

More sustainable power that's eco-friendly
imagination lives



INTRODUCTION

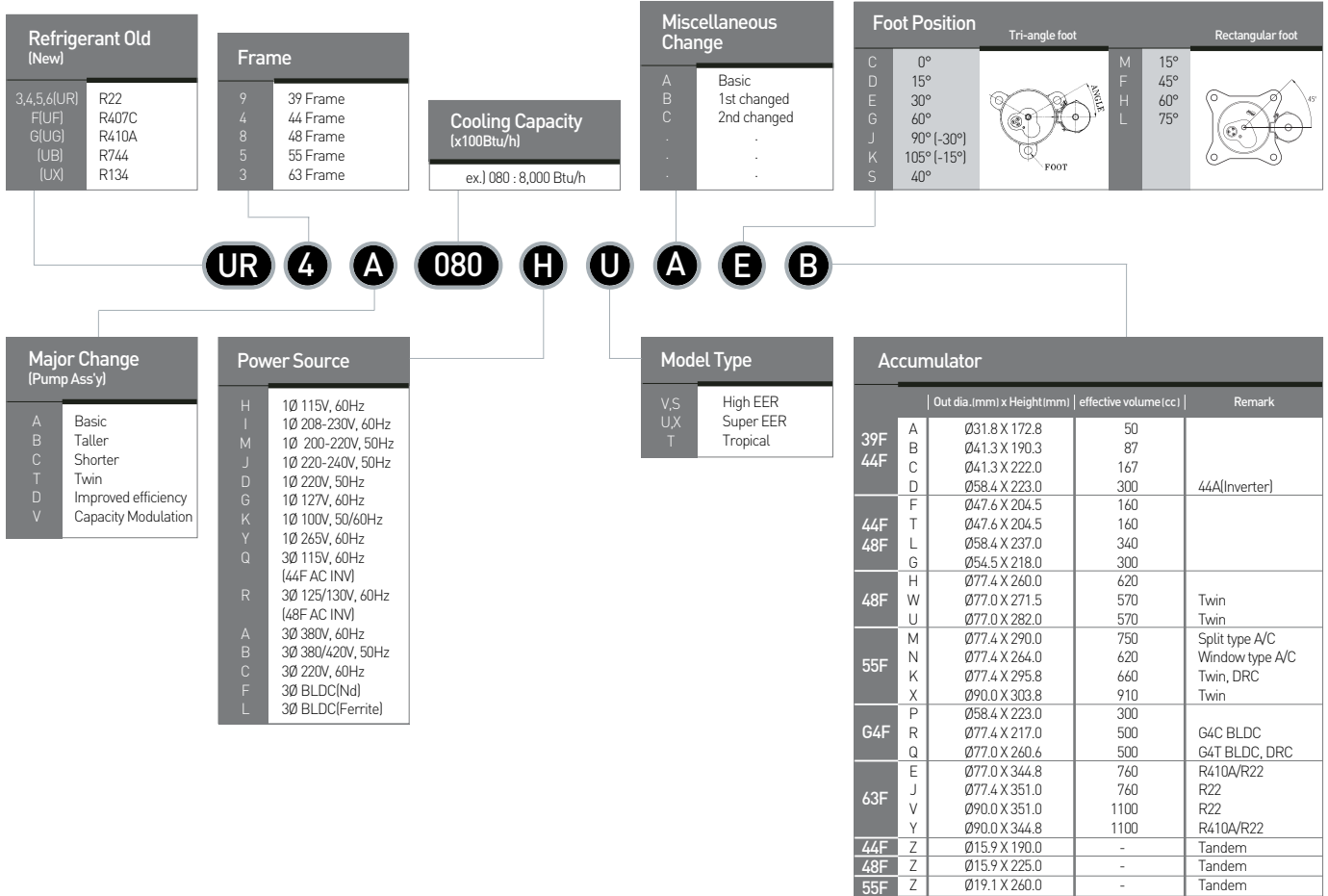
Brief Hisotry

1990	Established rotary compressor plant in Suwon Korea
1993	Approved and registered by ISO 9001
1995	Developed AC inverter compressors
1996	Approved and registered by ISO 14000
1997	Developed R407C compressors / Developed Super EER 44 frame compressors
2001	Developed R410A compressors and large volume 55 frame compressors Accomplished accumulated production 10 millions
2002	Developed single vane BLDC compressors, small volume 39 frame compressors
2003	Started production in Suzhou, China
2004	Developed twin vane BLDC and extra-large volume 63 frame compressors
2005	Increased production capacity to 7 millions
2006	Moved all Korean Line to Suzhou, China / Accomplished accumulated production 30 millions
2007	Increased production capacity to 8 millions
2008	Sine-Wave control BLDC full line up
2009	Developing environmental friendly products of CO ₂ BLDC

