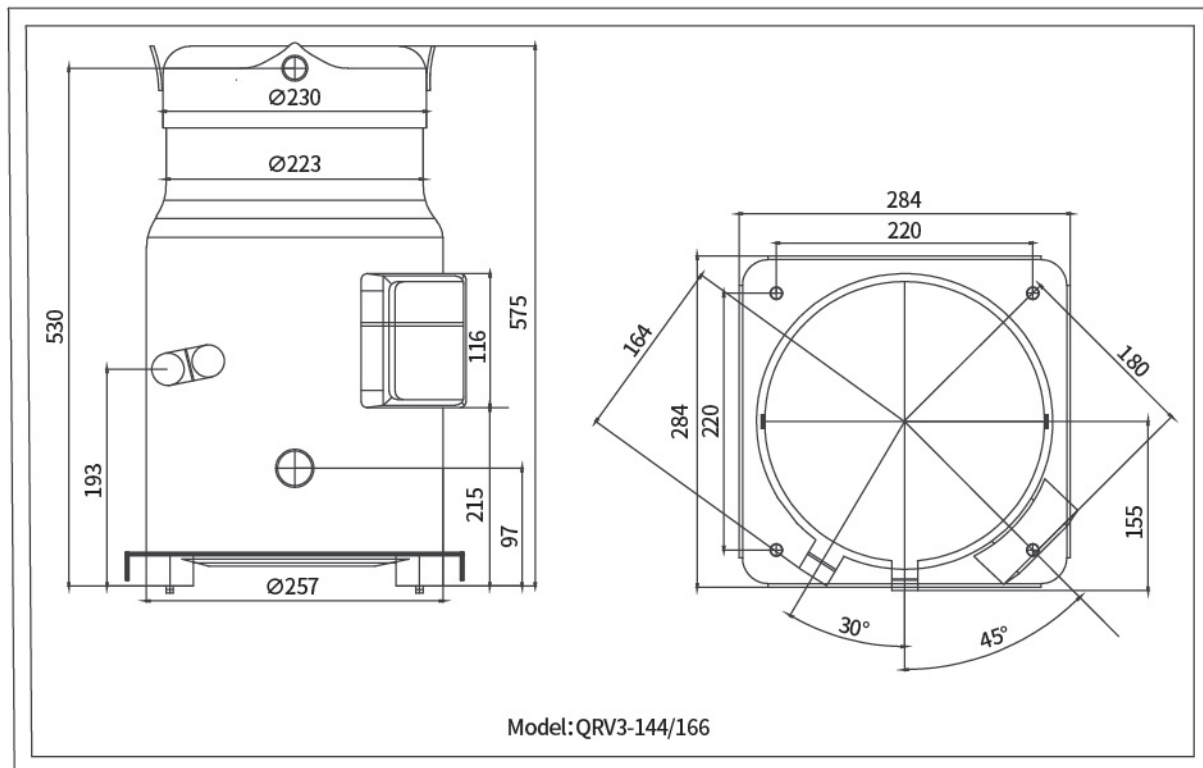
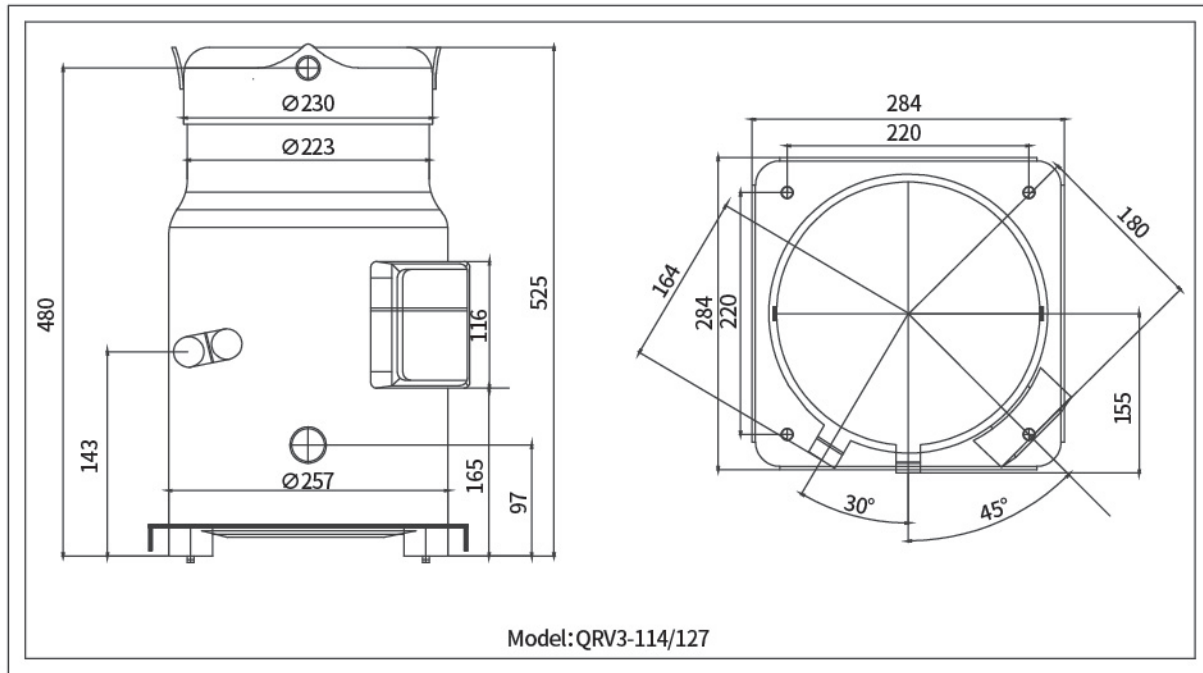


