SAMSUNG

SAMSUNG COMPRESSOR

Reciprocating / Rotary / Scroll

Samsung Compressor

BRIEF HISTORY

1970~1980
Business Readiness

1976 Reciprocating Compressor Production in Korea

1990
Growth & Innovation

1990 Rotary Compressor Production in Korea

1995 Variable Speed Rotary Compressor Production in Korea

1999 Variable Speed Reciprocating Compressor Production in Korea

2000
Global Expansion

2003 Rotary Compressor Production in China

2006 Moved Rotary Compressor Factory from Korea to China

2007 Launched World First Aluminum Wire Reciprocating Compressor

2010~
Face of the Future

2011 Built Reciprocating Compressor Factory in China

2012 Scroll Compressor Production in China

2014 Launched Mini Rotary Compressor

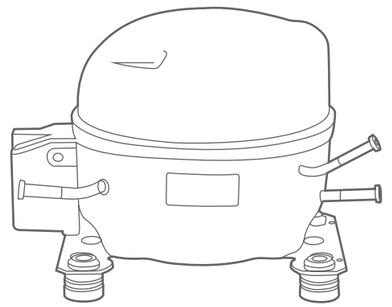
2016 Launched R32 Variable Speed Rotary Compressor

2017 Achieved Accumulated 200 Million Production of Reciprocating Compressor

2019 Launched World First Max 180 rps Variable Speed Scroll Compressor

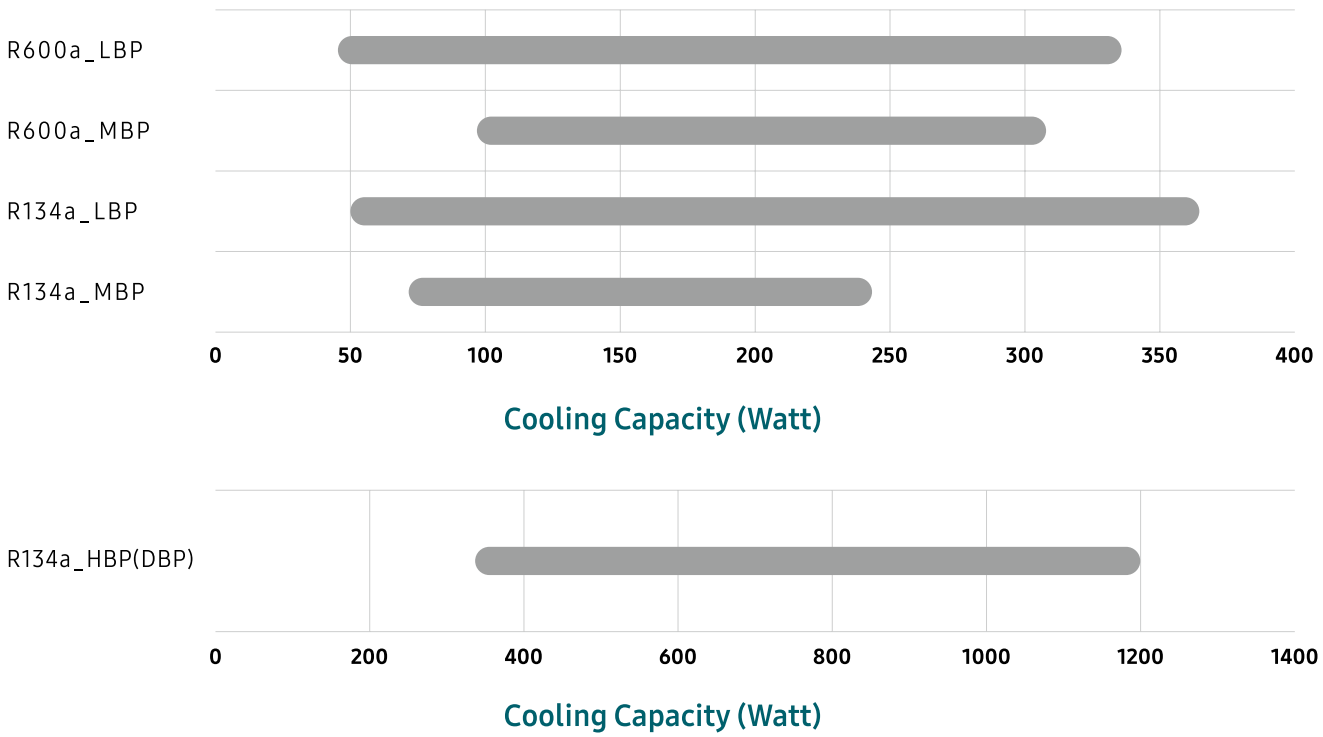
Reciprocating Compressor

CONTENTS

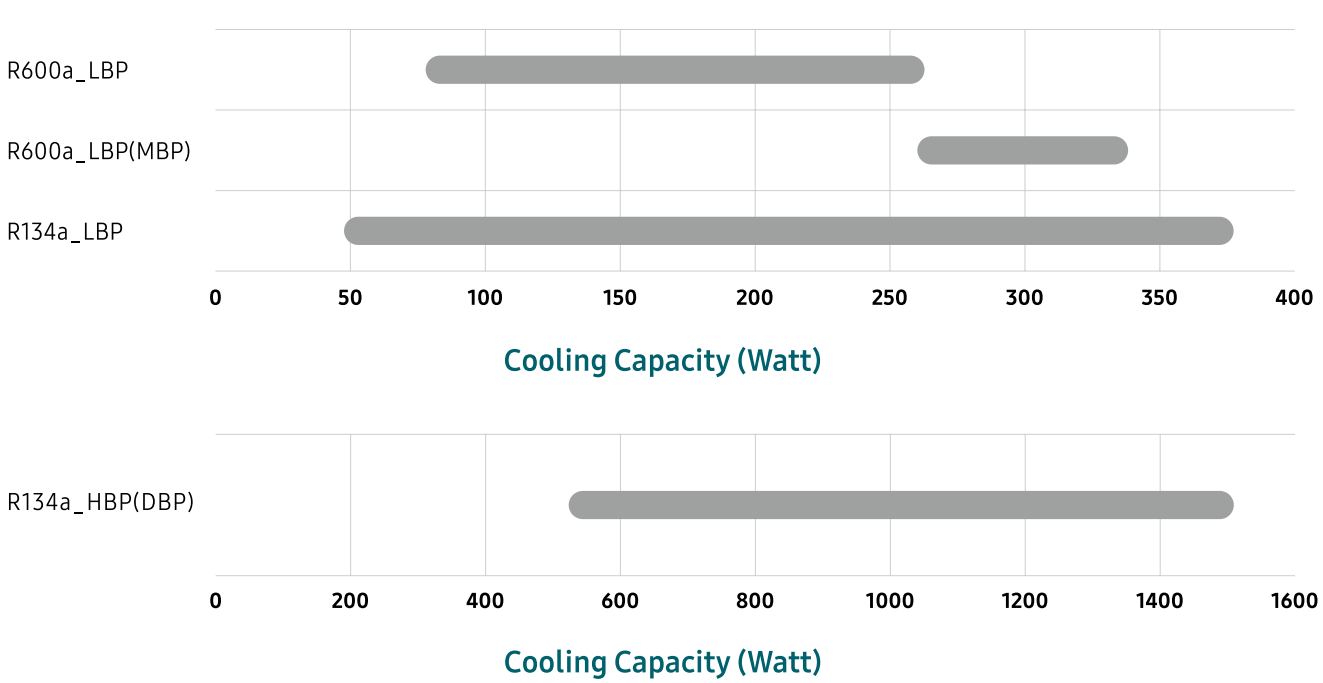


PRODUCT RANGE

Variable Speed



Fixed Speed



MODEL IDENTIFICATION

Type 1 (Series : CD, MSS, MSA, MSE, ENV, MSV)

MSS	1	43	C	—	L	1	B
Series	Refrigerant	Displacement	Rated Voltage		Application	Cooling Type	Motor Type

Type 2 (Series : EV, MV, A, AV)

NC	1	MV	43	A	L	P
Representative	Refrigerant	Series	Displacement	Rated Voltage	Application	Motor Type

Type 3 (Series : NF, NN, NI)

Series	General		Refrigerant		Displacement (cc/rev.)		Motor Type
	3,5,7,9	BLDC	1	R134a LBP	24~90	2.4~9.0cc	
	2,4,6,8	AC	4	R600a LBP	10~15	10.0~15.0cc	
			6	R134a HBP	A0~A5	10.0~15.0cc	
			7	R134a DBP			

NF	3	1	M	9	43	1	A	P

Launching Year	
K	2016
M	2017
N	2018
R	2019
T	2020
A	2021

Grade	
9	Market Leader
7, 8	Premium
5, 6	High
3, 4	Basic
1, 2	Simple

Release Variant	
1	1st
2	2nd
3	3rd
...	...

Rated Voltage & Frequency	
A	BLDC
B	220V~60Hz
C	115V~60Hz
D	115-127V~60Hz
E	100V~50/60Hz, 110V~60Hz
F	230V~50Hz
G	220-240V~50Hz, 220V~60Hz
H	200-220V~50Hz, 220V~60Hz
J	110-127V~60Hz, 100V~60Hz
K	220-240V~50Hz
P	127V~60Hz
Q	220-240~50Hz
S	220-230~50Hz
T	110V~60Hz
X	220V~50Hz

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 115-127V~60Hz	ENV4A5D-L2B	15.31	1,650	127	148	504	75	1.69	1.97	6.72	FC
			1,950	150	174	596	88	1.70	1.98	6.77	
			2,800	210	244	834	130	1.62	1.88	6.41	
			3,650	271	315	1,076	182	1.49	1.73	5.91	
AC 200-220V~50Hz, 220V~60Hz	ENV4A5H-L2B	15.31	1,650	127	148	504	75	1.69	1.97	6.72	FC
			1,950	150	174	596	88	1.70	1.98	6.77	
			2,800	210	244	834	130	1.62	1.88	6.41	
			3,650	271	315	1,076	182	1.49	1.73	5.91	
	ENV4A3G-L2J	13.07	1,650	111	129	441	68	1.63	1.90	6.48	FC
			1,800	119	138	472	73	1.63	1.90	6.47	
			2,800	184	214	730	120	1.53	1.78	6.09	
			3,600	239	278	949	166	1.44	1.67	5.72	
	ENV4A3G-L2B	13.07	1,650	111	129	441	66	1.68	1.96	6.68	FC
			1,800	119	138	472	71.5	1.66	1.94	6.61	
			2,800	184	214	730	115	1.60	1.86	6.35	
			3,600	239	278	949	161	1.48	1.73	5.89	
	ENV4A5G-L2B	15.31	1,650	127	148	504	75	1.69	1.97	6.72	FC
			1,950	150	174	596	88	1.70	1.98	6.77	
			2,800	210	244	834	130	1.62	1.88	6.41	
			3,600	271	315	1,076	182	1.49	1.73	5.91	
	ENV4A5G-L2J	15.31	1,650	127	148	504	78	1.63	1.89	6.46	FC
			1,950	150	174	596	91.5	1.64	1.91	6.51	
			2,800	210	244	834	139	1.51	1.76	6.00	
			3,600	271	315	1,076	193	1.40	1.63	5.57	
	MSV488A-L1J	8.82	1,200	54	63	214	35	1.54	1.79	6.13	ST
			1,400	62	72	246	41	1.51	1.76	6.00	
			3,000	126	147	500	90	1.40	1.63	5.56	
			4,300	175	203	695	131	1.34	1.55	5.30	
	MSV488A-L1P	8.82	1,200	54	63	214	35	1.57	1.82	6.21	ST
			1,400	62	72	246	41	1.53	1.78	6.08	
			3,000	126	147	500	89	1.42	1.65	5.62	
			4,300	175	203	695	129	1.36	1.58	5.39	
	MSV488A-L1R	8.82	1,200	54	63	214	37	1.48	1.72	5.87	ST
			1,400	62	72	246	42	1.49	1.74	5.93	
			3,000	126	147	500	91	1.38	1.61	5.50	
			4,300	175	203	695	132	1.33	1.54	5.26	

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NC4MV88ALP	8.82	1100	51	59	202	32	1.59	1.85	6.33	ST
			1400	65	76	258	40	1.63	1.89	6.45	
			3000	131	152	520	83	1.58	1.84	6.27	
			4300	179	208	711	121	1.48	1.72	5.87	
	NC4MV88ALR	8.82	1100	51	59	202	33	1.55	1.80	6.14	ST
			1400	65	76	258	41	1.59	1.84	6.29	
			3000	131	152	520	85	1.54	1.79	6.12	
			4300	179	208	711	123	1.46	1.69	5.78	
	MSV4A1A-L1B	11.1	1200	64	74	254	41	1.56	1.82	6.20	ST
			1400	80	93	318	51	1.57	1.82	6.23	
			3000	162	188	643	111	1.46	1.70	5.79	
			4300	210	244	834	151	1.39	1.62	5.52	
	MSV4A1A-L1J	11.1	1200	64	74	254	42	1.52	1.77	6.05	ST
			1400	80	93	318	52	1.54	1.79	6.11	
			3000	162	188	643	113	1.43	1.67	5.69	
			4300	210	244	834	154	1.36	1.59	5.41	
	MSV4A1A-L1R	11.1	1200	64	74	254	43	1.51	1.75	5.98	ST
			1400	80	93	318	53	1.52	1.77	6.05	
			3000	162	188	643	114	1.42	1.65	5.64	
			4300	210	244	834	155	1.35	1.58	5.38	
	NC4MVA1ALP	11.1	1100	55	64	220	35	1.60	1.86	6.35	ST
			1600	88	102	350	54	1.65	1.91	6.54	
			3000	163	189	647	101	1.61	1.88	6.40	
			4300	223	259	884	156	1.43	1.66	5.68	
	NC4MVA1ALR	11.1	1100	55	64	220	38	1.45	1.69	5.77	ST
			1600	88	102	350	58	1.53	1.78	6.07	
			3000	163	189	647	104	1.57	1.82	6.22	
			4300	223	259	884	168	1.32	1.54	5.26	
	NC4EVA3ALM	13.07	1450	98	114	389	59	1.66	1.93	6.59	ST
			1650	110	128	437	65	1.69	1.97	6.72	
			2800	178	207	707	111	1.60	1.86	6.37	
			3600	240	279	953	151	1.59	1.85	6.31	
	*NC4EVA3ALN	13.07	1450	98	114	389	60	1.63	1.90	6.48	ST
			1650	110	128	437	67	1.64	1.91	6.52	
			2800	178	207	707	113	1.58	1.83	6.25	
			3600	240	279	953	153	1.57	1.82	6.23	

Remark : * is under developed model

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NC4EVA5ALM	15.31	1450	110	128	437	67	1.64	1.91	6.52	ST
			1950	153	178	607	91	1.68	1.96	6.67	
			2800	207	241	822	130	1.59	1.85	6.32	
			3600	276	321	1096	182	1.52	1.76	6.02	
	NC4EVA5ALN	15.31	1450	110	128	437	69	1.59	1.85	6.33	ST
			1950	153	178	607	93	1.65	1.91	6.53	
			2800	207	241	822	132	1.57	1.82	6.23	
			3600	276	321	1096	184	1.50	1.74	5.96	
	NC4AV80ALR	8.0	1200	48	56	189	34.7	1.37	1.60	5.43	ST
			1600	66	77	262	45.2	1.46	1.70	5.78	
			2450	99	115	393	70.6	1.40	1.63	5.55	
			3650	139	162	552	105.5	1.32	1.53	5.21	
	NC4AV80ALP	8.0	1200	48	56	189	31.4	1.52	1.77	6.00	ST
			1400	56	66	224	36.2	1.56	1.81	6.17	
			2450	99	115	393	66.7	1.49	1.73	5.87	
			3650	139	162	552	98.2	1.42	1.65	5.60	
	NN34H9111AP	11.1	1100	67	78	266	39	1.72	2.00	6.82	ST
			1600	97	113	385	56	1.73	2.02	6.87	
			3000	179	208	710	109	1.64	1.91	6.52	
			4000	219	254	867	141	1.55	1.80	6.13	
	NN34H9112AP	11.1	1100	65	76	258	37.9	1.72	2.00	6.82	ST
			1600	92	107	366	53.3	1.73	2.01	6.88	
			3000	174	203	692	106.8	1.63	1.90	6.48	
			4000	198	230	784	131.7	1.50	1.74	5.96	
	NN34M9112AR	11.1	1100	65	76	258	38	1.70	1.97	6.73	ST
			1600	92	107	365	54	1.72	2.00	6.81	
			3000	174	203	690	106	1.64	1.91	6.53	
			4300	212	246	839	151	1.40	1.63	5.56	
	NN34J9902AP	9.1	1100	50	58	199	28	1.79	2.08	7.11	ST
			1400	64	74	254	35	1.80	2.10	7.16	
			3000	138	160	547	85	1.62	1.89	6.44	
			4300	183	213	728	131	1.40	1.63	5.55	
	NN34M9902AR	9.1	1100	50	58	198	29	1.74	2.02	6.89	ST
			1400	64	74	254	37	1.75	2.04	6.95	
			3000	138	160	547	87	1.59	1.85	6.31	
			4300	183	213	728	134	1.37	1.59	5.44	