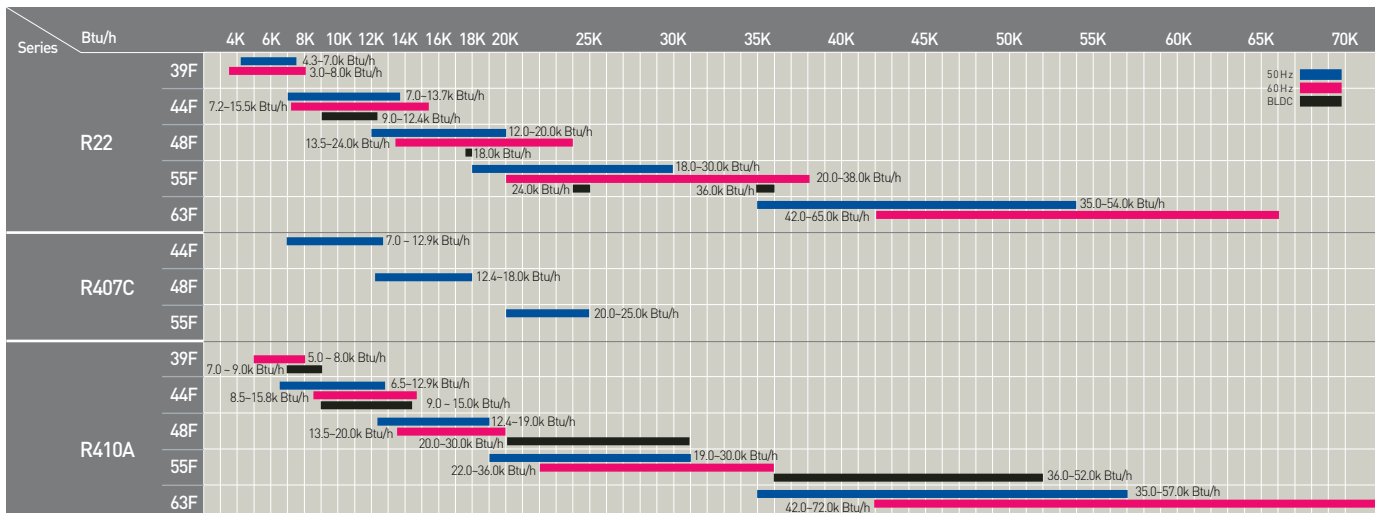
Full Line Up



Model Identification



products range



* Tested under ASHRAE-T condition

SPECIFICATIONS

R22 Compressor (60Hz)													
Ref.	Power Source	Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development ● Mass production ○ Under develop	
			cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg			
R22	60 Hz	1Ø 115V	UR9A030HV	4.4	3,000	879	9.8	2.87	306	210	6.5	1	●
			UR9A050HV	7.3	5,000	1,465	9.6	2.82	520	210	6.5	1	●
			UR9B068HV	9.6	6,600	1,934	10.0	2.93	660	230	7.7	7	●
			UR9A050HS	7.3	5,050	1,480	10.5	3.08	481	210	7.2	2	●
			UR9C052HS	7.6	5,300	1,553	10.9	3.20	485	210	7.2	13	●
			UR9A052HS	7.6	5,300	1,553	10.8	3.16	491	210	7.6	5	●
			UR9A056HS	8.1	5,780	1,694	10.7	3.14	540	210	7.8	5	●
			UR9A060HS	8.7	6,000	1,758	10.5	3.08	571	210	7.4	3	●
			UR9A062HS	9.0	6,300	1,846	10.7	3.13	589	210	7.8	5	●
			UR9B072HS	10.2	7,050	2,066	10.6	3.11	665	230	7.9	9	●
			UR9B076HS	10.8	7,500	2,198	10.6	3.10	708	230	8.2	10	●
			UR9B078HS	11.0	7,700	2,257	10.6	3.10	727	230	8.2	10	●
			UR9B080HS	11.3	8,000	2,345	10.6	3.11	755	230	8.2	10	●
			UR4A092HU	13.2	9,350	2,740	10.7	3.14	874	300	10.5	2	●
			UR4A098HU	14.1	10,100	2,960	10.8	3.17	935	300	10.7	5	●
			UR4B110HX	16.1	11,450	3,356	10.7	3.14	1,070	340	11.6	11	●
			UR4B117HX	16.6	11,900	3,488	10.7	3.14	1,112	340	11.6	11,13	●
		UR4B124HX	17.6	12,650	3,707	10.7	3.14	1,182	340	11.6	11,12	●	
		UR4B135HX	18.7	13,400	3,927	10.6	3.11	1,264	340	12.2	15	●	
		UR9A052IS	7.5	5,300	1,553	10.6	3.11	500	210	7.4	3,4	●	
		UR9B068IS	9.6	6,700	1,964	10.7	3.14	626	230	8.3	11	●	
		UR9B072IS	10.2	7,050	2,066	10.7	3.14	659	230	8.3	11	●	
		UR9B080IS	11.3	8,000	2,345	10.7	3.13	748	230	8.3	10	●	
		UR4A080IU	11.5	8,200	2,403	11.0	3.23	745	300	10.8	6,7	●	
		UR4A085IU	12.2	8,600	2,520	10.8	3.17	796	300	10.1	1	●	
		UR4A092IU	13.2	9,350	2,740	10.7	3.14	874	300	10.5	2,4	●	
		UR4A098IU	14.1	10,150	2,975	11.0	3.22	923	300	10.7	5,6,7	●	
		UR4A102IU	15.0	10,850	3,180	10.8	3.16	1,005	300	10.7	5,6,7	●	
		UR4B110IX	16.1	11,560	3,388	10.8	3.17	1,070	340	11.6	11	●	
		UR4B117IX	16.6	11,900	3,488	10.7	3.14	1,112	340	11.6	11,13	●	
		UR4B124IX	17.6	12,650	3,707	11.0	3.22	1,150	340	11.6	15,16	●	
		UR4B135IX	18.7	13,400	3,927	10.5	3.08	1,276	340	11.6	11,13,14	●	
		UR4D140IX	19.8	14,300	4,191	10.8	3.17	1,324	450	13.0	21	●	
		UR4D155IX	21.7	15,500	4,543	10.6	3.11	1,462	450	13.0	21,22	●	
	UR8C135IU	19.0	13,500	3,956	11.0	3.22	1,227	540	14.8	9	●		
	UR8C172IU	23.9	17,300	5,070	11.0	3.22	1,573	540	14.8	10	●		
	UR8D135IU	19.0	13,500	3,956	11.0	3.22	1,227	550	14.8	1	●		
	UR8D155IU	21.7	15,500	4,543	11.0	3.22	1,409	550	15.4	2,4	●		
	UR8D165IU	23.0	16,500	4,836	11.0	3.22	1,500	550	15.4	3	●		
	UR8D172IU	24.0	17,200	5,041	11.0	3.22	1,564	550	15.4	3	●		
	UR8D180IU	25.0	18,000	5,275	10.8	3.16	1,667	550	15.4	3,4	●		
	UR8D185IU	25.8	18,560	5,439	10.8	3.16	1,719	550	15.4	3	●		
	UR8D190IU	26.6	19,200	5,627	11.0	3.22	1,745	500	15.8	5,6	●		
	UR8D200IU	27.8	20,200	5,920	10.8	3.17	1,870	550	15.6	3	●		
	UR5A220IU	30.6	22,400	6,565	11.0	3.23	2,035	750	19.2/19.9	3,4	●		
	UR5A230IU	32.3	23,500	6,887	11.0	3.22	2,140	750	19.9	3	●		
UR5A240IU	33.4	24,500	7,180	11.0	3.23	2,220	500/750	19.2/19.5/19.9	2,3,4	●			
UR5A260IU	36.2	26,700	7,825	11.0	3.22	2,430	750	19.9	3	●			
UR5A280IU	39.0	29,500	8,646	11.0	3.23	2,680	800	22.1	6,7	●			
UR5A300IU	41.8	31,500	9,232	10.9	3.19	2,890	550/800	21.8/22.1	5,6	●			
UR5T360IU	49.4	36,500	10,697	10.9	3.19	3,349	900	24.6	12	●			
UR5A220AU	30.6	22,300	6,535	10.8	3.17	2,060	750	19.5	9	●			
UR5A300AU	41.8	30,100	8,821	10.5	3.07	2,870	800	20.5	10	●			
	3Ø / 380V												

SPECIFICATIONS

R22 Compressor (50Hz)													
Ref.	Power Source	Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development	
			cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		● Mass production	○ Under develop
R22	50 Hz	1Ø 200V~220V	UR9A052MS	9.0	5,200	1,524	10.1	2.96	515	210	7.6	6	●
			UR4A070MU	12.2	7,150	2,095	10.5	3.08	681	280	10.1	1	●
			UR4B098MX	16.6	9,800	2,872	10.6	3.10	925	360	11.6	12,13	●
			UR4B110MX	18.7	10,950	3,209	10.2	2.99	1,073	360	12.2	15	●
			UR4D129MX	21.7	12,730	3,731	10.5	3.08	1,212	380	13.0	20	●
			UR5A250MU	41.8	25,400	7,444	10.8	3.17	2,350	800	22.1	6	●
			UR5T285MU	47.4	29,000	8,499	10.8	3.17	2,685	1,100	24.6	12	○
		1Ø 220V~240V	UR9A052JS	9.0	5,200	1,524	10.2	2.99	510	210	7.5	5	●
			UR9B066JS	11.3	6,500	1,905	10.3	3.02	631	230	8.6	10	●
			UR4A070JU	12.2	7,100	2,081	10.6	3.11	670	300	10.1	1	●
			UR4A080JU	14.1	8,200	2,403	10.4	3.05	788	300	10.5	3	●
			UR4B092JX	16.1	9,400	2,755	10.5	3.08	895	340	11.6	9,10	●
			UR4B102JX	17.6	10,350	3,033	10.3	3.02	1,005	340	11.6	13	●
			UR4D124JX	21.0	12,400	3,634	10.4	3.05	1,192	380	13.0	20	●
			UR4D129JX	21.7	12,800	3,751	10.4	3.05	1,230	380	13.0	20	●
			UR8B180JU	30.4	18,000	5,275	10.3	3.02	1,748	550	15.8	7	●
			UR5A180JU	30.6	18,000	5,275	11.0	3.23	1,635	750	19.9	3	●
			UR5A250JU	41.8	25,400	7,444	10.8	3.17	2,350	550/800	21.3/22.1	5,6	●
		1Ø 220V	UR9A046DS	8.1	4,640	1,360	10.2	2.99	455	210	7.6	4	●
			UR9B066DS	11.3	6,400	1,876	9.5	2.78	674	230	8.4	8	●
			UR4A080DU	14.1	8,230	2,412	10.5	3.08	784	300	10.5	3	●
			UR4A080DUB	14.1	8,300	2,432	11.0	3.22	755	300	11.0	26	●
			UR4A085DU	15.0	8,900	2,608	10.7	3.14	832	300	10.7	6	●
			UR4A085DUB	15.0	8,800	2,579	11.0	3.22	800	300	11.0	26	●
			UR4B092DX	16.1	9,380	2,749	10.8	3.17	868	340	12.2	15	●
			UR4B092DXC	15.9	9,400	2,755	11.0	3.22	855	340	12.1	15	●
			UR4B098DX	16.6	9,700	2,843	10.6	3.11	915	340	11.6	13	●
			UR4B102DX	17.6	10,300	3,019	10.8	3.16	954	340	12.2	15	●
			UR4B110DX	18.7	11,150	3,268	11.0	3.22	1,015	400	13.0	17	●
			UR4D115DX	19.8	11,500	3,370	10.7	3.14	1,075	380	13.0	20	●
			UR4D124DX	21.0	12,400	3,634	10.7	3.14	1,159	450	13.0	22	●
			UR4D129DX	21.7	12,700	3,722	10.6	3.10	1,200	380	13.0	20	●
			UR4D132DX	22.4	13,000	3,810	10.7	3.14	1,215	450	12.5	21	●
			UR4D137DX	23.6	13,700	4,015	10.6	3.11	1,292	450	12.7	22	●
			UR8C124DUA	21.0	12,300	3,605	10.8	3.16	1,139	540	14.8	10	●
			UR8C124DUB	21.0	12,320	3,611	11.0	3.22	1,120	540	15.4	11	●
			UR8C129DU	21.7	12,900	3,781	11.2	3.28	1,152	540	15.4	12	●
			UR8D129DU	21.7	12,800	3,751	11.0	3.22	1,164	550	15.9	5	●
			UR8D137DU	23.0	13,700	4,015	11.0	3.22	1,246	550	15.4	3	●
			UR8D158DU	26.6	15,800	4,631	10.8	3.17	1,463	550	15.4	3	●
			UR8B180DU	30.4	18,100	5,305	10.5	3.08	1,724	550	16.4	8	●
			UR8B200DU	32.4	19,400	5,686	10.5	3.08	1,848	550	16.4	8	●
UR5A215DU	36.2		21,800	6,389	10.8	3.16	2,020	750	19.9	3	●		
UR5A250DT	41.8		25,300	7,415	10.0	2.93	2,530	800	21.7	6	●		
UR5T275DU	45.2		27,500	8,059	10.9	3.20	2,515	1,000	24.6	12	○		