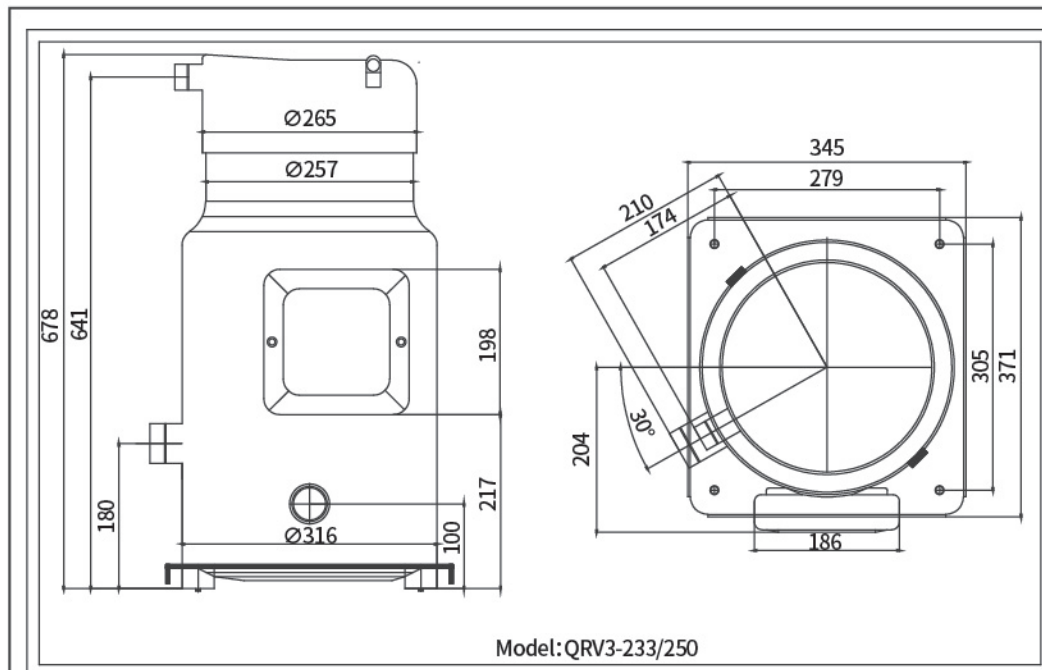
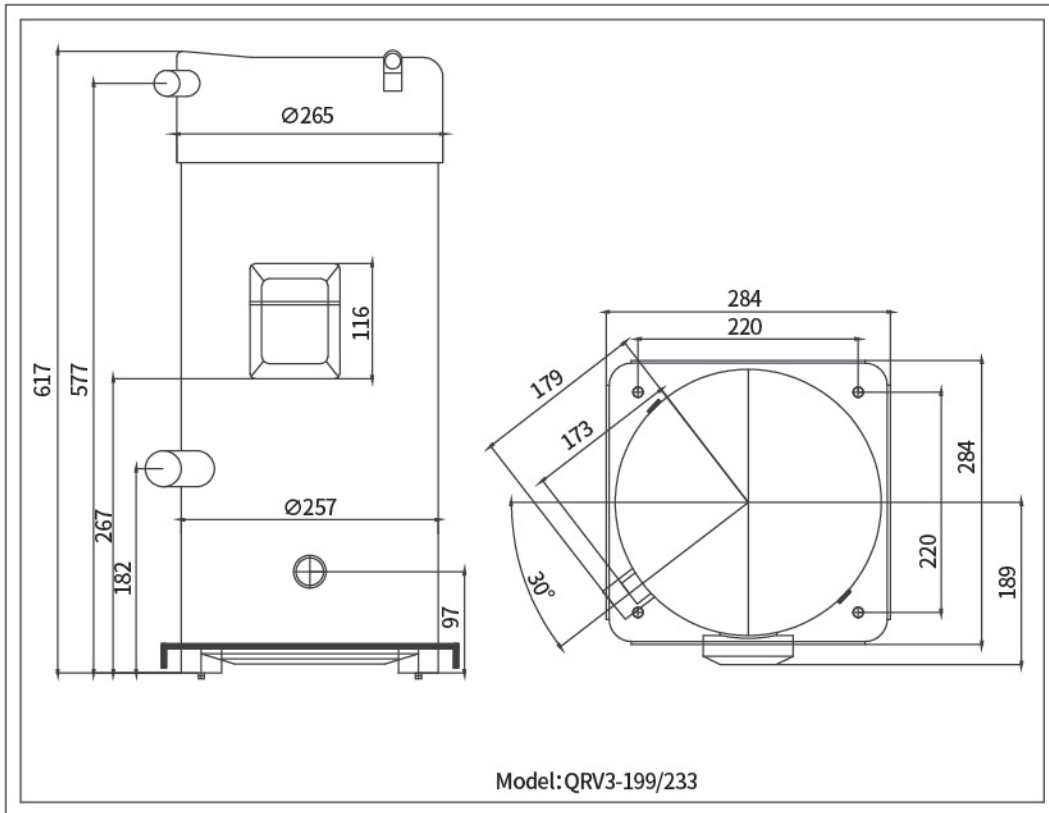
### Condensing Unit Size