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NN54N9112AV	11.1	1100	67	78	268	38	1.80	2.09	7.13	ST
			1400	85	98	335	46	1.85	2.15	7.34	
			3000	176	204	697	102	1.73	2.01	6.86	
			3800	193	224	765	119	1.62	1.89	6.43	
	NN54N9101AX	10.1	1200	67	77	264	38	1.77	2.06	7.02	ST
			1600	87	102	347	48	1.82	2.12	7.23	
			3000	160	186	633	94	1.71	1.98	6.77	
			3600	181	210	716	108	1.67	1.94	6.63	
	NI34N9602AD	5.99	1300	39	45	153	28	1.40	1.63	5.53	ST
			1600	50	58	197	35	1.43	1.66	5.64	
			2000	62	73	248	41	1.51	1.75	5.97	
			3000	92	107	364	65	1.41	1.64	5.58	
			4300	120	140	478	90	1.34	1.56	5.30	
	NI34N9601AD	5.99	1300	39	45	153	24	1.59	1.85	6.28	ST
			1600	50	58	197	30	1.66	1.94	6.58	
			2000	62	73	248	37	1.69	1.96	6.68	
			3000	92	107	364	57	1.62	1.88	6.39	
			4300	120	140	478	82	1.48	1.72	5.84	
	NI34N9601AB	5.99	1300	39	45	153	23	1.66	1.94	6.58	ST
			1600	50	58	197	29	1.73	2.01	6.83	
			2000	62	73	248	36	1.74	2.02	6.88	
			3000	92	107	364	56	1.63	1.90	6.45	
			4300	120	140	478	79	1.52	1.76	5.99	
	NI34N9802AD	8.0	1300	50	59	200	36	1.39	1.61	5.48	ST
			1600	65	76	259	45	1.44	1.68	5.70	
			2000	84	97	331	57	1.47	1.71	5.81	
			3000	123	143	488	86	1.43	1.66	5.65	
			4300	159	185	630	119	1.33	1.55	5.27	
	NI34N9801AD	8.0	1300	50	59	200	31	1.63	1.90	6.46	ST
			1600	65	76	259	39	1.66	1.94	6.58	
			2000	84	97	331	50	1.68	1.96	6.65	
			3000	123	143	488	76	1.62	1.88	6.39	
			4300	159	185	630	108	1.48	1.72	5.83	

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NI34N9801AB	8.0	1300	50	59	200	30	1.70	1.97	6.70	ST
			1600	65	76	259	38	1.74	2.02	6.87	
			2000	84	97	331	49	1.72	2.00	6.81	
			3000	123	143	488	75	1.64	1.91	6.48	
			4300	159	185	630	105	1.52	1.77	6.01	
	*NI34T9902AD	9.0	1300	55	64	219	40	1.39	1.61	5.48	ST
			1600	72	83	284	50	1.44	1.68	5.70	
			2000	96	112	382	66	1.46	1.69	5.76	
			3000	138	160	546	97	1.42	1.65	5.61	
			4300	174	202	690	134	1.30	1.51	5.14	
	*NI34T9901AD	9.0	1300	55	64	219	34	1.61	1.87	6.37	ST
			1600	72	83	284	44	1.64	1.91	6.50	
			2000	96	112	382	58	1.66	1.94	6.58	
			3000	138	160	546	86	1.60	1.86	6.33	
			4300	174	202	690	119	1.46	1.70	5.77	
	*NI34T9901AB	9.0	1300	55	64	219	33	1.66	1.94	6.58	ST
			1600	72	83	284	41	1.73	2.01	6.84	
			2000	96	112	382	57	1.68	1.95	6.64	
			3000	138	160	546	85	1.62	1.89	6.41	
			4300	174	202	690	115	1.51	1.76	5.98	
	*NI34T9102AD	10.0	1300	60	69	237	43	1.39	1.62	5.51	ST
			1600	78	91	310	55	1.41	1.64	5.56	
			2000	110	128	437	74	1.48	1.72	5.86	
			3000	156	181	619	110	1.42	1.65	5.62	
			4500	205	239	814	157	1.31	1.52	5.17	
	*NI34T9101AD	10.0	1300	60	69	237	37	1.62	1.88	6.40	ST
			1600	78	91	310	47	1.65	1.91	6.51	
			2000	110	128	437	66	1.66	1.94	6.58	
			3000	156	181	619	98	1.60	1.86	6.31	
			4500	205	239	814	142	1.44	1.68	5.70	
	*NI34T9101AB	10.0	1300	60	69	237	36	1.65	1.92	6.52	ST
			1600	78	91	310	45	1.72	2.00	6.80	
			2000	110	128	437	65	1.69	1.97	6.68	
			3000	156	181	619	97	1.61	1.88	6.38	
			4500	205	239	814	137	1.49	1.74	5.91	

Remark : * is under developed model

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT [cc/rev.]	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	*NI34T9112AD	11.0	1300	66	77	262	47	1.39	1.62	5.51	ST
			1600	85	99	339	61	1.41	1.64	5.56	
			2000	119	139	474	81	1.48	1.72	5.86	
			3000	173	201	685	121	1.42	1.65	5.62	
			4300	219	254	867	167	1.31	1.52	5.17	
	*NI34T9111AD	11.0	1300	66	77	262	44	1.50	1.74	5.92	ST
			1600	85	99	339	55	1.55	1.80	6.12	
			2000	119	139	474	75	1.59	1.85	6.29	
			3000	173	201	685	113	1.53	1.78	6.06	
			4300	219	254	867	156	1.40	1.63	5.55	
	*NI34T9111AB	11.0	1300	66	77	262	41	1.62	1.88	6.40	ST
			1600	85	99	339	52	1.65	1.91	6.51	
			2000	119	139	474	72	1.66	1.94	6.58	
			3000	173	201	685	108	1.60	1.86	6.31	
			4300	219	254	867	152	1.44	1.68	5.70	
	NF34J9131AM	13.07	1200	81	94	322	48	1.70	1.98	6.75	ST
			1450	95	111	379	55	1.74	2.02	6.90	
			1650	106	123	422	61	1.74	2.02	6.89	
			3700	243	283	965	162	1.50	1.74	5.94	
	NF34J9131AN	13.07	1200	81	94	322	49	1.65	1.92	6.57	ST
			1450	95	111	379	56	1.69	1.97	6.73	
			1650	106	123	422	63	1.69	1.97	6.71	
			3700	243	283	965	165	1.48	1.72	5.86	
	NF34H9151AM	15.31	1200	92	107	364	54	1.69	1.96	6.69	ST
			1450	112	130	443	66	1.70	1.98	6.76	
			1850	145	168	575	83	1.74	2.02	6.90	
			3700	288	335	1143	193	1.49	1.74	5.93	
	NF34J9151AN	15.31	1200	92	107	364	57	1.61	1.87	6.40	ST
			1450	112	130	443	67	1.66	1.93	6.60	
			1850	145	168	575	86	1.69	1.97	6.72	
			3700	288	335	1143	195	1.48	1.72	5.87	
	NF54M5131AR	15.31	1100	74	86	294	46	1.61	1.87	6.39	ST
			1450	95	111	379	57	1.67	1.95	6.64	
			1650	106	123	422	64	1.67	1.94	6.64	
			3700	243	283	965	160	1.52	1.77	6.03	

Remark : * is under developed model

SPECIFICATIONS

Variable Speed / R600a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NF54M7131AN	13.07	1100	74	86	294	43	1.72	2.00	6.83	ST
			1450	95	111	379	55	1.74	2.02	6.90	
			1650	106	123	422	61	1.74	2.02	6.90	
			3700	243	283	965	160	1.52	1.77	6.03	
	NF54M9131AM	13.07	1100	74	86	294	43	1.72	2.01	6.85	ST
			1450	95	111	379	53	1.79	2.08	7.10	
			1650	106	123	422	59	1.79	2.08	7.10	
			3700	243	283	965	161	1.51	1.76	6.00	
	NF54M5151AR	15.31	1100	84	98	333	56	1.51	1.76	6.01	ST
			1450	112	130	443	69	1.61	1.88	6.40	
			1850	145	168	575	87	1.68	1.95	6.65	
			3700	288	335	1143	191	1.51	1.76	6.00	
	NF54M7151AN	15.31	1100	84	98	333	52	1.63	1.89	6.46	ST
			1450	112	130	443	66	1.70	1.98	6.74	
			1850	145	168	575	84	1.73	2.01	6.85	
			3700	288	335	1143	191	1.51	1.76	6.00	
	NF54K9151AM	15.31	1100	84	98	333	50	1.69	1.96	6.70	ST
			1450	112	130	443	63	1.77	2.06	7.03	
			1850	145	168	575	81	1.79	2.08	7.10	
			3700	288	335	1143	191	1.51	1.76	6.00	
	*NF94R9131AT	13.07	900	63	73	250	37	1.71	1.99	6.80	ST
			1100	74	86	294	41	1.81	2.10	7.18	
			1450	95	111	379	52	1.84	2.14	7.30	
			1650	106	123	422	58	1.84	2.14	7.30	
			3700	243	283	965	160	1.52	1.77	6.00	
	*NF94R9151AT	15.31	900	72	83	285	42	1.71	1.99	6.80	ST
			1100	84	98	333	46	1.81	2.10	7.18	
			1450	112	130	443	61	1.84	2.14	7.30	
			1850	145	168	575	80	1.82	2.12	7.23	
			3700	288	335	1143	190	1.52	1.76	6.00	

Remark : * is under developed model

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

ASHRAE CONDITIONS (LBP)

Evaporating Temp. : -23.3°C (-10°F)

Condensing Temp. : 54.4°C (130°F)

Gas Superheated to : 32.2°C (90°F)

Liquid sub-cooled to : 32.2°C (90°F)

Ambient Temp. : 32.2°C (90°F)

Unit conversion table

1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Variable Speed / R600a / MBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	MSV460A-M1B	5.99	1,200	68	79	270	35.0	1.94	2.26	7.71	ST
			1,400	82	95	326	39.7	2.07	2.40	8.20	
			2,000	118	137	468	57.5	2.05	2.39	8.15	
			3,650	205	238	814	108.0	1.90	2.21	7.54	
	NN35J9602AP	5.99	1,200	61	71	242	28.6	2.13	2.48	8.46	ST
			1,400	79	92	314	35.9	2.20	2.56	8.73	
			2,000	111	129	441	50.7	2.19	2.55	8.70	
			3,650	208	242	826	101.3	2.05	2.39	8.15	

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

ASHRAE CONDITIONS (MBP)

Evaporating Temp. : -6.7°C (20°F)

Condensing Temp. : 54.4°C (130°F)

Gas Superheated to : 35.0°C (95°F)

Liquid sub-cooled to : 46.1°C (115°F)

Ambient Temp. : 35.0°C (95°F)

Unit conversion table

1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Variable Speed / R134a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	*NC1MV43ALP	4.33	1,200	45	52	179	31	1.45	1.69	5.76	ST
			2,000	76	88	302	50	1.52	1.77	6.03	
			3,000	112	130	445	76	1.47	1.71	5.85	
			4,300	146	170	580	110	1.33	1.54	5.27	
	*NC1MV43ALR	4.33	1,200	45	52	179	32	1.41	1.64	5.58	ST
			2,000	76	88	302	51	1.49	1.73	5.92	
			3,000	112	130	445	78	1.44	1.67	5.70	
			4,300	146	170	580	112	1.30	1.52	5.18	
	*NC1MV60ALP	5.99	1,200	65	76	258	41	1.59	1.84	6.29	ST
			2,000	111	129	441	69	1.61	1.87	6.39	
			3,000	158	184	627	102	1.55	1.80	6.15	
			4,300	211	245	838	143	1.48	1.72	5.86	
	*NC1MV60ALR	5.99	1,200	65	76	258	42	1.55	1.80	6.14	ST
			2,000	111	129	441	71	1.56	1.82	6.21	
			3,000	158	184	627	104	1.52	1.77	6.03	
			4,300	211	245	838	145	1.46	1.69	5.78	
	MSV162A-L1J	6.16	1,200	60	70	238	44	1.36	1.59	5.41	ST
			2,000	105	122	417	70	1.50	1.74	5.96	
			3,000	155	180	615	105	1.48	1.72	5.86	
			4,000	210	244	834	143	1.47	1.71	5.83	
	MSV162A-L1B	6.16	1,200	60	70	238	43	1.40	1.62	5.54	ST
			2,000	105	122	417	68	1.54	1.80	6.13	
			3,000	155	180	615	103	1.50	1.75	5.97	
			4,000	210	244	834	141	1.49	1.73	5.91	
	MSV172A-L2J	7.21	1,200	67	78	266	53	1.26	1.47	5.02	FC
			2,000	123	143	488	82	1.50	1.74	5.96	
			3,000	192	223	762	129	1.49	1.73	5.91	
			4,300	256	298	1,016	200	1.28	1.49	5.08	
	MSV172A-L1B	7.21	1,200	67	78	266	50	1.34	1.56	5.32	ST
			2,000	123	143	488	79	1.56	1.81	6.18	
			3,000	192	223	762	125	1.54	1.79	6.10	
			4,300	256	298	1,016	188	1.36	1.58	5.41	
	NC1MV72ALP	7.21	1,200	80	93	318	51	1.57	1.82	6.23	ST
			2,000	137	159	544	84	1.63	1.90	6.47	
			3,000	193	224	766	125	1.54	1.80	6.13	
			4,000	249	290	989	178	1.40	1.63	5.55	

Remark : * is under developed model

SPECIFICATIONS

Variable Speed / R134a / LBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NC1MV72ASR	7.21	1200	80	93	318	52	1.54	1.79	6.11	ST
			2000	137	159	544	86	1.59	1.85	6.32	
			3000	193	224	766	127	1.52	1.77	6.03	
			4000	249	290	989	175	1.42	1.65	5.65	
	NC1MV82ALP	8.19	1200	90	105	357	59	1.53	1.77	6.06	ST
			1700	135	157	536	83	1.63	1.89	6.46	
			3000	221	257	877	143	1.55	1.80	6.14	
			4300	307	357	1219	209	1.47	1.71	5.83	
	*NC1MV82ALR	8.19	1200	90	105	357	61	1.48	1.72	5.86	ST
			1700	135	157	536	85	1.59	1.85	6.31	
			3000	221	257	877	146	1.51	1.76	6.01	
			4300	307	357	1219	213	1.44	1.68	5.72	
	NC1MV90ALP	9.08	1200	100	116	397	66	1.52	1.76	6.02	ST
			1600	135	157	536	83	1.63	1.89	6.46	
			2800	233	271	925	152	1.53	1.78	6.09	
			3800	283	329	1122	202	1.40	1.63	5.57	
			4000	297	345	1178	213	1.39	1.62	5.53	
	NC1MV90ASR	9.08	1200	100	116	397	69	1.45	1.69	5.75	ST
			1600	135	157	536	87	1.55	1.80	6.16	
			2800	233	271	925	160	1.46	1.69	5.78	
			3800	283	329	1122	207	1.37	1.59	5.42	
			4000	297	365	1247	218	1.36	1.58	5.41	

Remark : * is under developed model

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

ASHRAE CONDITIONS (LBP)

Evaporating Temp. : -23.3°C (-10°F)

Condensing Temp. : 54.4°C (130°F)

Gas Superheated to : 32.2°C (90°F)

Liquid sub-cooled to : 32.2°C (90°F)

Ambient Temp. : 32.2°C (90°F)

Unit conversion table

1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Variable Speed / R134a / MBP

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	NC1MV43AMP	4.33	1,200	85	98	335	43	1.97	2.29	7.80	ST
			2,000	153	178	607	74	2.07	2.40	8.21	
			3,000	230	267	913	114	2.02	2.35	8.01	
			3,650	263	306	1,044	137	1.92	2.23	7.62	

Variable Speed / R134a / HBP(DBP)

RATED VOLTAGE	MODEL	DISPLACEMENT	RUNNING RPM	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
		[cc/rev.]		kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-240V~50Hz, 220V~60Hz	MSV572A-D1R	7.21	1,200	283	329	1123	109	2.60	3.02	10.30	ST
			2,160	512	596	2032	191	2.68	3.12	10.64	
			2,880	682	794	2706	266	2.56	2.98	10.17	
			3,600	829	965	3290	344	2.41	2.80	9.56	
			3,780	871	1014	3456	372	2.34	2.73	9.29	
	MSV672A-H1P	7.21	2,160	523	608	2,076	186	2.81	3.27	11.16	ST
			2,880	685	797	2,719	258	2.66	3.09	10.54	
			3,600	834	970	3,311	333	2.50	2.91	9.94	
			3,780	870	1,012	3,454	351	2.48	2.88	9.84	
	MSV672B-D1P	7.21	2,160	523	608	2,076	186	2.81	3.27	11.16	ST
			2,880	685	797	2,719	258	2.66	3.09	10.54	
			3,600	834	970	3,311	333	2.50	2.91	9.94	
			3,780	870	1,012	3,454	351	2.48	2.88	9.84	
	NC6MV90ADP	9.08	1,740	510	594	2024	190	2.68	3.12	10.65	ST
			2,160	640	745	2540	240	2.67	3.10	10.58	
			2,880	850	989	3373	335	2.54	2.95	10.07	
			4,080	1050	1222	4167	540	1.94	2.26	7.72	

COOLING TYPE

FC : Fan cooling
OC : Oil cooling
ST : Static

ASHRAE CONDITIONS (MBP)

Evaporating Temp. : -6.7°C (20°F)
Condensing Temp. : 54.4°C (130°F)
Gas Superheated to : 35.0°C (95°F)
Liquid sub-cooled to : 46.1°C (115°F)
Ambient Temp. : 35.0°C (95°F)

ASHRAE CONDITIONS (HBP)

Evaporating Temp. : 7.2°C (45°F)
Condensing Temp. : 54.4°C (130°F)
Gas Superheated to : 35.0°C (95°F)
Liquid sub-cooled to : 46.1°C (115°F)
Ambient Temp. : 35.0°C (95°F)