SPECIFICATIONS

R410A Compressor													
Ref.	Power Source		Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
				cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		● Mass production ○ Under develop
R410A	60 Hz	1Ø 115V	UG9C052HS	5.0	5,200	1,524	10.2	2.99	510	210	7.5	14	●
			UG9C060HS	5.8	6,000	1,758	10.2	2.99	589	210	7.5	14	●
			UG9C076HS	7.3	7,600	2,227	10.1	2.95	755	210	7.8	15	●
			UG9C080HS	7.6	8,000	2,345	10.1	2.95	795	210	7.8	15	●
			UG4A098HU	9.7	9,800	2,872	10.3	3.02	951	300	10.7	25	●
			UG4A110HU	10.9	11,500	3,370	10.1	2.96	1,140	300	10.8	25	●
			UG4A124HU	11.5	12,200	3,575	10.5	3.08	1,160	300	10.8	25	●
		UG4B135HX	13.2	13,500	3,956	10.1	2.95	1,340	340	12.2	28	○	
		UG9C067IS	6.6	6,700	1,964	10.1	2.95	665	210	7.8	15	●	
		UG9C080IS	7.6	8,000	2,345	10.1	2.97	790	210	7.8	15	●	
		UG4C085IU	8.0	8,340	2,444	10.4	3.04	803	260	10.5	24	●	
		UG4A098IU	9.7	9,800	2,872	10.3	3.02	951	300	10.7	25	●	
		UG4A102IU	10.3	10,900	3,194	10.4	3.05	1,048	300	10.8	26	●	
		UG4A110IU	10.9	11,600	3,400	10.6	3.10	1,095	300	10.8	26	●	
		UG4B135IX	13.2	13,500	3,956	10.1	2.95	1,340	340	12.2	28	○	
		UG8C155IU	15.2	15,800	4,631	10.4	3.05	1,519	540	15.4	16	●	
		UG8C180IU	17.6	18,500	5,422	10.4	3.05	1,779	540	15.4	16	●	
		UG8C200IU	19.0	20,000	5,861	10.2	2.99	1,960	540	15.4	16	●	
		UG5A220IU	21.5	22,400	6,565	10.2	2.99	2,196	750	19.9	15	●	
		UG5A240IU	23.4	24,500	7,180	10.2	2.99	2,402	750	19.9	15	●	
		UG5A260IU	25.4	26,500	7,766	10.2	2.99	2,598	750	19.9	15	●	
	UG5A280IU	27.2	28,500	8,353	10.2	2.99	2,794	750	19.9	15	●		
	UG5A300IU	29.3	30,500	8,939	10.2	2.99	2,990	750	19.9	15	●		
	UG5T360IU	36.1	37,000	10,844	10.2	2.99	3,627	900	20.0	11	○		
	UG9C060YS	5.8	6,000	1,758	10.1	2.96	594	210	7.5	14	●		
	UG9C067YS	6.6	6,700	1,964	10.0	2.93	670	210	7.8	15	●		
	UG9C080YS	7.6	8,000	2,345	10.0	2.93	800	210	7.8	15	●		
	UG4C085YU	8.0	8,200	2,403	10.3	3.02	796	260	10.7	26	●		
	UG4A110YU	10.9	11,450	3,356	10.5	3.08	1,090	300	10.8	26	●		
	UG4B135YX	14.1	13,550	3,971	10.8	3.16	1,255	340	12.1	15	●		
	UG4B147YX	15.0	14,700	4,308	10.3	3.01	1,430	340	12.1	15	○		
	UG4C065JU	8.0	6,800	1,993	10.0	2.93	680	260	10.2	23	●		
	UG4A080JU	9.7	8,350	2,447	10.0	2.93	835	300	10.8	25	●		
UG4A086JU	10.3	8,800	2,579	10.0	2.93	880	300	10.8	25	●			
UG4A091JU	10.9	9,300	2,726	10.0	2.93	930	300	10.8	26	●			
UG4A097JU	11.5	9,850	2,887	10.0	2.93	985	300	10.8	26	●			
UG4B124JX	14.1	12,200	3,575	9.8	2.87	1,245	340	11.6	27	●			
UG4B129JX	15.0	13,000	3,810	9.9	2.90	1,315	340	12.6	28	●			
UG8D180JU	21.7	18,300	5,363	10.0	2.93	1,830	550	15.8	17	●			
UG8D185JU	21.7	18,900	5,539	9.8	2.87	1,928	550	15.8	17	●			
UG8D190JU	23.0	20,000	5,861	9.9	2.89	2,030	550	16.0	17	●			
UG5A240JU	29.3	24,100	7,063	9.8	2.86	2,470	750	19.9	14	●			

R407C Compressor													
Ref.	Power Source		Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
				cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		● Mass production ○ Under develop
R407C	50 Hz	1Ø 220V~240V	UF4A070JU	12.2	7,100	2,081	10.6	3.11	670	300	10.1	1	●
			UF4B092JX	16.1	9,400	2,755	10.3	3.02	913	340	11.3	10	●
			UF4D129JX	21.7	12,800	3,751	10.4	3.05	1,231	380	12.4	19	●
			UF8B180JU	30.4	17,600	5,158	10.0	2.92	1,768	600	16.0	7	●
			UF5A200JU	33.4	19,300	5,656	10.6	3.11	1,820	800	22.1	3	●
			UF5A250JU	41.8	24,200	7,092	10.4	3.05	2,325	800	22.1	6	●

SPECIFICATIONS

Tropical Compressor (UTR - Ultra Tropical Rotary)

Ref.	Power Source		Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development ● Mass production ○ Under develop
				cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		
R22	60 Hz	1φ 208V~230V	UR4B124IT	17.6	12,650	3,707	10.3	3.02	1,228	360	11.6	13	●
			UR4B135IT	18.7	13,500	3,956	10.3	3.02	1,310	360	11.6	15	●
			UR8D190IT	26.6	19,300	5,656	10.6	3.11	1,820	550	15.4	3	●
			UR5A240IT	33.4	24,800	7,268	10.8	3.17	2,295	500/750	19.5/19.9	2,3	●
			UR5A260IT	36.2	27,500	8,059	10.3	3.02	2,670	750	19.9	3	●
			UR5A300IT	41.8	31,700	9,290	10.0	2.93	3,170	800	22.1	6	●
			UR5T340IT	47.4	35,500	10,404	10.7	3.14	3,318	1,000	24.0	12	○
	50 Hz	1φ 220V~240V	UR4B092JT	16.1	9,300	2,726	10.0	2.93	930	360	11.6	13	●
			UR4D124JT	21.0	12,400	3,634	9.7	2.84	1,278	380	13.0	20	●
			UR4D129JT	21.7	12,800	3,751	9.6	2.81	1,333	380	13.0	20	●
			UR8B180JT	30.4	18,150	5,319	9.7	2.84	1,871	550	16.4	7	●
			UR8B200JT	32.4	19,500	5,715	9.3	2.73	2,097	550	16.4	8	●
			UR5A215JT	36.2	21,800	6,389	10.5	3.07	2,080	500	19.5	2	●
			UR5A230JT	39.0	23,800	6,975	10.3	3.02	2,310	550	21.3	5	●
			UR5A245JT	40.4	24,550	7,195	10.1	2.96	2,430	550/800	21.3/22.1	5,6	●
			UR5A250JT	41.8	25,300	7,415	10.2	2.99	2,480	550/800	21.3/22.1	5,6	●
			UR5A260JT	44.6	27,400	8,030	10.0	2.93	2,740	800	22.1	8	●
		UR5T285JT	47.4	29,000	8,499	10.3	3.02	2,816	1,000	24.0	12	○	
		UR5T300JT	49.4	29,650	8,499	9.80	2.81	3,025	950	24.0	12	●	
		1φ 220V	UR4B092DT	16.1	9,300	2,726	10.0	2.93	930	360	11.6	13	○
			UR4D124DT	21.0	12,400	3,634	9.7	2.84	1,278	380	13.0	20	○
			UR8B200DT	32.4	19,300	5,715	9.3	2.73	2,075	550	16.4	8	●
			UR5A250DT	41.8	25,300	7,415	10.2	2.99	2,480	550/800	21.3/22.1	6	○



Tropical Environment

- Ultimate Freeze
- Powerful Cooling



Upgrade of UTR

- Decrease Motor Temperature
- Upgrade Pump Reliability
- Decrease Noise Level
- Improve Protection Ability



'04 Rotary

- High Motor Torque
- Light Weight (30% ↓)
- High Reliability
- High Efficiency (5~10%)



'06 Rotary

- Improve the Sound & Vibration (3dB ↓)

Items	UTR	UTR Plus	Remark
Outside Temp [°C]	54	54	-
Motor Temp [°C]	135	125	10°C ↓
Noise [dB]	57	54	3dB ↓

Certificate
All of the **UTR Compressor**
are Licensed by KSA



Certified by Maryland **CEEE**
(Max 9% Higher EER
than Recip. comp)



SPECIFICATIONS

BLDC Compressor (Single & Twin)