**SCROLL COMPRESSOR Dimensional Drawing**



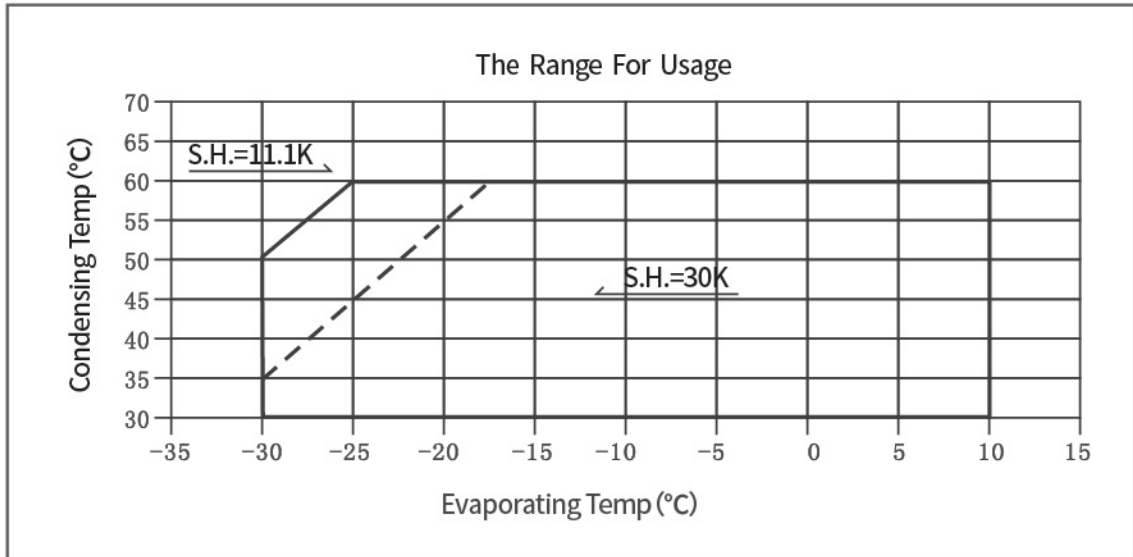




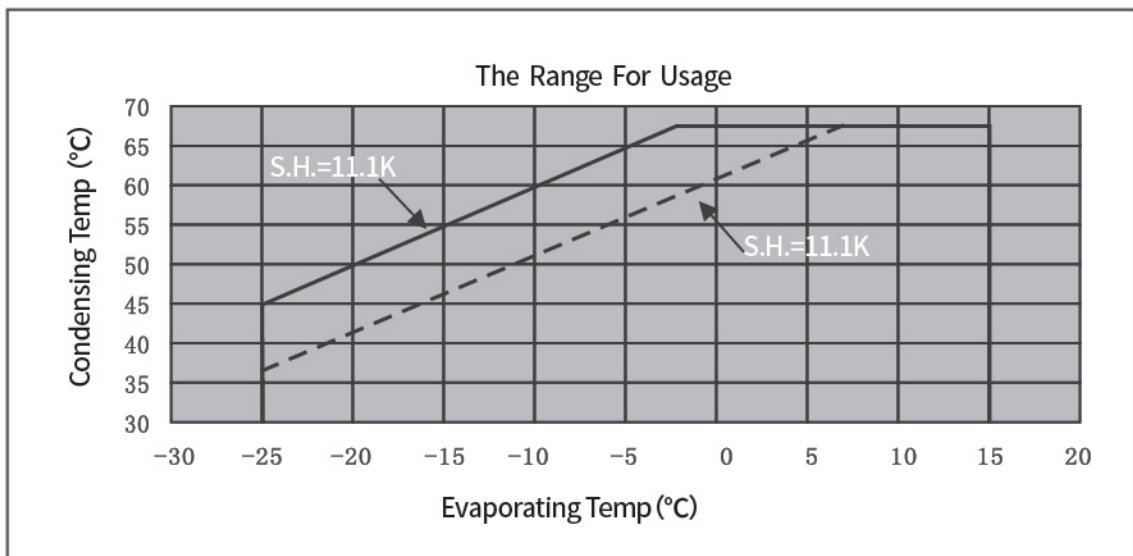
## Application Instructions

- 01 Oil has been charged in the compressor. Do not add or subtract randomly. SUNISO 3GS is only used.
- 02 DON't open the compressor plugs more than 10 minutes before use to prevent moisture from getting into the compressor.
- 03 The compressor's motor is cooled by refrigerant R404a/R22. Don't operate the compressor with or without refrigerant R404a/R22.
- 04 The compressor should not be operated while under vacuum; otherwise, internal arcing can cause damaging parts.
- 05 Three minutes shut-off time should be ensured at least until restarting.
- 06 The allowable incline should be less than 5 degrees from vertical during operation.
- 07 Max weight of refrigerant charge should be less than oil weight multiplied by 2.5.
- 08 Refrigerant should be charged from the end of condenser of refrigerating systems, never charge refrigerant to the compressor directly.
- 09 A suction accumulator is normally required for the compressor being used on medium backpressure condition. The return gas temperature must maintain 2.8°C (5 ° F) superheat above to prevent excessive liquid from entering the compressor.
- 10 Before starting the compressor, check the wiring. And the lead wires should not be touched on the surface of the compressor.