Unit conversion table

1 watt = 3.41 Btu/Hr
1 watt = 0.86 Kcal/Hr
1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Fixed Speed / R600a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 110V~60Hz	NN24N4821TH	RSCR	110-60	152	177	603	92.8	1.64	1.90	6.50	ST
	NN24N4101TH	RSCR	110-60	190	221	754	118.7	1.60	1.86	6.35	ST
AC 115V~60Hz	MSE482C-S1H	RSCR	115-60	150	174	596	98	1.54	1.79	6.10	ST
	MSE482C-L1H	RSCR	115-60	150	174	596	96	1.56	1.82	6.20	ST
	MSA488C-S1B	RSCR	115-60	160	186	635	124	1.29	1.49	5.10	ST
	MSE4A0C-S1H	RSCR	115-60	186	216	738	125	1.49	1.73	5.90	ST
	MSE4A0C-L1H	RSCR	115-60	186	216	738	123	1.51	1.76	6.00	ST
	MSA4A1C-S1B	RSCR	115-60	197	229	782	156	1.26	1.47	5.00	ST
AC 115-127V~60Hz	MSE4A2D-L1H	RSCR	115-60	225	262	893	156	1.44	1.68	5.75	ST
AC 220-240V~50Hz	NC4A51QLA	RSIR	220-50	68	79	270	71	0.96	1.11	3.80	ST
	MSE466Q-L1G	RSCR	220-50	94	109	373	61.7	1.52	1.77	6.05	ST
	MSE466Q-L1U	RSCR	220-50	94	109	373	57	1.65	1.92	6.55	ST
	NN24N4661QH	RSCR	220-50	94	109	373	58.3	1.61	1.88	6.40	ST
	MSA471Q-L1A	RSIR	220-50	98	114	389	79	1.24	1.44	4.92	ST
	MSA471Q-L1B	RSCR	220-50	98	114	389	76	1.29	1.50	5.12	ST
	MSS470Q-L1U	RSCR	220-50	98	114	389	67	1.46	1.70	5.81	ST
	MSA477Q-L1B	RSCR	220-50	109	127	433	78	1.40	1.62	5.55	ST
	MSE482Q-L1G	RSCR	220-50	128	149	508	82	1.55	1.80	6.15	ST
	MSE482Q-L1H	RSCR	220-50	128	149	508	79	1.61	1.88	6.40	ST
	MSE482Q-L1U	RSCR	220-50	128	149	508	77	1.66	1.93	6.60	ST
	MSA488Q-L1B	RSCR	220-50	120	140	476	90	1.33	1.55	5.29	ST
	MSS488Q-L1U	RSCR	220-50	120	140	476	82	1.46	1.70	5.81	ST
	MSE490Q-L1G	RSCR	220-50	138	160	548	91	1.51	1.76	6.00	ST
	MSE490Q-L1H	RSCR	220-50	140	163	556	88.2	1.59	1.85	6.30	ST
	MSE490Q-L1U	RSCR	220-50	140	163	556	85.5	1.64	1.90	6.50	ST
	MSE4A0Q-L1G	RSCR	220-50	162	188	643	107	1.51	1.76	6.00	ST
	MSE4A0Q-L1H	RSCR	220-50	162	188	643	104	1.56	1.82	6.20	ST
	MSE4A0Q-L1U	RSCR	220-50	162	188	643	100.5	1.61	1.88	6.40	ST
	NN24N4101QH	RSCR	220-50	160	186	635	96.9	1.65	1.92	6.55	ST
	MSA4A1Q-L1B	RSCR	220-50	164	191	651	115	1.43	1.66	5.66	ST
	MSS4A1Q-L1U	RSCR	220-50	164	191	651	109	1.50	1.75	5.97	ST
	MSE4A1Q-L1G	RSCR	220-50	175	203	695	118	1.49	1.73	5.90	ST
	MSE4A1Q-L1U	RSCR	220-50	176	205	699	111	1.59	1.85	6.30	ST
	MSA4A2Q-L1B	RSCR	220-50	185	215	734	135	1.37	1.59	5.44	ST
	MSS4A2Q-R1U	RSCR	220-50	180	209	715	120	1.50	1.74	5.96	ST

SPECIFICATIONS

Fixed Speed / R600a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 220-240V~50Hz	MSE4A2Q-L1H	RSCR	220-50	192	223	762	127	1.51	1.76	6.00	ST
	MSE4A2Q-L1U	RSCR	220-50	192	223	762	123	1.56	1.82	6.20	ST
AC 220V~60Hz	NN24N4661BG	RSCR	220-60	114	133	452	75.4	1.51	1.76	6.00	ST
AC 200-220V~50Hz, 220V~60Hz	MSA471H-L1B	RSCR	220-50	98	114	389	76	1.29	1.50	5.12	ST
			220-60	122	142	484	89	1.37	1.59	5.44	
	MSA477H-L1B	RSCR	220-50	109	127	433	78	1.40	1.62	5.55	ST
			220-60	124	144	492	90	1.38	1.60	5.47	
	MSA488H-L1A	RSIR	220-50	135	157	536	119	1.13	1.32	4.60	ST
			220-60	160	186	635	127	1.26	1.46	5.00	
	MSA488H-L1B	RSCR	220-50	120	140	476	90	1.33	1.55	5.29	ST
			220-60	153	178	607	110	1.39	1.62	5.52	
	MSE482H-L1G	RSCR	220-50	127	148	504	84.4	1.50	1.75	5.97	ST
			220-60	150	174	595	101.4	1.48	1.72	5.87	
	MSA4A1H-L1A	RSIR	220-50	164	191	651	148	1.11	1.29	4.40	ST
			220-60	194	226	770	159	1.22	1.42	4.85	
AC 200~220V~50Hz	NC4A62KLB	RSCR	220-50	88	102	349	65	1.35	1.57	5.37	ST
	MSA462K-S1B	RSCR	220-50	90	105	357	65	1.38	1.61	5.50	ST
	NN24R4829KH	RSCR	220-50	124	144	492	80.0	1.55	1.80	6.15	ST
	MSE490K-L1G	RSCR	220-50	138	160	548	105.3	1.31	1.52	5.20	ST
	NN24R6101KA	RSIR	220-60	160	186	635	119.8	1.34	1.55	5.30	ST
	MSE4A0K-L1G	RSCR	220-50	162	188	643	125.6	1.29	1.50	5.12	ST
	MSE4A2K-L1G	RSCR	220-50	192	223	762	143.7	1.34	1.55	5.30	ST

COOLING TYPE
FC : Fan cooling
OC : Oil cooling
ST : Static

MOTOR TYPE
RSIR : Resistance Start Induction Run
RSCR : Resistance Start Capacitor Run
CSIR : Capacitor Start Induction Run
CSR : Capacitor Start Capacitor Run

ASHRAE CONDITIONS (LBP)
Evaporating Temp. : -23.3°C (-10°F)
Condensing Temp. : 54.4°C (130°F)
Gas Superheated to : 32.2°C (90°F)
Liquid sub-cooled to : 32.2°C (90°F)
Ambient Temp. : 32.2°C (90°F)

Unit conversion table
1 watt = 3.41 Btu/Hr
1 watt = 0.86 Kcal/Hr
1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Fixed Speed / R600a / LBP, MBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-220V~50Hz, 220V~60Hz	MSE482H-M1H	RSCR	220-50	242	281	961	121.6	1.99	2.32	7.90	ST
			220-60	290	337	1151	142.1	2.04	2.37	8.10	
	MSE482H-M1U	RSCR	220-50	242	281	961	115.7	2.09	2.43	8.30	ST
			220-60	290	337	1151	140.3	2.07	2.40	8.20	
AC 220V~60Hz	MSE466B-M1H	RSCR	220-60	224	260	889	110.0	2.04	2.37	8.10	ST

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

ASHRAE CONDITIONS (MBP)

Evaporating Temp. : -6.7°C (20°F)

Condensing Temp. : 54.4°C (130°F)

Gas Superheated to : 35.0°C (95°F)

Liquid sub-cooled to : 46.1°C (115°F)

Ambient Temp. : 35.0°C (95°F)

Unit conversion table

1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 100V~50/60Hz 110V~60Hz	CD124E-L1ZB	RSIR	100-50	42	49	167	72	0.58	0.68	2.31	ST
			100-60	50	58	199	68	0.74	0.85	2.92	
	CD124E-L1Z2	RSIR	100-50	43	50	171	68	0.63	0.74	2.51	ST
			100-60	52	60	206	68	0.76	0.89	3.03	
	CD130E-L1Z2	RSIR	100-50	58	67	230	76	0.76	0.89	3.03	ST
			100-60	70	81	278	79	0.89	1.03	3.52	
	NC1A30ELA	RSIR	100-50	68	79	270	69	0.99	1.15	3.91	ST
			100-60	80	93	318	75	1.07	1.24	4.23	
	MSA150E-L1A	RSIR	100-50	125	145	496	112	1.12	1.30	4.43	ST
			100-60	152	177	603	124	1.23	1.43	4.86	
	MSA151E-L1A	RSIR	100-50	128	149	508	109	1.17	1.37	4.66	ST
			100-60	152	177	603	121	1.26	1.46	4.98	
	MSA160E-L1A	RSIR	100-50	151	176	599	139	1.09	1.26	4.31	ST
			100-60	187	217	742	156	1.20	1.39	4.76	

SPECIFICATIONS

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 115V~60Hz	CD124C-L1ZA	RSIR	115-60	50	58	199	68	0.74	0.85	2.92	ST
	CD124C-L1ZB	RSIR	115-60	50	58	199	68	0.74	0.85	2.92	ST
	CD124C-L1Z2	RSIR	115-60	52	60	206	65	0.80	0.93	3.17	ST
	CD124C-S1Z2	RSIR	115-60	52	60	206	57	0.91	1.06	3.62	ST
	CD130C-S1ZA	RSIR	115-60	70	81	278	82	0.85	0.99	3.39	ST
	CD130C-L1Z2	RSIR	115-60	70	81	278	76	0.92	1.07	3.65	ST
	CD130C-S1Z2	RSIR	115-60	70	81	278	73	0.96	1.12	3.80	ST
	MSE140C-L1G	RSCR	115-60	126	147	500	87	1.45	1.68	5.75	ST
	MSE140C-L1H	RSCR	115-60	126	147	500	84	1.50	1.74	5.95	ST
	MSE140C-L1U	RSCR	115-60	126	147	500	81.3	1.55	1.80	6.15	ST
	MSA141C-S1A	RSIR	115-60	124	144	492	101	1.23	1.43	4.87	ST
	MSA141C-S1B	RSCR	115-60	124	144	492	96	1.29	1.50	5.13	ST
	MSA143C-S1A	RSIR	115-60	124	144	492	100	1.24	1.44	4.92	ST
	MSA143C-S1B	RSCR	115-60	124	144	492	94	1.32	1.53	5.23	ST
	MSA150C-L1A	RSIR	115-60	152	177	603	123	1.24	1.44	4.90	ST
	MSA151C-L1U	RSCR	115-60	152	177	603	116	1.31	1.52	5.20	ST
	MSA151C-L1B	RSCR	115-60	152	177	603	113	1.35	1.56	5.34	ST
	MSA151C-L1G	RSCR	115-60	152	177	603	109	1.39	1.62	5.54	ST
	MSS151C-L1U	RSCR	115-60	152	177	603	107	1.42	1.65	5.64	ST
	MSA152C-L1G	RSCR	115-60	152	177	603	105	1.45	1.68	5.74	ST
	MSE148C-L1G	RSCR	115-60	155	180	615	107	1.45	1.68	5.75	ST
	MSE148C-L1H	RSCR	115-60	155	180	615	103.4	1.50	1.74	5.95	ST
	MSE148C-L1U	RSCR	115-60	155	180	615	100	1.55	1.80	6.15	ST
	MSE152C-L1G	RSCR	115-60	168	195	667	114	1.47	1.71	5.85	ST
	MSE152C-L1H	RSCR	115-60	168	195	667	110.2	1.52	1.77	6.05	ST
	MSE152C-L1U	RSCR	115-60	168	195	667	106.7	1.58	1.83	6.25	ST
	MSA160C-L1A	RSIR	115-60	187	217	742	155	1.21	1.40	4.79	ST
	MSA161C-L1A	RSIR	115-60	187	217	742	152	1.23	1.43	4.88	ST
	MSA162C-L1B	RSCR	115-60	187	217	742	145	1.29	1.50	5.12	ST
	MSA162C-L1U	RSCR	115-60	182	212	723	136	1.34	1.56	5.31	ST
	MSS162C-L1U	RSCR	115-60	182	212	723	129	1.41	1.64	5.60	ST
	MSE156C-L1H	RSCR	115-60	188	219	746	123.3	1.52	1.77	6.05	ST
	MSE156C-L1U	RSCR	115-60	188	219	746	119.4	1.58	1.83	6.25	ST
	MSA171C-L1B	RSCR	115-60	220	256	873	162	1.36	1.58	5.39	ST
	MSA170C-L1B	RSCR	115-60	222	258	881	160	1.39	1.61	5.51	ST
	MSA170C-L1U	RSCR	115-60	222	258	881	160	1.39	1.61	5.51	ST

SPECIFICATIONS

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 115V~60Hz	MSS170C-L1U	RSCR	115-60	222	258	881	152	1.46	1.70	5.80	ST
	MSE166C-L1G	RSCR	115-60	225	262	893	155.3	1.45	1.68	5.75	ST
	MSE166C-L1H	RSCR	115-60	225	262	893	150.1	1.50	1.74	5.95	ST
	MSE166C-L1U	RSCR	115-60	225	262	893	145.2	1.55	1.80	6.15	ST
	NF21K5111CW	CSR	115-60	322	374	1278	304	1.06	1.23	4.21	FC
AC 115-127V~60Hz	NC1A30DLA	RSIR	115-60	80	93	318	79	1.01	1.18	4.02	ST
	NC1A37DLB	RSCR	115-60	108	126	429	100	1.08	1.26	4.29	ST
	NC1A43DLB	RSCR	115-60	118	137	468	100	1.18	1.37	4.68	ST
	MSS143D-S1U	RSCR	115-60	116	135	461	85	1.36	1.59	5.42	ST
	MSA151D-L1A	RSIR	115-60	152	177	603	121	1.26	1.46	5.00	ST
	MSA151D-L1B	RSCR	115-60	152	177	603	113	1.35	1.56	5.34	ST
	MSA162D-L1B	RSCR	115-60	187	217	742	145	1.29	1.50	5.12	ST
	MSS162D-S1U	RSCR	115-60	187	217	742	135	1.39	1.61	5.50	ST
	MSA162D-S1G	RSCR	115-60	187	217	742	133	1.41	1.63	5.58	ST
	MSA162D-L1A	RSIR	115-60	192	223	762	153	1.25	1.46	5.00	ST
	MSA162D-L1H	RSCR	115-60	192	223	762	132	1.45	1.69	5.80	ST
	MSA170D-L1H	RSCR	115-60	218	253	865	155	1.41	1.64	5.60	ST
	MSA182D-L2H	RSCR	115-60	270	314	1072	193	1.40	1.63	5.55	ST
	MSA182D-L2G	RSCR	115-60	270	314	1072	201	1.34	1.56	5.35	ST
	MSS182D-L2U	RSCR	115-60	264	307	1048	181	1.46	1.70	5.80	ST
AC 127V~60Hz	CD124P-S1ZB	RSIR	127-60	52	60	206	74	0.70	0.82	2.79	ST
	CD124P-L1Z2	RSIR	127-60	52	60	206	68	0.76	0.89	3.04	ST
	CD130P-S1ZB	RSIR	127-60	70	81	278	92	0.76	0.88	3.02	ST
	CD130P-L1Z2	RSIR	127-60	70	81	278	76	0.92	1.07	3.66	ST
	MSA162P-S1B	RSCR	127-60	187	217	742	137	1.36	1.59	5.42	ST
AC 200-220V~50Hz, 220V~60Hz	CD124H-L1ZA	RSIR	220-50	42	49	167	71	0.59	0.69	2.35	ST
			220-60	50	58	199	71	0.70	0.82	2.80	
	CD124H-L1Z2	RSIR	220-50	43	50	171	63	0.68	0.79	2.71	ST
			220-60	52	60	206	64	0.81	0.94	3.23	
	CD130H-L1Z2	RSIR	220-50	58	67	230	73	0.79	0.92	3.15	ST
			220-60	70	81	278	76	0.92	1.07	3.66	
	NC1A37HLB	RSCR	220-50	90	105	357	84	1.07	1.25	4.25	ST
			220-60	108	126	429	97	1.11	1.29	4.42	
	NC1A43HLB	RSCR	220-50	102	119	405	91	1.12	1.30	4.45	ST
			220-60	118	137	468	100	1.18	1.37	4.68	