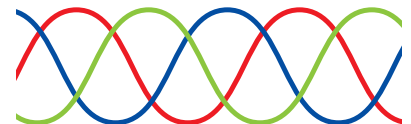
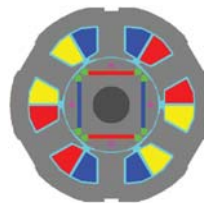
Ref.	Power Source	Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
			cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		
R22	BLDC (Single Pump, Ferite)	UR4B092LU	13.22	9,500	2,784	11.5	3.37	826	500	10.4	18	●
		UR4B124LU	17.64	12,750	3,737	11.4	3.34	1,118	500	10.4	18	●
	BLDC (Twin Pump, Nd)	UR8T180FUA	25.2	18,000	5,275	11.8	3.46	1,525	700	14.3	13	○
		UR5T240FUA	35.1	24,000	7,034	12.0	3.52	2,000	1,100	20.0	11	○
		UR5T360FUA	49.4	36,000	10,551	11.8	3.46	3,050	1,100	21.0	12	○
R410A	BLDC (Single Pump, Ferite)	UG4A090LU	8.86	9,300	2,726	10.9	3.20	853	340	10.3	31, 34	●
		UG4A110LU	10.32	10,900	3,194	10.7	3.14	1,018	340	10.3	31, 34	●
		UG4B135LU	13.22	14,300	4,191	10.8	3.17	1,324	600	10.5	30	●
		UG4C090LU	8.85	9,400	2,755	11.0	3.22	855	320	10.0	29, 32, 33	●
	BLDC (Single Pump, Nd)	UG9C072FU	7.27	7,250	2,125	11.1	3.25	653	270	7.3	16	○
		UG9A090FU	9.00	9,300	2,726	11.0	3.23	845	320	7.2	17	○
	BLDC (Twin Pump, Nd)	UG4T110FUA	11.1	11,000	3,224	11.0	3.22	1,000	400	10.2	35	●
		UG4T135FUA	13.1	13,200	3,869	11.1	3.25	1,189	500	10.4	36	●
		UG4T150FUA	15.0	15,200	4,455	11.1	3.25	1,369	500	10.4	36	●
		UG4T150FUB	15.0	15,200	4,455	11.1	3.25	1,369	600	10.5	36	●
		UG8T200FUA	19.5	20,000	5,861	11.0	3.22	1,818	700	14.0	13	●
		UG8T260FUA	25.2	26,500	7,766	11.1	3.25	2,387	700	14.0	13	●
		UG8T265FUA	25.2	26,500	7,766	11.3	3.31	2,345	700	14.5	14	●
		UG8T300FUA	30.0	32,000	9,378	11.2	3.28	2,857	750	15.8	15	●
		UG5T360FUA	35.1	37,500	10,990	11.0	3.22	3,409	1,100	20.0	11	●
		UG5T360FUB	35.1	37,500	10,990	11.0	3.22	3,409	1,100	20.0	11	●
UG5T450FUA	43.0	46,500	13,628	11.3	3.31	4,115	1,100	21.3	12	●		
UG5T450FUB	43.0	46,500	13,628	11.3	3.31	4,115	1,100	21.3	12	●		
UG5T520FUB	49.4	53,600	15,709	11.2	3.29	4,780	1,100	21.3	12	●		



SINGLE BLDC ROTARY



TWIN BLDC ROTARY



Wide Capacity Range

▶ 15Hz ~ 120Hz Variable Control

High Efficiency

▶ Adopt high efficiency pump
▶ High Precision process parts and assembly

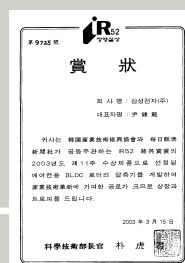
Low Noise

▶ Sine wave control available
▶ Adopt the Optimized Muffer structure

Excellent Reliability

▶ Adopt the coating material to improve reliability
▶ Reduction the oil circulation

Awarded **Jang Young Shil**
Mark from KOITA(Korean Industrial
Technology Association), 2003



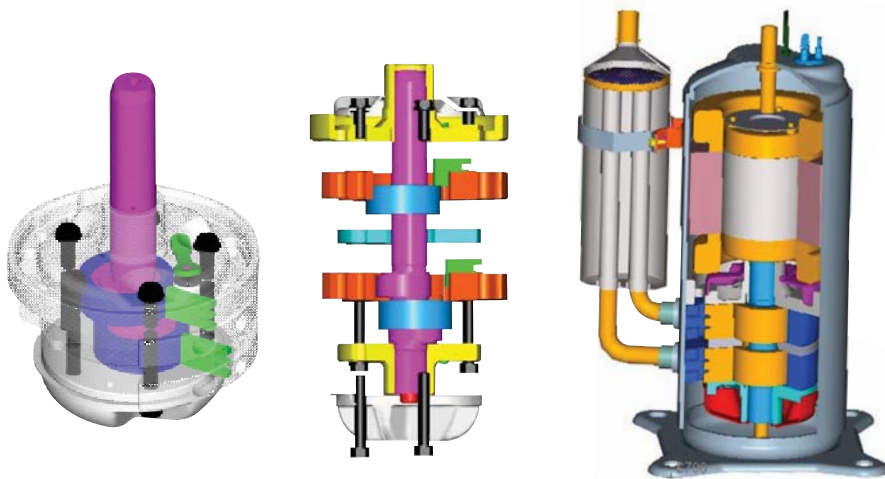
Awarded **Cheoltap** Medal
form Korean Government,
2005



SPECIFICATIONS

Large Volume Compressor (TTR-Turbo Twin Rotary)

Ref.	Power Source		Model	Displacement	Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
				cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg		● Mass production ○ Under develop
R22	60 Hz	3φ 380V	UR5T360AU	49.4	36,000	10,551	10.9	3.19	3,303	1,000	23.7	13	●
			UR3T480AU	65.8	49,850	14,610	11.2	3.28	4,450	1,700	35.0	5	●
			UR3T550AT	72.6	55,500	16,265	11.0	3.23	5,040	1,900	35.0	2	●
		UR3T650AU	85.5	65,000	19,050	10.9	3.19	5,965	1,900	35.5	3	●	
		UR3T480CT	65.8	49,850	14,610	10.8	3.17	4,615	1,700	35.0	5	●	
		UR3T550CT	72.6	55,500	16,265	11.0	3.23	5,040	1,900	35.0	2	●	
	50 Hz	3φ 380V~420V	UR3T400BU	65.8	40,500	11,869	10.9	3.19	3,715	1,700	32.5	4	●
			UR3T480BU	78.6	48,500	14,214	10.9	3.19	4,450	1,700	35.0	2	●
			UR3T510BU	83.6	51,500	15,093	10.9	3.19	4,725	1,700	35.0	2	●
			UR3T400BT	65.8	40,500	11,869	10.8	3.17	3,750	1,700	32.5	4	●
			UR3T480BT	78.6	48,900	14,331	10.8	3.16	4,530	1,900	35.0	2	●
			UR3T510BT	83.6	51,500	15,093	10.8	3.16	4,770	1,900	35.0	2	●
		1φ 220V~240V	UR3T350JT	57.5	35,000	10,257	10.2	2.99	3,430	1,700	34.5	7	○
			UR3T400JT	65.8	40,000	11,723	10.2	2.99	3,920	1,700	34.5	7	○
R410A	60Hz	3φ / 380V	UG3T720AU	65.8	72,000	21,101	10.4	3.05	6,920	1,900	34.5	7	○
			UG3T400BU	46.3	40,500	11,869	10.4	3.05	3,895	1,700	33.5	5	●
	50 Hz	3φ 380V~420V	UG3T450BU	52.1	45,500	13,335	10.4	3.05	4,375	1,700	33.5	5	●
			UG3T470BU	54.5	47,500	13,921	10.4	3.05	4,565	1,700	33.5	5	●
			UG3T530BU	61.5	53,900	15,797	10.4	3.05	5,185	1,700	34.5	7	○
			UG3T570BU	65.8	57,500	16,852	10.4	3.05	5,530	1,700	34.5	7	●



Extremely Low Vibration

▶ 1/4 of Single

Excellent Reliability

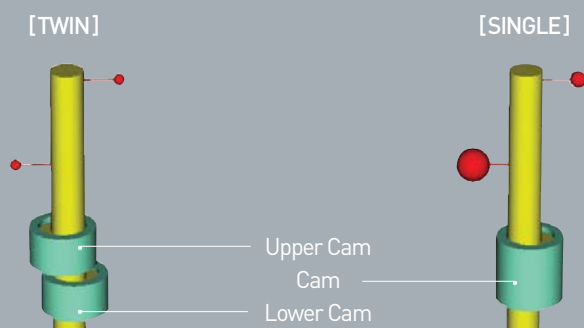
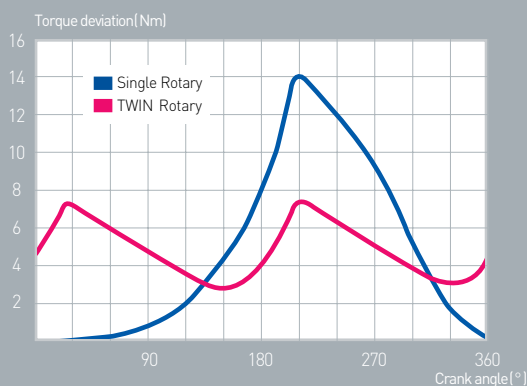
▶ Wide Operation Range (Pd 33.0kg/cm²)

▶ High Ambient Temperature 65°C (Tropical)