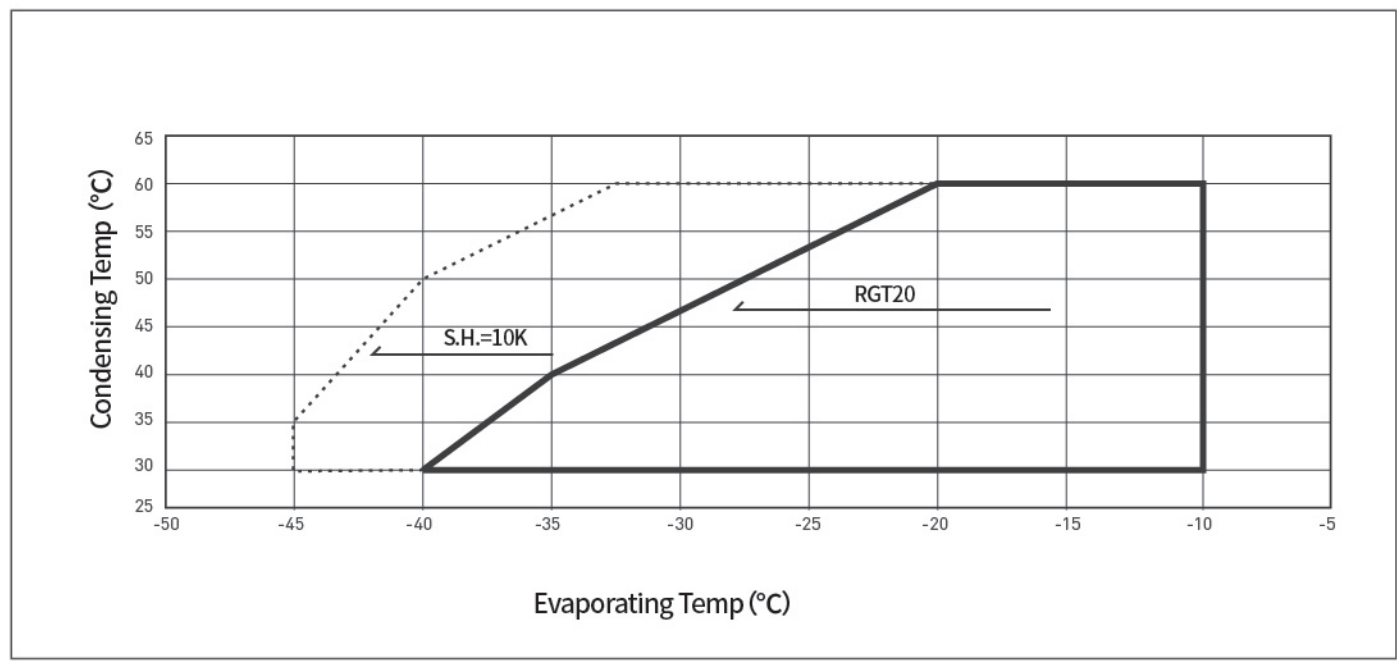
**QR MODELS Operating Conditions R404**



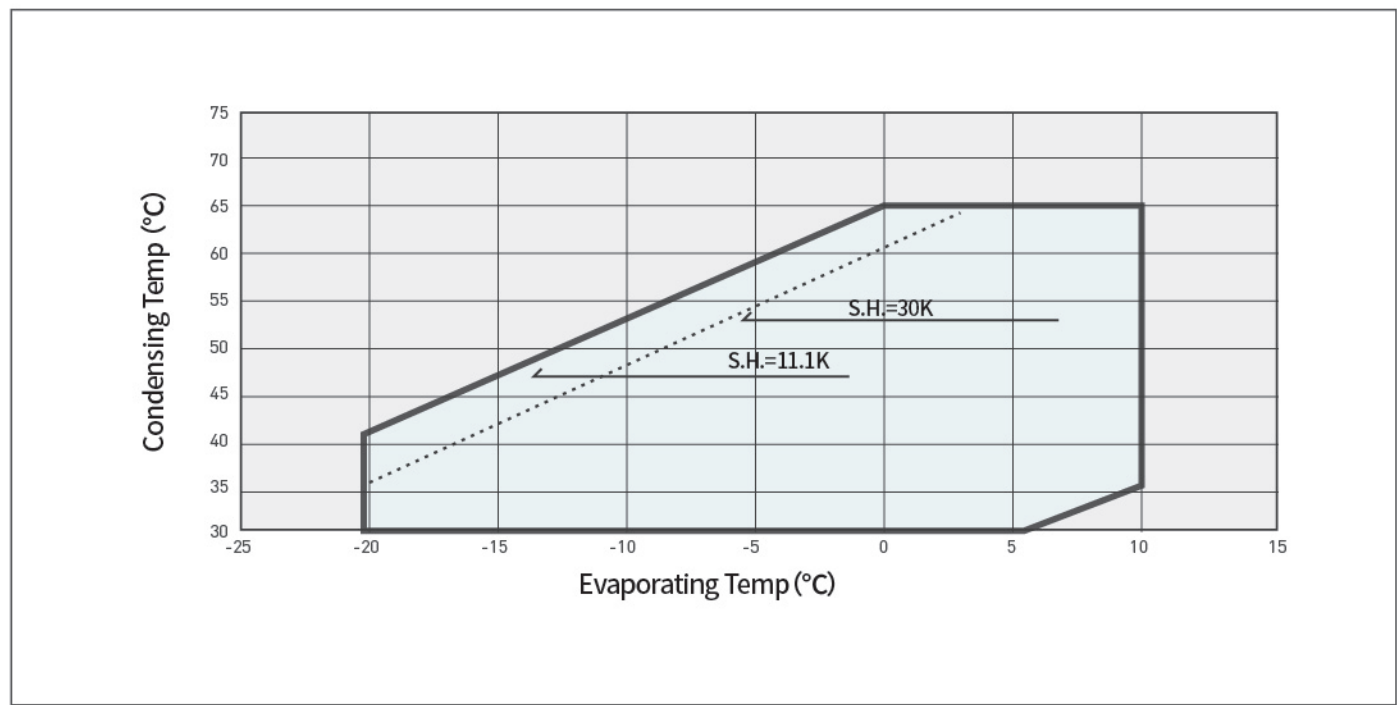
**QR MODELS Operating Conditions R22**



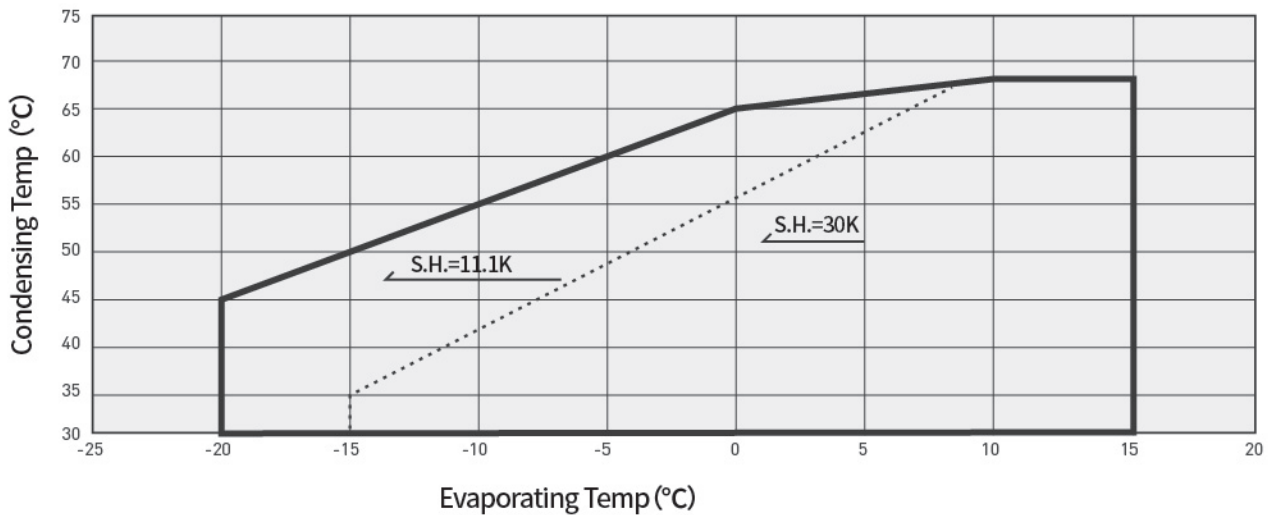
**QL MODELS Operating Conditions R404**



**QRV MODELS Operating Conditions R404**



**QRV MODELS Operating Conditions R22**

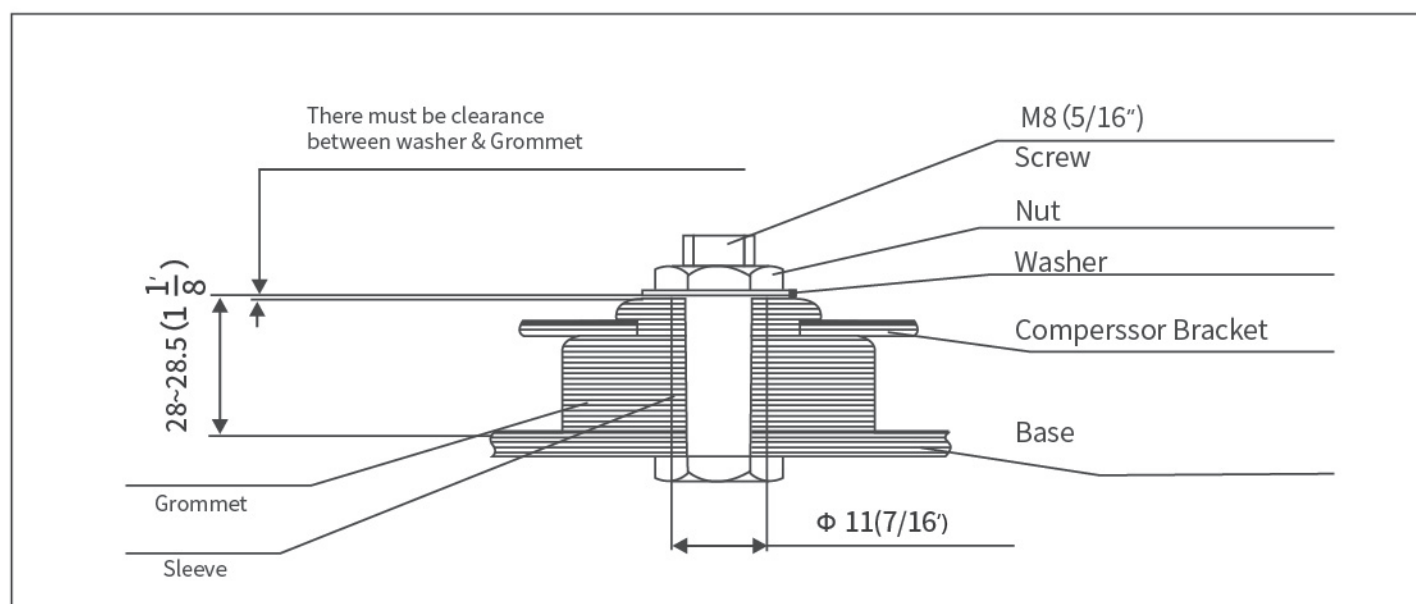