SPECIFICATIONS

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 200-220V~50Hz, 220V~60Hz	MSA141H-L1A	RSIR	220-50	96	112	381	83	1.16	1.34	4.59	ST
			220-60	124	144	492	103	1.20	1.40	4.78	
	MSA143H-L1A	RSIR	220-50	95	110	377	85	1.12	1.30	4.43	ST
			220-60	128	149	508	102	1.25	1.46	5.00	
	MSA150H-L1A	RSIR	220-50	125	145	496	110	1.14	1.32	4.51	ST
			220-60	152	177	603	123	1.24	1.44	4.90	
	MSA151H-L1A	RSIR	220-50	128	149	508	107	1.20	1.39	4.75	ST
			220-60	152	177	603	121	1.26	1.46	5.00	
	MSA160H-L1A	RSIR	220-50	151	176	599	136	1.11	1.29	4.41	ST
			220-60	187	217	742	150	1.25	1.45	4.95	
	MSA161H-L1A	RSIR	220-50	151	176	599	135	1.12	1.30	4.44	ST
			220-60	187	217	742	149	1.26	1.46	4.98	
	MSA162H-L1A	RSIR	220-50	152	177	603	141	1.08	1.25	4.28	ST
			220-60	192	223	762	153	1.25	1.46	5.00	
	MSA162H-L1H	RSCR	220-50	152	177	603	110	1.38	1.61	5.50	ST
			220-60	192	223	762	134	1.43	1.67	5.70	
	MSA171H-L1B	RSCR	220-50	173	201	687	142	1.22	1.42	4.83	ST
			220-60	220	256	873	161	1.37	1.59	5.42	
	MSA170H-L1B	RSCR	220-50	173	201	686	141	1.23	1.43	4.87	ST
			220-60	220	256	873	163	1.35	1.57	5.36	
	MSA170H-L1G	RSCR	220-50	173	201	686	131	1.32	1.54	5.24	ST
			220-60	220	256	873	157	1.40	1.63	5.56	
	MSA170H-L1H	RSCR	220-50	170	198	675	130	1.31	1.52	5.20	ST
			220-60	218	253	865	155	1.41	1.64	5.60	
	MSA182H-L2G	RSCR	220-50	218	253	865	188	1.16	1.35	4.60	ST
			220-60	270	314	1071	201	1.34	1.56	5.35	
	MSA182H-L2H	RSCR	220-50	218	253	865	173	1.26	1.47	5.00	ST
			220-60	270	314	1071	193	1.40	1.63	5.55	
	MSS182H-L2U	RSCR	220-50	212	247	841	165	1.28	1.49	5.10	ST
			220-60	264	307	1048	181	1.46	1.70	5.80	
	MSA190H-L2G	RSCR	220-50	242	281	960	216	1.12	1.30	4.45	ST
			220-60	300	349	1190	225	1.33	1.55	5.30	
	MSA190H-L2H	RSCR	220-50	242	281	960	200	1.21	1.41	4.80	ST
			220-60	300	349	1190	215	1.40	1.62	5.55	
AC 220V~60Hz	CD124B-L1ZA	RSIR	220-60	50	58	199	71	0.70	0.82	2.80	ST
	CD124B-L1ZB	RSIR	220-60	50	58	199	71	0.70	0.82	2.80	ST

SPECIFICATIONS

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 220V~60Hz	NC1A24BLA	RSIR	220-60	50	58	199	71	0.70	0.82	2.80	ST
	CD130B-S1ZA	RSIR	220-60	70	81	278	82	0.85	0.99	3.37	ST
	CD130B-S1ZB	RSIR	220-60	70	81	278	82	0.85	0.99	3.37	ST
	NC1A37BLA	RSIR	220-60	108	126	429	103	1.05	1.22	4.16	ST
	MSE140B-L1U	RSCR	220-60	126	147	500	81	1.55	1.80	6.15	ST
	MSE148B-L1U	RSCR	220-60	155	180	615	100	1.55	1.80	6.15	ST
	MSE156B-L1U	RSCR	220-60	188	219	746	121	1.55	1.81	6.17	ST
	MSA162B-L1G	RSCR	220-60	187	217	742	130	1.44	1.67	5.71	ST
	MSE166B-L1U	RSCR	220-60	225	262	893	146	1.54	1.79	6.15	ST
	NF21K5111BW	CSR	220-60	322	374	1278	284	1.13	1.32	4.50	FC
	NF21K5131BW	CSR	220-60	385	448	1528	322	1.20	1.39	4.75	FC
AC 220-240V~50Hz, 220V~60Hz	MSA151G-L1B	RSCR	220-50	123	143	488	94	1.31	1.52	5.19	ST
			220-60	152	177	603	110	1.38	1.61	5.48	
	MSS151G-L1U	RSCR	220-50	125	145	496	90	1.39	1.61	5.51	ST
			220-60	152	177	603	107	1.42	1.65	5.64	
	MSA162G-L1B	RSCR	220-50	151	176	599	115	1.31	1.53	5.21	ST
			220-60	187	217	742	135	1.39	1.61	5.50	
	MSS170G-L1U	RSCR	220-50	178	207	707	124	1.44	1.67	5.70	ST
			220-60	222	258	881	151	1.47	1.71	5.84	
	NC1A30GLA	RSIR	220-50	68	79	270	71	0.96	1.11	3.80	ST
			220-60	80	93	318	77	1.04	1.21	4.12	
AC 220-240V~50Hz	CD124Q-L1Z2	RSIR	220-50	43	50	171	57	0.75	0.88	2.99	ST
	CD130Q-S1ZA	RSIR	220-50	58	67	230	74	0.78	0.91	3.10	ST
	CD130Q-L1Z2	RSIR	220-50	58	67	230	65	0.89	1.04	3.54	ST
	NC1A37QLB	RSCR	220-50	90	105	357	80	1.13	1.31	4.47	ST
	MSA141Q-S1A	RSIR	220-50	96	112	381	83	1.16	1.34	4.59	ST
	MSA143Q-S1Z	RSIR	220-50	96	112	381	83	1.16	1.34	4.59	ST
	MSA153Q-L1A	RSIR	220-50	125	145	496	111	1.13	1.31	4.47	ST
	MSA150Q-L1A	RSIR	220-50	125	145	496	104	1.20	1.40	4.77	ST
	MSA151Q-L1A	RSIR	220-50	128	149	508	102	1.25	1.46	5.00	ST
	MSA163Q-L1A	RSIR	220-50	151	176	599	134	1.13	1.31	4.47	ST
	MSA161Q-L1A	RSIR	220-50	151	176	599	126	1.20	1.39	4.76	ST
	MSA161Q-L1B	RSCR	220-50	151	176	599	116	1.30	1.51	5.17	ST
	MSA162Q-L1G	RSCR	220-50	151	176	599	106	1.42	1.66	5.65	ST
	MSS162Q-L1U	RSCR	220-50	151	176	599	105	1.44	1.67	5.71	ST
	MSA171Q-L1B	RSCR	220-50	173	201	687	131	1.32	1.54	5.24	ST

SPECIFICATIONS

Fixed Speed / R134a / LBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 220-240V~50Hz	MSA170Q-L1B	RSCR	220-50	173	201	687	129	1.34	1.56	5.32	ST
	MSA170Q-L1G	RSCR	220-50	173	201	687	126	1.37	1.60	5.45	ST
	MSA170Q-L1H	RSCR	220-50	170	198	675	123	1.38	1.61	5.50	ST
	MSA182Q-L2H	RSCR	220-50	218	253	865	153	1.42	1.66	5.65	ST
	MSS182Q-L2U	RSCR	220-50	212	247	842	145	1.46	1.70	5.80	ST
AC 200-220V~50Hz	CD124K-S1ZA	RSIR	220-50	42	49	167	64	0.66	0.76	2.61	ST
	CD124K-S1ZB	RSIR	220-50	42	49	167	64	0.66	0.76	2.61	ST
	CD130K-S1ZA	RSIR	220-50	58	67	230	79	0.73	0.85	2.91	ST
	MSA141K-L1A	RSIR	220-50	96	112	381	86	1.12	1.30	4.43	ST
	MSA141K-S1A	RSIR	220-50	96	112	381	83	1.16	1.34	4.59	ST
	MSA141K-S1B	RSCR	220-50	96	112	381	79	1.22	1.41	4.82	ST
	MSA143K-S1B	RSCR	220-50	96	112	381	77	1.25	1.45	4.95	ST
	NC1A43KLA	RSIR	220-50	102	119	405	94	1.09	1.26	4.31	ST
	NC1A43KLB	RSCR	220-50	102	119	405	90	1.13	1.32	4.50	ST
	MSA151K-S1G	RSCR	220-50	125	145	496	102	1.23	1.42	4.86	ST
	MSA162K-S1G	RSCR	220-50	151	176	599	117	1.29	1.50	5.12	ST
	MSA170K-S1G	RSCR	220-50	173	201	687	132	1.31	1.52	5.20	ST
AC 230V~50Hz	NF21K5111FU	RSCR	230-50	265	308	1052	228	1.16	1.35	4.61	FC
	NF21K5131FU	RSCR	230-50	325	378	1290	275	1.18	1.37	4.69	FC

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

MOTOR TYPE

RSIR : Resistance Start Induction Run

RSCR : Resistance Start Capacitor Run

CSIR : Capacitor Start Induction Run

CSR : Capacitor Start Capacitor Run

ASHRAE CONDITIONS (LBP)

Evaporating Temp. : -23.3℃ (-10℉)

Condensing Temp. : 54.4℃ (130℉)

Gas Superheated to : 32.2℃ (90℉)

Liquid sub-cooled to : 32.2℃ (90℉)

Ambient Temp. : 32.2℃ (90℉)

Unit conversion table

1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

SPECIFICATIONS

Fixed Speed / R134a / DBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 220V~60Hz	MSA662B-D1B	RSCR	220-60	690	802	2739	285	2.42	2.82	9.60	ST
	MSA670B-D1B	RSCR	220-60	810	942	3216	360	2.25	2.62	8.90	ST
	MSS670B-D1U	RSCR	220-60	810	942	3216	305	2.66	3.09	10.54	ST
AC 220-240V~50Hz	MSA670Q-D1B	RSCR	220-50	665	773	2640	278	2.39	2.78	9.50	ST

Fixed Speed / R134a / HBP

RATED VOLTAGE	MODEL	MOTOR TYPE	VOLTAGE [V-Hz]	ASHRAE							COOLING TYPE
				COOLING CAPACITY			POWER INPUT	EFFICIENCY			
								EFF	COP	EER	
				kcal/h	Watts	Btu/h	Watts	kcal/Wh	W/W	Btu/Wh	
AC 115V~60Hz	MSA643C-H1G	RSCR	115-60	495	576	1965	191	2.59	3.01	10.29	ST
	NF26K5111CW	CSR	115-60	1070	1244	4248	602	1.78	2.07	7.06	FC
	NF26K5111CB	RSCR	115-60	1070	1244	4248	545	1.96	2.28	7.79	FC
	NF26K5131CW	CSR	115-60	1255	1459	4982	682	1.84	2.14	7.31	FC
AC 220V~60Hz	MSA635C-H1A	RSIR	220-50	388	451	1540	156.0	2.49	2.89	9.87	ST
	MSA643B-H1G	RSCR	220-60	495	576	1965	191	2.59	3.01	10.28	ST
	MSA651B-H1G	RSCR	220-60	590	686	2342	230	2.57	2.98	10.18	ST
	NF26K5111BS	CSIR	220-60	1070	1244	4248	669	1.60	1.86	6.35	FC
	NF26K5111BW	CSR	220-60	1070	1244	4248	540	1.98	2.30	7.87	FC
	NF26K5131BS	CSIR	220-60	1255	1459	4982	776	1.62	1.88	6.42	FC
AC 230V~50Hz	NF26K5111FZ	RSIR	230-50	935	1087	3712	562	1.66	1.93	6.60	FC
	NF26K5131FZ	RSIR	230-50	1050	1221	4169	631	1.66	1.93	6.61	FC
AC 220-240V~50Hz	MSA643Q-H1G	RSCR	220-50	400	465	1588	154	2.60	3.02	10.30	FC
	MSA651Q-H1G	RSCR	220-50	480	558	1906	185	2.59	3.02	10.30	FC
	NF26K5111QZ	RSIR	220-50	935	1087	3712	510	1.83	2.13	7.28	FC

COOLING TYPE

FC : Fan cooling

OC : Oil cooling

ST : Static

MOTOR TYPE

RSIR : Resistance Start Induction Run

RSCR : Resistance Start Capacitor Run

CSIR : Capacitor Start Induction Run

CSR : Capacitor Start Capacitor Run

ASHRAE CONDITIONS (DBP/HBP)

Evaporating Temp. : 7.2℃ (45°F)

Condensing Temp. : 54.4℃ (130°F)

Gas Superheated to : 35.0℃ (95°F)

Liquid sub-cooled to : 46.1℃ (115°F)

Ambient Temp. : 35.0℃ (95°F)

Unit conversion table

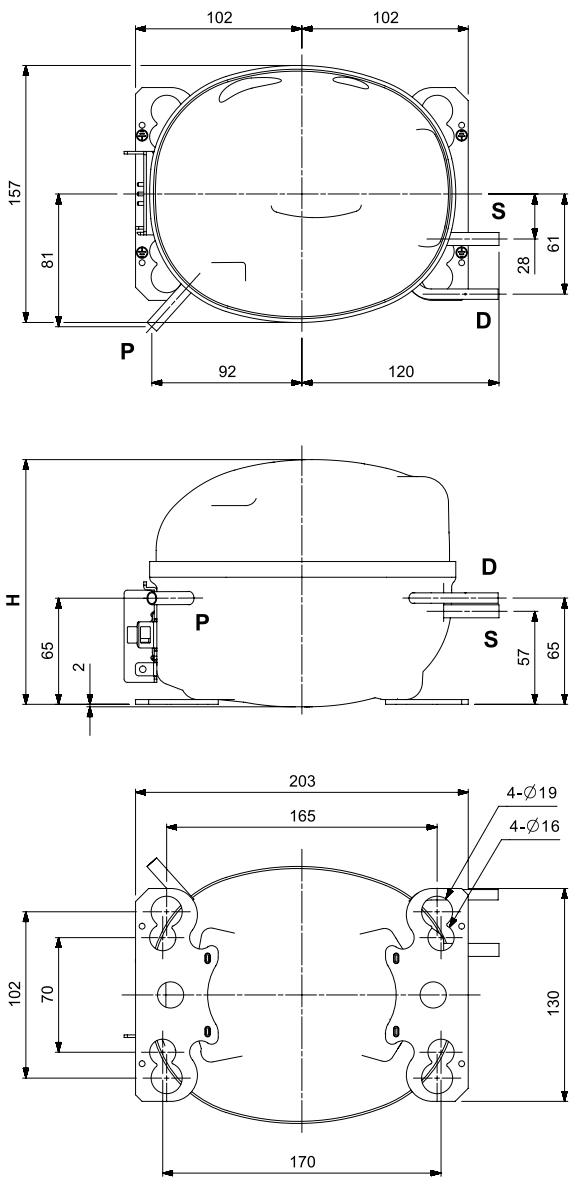
1 watt = 3.41 Btu/Hr

1 watt = 0.86 Kcal/Hr

1 Kcal/Hr = 3.97 Btu/Hr

DIMENSION / Variable Speed

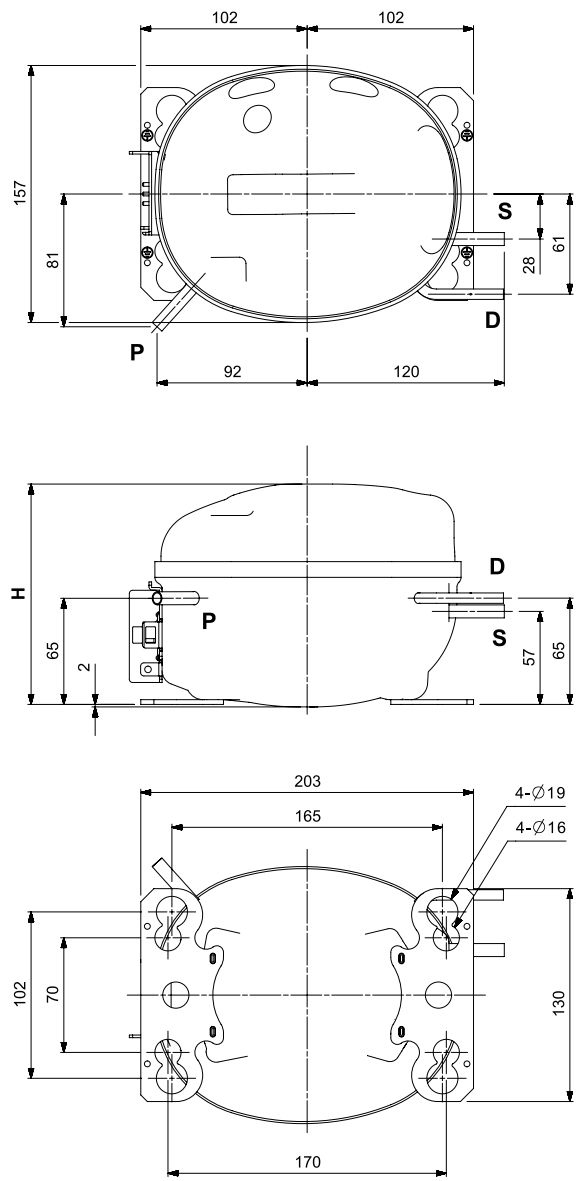
MSV, MV Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
62/72/88/90 /A1 GR	Static	149

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

NN Series(Universal Type)