High Efficiency & Low Noise

▶ R22(11.2), R410A(10.4)

COMPARISON OF TORQUE DEVIATION

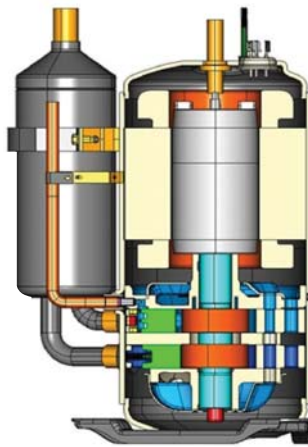
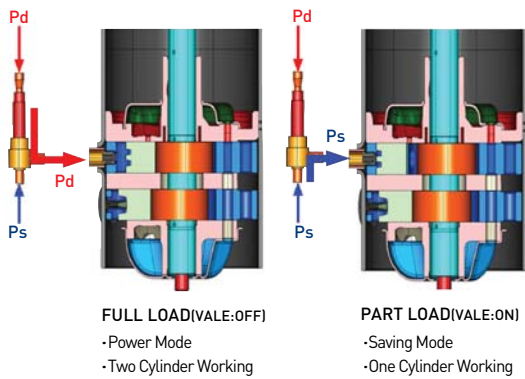


SPECIFICATIONS

Digital Rotary Compressor

Ref.	Power Source	Model	Displacement		Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
			cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg			
R22	60 Hz 1Ø 208V~230V	UR8V210IU	15.0	10,800	3,165	9.8	2.87	1,102	600	18.7	1	○	
			30.0	21,400	6,272	10.9	3.19	1,963					
R410A	60 Hz	1Ø 208V~230V	UG5V340IU	16.5	17,500	5,129	9.2	2.70	1,902	800	23.0	2	○
				32.9	34,400	10,082	9.8	2.87	3,510				
		3Ø 380V	UG3V550AU	26.6	28,800	8,440	10.0	2.93	2,880	1,600	35.0	4	○
				53.1	56,000	16,412	10.1	2.96	5,545				

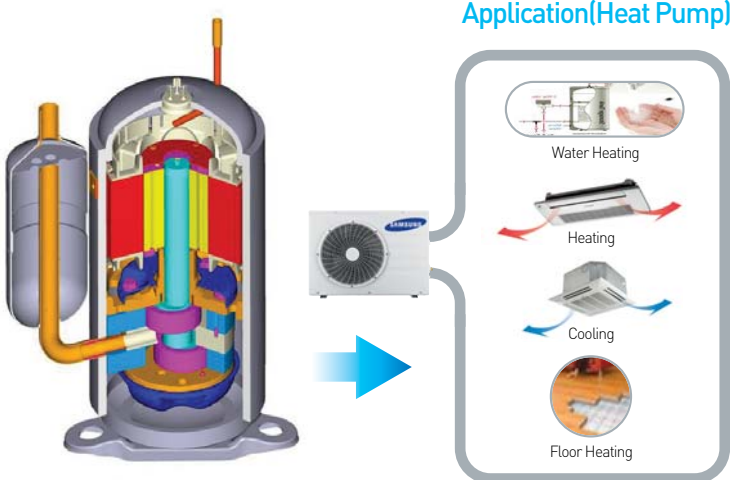
Working Mechanism



- High Efficiency**
 - 30% SEER Improvement
 - Non Stop Modulation
- Multi-evaporator with one Condensing unit**
 - Easy Installation & Maintenance
- Superior Reliability**
 - Fewer stops and starts
 - Oil management free

CO₂ Rotary Compressor (Single BLDC)

Ref.	Power Source	Model	Displacement		Cooling Capacity		EER	COP	Input	Oil charge	Net weight	Dimension	Development
			cc/rev	Btu/h	w	Btu/Wh	w/w	w	cc	kg			
R744 (CO ₂)	BLDC (Single Pump,Nd)	UB8A153FUA	6.0	15,300	4,500	10.2	3.00	1,500	700	17.0	1	○	
		UB5A265FUA	10.4	26,500	7,800	10.2	3.00	2,600	1,000	24.5	2	○	



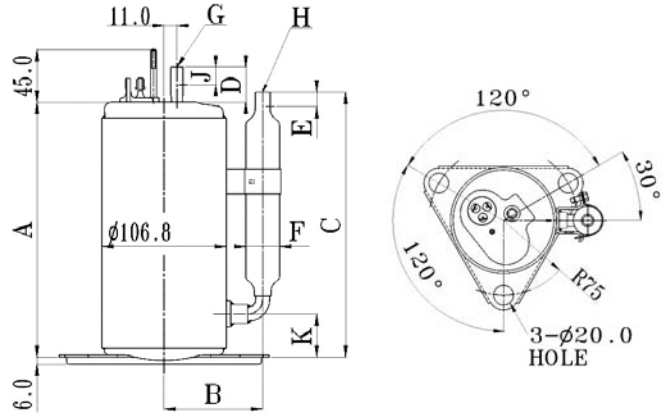
- Wide Capacity Range**
 - Variable Control
- High Efficiency**
 - Adopt high efficiency pump
 - High Precision process parts and assembly
- Low Noise**
 - Sine wave control available
 - Adopt the Optimized Muffer structure
- Excellent Reliability**
 - Adopt the coating material to improve reliability
 - Reduction the oil circulation for R744(CO₂)
 - IEC60335-2-34 / UL1995 (Design Pressure:14MPa)
- Application**
 - High Temperature Water Heating Technology (60~90°C)
 - Advantage under Low ambient Temperature until -25°C

DIMENSION

39 Frame

[UNIT:mm]

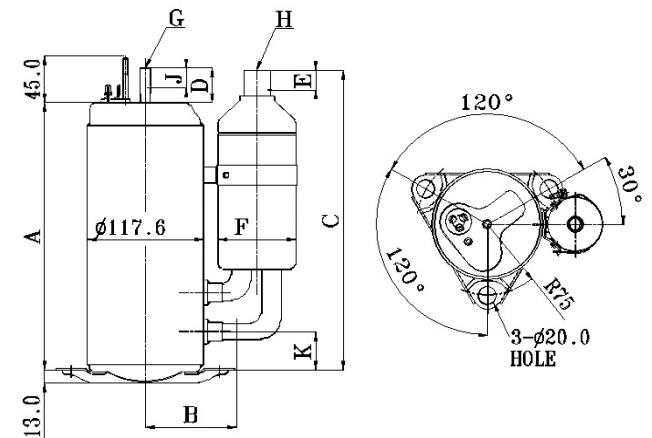
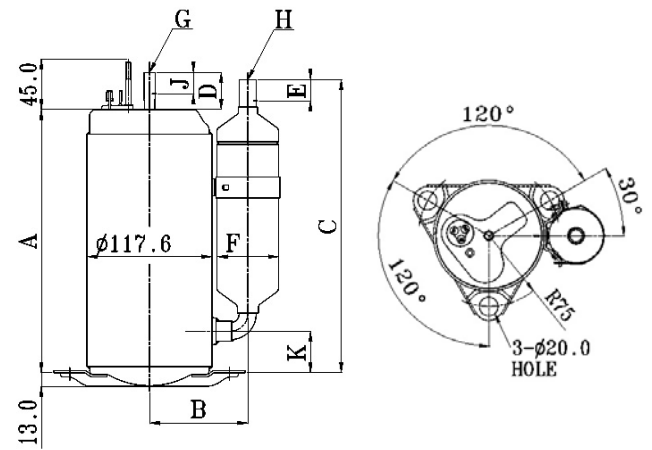
Frame	Type	A	B	C	D	E	J	F	G	H	K
UR9A	1	174.3	84.6	203.1	30.0	15.0	15.0	31.8	8.15	9.64	30.3
	2	189.3	84.6	203.1	30.0	15.0	15.0	31.8	8.15	9.64	30.3
	3	193.3	84.6	203.1	30.0	15.0	15.0	31.8	8.15	9.64	30.3
	4	193.3	86.5	220.6	30.0	15.0	15.0	41.3	8.15	9.64	30.3
	5	197.3	84.6	203.1	30.0	15.0	15.0	31.8	8.15	9.64	30.3
	6	197.3	86.5	220.6	30.0	15.0	15.0	41.3	8.15	9.64	30.3
UR9B	7	198.8	84.6	209.8	30.0	15.0	15.0	31.8	8.15	9.64	37.0
	8	202.8	86.5	227.3	30.0	15.0	15.0	41.3	8.15	9.64	37.0
	9	206.8	86.5	227.3	30.0	15.0	15.0	41.3	8.15	9.64	37.0
	10	212.8	84.6	209.8	30.0	15.0	15.0	31.8	8.15	9.64	37.0
	11	212.8	86.5	227.3	30.0	15.0	15.0	41.3	8.15	9.64	37.0
UR9C	12	186.3	84.6	201.6	30.0	15.0	15.0	31.8	8.15	9.64	28.8
	13	190.3	84.6	201.6	30.0	15.0	15.0	31.8	8.15	9.64	28.8
UG9C	14	194.3	84.6	201.6	30.0	15.0	15.0	31.8	8.15	9.64	28.8
	15	200.3	86.5	201.6	30.0	15.0	15.0	31.8	8.15	9.64	28.8
UG9A	16	235.5	97.2	235.0	30.0	15.0	15.0	77.4	8.15	12.85	42.0
	17	240.5	97.2	264.0	30.0	15.0	15.0	77.4	8.15	12.85	47.0