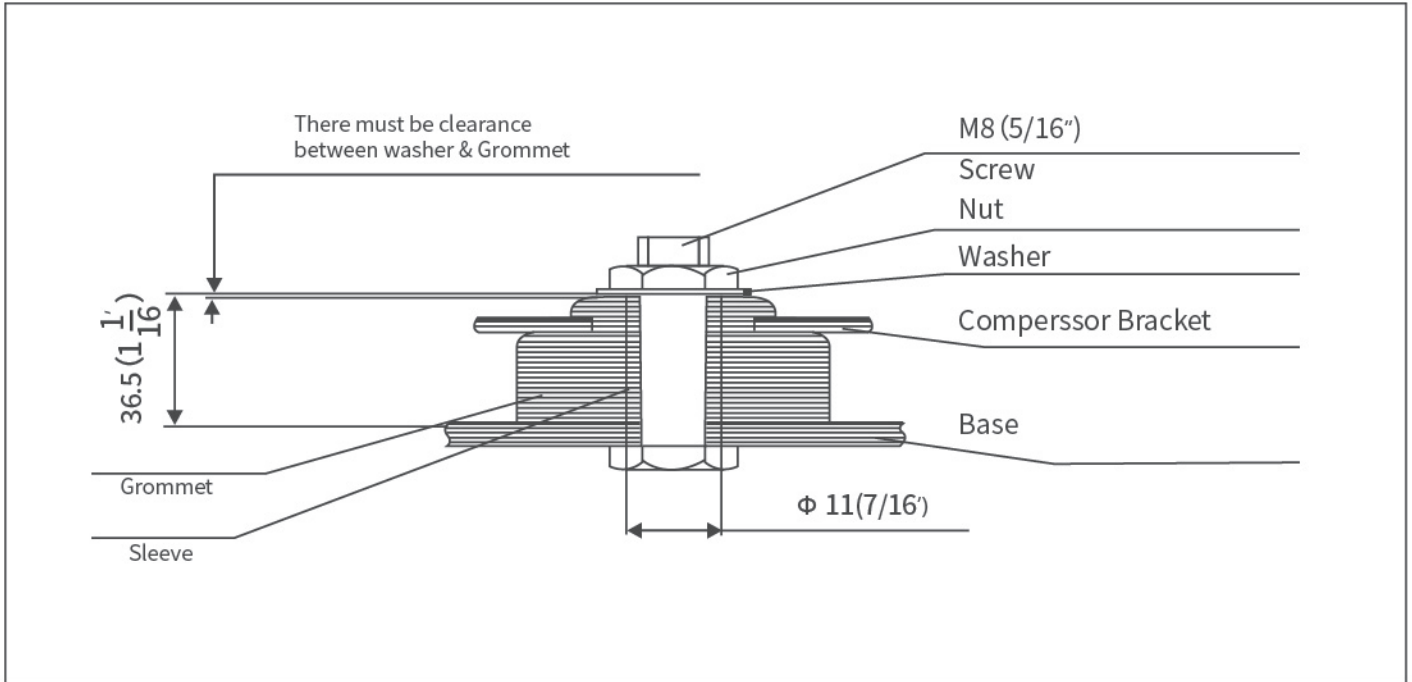
- Discharge Temperature (QR/QL):  $\leq 150^{\circ}\text{C}$   
Discharge Temperature (QRV):  $\leq 130^{\circ}\text{C}$
- Motor Wiring Temperature (QR/QL):  $\leq 130^{\circ}\text{C}$   
Motor Wiring Temperature (QRV):  $\leq 125^{\circ}\text{C}$
- Voltage Range (QR/QL) :220V/1PH/50Hz 220-240V/1PH/60Hz  
380V/3PH/50Hz 460V/3PH/60Hz  
220V/3PH/50Hz 220V/3PH/60Hz  
Voltage Range (QRV) :380V/3PH/50Hz,460V/3PH/60Hz
- Compressor Compression Ratio  
Refer to individual performance table envelope. Do not run continuously at boundaries,run only for a shot period of time at boundary conditions.