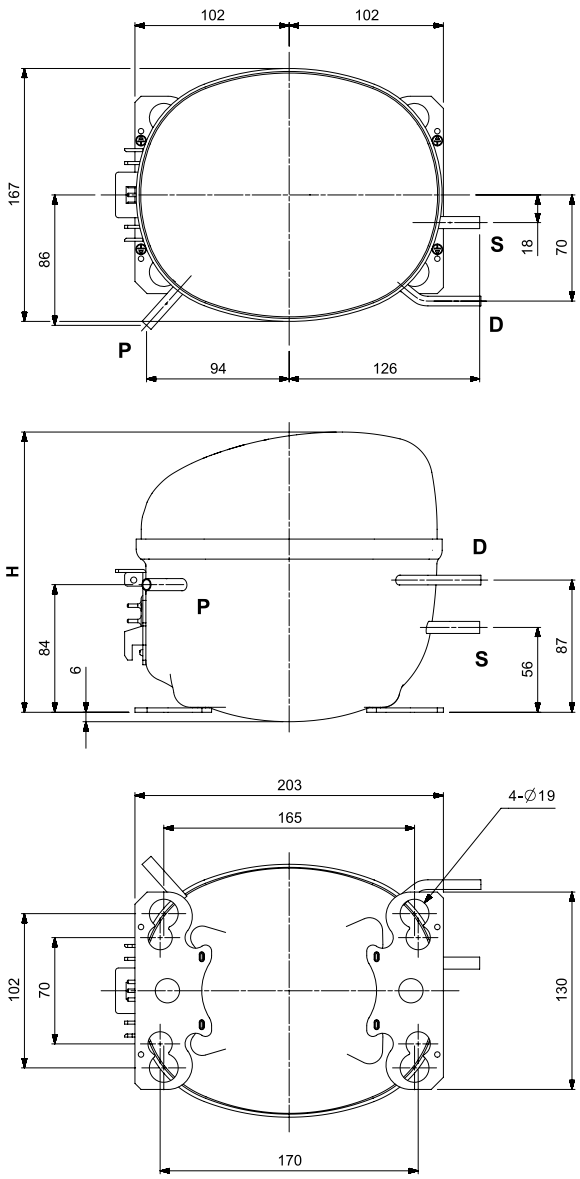


Height [mm]		
Grade	Cooling Type	H
60/90/11 GR	Static	129

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

DIMENSION / Variable Speed

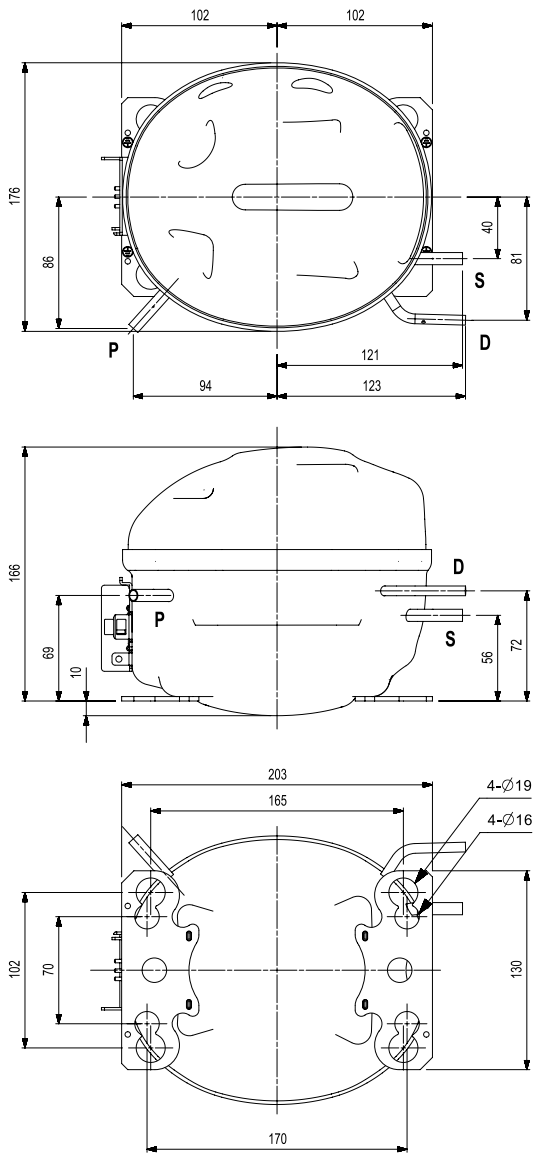
ENV, EV Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
A3/A5 GR	Fan	183

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

NF3, NF5 Series(Universal Type)

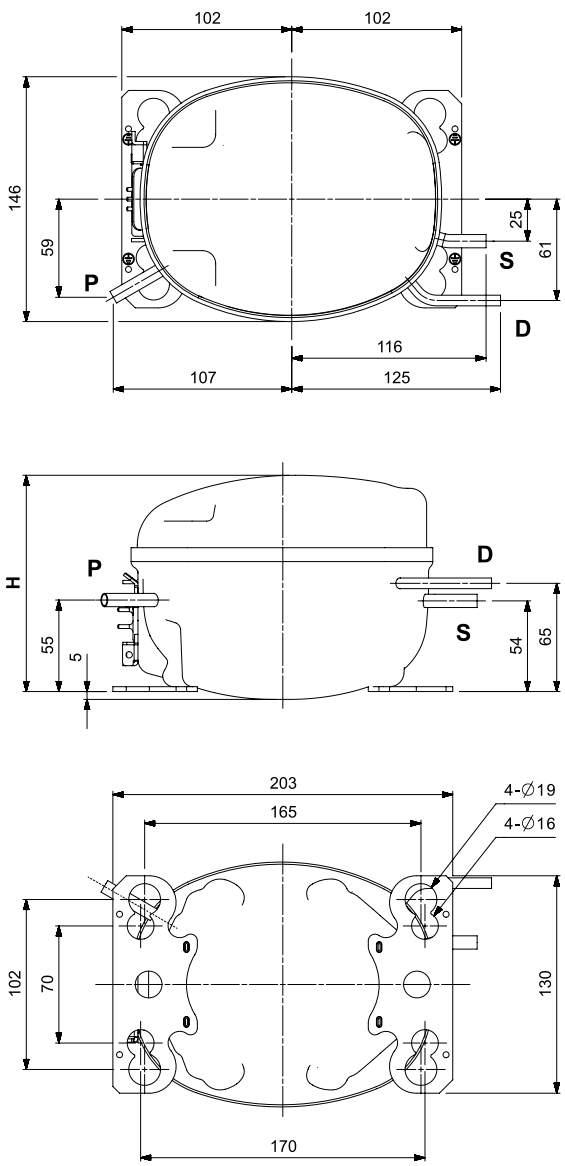


Height [mm]		
Grade	Cooling Type	H
13/15 GR	Fan	167

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

DIMENSION / Variable Speed

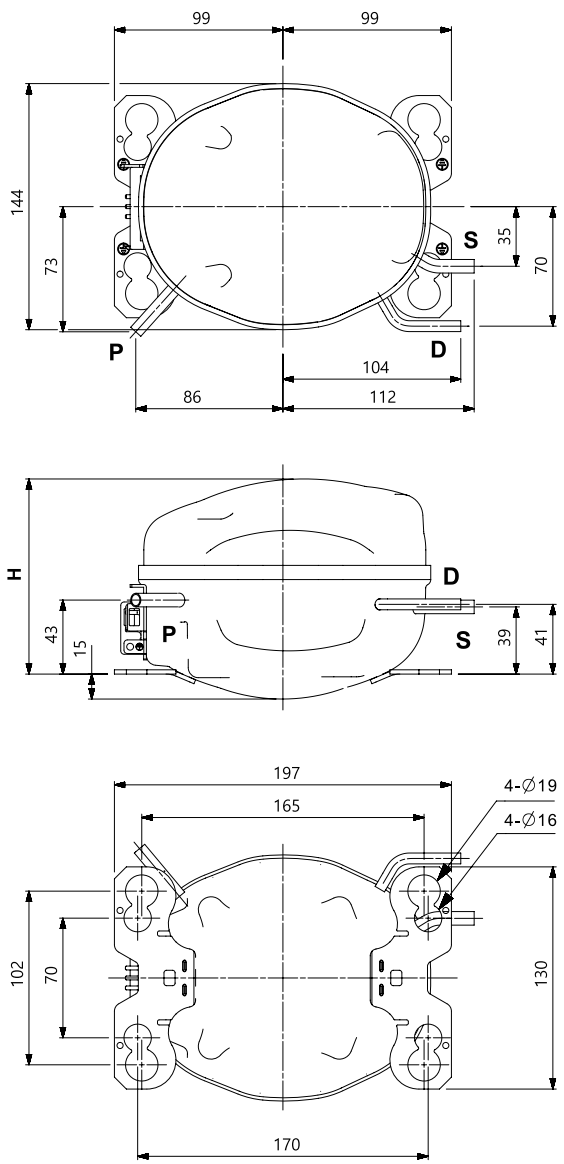
AV Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
60/80 GR	Static	129

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

NI Series(Universal Type)

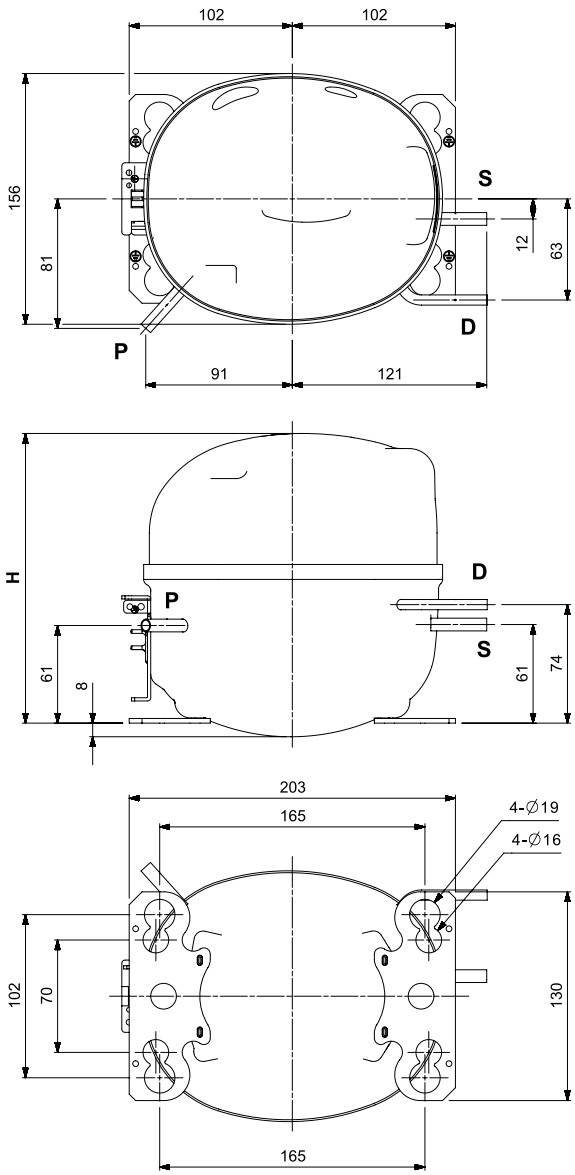


Height [mm]		
Grade	Cooling Type	H
60/80/90 10/11 GR	Static	122

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

DIMENSION / Fixed Speed

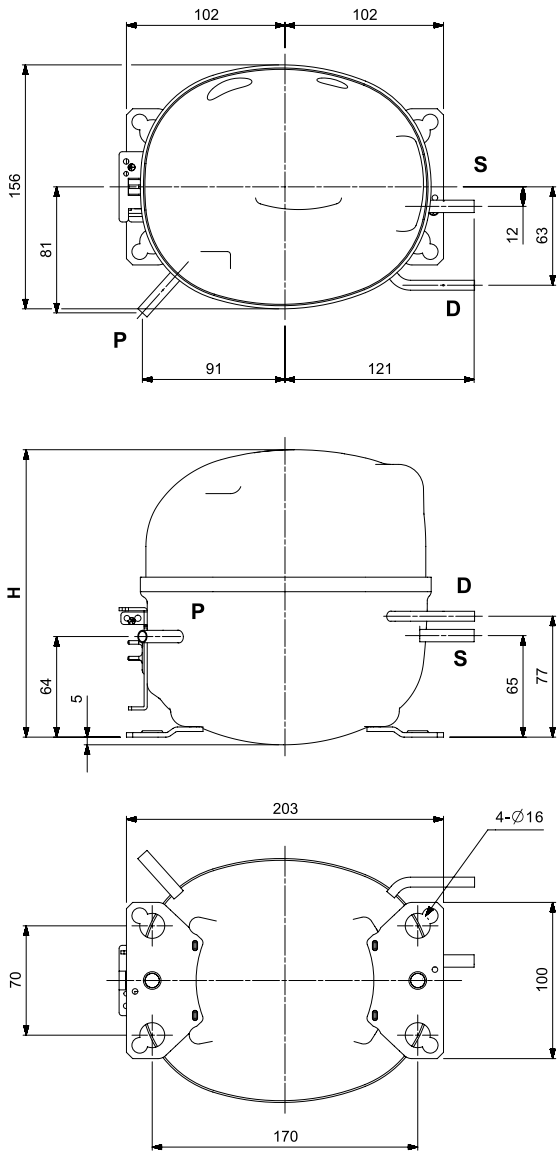
MS Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
43/51GR	Static	169
62/70/A2GR		173

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

MS Series(European Type)

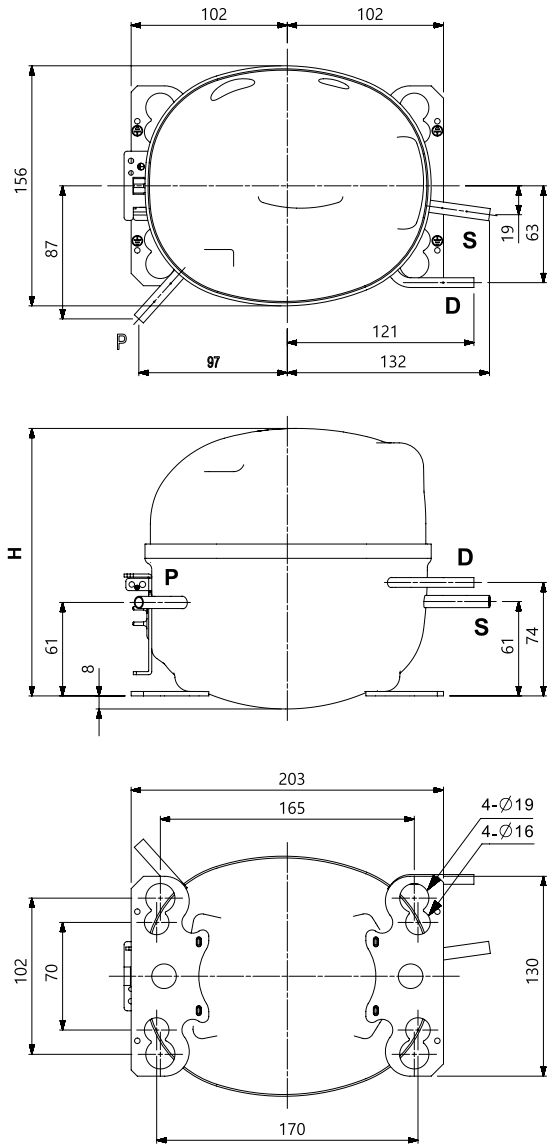


Height [mm]		
Grade	Cooling Type	H
43/51GR	Static	172
62/70/A2GR		177

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

DIMENSION / Fixed Speed

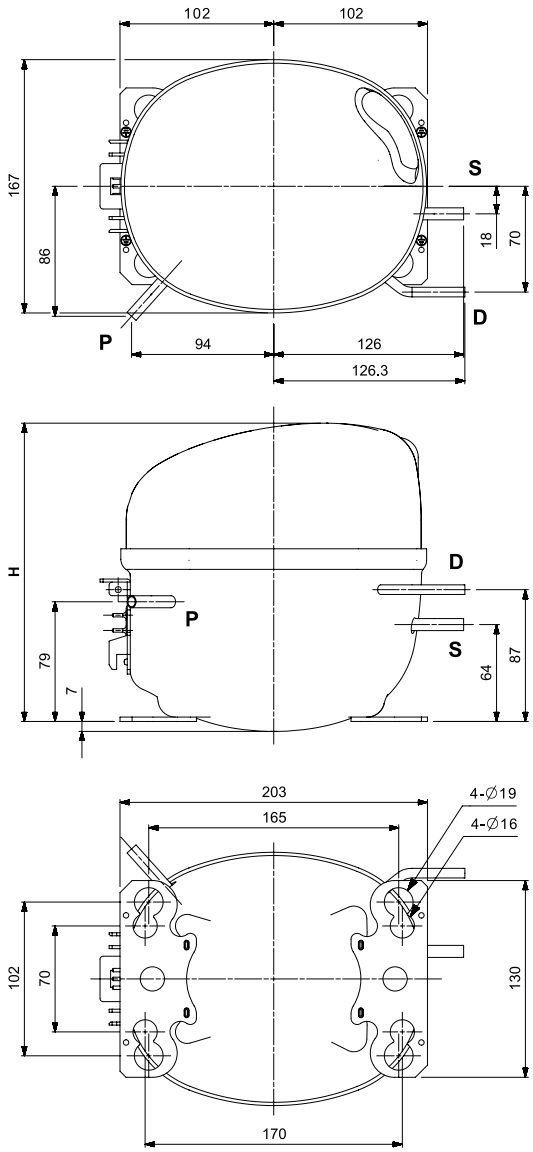
NN Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
66/82/10 GR	Static	169

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

NF2 Series(Universal Type)