44 Frame

[UNIT:mm]

Frame	Type	A	B	C	D	E	J	F	G	H	K
UR4A UF4A	1	216.1	92.0	220.0	35.0	15.0	15.0	41.3	8.15	9.64	29.7
	2	216.1	95.0	234.2	35.0	15.0	15.0	47.6	8.15	12.85	29.7
	3	216.1	93.5	252.7	35.0	15.0	15.0	58.4	8.15	12.85	29.7
	4	216.1	99.2	219.7	35.0	15.0	15.0	15.9	8.15	14.10	29.7
	5	220.1	95.0	234.2	35.0	15.0	15.0	47.6	8.15	12.85	29.7
	6	220.1	93.5	252.7	35.0	15.0	15.0	58.4	8.15	12.85	29.7
	7	220.1	99.2	219.7	35.0	15.0	15.0	15.9	8.15	14.10	29.7
UR4B UF4B	8	228.7	95.0	238.5	35.0	15.0	15.0	47.6	8.15	12.85	34.0
	9	233.7	95.0	243.5	35.0	15.0	15.0	47.6	8.15	12.85	39.0
	10	233.7	93.5	276.0	35.0	15.0	15.0	58.4	8.15	12.85	39.0
	11	240.7	95.0	243.5	35.0	15.0	15.0	47.6	8.15	12.85	39.0
	12	240.7	91.5	257.0	35.0	15.0	15.0	54.5	8.15	12.85	39.0
	13	240.7	93.5	276.0	35.0	15.0	15.0	58.4	8.15	12.85	39.0
	14	240.7	99.2	264.0	35.0	15.0	15.0	15.9	8.15	14.10	39.0
	15	247.7	93.5	276.0	35.0	15.0	15.0	58.4	8.15	12.85	39.0
	16	247.7	99.2	264.0	35.0	15.0	15.0	15.9	8.15	14.10	39.0
	17	247.7	110.6	311.0	35.0	15.0	15.0	77.4	8.15	12.85	39.0
UR4D UF4D	18	245.7	110.6	311.0	35.0	15.0	15.0	77.4	8.15	12.85	51.0
	19	246.2	93.5	277.9	35.0	15.0	15.0	58.4	8.15	12.85	55.9
	20	253.2	93.5	277.9	35.0	15.0	15.0	58.4	8.15	12.85	40.9
	21	268.2	93.5	292.9	35.0	15.0	15.0	58.4	8.15	12.85	55.9
	22	268.2	110.6	315.9	35.0	15.0	15.0	77.4	8.15	12.85	55.9
UG4C UG4A UG4B UG4T	23	212.1	90.1	249.7	35.0	15.0	15.0	41.3	8.15	9.64	27.7
	24	216.1	93.5	250.7	35.0	15.0	15.0	58.4	8.15	12.85	27.7
	25	220.1	93.5	252.7	35.0	15.0	15.0	58.4	8.15	12.85	29.7
	26	227.1	93.5	252.7	35.0	15.0	15.0	58.4	8.15	12.85	29.7
	27	240.7	93.5	276.0	35.0	15.0	15.0	58.4	8.15	12.85	39.0
	28	247.7	93.5	276.0	35.0	15.0	15.0	58.4	8.15	12.85	39.0
	29	223.8	102.6	252.3	35.0	15.0	15.0	77.4	8.15	12.85	35.3
	30	245.7	110.6	311.0	35.0	15.0	15.0	77.4	8.15	12.85	51.0
	31	227.1	102.6	253.7	35.0	15.0	15.0	77.4	8.15	12.85	36.7
	32	229.8	102.6	252.3	35.0	15.0	15.0	77.4	8.15	12.85	35.3
	33	221.3	102.6	252.3	35.0	15.0	15.0	77.4	8.15	12.85	35.3
	34	224.6	102.6	253.7	35.0	15.0	15.0	77.4	8.15	12.85	36.7
	35	234.3	102.6	295.9	35.0	15.0	15.0	77.0	8.15	12.85	35.3
	36	247.6	102.6	309.2	35.0	15.0	15.0	77.0	8.15	12.85	48.6



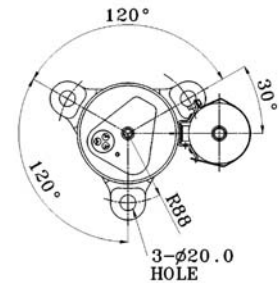
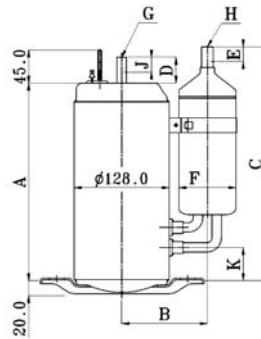
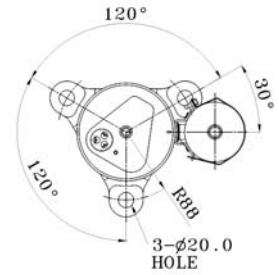
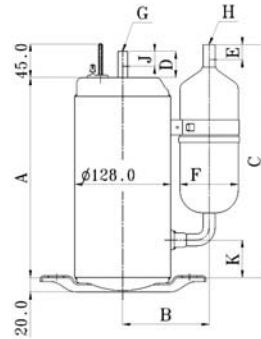
TWIN

DIMENSION

48 Frame

[UNIT:mm]

Frame	Type	A	B	C	D	E	J	F	G	H	K
UR8B UR8C UR8D UF8B UF8D	1	273.9	103.6	276.2	35.0	15.0	15.0	15.9	9.70	14.10	51.2
	2	280.9	98.0	288.2	35.0	15.0	15.0	58.4	9.70	12.85	51.2
	3	280.9	114.5	311.2	35.0	15.0	15.0	77.4	9.70	12.85	51.2
	4	280.9	103.6	276.2	35.0	15.0	15.0	15.9	9.70	14.10	51.2
	5	285.9	98.0	288.2	35.0	15.0	15.0	58.4	9.70	12.85	51.2
	6	285.9	114.5	311.2	35.0	15.0	15.0	77.4	9.70	12.85	51.2
	7	286.9	114.5	311.2	35.0	15.0	15.0	77.4	9.70	12.85	51.2
	8	291.9	114.5	311.2	35.0	15.0	15.0	77.4	9.70	12.85	51.2
	9	269.4	98.0	286.0	35.0	15.0	15.0	58.4	9.70	12.85	49.0
	10	269.4	114.5	309.0	35.0	15.0	15.0	77.4	9.70	12.85	49.0
	11	276.4	114.5	309.0	35.0	15.0	15.0	77.4	9.70	12.85	49.0
	12	281.4	98.0	286.0	35.0	15.0	15.0	58.4	9.70	12.85	49.0
UR8T UG8T	13	267.5	115.2	316.7	35.0	15.0	15.0	77.0	9.70	12.85	45.2
	14	272.5	115.2	316.7	35.0	15.0	15.0	77.0	9.70	12.85	45.2
	15	287.5	115.2	330.5	35.0	15.0	15.0	77.0	9.70	12.85	48.5
UG8C UG8D	16	276.4	114.5	309.0	35.0	15.0	15.0	77.4	9.70	12.85	49.0
	17	285.9	114.5	311.2	35.0	15.0	15.0	77.4	9.70	12.85	51.2

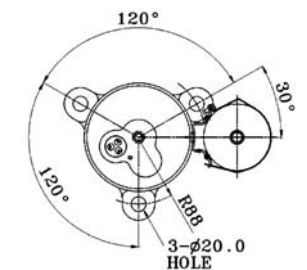
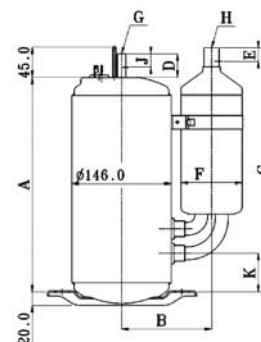
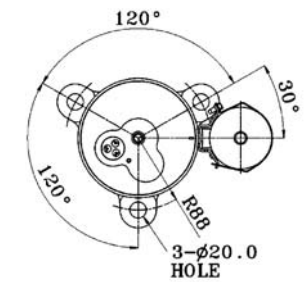
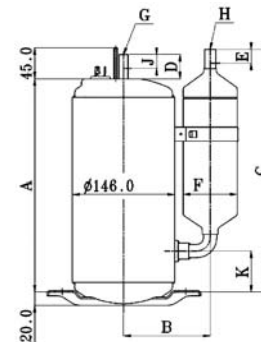


TWIN

55 Frame

[UNIT:mm]