## Characteristics

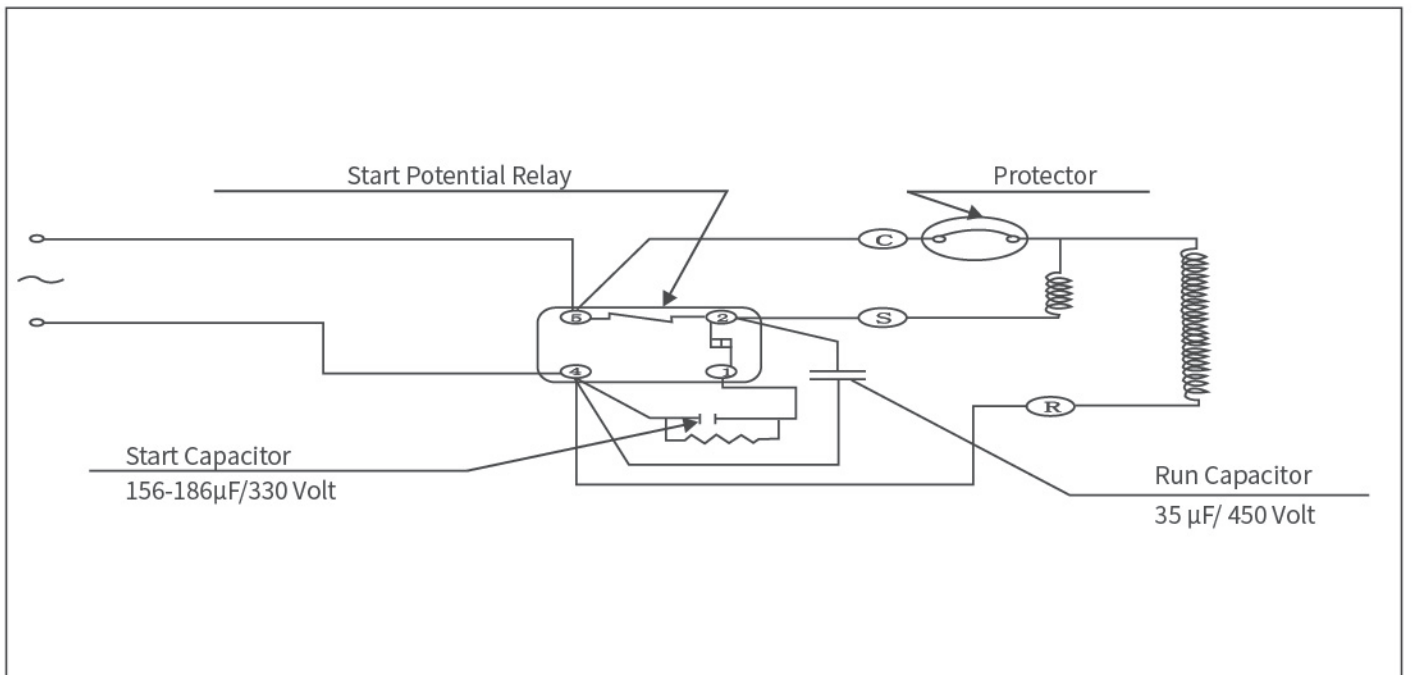
- 01** Painting: Black or blue Paint, Backed Smoothly & Firmly.
- 02** The shell of compressor shall withstand the pressure of 2.0MPa for one minute, any leakage can't occur
- 03** Insulation resistance (terminal to earth) should be more than 200MΩ.
- 04** The compressor shall withstand high potential test (1250V/1min, between terminal to earth, current limit is 5 milli-amps total).
- 05** Residual moisture should be less than 300mg, residual impurities should be less than 200mg.
- 06** Compressor internal protectors include internal motor protector and pressure relief valve, which can effectively prevent the damage to compressor, caused by leakage of refrigerant and blocked fan condition.
- 07** According to purchaser's demand, crank case heater may be supplied.