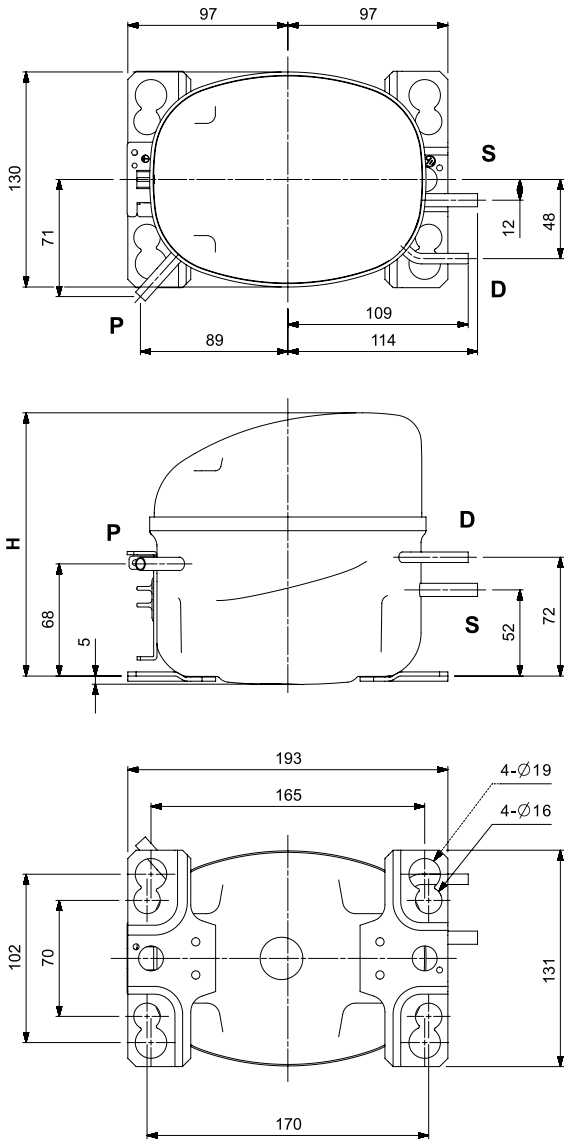


Height [mm]		
Grade	Cooling Type	H
11/13 GR	Fan	191

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

DIMENSION / Fixed Speed

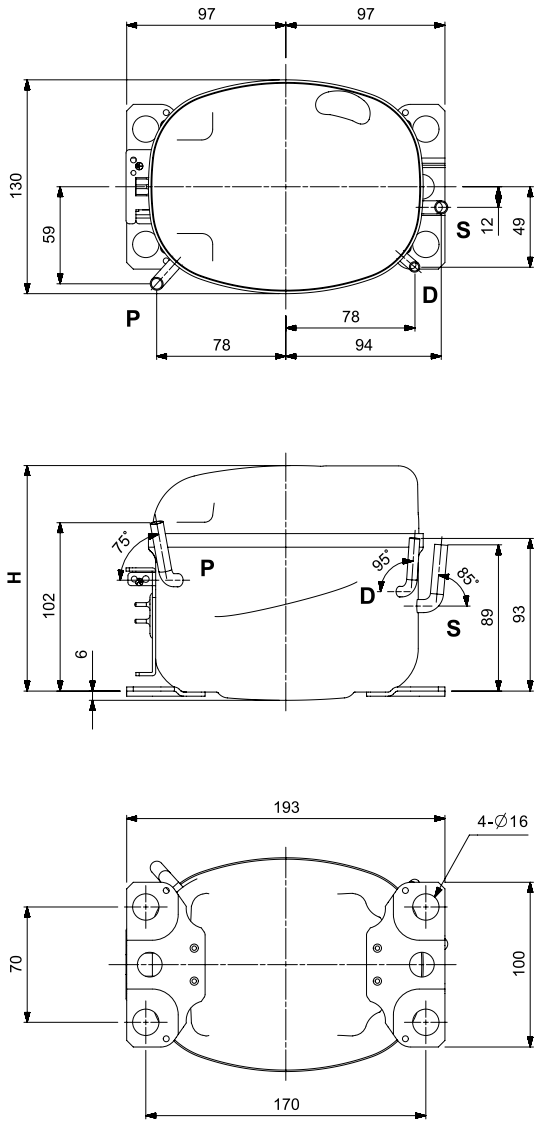
CD Series(Universal Type)



Height [mm]		
Grade	Cooling Type	H
24/30 GR	Static	157

Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

NCD Series(European Type)

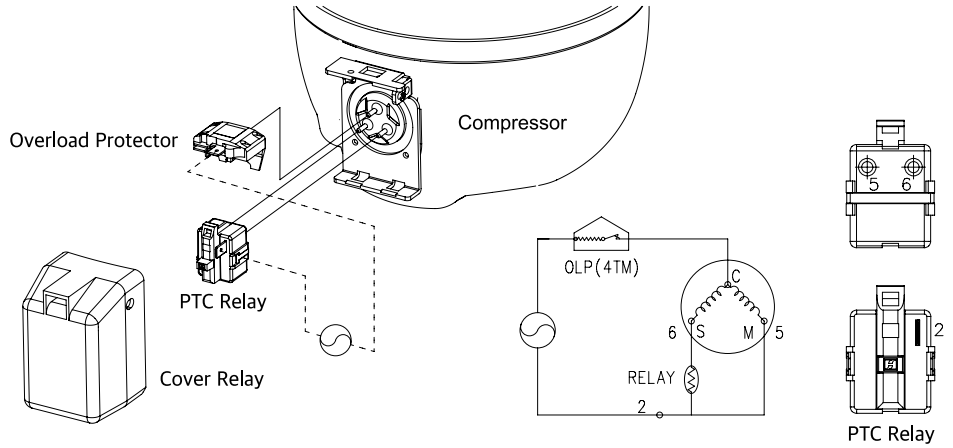


Height [mm]		
Grade	Cooling Type	H
24 GR	Static	137

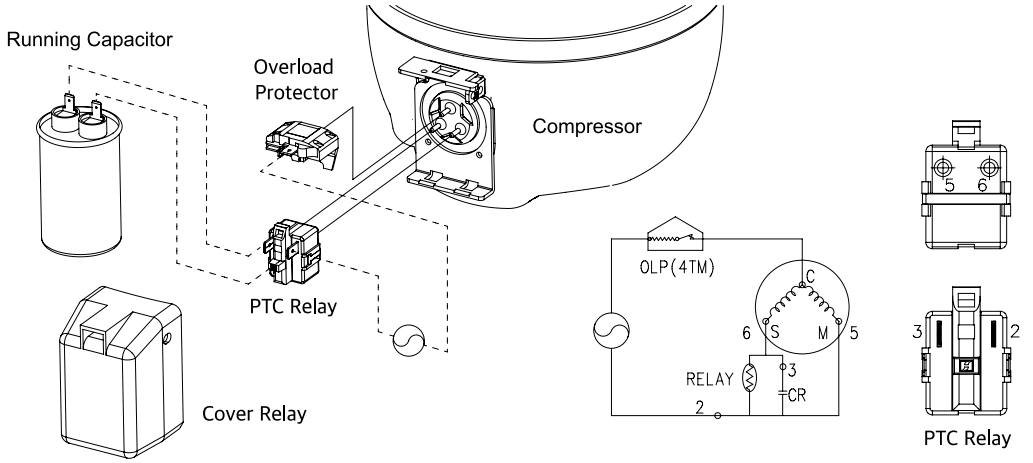
Tube Connection [mm]		
Tube	Material	OD [T:0.7]
(D) Discharge	Copper	6.35
(S) Suction		7.94
(P) Process		7.94

ASSEMBLY DIAGRAMS

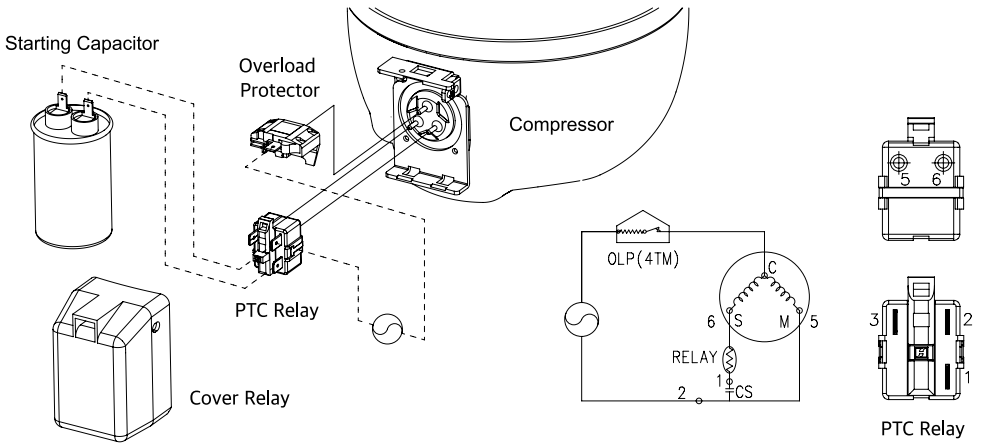
Assembly of OLP and PTC Relay in RSIR Motor (with S-HOOK Cover Type)



Assembly of OLP and PTC Relay in RSCR Motor (with S-HOOK Cover Type)

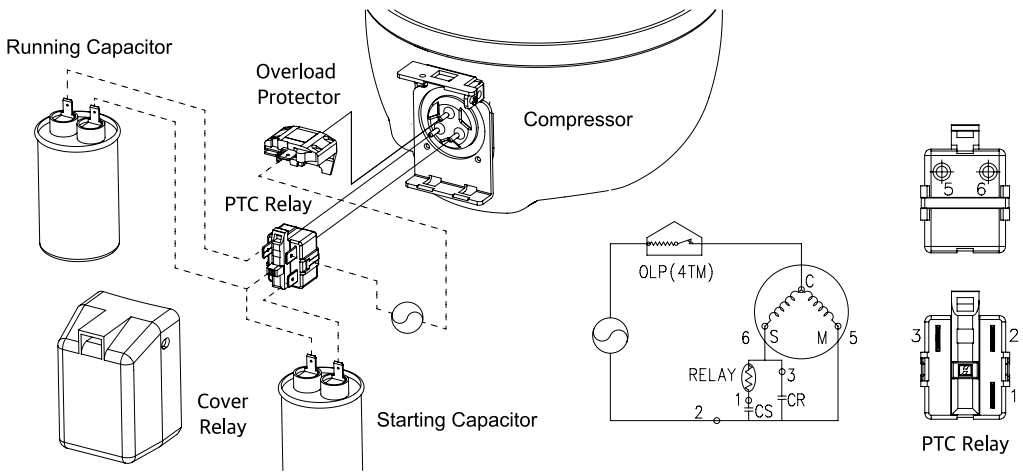


Assembly of OLP and PTC Relay in CSIR Motor (with S-HOOK Cover Type)

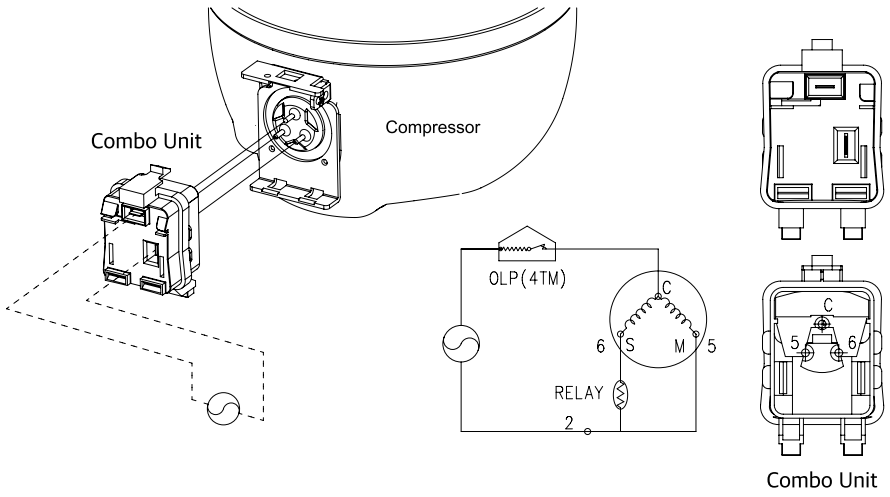


ASSEMBLY DIAGRAMS

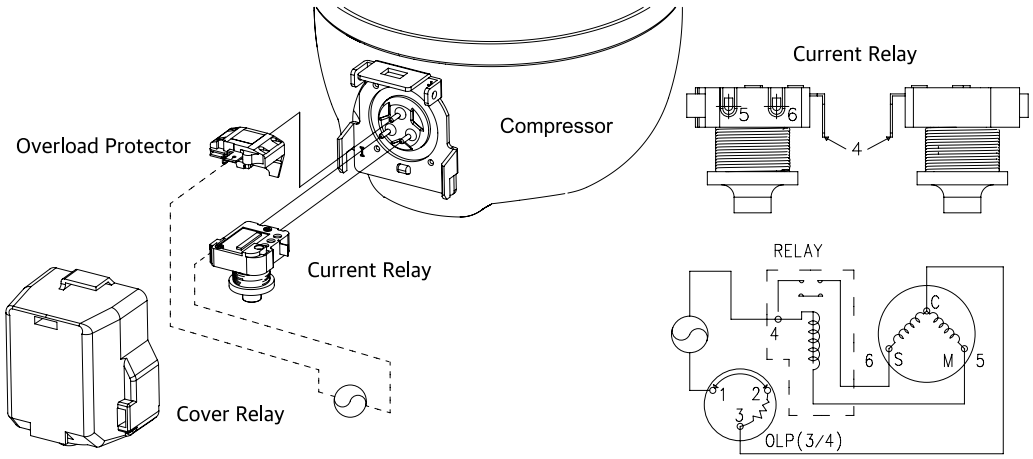
Assembly of OLP and PTC Relay in CSR Motor (with S-HOOK Cover Type)



Assembly of Assy Combo in RSIR Motor (with Combo Type)

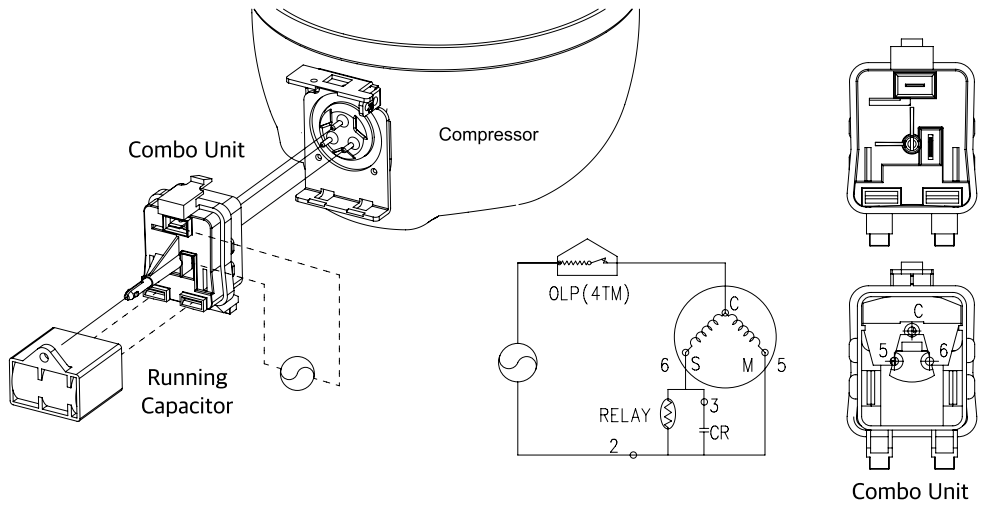


Assembly of OLP and Current Relay in RSIR Motor (with HOOK Cover Type)

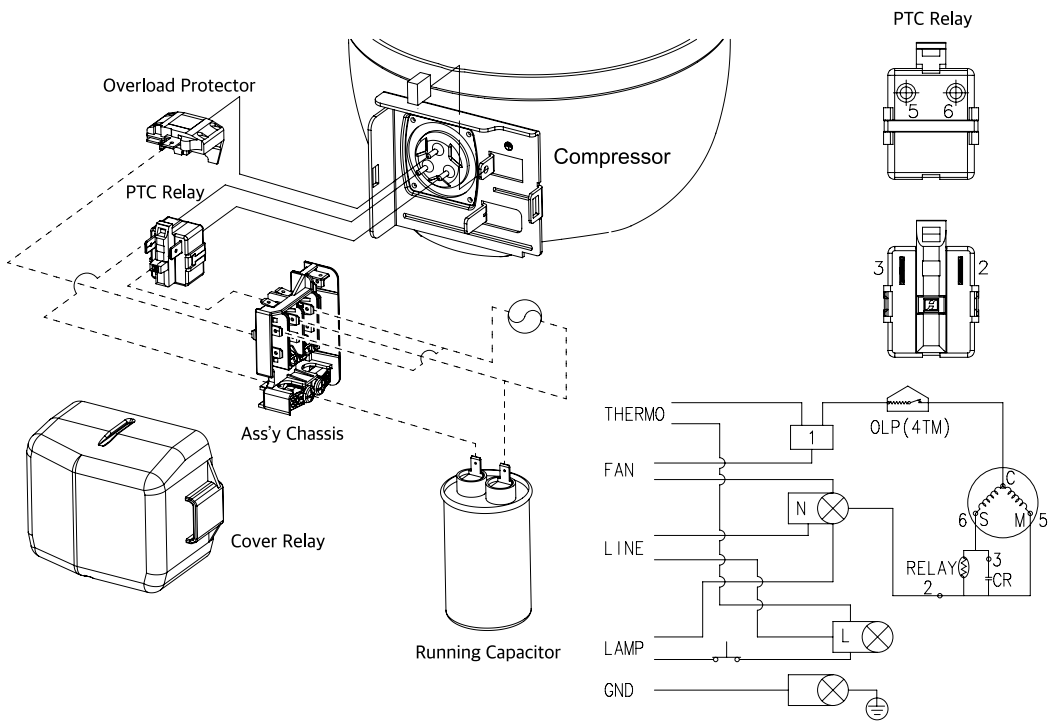


ASSEMBLY DIAGRAMS

Assembly of Assy Combo in RSCR Motor (with Combo Type)