Frame	Type	A	B	C	D	E	J	F	G	H	K
UR5A UF5A	1	255.9	124.8	303.2	35.0	15.0	15.0	77.4	9.70	16.03	39.2
	2	265.9	124.8	303.2	35.0	15.0	15.0	77.4	9.70	16.03	39.2
	3	282.9	124.8	346.2	35.0	15.0	15.0	77.4	9.70	16.03	56.2
	4	282.9	123.8	316.2	35.0	15.0	15.0	19.1	9.70	17.05	56.2
	5	283.2	124.8	303.2	35.0	15.0	15.0	77.4	9.70	16.03	39.2
	6	300.2	124.8	346.2	35.0	15.0	15.0	77.4	9.70	16.03	56.2
	7	300.2	123.8	316.2	35.0	15.0	15.0	19.1	9.70	17.05	56.2
	8	305.3	124.8	346.2	35.0	15.0	15.0	77.4	9.70	16.03	56.2
	9	304.3	124.8	317.6	35.0	18.0	15.0	19.1	9.70	16.03	57.6
	10	311.5	124.8	317.6	35.0	18.0	15.0	19.1	9.70	16.03	57.6
UR5T UG5T	11	314.2	125.5	350.0	35.0	15.0	15.0	77.4	9.70	16.03	54.1
	12	326.2	132.4	361.0	35.0	15.0	15.0	90.0	9.70	19.20	57.2
	13	341.2	132.4	361.0	35.0	15.0	15.0	90.0	9.70	19.20	57.2
UG5A	14	282.9	124.8	346.2	35.0	15.0	15.0	77.4	9.70	16.03	56.2
	15	292.9	124.8	346.2	35.0	15.0	15.0	77.4	9.70	16.03	56.2



TWIN

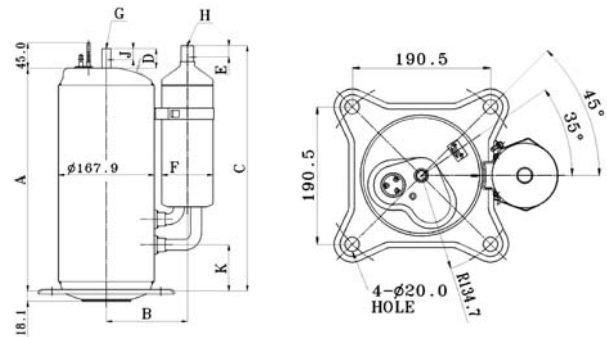
DIMENSION

63 Frame

[UNIT:mm]

Frame | Type | A | B | C | D | E | J | F | G | H | K

UR3T	1	387.8										
	2	392.8	142.2					90.0				
	3	397.8	135.7	432.6	35.0	15.0	15.0	77.0	12.90	19.20	81.6	
UG3T (UR63T)	4	374.8										
	5	379.8	142.2					90.0				
	6	384.8	135.7	422.6	35.0	15.0	15.0	77.0	12.90	19.20	77.8	
	7	389.8										

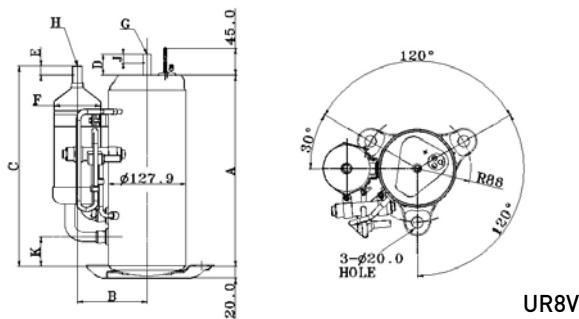


DRC

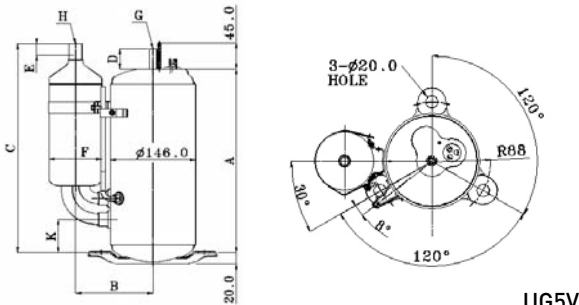
[UNIT:mm]

Frame | Type | A | B | C | D | E | J | F | G | H | K

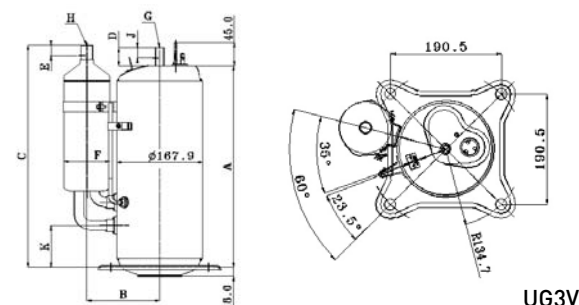
UR8V	1	315.6	115.2	330.5	35.0	15.0	15.0	77.0	9.70	12.85	48.5
UG5V	2	325.9	125.0	349.9	35.0	15.0	15.0	77.4	9.70	16.03	54.1
	3	379.8									
UG3V	4	384.8	142.2	422.6	35.0	15.0	15.0	90.0	12.90	19.20	77.8
	5	389.8									



UR8V



UG5V



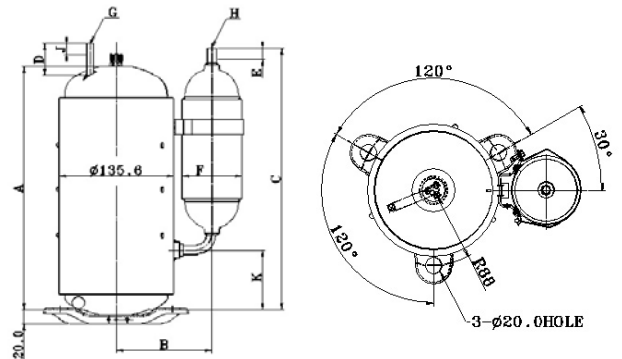
UG3V

CO₂ (CSR)

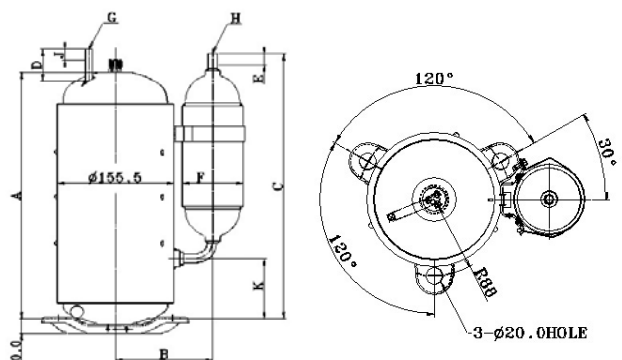
[UNIT:mm]

Frame | Type | A | B | C | D | E | J | F | G | H | K

UB8A	1	314.0	120.0	329.5	45.0	15.0	15.0	81.5	8.46	12.70	54.5
UB5A	2	331.5	130.0	335.0	45.0	15.0	15.0	81.5	9.52	12.70	60.0



UB8A



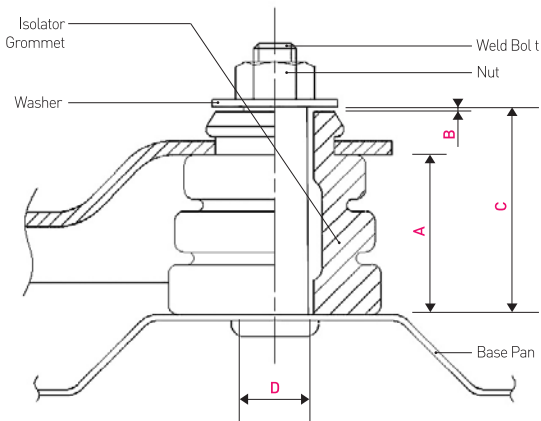
UB5A

* CO₂ (CSR) dimension can be changed without previous notice.

MOUNTING SYSTEM & WIRING DIAGRAM

Mounting System

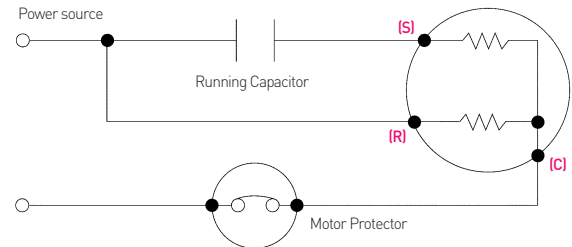
Frame / Parts	A	B	C	D
39F	14.0	0.5-2.0	21.0	10.5
44, 48, 55, 63F	25.5	0.5-2.0	33.5	11.5



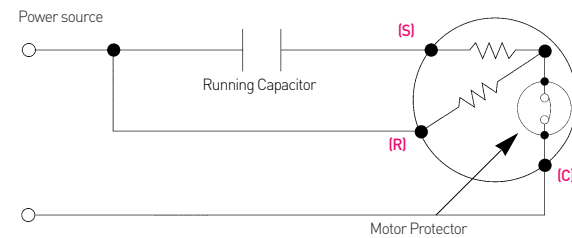
REMARK ▶ Keep the Clearance between Washer and Isolator Grommet by 0.5-2.0mm