## Mount Diagram

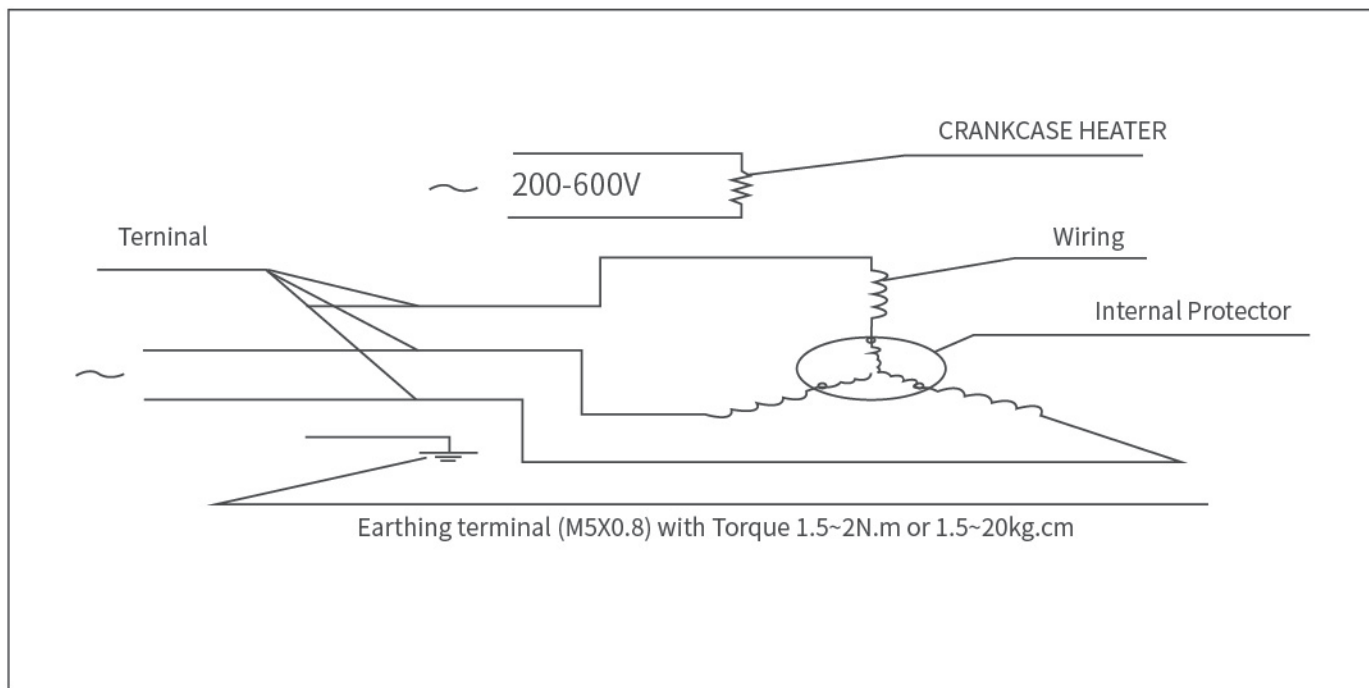




### Single-phase Compressor Wiring Diagram



### Three-phase Compressor Wiring Diagram



### Parts List

Serial number	Name	Quantity	Notes
1	Compressor	1	
2	Grommet	4	
3	Sleeve	4	
4	Qualification	1	
5	Specification	1	Needed

## Packing, transportation And Storage

- 01 The packing should be moisture-resistant, and prevent the compressor in it being damaged. The letters and marks on the package should be clearly painted.
- 02 Don' t incline the compressor more than 45°.
- 03 The compressor should be kept in the place with normal room temperature , and should be kept out of corrosive atmosphere.

## Tables

- RATING CONDITION

Evaporating Temp	Condensing Temp	Return Gas Temp	Liquid Temp	Ambient Temp
7.2	54.4	18.3	46.1	35

- UNITS CONVERSION CHART

### UNITS CONVERSION CHART

1KCAL/H=1.163 WATTS

1BTU/H=0.293 WATTS

$t^{\circ}F=9/5Xt^{\circ}C+32$

1INCHE(IN)=25.4MILLIMETERS (mm)

Piston  
compressor

Scroll  
compressor

Hermetic  
condensing unit



## ZHEJIANG ANKANG REFRIGERATION EQUIPMENT Co.,LTD.

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