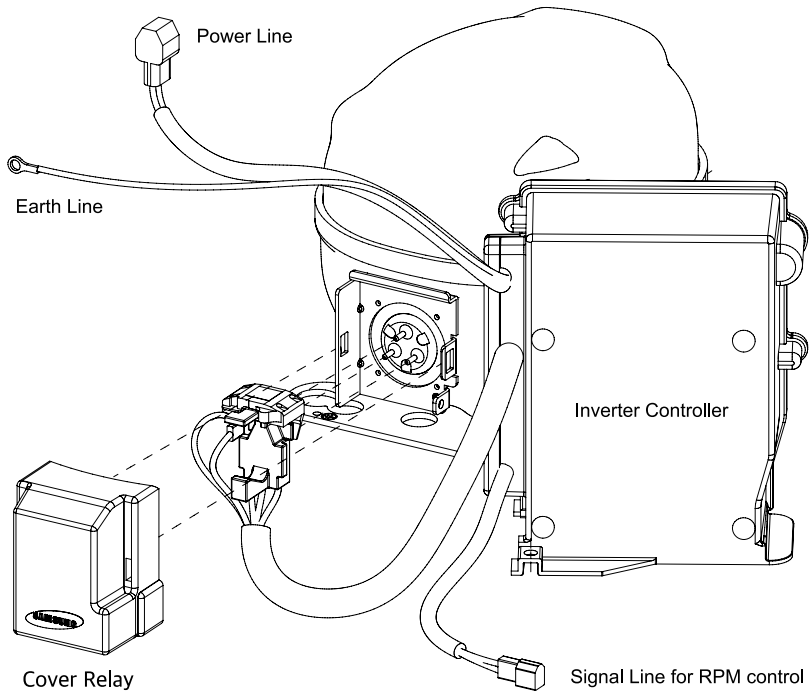


Assembly of OLP and PTC Relay in RSCR Motor (with T/B Cover Type)

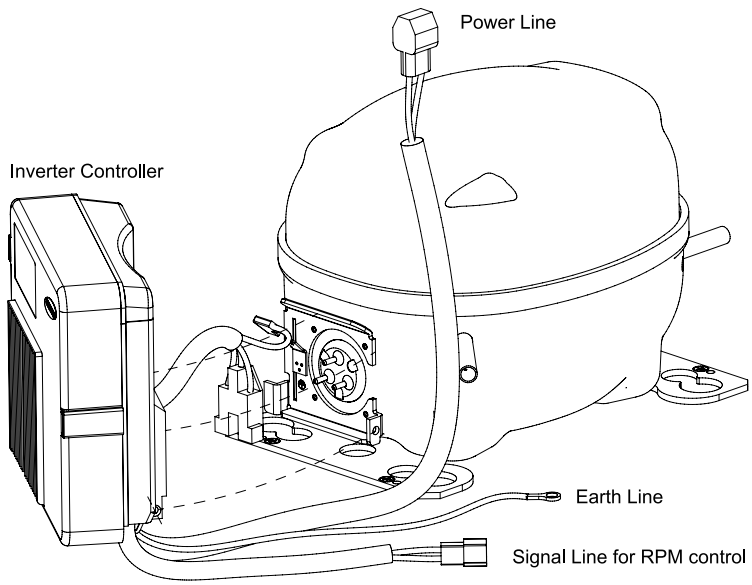


ASSEMBLY DIAGRAMS

Assembly of Inverter Controller in BLDC Motor (with Separation Type)



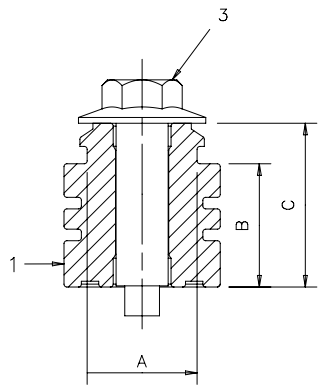
Assembly of Inverter Controller in BLDC Motor (with Built-in Type)



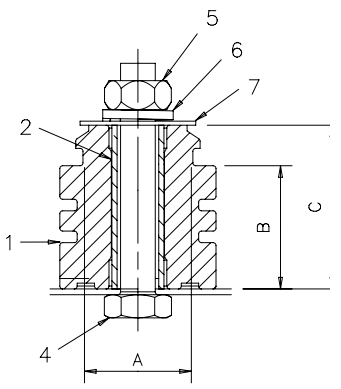
MOUNTING ACCESSORIES

Variable Speed Model

BOLT-HEX (Type Ⅰ)

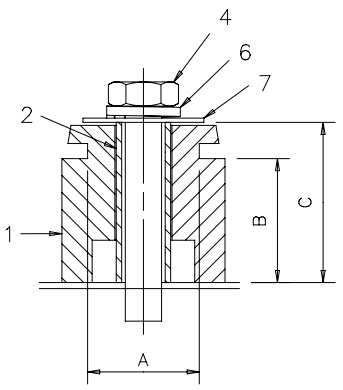


NUT-HEX (Type Ⅰ)

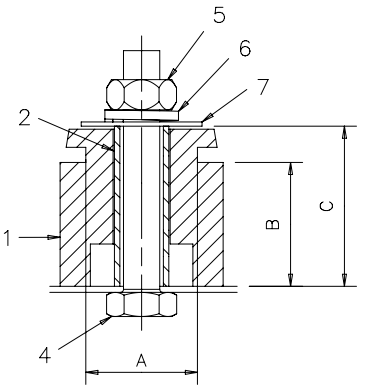


Fixed Speed Model

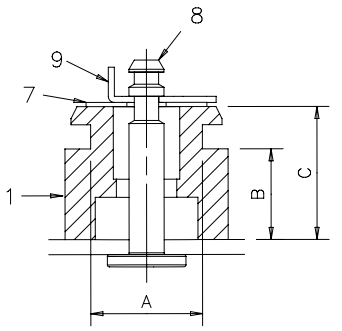
BOLT-HEX (Type Ⅱ)



NUT-HEX (Type Ⅱ)



SNAP-ON



1. Grommet 2. Sleeve 3. Bolt-comp(M6) 4. Bolt-hex(M6) 5. Nut-hex(M6) 6. Washer spring
7. Washer plain 8. Bolt-stud 9. Retainer

MOUNTING TYPE		BOLT-HEX TYPE Ⅱ				
		NUT-HEX TYPE				
		BOLT-HEX TYPE Ⅰ	SNAP-ON TYPE			
Series		ENV, EV, NF(BLDC), MSV, MV, NN(BLDC), AV	NF	MS, CD, A, NN		
Mounting Bracket		Universal	Universal	Universal		European
Hole Size		Ø19	Ø19	Ø19	Ø16	Ø16
DIMENSION[mm]	A	18.5	18.5	18.5	15.5	15.5
	B	21.3	20.5	15.0	15.0	9.0
	C	28.0	26.0	23.0	22.5	16.0

INVERTER CONTROLLER

Series		SBC (for Reciprocating compressor)					
		SBC2		SBC3			SBC4
		-V1	-V3	-V1	-V1 (Feedback)	-V5	-V1 / -V2
Compressor		LBP All Model	R-600a 15cc↓ R-134a 7.2cc↓	R-600a 15cc↓ R-134a 7.2cc↓	R-600a 15cc↓ R-134a 7.2cc↓	R-600a 11cc↓	LBP All Model
Image							
Power Supply	Rated Voltage	220V / 110V	220V / *110V	220V / 110V			220V / 110V
	Frequency	50/60Hz		50/60Hz			50/60Hz
	Max Input Arms	5A	4A	4A		2A	5A
	Max Input Power	310W	250W	250W		150W	310W
Interface	Type	Frequency input		Frequency input	Frequency input /Feedback	Frequency input /AMR	Frequency input
Structure	PBA or Case	PBA		Case (Bulit in)			Case (Seperated)
	Size	140*96*32		137.7*121.5*72		143.75*100.5*54.6	161.3*142.1*54.2
	Cooling	Static		Static			Static
Environment	Ambient Temp.	-5~43℃		-5~43℃			-5~43℃
	Storage Temp.	-25~85℃		-25~85℃			-25~85℃
	Max. Storage Relative Humidity	85%		85%			85%
Protection		Voltage /Current	Voltage /Current /Temp.	Voltage /Current		Voltage /Current /Temp.	Voltage /Current

Remark : * is under developed model

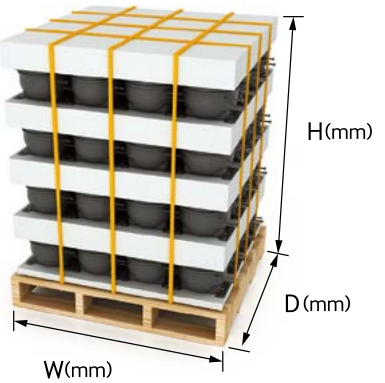
PACKING INFORMATION

Type	Series	Grade	Weight	Array	Pallet Height	Compressor Q'ty pallet	Pallet Q'ty CNTR	Loading Q'ty CNTR
			(kg)	(WxDxH)	(mm)	(pcs)	(pcs)	(pcs)
Fixed Speed	CD	24GR	6.3	7x4x5	1,114	140	20	2,800
		30GR	6.4	7x4x5	1,114	140	19	2,660
	A	24GR	5.6	7x4x5	1,114	140	20	2,800
	MSS, MSA, MSE	43GR	8.3	6x3x4	990	72	11	2,052
				6x3x5	1,190	90	14	
		51GR	8.6	6x3x4	990	72	25	1,800
		62GR	8.8	6x3x4	1,006	72	25	1,800
		70GR, 88GR	9.1	6x3x4	1,006	72	25	1,800
		A1GR, A2GR	9.6	6x3x4	1,006	72	25	1,800
	NN	66GR, 82GR, 10GR	8.4	6x3x4	1,006	72	25	1,800
	NF	11GR, 13GR	10	5x3x4	1,009	60	23	1,380
Variable Speed	MSV, MV	62GR, 88GR	7.1	6x3x5	1,010	90	25	2,250
		A1GR	7.4	6x3x5	1,010	90	25	2,250
	NN	60GR, 90GR, 11GR	6.6	6x3x5	982	90	25	2,250
	ENV, EV	A3GR, A5GR	9.6	5x3x4	1,038	60	25	1,500
	NF	13GR, 15GR	8.6	5x3x5	1,115	75	25	1,875
	AV	60GR, 80GR	5.7	6x3x6	1,042	108	25	2,700
	NI	60GR, 80GR	4.3	6x3x6	1,121	108	25	2,700
		90GR, 10GR, 11GR	4.4	6x3x6	1,121	108	25	2,700

Container Packing Method

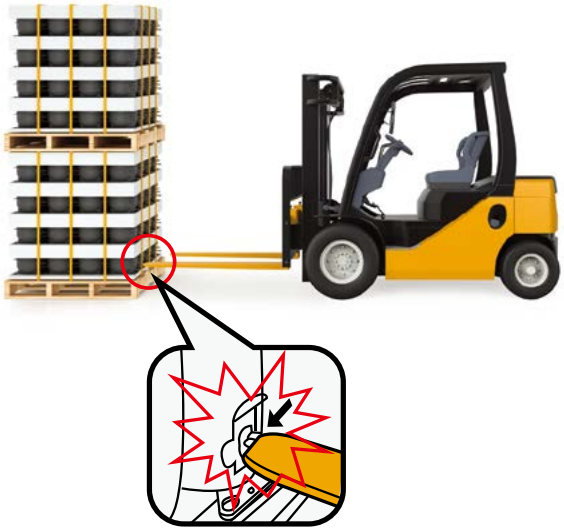
※ A, B, C : Accessory Packing Box

Pallet Packing Size



※ Pallet Size
CD, A : 1,090(W)*946(D)
MS, MSV, NF, NI, NN, ENV, EV, NF, AV : 1,100(W)*766(D)

HANDLING GUIDE



Handle with care

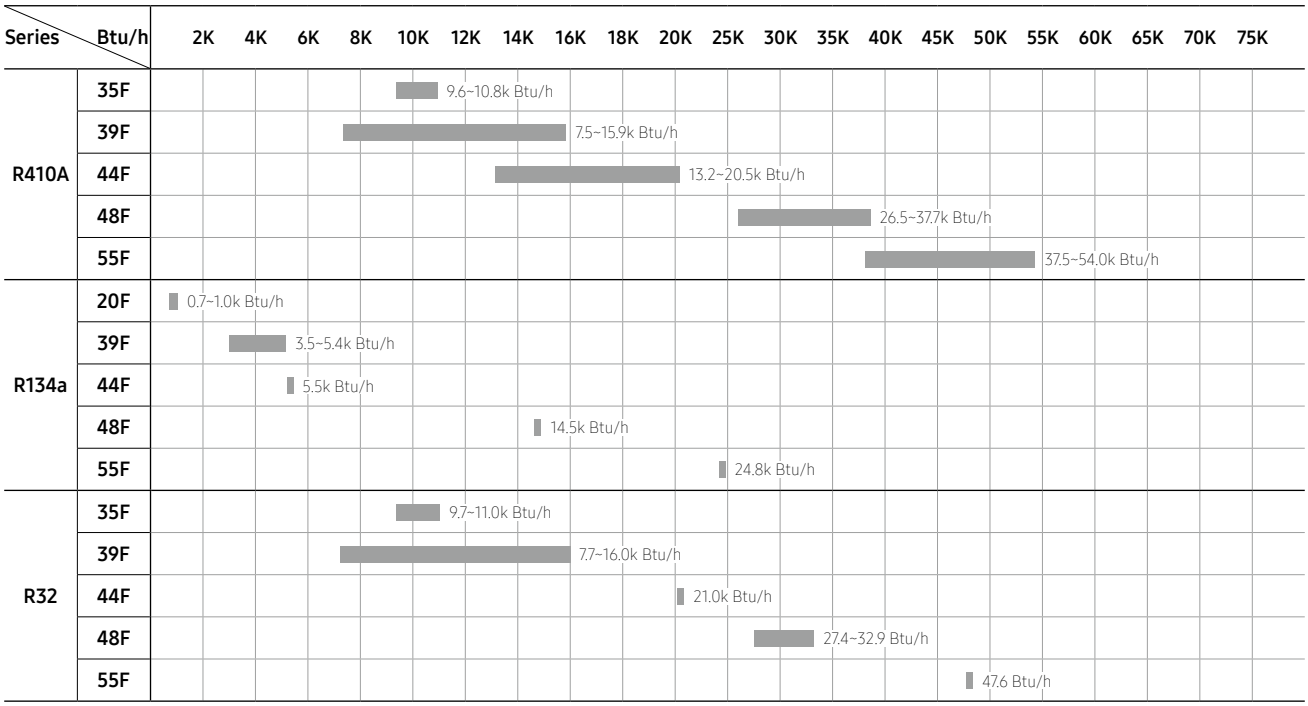
Max 3 Pallets

Rotary Compressor

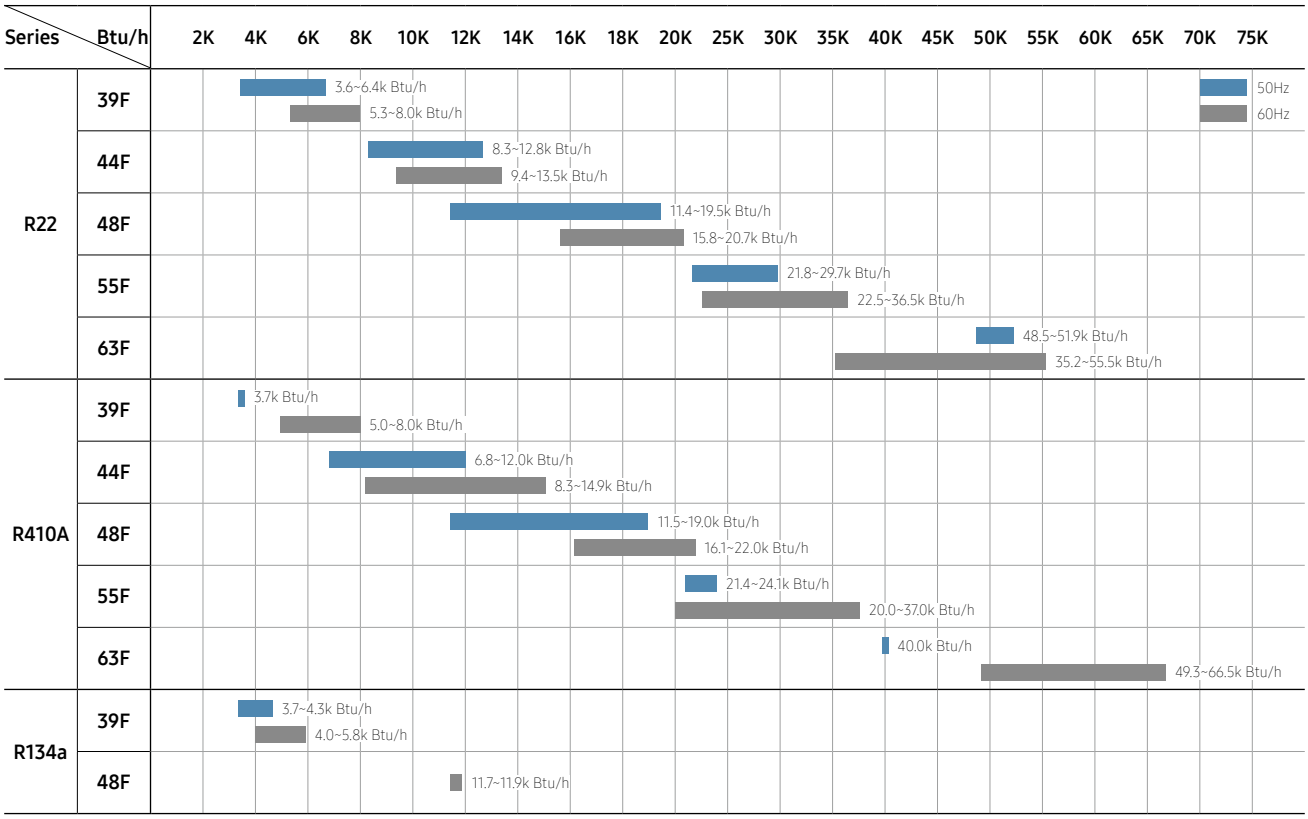
CONTENTS

PRODUCT RANGE

Variable Speed



Fixed Speed



MODEL IDENTIFICATION

Type 1

UR	4	A	080	H	U	A	E	B
Refrigerant	Frame	MajorChange	Cooling Capacity (*100 Btu/h)	Power Source	Model Type	Misellaneous Change	Foot Position	Accumulator