Wiring Diagram

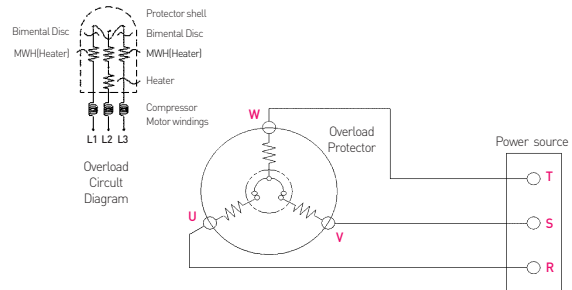
External OLP Type



Internal OLP Type



3 Phase Internal OLP Type



Test Condition

Refrigerant	R-22 / R407C / R410A
Condensing Temp. (°C)	54.4
Evaporating Temp. (°C)	7.2
Ambient Temp. (°C)	35.0
Return Gas Temp. (°C)	35.0
Liquid Temp. (°C)	46.1

Application Envelopes

Items	Normal	Tropical
Condensing Temp. (°C)	28.0 ~ 65.0	28.0 ~ 74.5
Evaporating Temp. (°C)		-25.0 ~ 12.7
Discharge Temp. (°C)		Max. 115.0

* Evaporating Temp Range of 39Frame is -10.0 ~ 12.0

ACCESSORY & PACKING

Standard Accessory Parts

Items	Application				Quantity (pcs)
	Comp. with External OLP	Comp. with Internal OLP	BLDC Compressor		
			Type 1	Type 2	
Nut for Terminal Cover	①				1
Terminal Cover	②	③	②	③	1
Overload Protector	④	—	—	—	1
Spring for Overload Protector Hold Down	⑤	—	—	—	1
Holder Thermistor	—	—	⑥	—	1
Gasket for Terminal Cover	⑦	⑧	⑦	⑧	1
Rubber Grommet	⑨				3 (63F4Pcs)

Standard Export Packing & Loading Quantity (20ft container)

Frame	Compressor Quantity/ Carton (pcs)		Carton Quantity (carton)		Accessory Box (e)	Loading Quantity (t) (pcs)	Packing Height	
	1stage(a)	2stage(b)	1stage(c)	2stage(d)			1stage(h1)	2stage(h2)
39F	36	72	2	24	6	1,800	477	788
44A, 44C	36	72	2	22		1,656	477	788
44A(+60°)	30	60	2	22		1,380	477	788
44B	36	72	4	18		1,440	507	840
44B(+60°)	30	60	4	18		1,200	507	840
44D	36	72	4	16		1,296	507	840
44 BLDC	30	60	2	23		1,440	507	840
48F	30	60	4	16	4	1,080	523	896
48F(+60°)	20	40	4	16		720	523	896
55F	20	40	4	16	3	720	560	965
63F	12	24	12	12		432	660	1,153

1 Stage Packing

ex.) Compressor Total Quantity of 44Frame 8.5K Btu/h Model ▶ $[a] \times [c] + [b] \times [d] = (t) / 1,656$ pcs

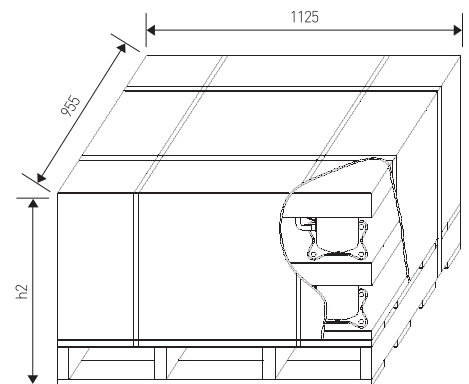
ex.) Carton Total Quantity of 44Frame 8.5K Btu/h Model ▶ $[c] + [d] + [e] = 30$ Cartons

*Korean sale is exception in upside standard.

WARNING / DANGER

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY.

1. GROUND THE EQUIPMENT SECURELY.
2. TURN OFF POWER BEFORE SERVICING.
3. MOUNT THE TERMINAL COVER IN PLACE WHENEVER POWER IS APPLIED TO THIS COMPRESSOR.
4. WEAR PROTECTIVE GOGGLES WHEN SERVICING.
5. BEFORE BRAZING, REMOVE PREVIOUS PRESSURE FROM BOTH HIGH AND LOW SIDE.
6. DO NOT USE THIS COMPRESSOR TO COMPRESS AIR.
7. USE ONLY APPROVED REFRIGERANTS AND LUBRICANTS.
8. DO NOT TOUCH WITH BARE HANDS DURING RUNNING OR AFTER STOPPING INSTANTLY.



2 Stage Packing

APPROVED LICENSES & RoHS

Approved Licenses



VDE or TUV for European Compressor
[220-240V 50Hz and some 3-phase compressor]



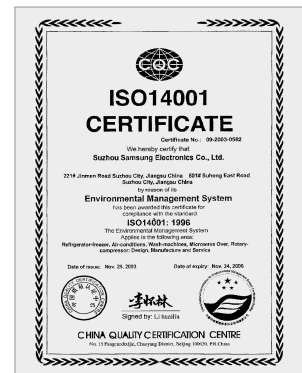
CCC for Chinese Compressor
[200V, 200-220V 50Hz and some 3-phase compressor]

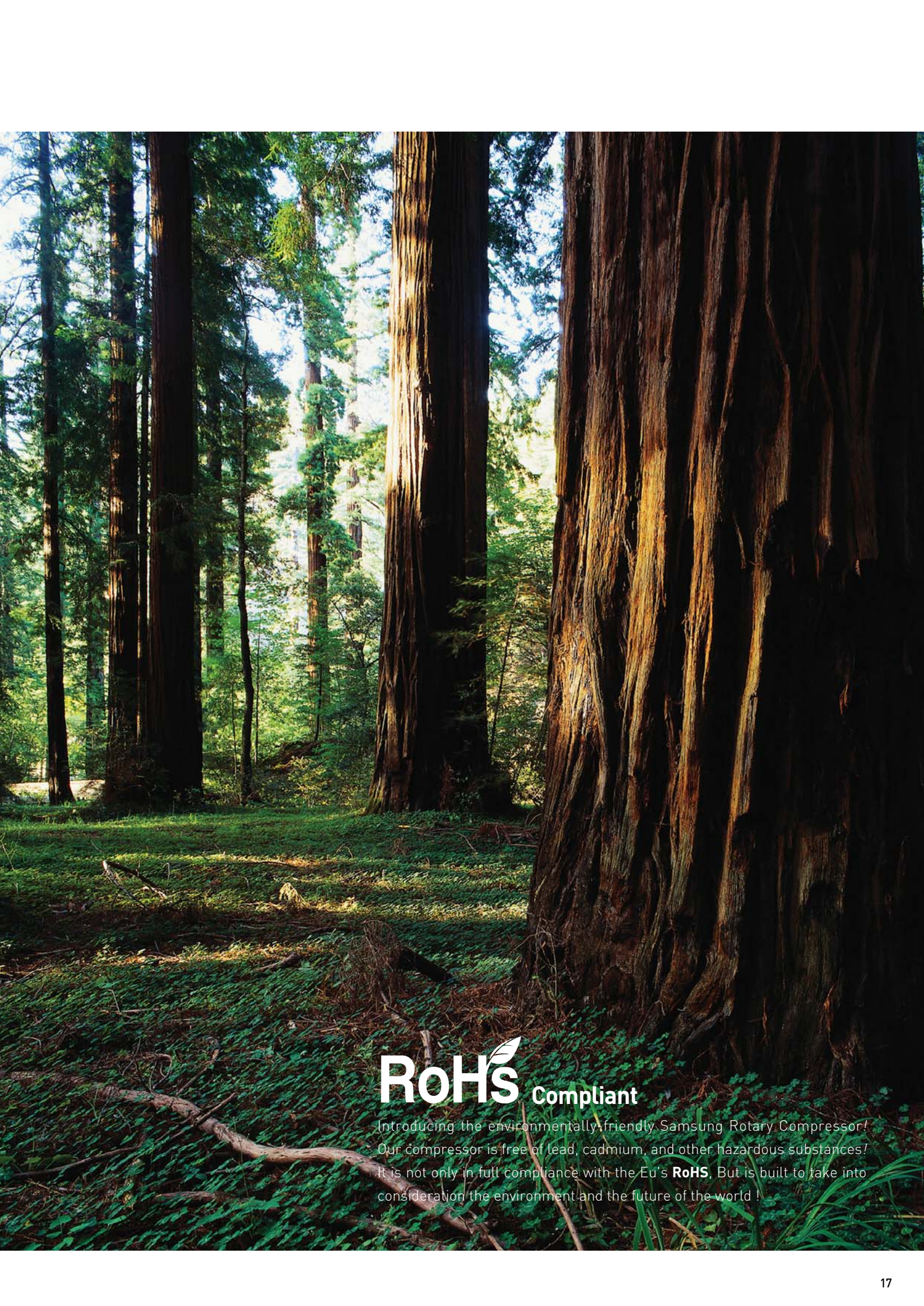


C-UL for American Compressor
[115V or 208-230V 60Hz]



KSA for tropical compressor
[208-230V]





RoHS Compliant

Introducing the environmentally-friendly Samsung Rotary Compressor!
Our compressor is free of lead, cadmium, and other hazardous substances!
It is not only in full compliance with the Eu's **RoHS**, But is built to take into
consideration the environment and the future of the world !



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