Type 2

Refrigerant	
UR	R22
UG	R410A
UB	R32
UX	R134a
UF	R600a

Frame	
0	20Frame
1	35Frame
9	39Frame
4	44Frame
8	48Frame
5	55Frame
3	63Frame

Launching Year	
K	2016
M	2017
N	2018
R	2019
T	2020
A	2021

Cooling Capacity (*100 Btu/h)

ex) 080:8,000 Btu/h

Accumulator

UR	4	A	M	5	080	H	E	B

Major Change	
A	Basic
B	Taller
C	Shorter
T	Twin
D	Improved Efficiency
V	Capacity Modulation

Series

Power Source	
H	1Φ 115V, 60Hz
I	1Φ 208-230V, 60Hz
M	1Φ 200-220V, 50Hz
J	1Φ 220-240V, 50Hz
D	1Φ 220V, 50Hz
G	1Φ 127V, 60Hz
K	1Φ 100V, 50/60Hz
Y	1Φ 265V, 60Hz
A	3Φ 380V, 60Hz
B	3Φ 380-420V, 50Hz
C	3Φ 220V, 60Hz
F	3Φ 220V/380V (BLDC/Nd)
L	3Φ 220V/380V (BLDC/Ferrite)
Z	3Φ 24V (BLDC)
Q	3Φ 100V (BLDC)
R	3Φ 48V (BLDC)
S	3Φ 12V (BLDC)

Foot Position			
Triangular foot		Rectangular foot	
E	30°	M	15°
J	90°(-30°)	F	45°
		H	60°
		L	75°

SPECIFICATIONS

Variable Speed / R410A

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	AC 200-240V ~50Hz, 220V ~60Hz	Single	39	UG9CK1072F	7.3	7,450	2,183	10.9	3.20	683	24
				UG9AJ1090F	9.0	9,300	2,726	11.0	3.22	845	22
				UG9AJ3090F	9.0	9,300	2,726	11.3	3.31	823	23
				UG9AJ5090F	9.0	9,300	2,726	11.5	3.37	809	1
		Twin	39	UG9TK2150F	15.1	15,600	4,572	11.1	3.25	1,406	25
				UG9TK3150F	15.1	15,600	4,572	10.9	3.19	1,431	26
				UG9TK5150F	15.1	15,600	4,572	11.3	3.31	1,381	27
				UG9TT8150F	15.0	15,900	4,660	11.9	3.49	1,336	34
			44	UG4T135FUA	13.1	13,300	3,898	11.1	3.25	1,198	18
				UG4T150FUA	15.0	15,200	4,455	11.1	3.25	1,369	18
				UG4T150FUD	15.0	15,200	4,455	11.1	3.25	1,369	18
				UG4TJ5150F	15.0	16,000	4,689	11.3	3.31	1,416	21
				UG4T150LNB	15.0	15,200	4,455	10.7	3.14	1,420	21
				UG4T200FUA	19.5	20,200	5,920	11.3	3.31	1,788	19
				UG4TH8200F	19.5	20,500	6,008	11.6	3.40	1,767	20
				UG4TN3200F	19.5	20,500	6,008	11.4	3.34	1,798	24
				UG4TT3200F	19.5	20,500	6,008	11.4	3.34	1,798	25
				UG4T200LNE	19.5	20,500	6,008	11.1	3.25	1,847	22
				UG4T200LNF	19.5	20,500	6,008	11.1	3.25	1,847	22
			48	UG8T260FUA	25.2	26,500	7,766	11.1	3.25	2,387	13
				UG8T265FUA	25.2	26,500	7,766	11.3	3.31	2,345	14
				UG8TH8265F	25.2	26,700	7,825	11.7	3.43	2,282	15
				UG8TN3265F	25.2	26,800	7,854	11.5	3.37	2,330	20
				UG8TT8265F	25.2	26,800	7,854	11.9	3.49	2,252	15
				UG8T300FUB	30.0	31,300	9,173	11.1	3.25	2,820	17
				UG8T300FUC	30.0	31,300	9,173	11.1	3.25	2,820	17
				UG8TK8300F	30.0	31,300	9,173	11.6	3.40	2,698	19
				UG8T300LNB	30.0	31,300	9,173	11.0	3.22	2,845	18
				UG8TT3360F	35.1	37,700	11,049	11.4	3.34	3,366	21

SPECIFICATIONS

Variable Speed / R410A

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	AC 200-240V ~50Hz, 220V ~60Hz	Twin	55	UG5T360FUA	35.1	37,500	10,990	11.0	3.22	3,409	17
				UG5T360FUE	35.1	37,500	10,990	11.0	3.22	3,409	18
				UG5T450FUA	43.0	46,500	13,628	11.3	3.31	4,115	19
				UG5T450FUE	43.0	46,500	13,628	11.3	3.31	4,115	20
				UG5T450FUF	43.0	46,500	13,628	11.3	3.31	4,115	20
				UG5T450FXA	43.0	46,500	13,628	11.6	3.40	4,009	21
				UG5TK1450F	43.0	46,500	13,628	11.3	3.31	4,115	22
				UG5TK5450F	43.0	46,500	13,628	11.5	3.37	4,043	22
				UG5TJ8450F	43.0	46,500	13,628	11.8	3.46	3,941	20
				UG5TN3450F	43.0	46,000	13,481	11.4	3.34	4,035	20
				UG5TT8450F	43.0	46,000	13,481	11.9	3.49	3,865	20
				UG5T520FUB	49.4	54,000	15,826	11.3	3.31	4,779	21
				UG5TM5520F	49.4	54,000	15,836	11.3	3.31	4,779	23
				UG5TK8520F	49.4	54,000	15,826	11.6	3.40	4,655	20

Variable Speed / R32

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R32	AC 200-240V~ 50Hz, 220V~ 60Hz	Single	39	UB9CK1072F	7.3	7,700	2,257	10.6	3.11	726	24
				UB9AK1090F	9.0	9,600	2,813	10.7	3.14	897	22
				UB9AK5090F	9.0	9,600	2,813	11.1	3.25	865	23
		Twin	39	UB9TK2150F	15.1	16,000	4,689	11.0	3.16	1,455	25
				UB9TK3150F	15.1	16,000	4,689	10.8	3.11	1,481	26
			44	UB4TN8200F	19.5	21,000	6,154	11.0	3.22	1,909	20
			48	UB8TN8265F	25.2	27,380	8,024	11.2	3.28	2,445	15
				UB8TN8300F	30.0	32,880	9,636	11.3	3.31	2,911	19
			55	UB5TN5450F	43.0	47,600	13,950	11.2	3.28	4,250	20
R32/ R410A		Single	35	UB1AR1090F	9.0	9,720	2,849	10.5	3.08	926	1
						9,550	2,799	10.9	3.19	876	
				UB1AR5090F	9.0	9,720	2,849	10.8	3.17	900	2
						9,550	2,799	11.3	3.31	845	
				UB1BR5102F	10.2	11,000	3,224	10.7	3.85	1,030	3
						10,820	3,171	11.1	4.00	975	

SPECIFICATIONS

Fixed Speed / R410A, 60Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	60Hz	1φ, 115V	Single	39	UG9C050HS	4.9	5,000	1,465	10.1	2.96	495	9
					UG9C052HS	5.0	5,200	1,524	10.1	2.96	515	9
					UG9C060HS	5.8	6,000	1,758	10.1	2.96	594	9
					UG9C067HS	6.6	6,750	1,978	10.1	2.96	668	10
					UG9C076HS	7.3	7,600	2,227	10.0	2.93	760	11
					UG9C080HS	7.6	8,000	2,345	10.0	2.93	800	11
				44	UG4A098HU	9.7	10,000	2,931	10.2	2.99	980	9
					UG4A110HU	10.9	11,500	3,370	10.5	3.08	1,095	6
		1φ, 208-230V		39	UG9C060IS	5.8	6,000	1,758	10.0	2.93	600	12
					UG9C067IS	6.6	6,750	1,978	10.2	3.00	660	11
					UG9C076IS	7.3	7,600	2,227	10.1	2.97	750	11
					UG9C080IS	7.6	7,800	2,286	10.1	2.97	770	11
				44	UG4C085IU	8.0	8,340	2,444	10.4	3.04	803	10
					UG4C090IU	8.9	9,000	2,638	10.3	3.02	874	11
					UG4A098IU	9.7	9,900	2,901	10.2	2.99	971	9
					UG4A102IU	10.3	10,900	3,194	10.4	3.05	1,048	9
					UG4A110IU	10.9	11,600	3,400	10.6	3.10	1,095	12
					UG4AH5110I	10.9	11,400	3,341	10.6	3.11	1,075	14
					UG4A124IU	11.5	12,050	3,532	10.2	2.99	1,180	9
					UG4B135IX	13.2	13,780	4,039	10.1	2.96	1,365	13
					UG4BK8147I	13.9	14,200	4,162	10.0	2.84	1,420	5
					UG4B147IX	13.9	14,850	4,352	10.1	2.96	1,470	13
				48	UG8CH5155I	15.2	16,100	4,718	10.7	3.14	1,505	8
					UG8C155IN	15.2	16,100	4,718	10.6	3.11	1,519	7
					UG8C180IU	17.0	18,100	5,305	10.6	3.11	1,708	6
					UG8CH5180I	17.0	18,100	5,305	10.8	3.17	1,676	8
					UG8C185IU	17.6	18,500	5,422	10.4	3.05	1,779	6
					UG8C200IN	19.0	20,400	5,979	10.6	3.11	1,925	6
				55	UG5CH5200I	19.3	20,400	5,979	10.5	3.08	1,943	8
					UG5DR8200I	19.3	20,000	5,865	10.6	3.11	1,886	24
					UG8CK8215I	21.0	22,000	6,448	10.5	3.08	2,095	8
					UG5A240IU	23.4	24,500	7,180	10.1	2.96	2,425	10
					UG5C250IN	23.9	25,300	7,415	10.7	3.14	2,365	9
					UG5DR8250I	23.9	25,300	7,415	10.7	3.14	2,365	11
					UG5C260IN	24.7	26,250	7,693	10.5	3.08	2,500	9
					UG5A280IU	27.2	28,600	8,382	10.2	2.97	2,820	10
					UG5A290IN	27.9	29,800	8,646	10.6	3.11	2,810	11
					UG5A300IU	29.3	30,600	8,968	10.0	2.93	3,060	10
					UG5DN8300I	29.3	29,400	8,616	10.8	3.15	2,735	11

SPECIFICATIONS

Fixed Speed / R410A, 60Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	60Hz	1φ, 265V	Single	39	UG9C060YS	5.8	6,000	1,758	10.0	2.93	600	12
					UG9C067YS	6.6	6,750	1,978	9.9	2.89	685	9
					UG9C076YS	7.3	7,600	2,227	10.2	2.99	745	11
				44	UG4C085YU	8.0	8,100	2,374	10.2	2.99	794	10
					UG4A102YU	10.3	10,850	3,180	10.5	3.08	1,033	12
					UG4A110YU	10.9	11,450	3,356	10.5	3.08	1,090	12
					UG4A124YU	11.5	12,050	3,532	10.5	3.08	1,145	9
					UG4B147YX	13.9	14,800	4,337	10.3	3.02	1,435	13
		1φ, 208-230V	Twin	55	UG5T320IU	30.6	32,500	9,525	10.3	3.02	3,155	15
					UG5T360IN	35.1	37,000	10,844	9.8	2.87	3,776	16
		3φ, 380V		63	UG3T480AN	46.3	49,600	14,536	10.2	2.99	4,865	3
					UG3T650AN	61.5	66,500	19,489	10.1	2.96	6,585	3
		3φ, 220V			UG3T480CN	46.3	49,300	14,448	10.1	2.96	4,880	3
					UG3T650CN	61.5	65,350	19,152	9.9	2.90	6,600	3

Fixed Speed / R410A, 50Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	50Hz	1φ, 220-240V	Single	44	UG4C065JN	8.0	6,800	1,993	9.9	2.90	687	15
					UG4B124JX	14.1	12,000	3,517	9.5	2.78	1,263	5
				48	UG8C124JU	15.2	12,900	3,781	10.2	2.99	1,265	9
		1φ, 220V		39	UG9CH8037D	4.4	3,730	1,093	10.0	2.93	373	13
				44	UG4AH8080D	9.7	8,250	2,418	10.4	3.05	810	4
					UG4AK5080D	9.7	8,150	2,403	10.2	2.99	788	4
					UG4A091DN	10.9	9,300	2,726	10.0	2.93	930	4
				48	UG8CH8110D	13.3	11,500	3,370	10.5	3.08	1,095	4
					UG8CH8165D	19.0	16,600	4,865	10.4	3.05	1,596	8
					UG8CH8180D	21.0	18,500	5,422	10.5	3.08	1,762	8
					UG8D185DN	21.7	18,950	5,554	10.2	2.99	1,860	3
				55	UG5CH8215D	24.7	21,400	6,272	10.6	3.10	2,020	12
					UG5A240DN	27.9	24,100	7,063	9.9	2.90	2,435	2
		3φ, 380-420V		63	UG3AK5415B	44.8	40,000	11,723	10.3	3.02	3,883	5

SPECIFICATIONS

Fixed Speed / R22, 60Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R22	60Hz	1φ, 115V	Single	39	UR9B072HS	10.2	7,050	2,066	10.6	3.11	665	2
					UR9B080HS	11.3	8,000	2,345	10.6	3.11	755	3
				44	UR4A092HU	13.2	9,350	2,740	10.7	3.14	874	1
					UR4B117HX	16.6	11,900	3,488	10.7	3.14	1,112	2
		1φ, 208-230V		39	UR9A052IS	7.6	5,300	1,553	10.6	3.11	500	4
					UR9B068IS	9.6	6,700	1,964	10.7	3.14	626	5
					UR9B072IS	10.2	7,100	2,081	10.5	3.07	677	6
					UR9B080IS	11.3	8,000	2,345	10.7	3.13	748	3
				44	UR4AH5092I	13.2	9,400	2,755	10.6	3.11	886	3
					UR4A098IN	14.1	10,260	3,007	10.8	3.17	950	4
					UR4B110IX	16.1	11,500	3,370	10.7	3.14	1,075	5
					UR4BJ5117I	16.6	11,800	3,458	10.6	3.11	1,113	5
					UR4B124IX	17.6	12,650	3,707	10.6	3.11	1,193	5
					UR4B135IX	18.7	13,400	3,927	10.5	3.08	1,276	2
				48	UR8C155IU	21.7	15,800	4,631	10.9	3.19	1,450	1
					UR8C172IN	23.9	17,500	5,129	10.9	3.19	1,606	2
					UR8D185IN	25.8	18,700	5,480	10.7	3.14	1,748	3
				55	UR5A220IN	30.6	22,500	6,594	10.9	3.19	2,065	1
					UR5A240IN	33.4	25,000	7,327	10.9	3.20	2,293	1,2
					UR5A280IU	39.0	29,500	8,646	11.0	3.23	2,680	4
					UR5A300IU	41.8	31,500	9,232	10.9	3.19	2,890	4
		1φ, 208-230V	Twin	55	UR5T360IU	49.4	36,500	10,697	10.9	3.19	3,349	13
		3φ, 380-440V		63	UR3T480AU	65.8	49,850	14,610	11.2	3.28	4,450	1
					UR3T550AT	72.6	55,500	16,265	11.0	3.23	5,040	2
		3φ, 220V			UR3T480CT	65.8	49,850	14,610	10.8	3.17	4,615	1
					UR3T550CT	72.6	55,500	16,265	11.0	3.23	5,040	2
		3φ, 380V	Single	63	UR3AK5360A	45.8	35,200	10,316	10.8	3.16	3,260	4

SPECIFICATIONS

Fixed Speed / R22, 50Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R22	50Hz	1φ, 220-240V	Single	55	UR5A250JN	41.8	25,600	7,503	10.6	3.11	2,415	5
		1φ, 220V		39	UR9CJ1037D	6.6	3,640	1,067	9.3	2.73	391	29
					UR9C037DS	6.6	3,700	1,084	10.1	2.97	365	8
					UR9BJ1066D	11.3	6,350	1,861	8.5	2.49	747	2
					UR9B066DS	11.3	6,400	1,876	9.9	2.91	645	5
				44	UR4A080DN	14.1	8,300	2,432	11.0	3.22	755	4
					UR4AK5080D	14.1	8,300	2,432	10.6	3.11	783	4
					UR4A085DU	15.0	8,900	2,608	10.3	3.02	864	6
					UR4B098DX	16.6	9,700	2,843	10.3	3.02	940	5
					UR4D115DN	19.8	11,400	3,341	10.6	3.11	1,075	7
					UR4D124DX	21.0	12,200	3,575	10.5	3.08	1,161	8
				48	UR8C110DN	19.0	11,350	3,326	11.0	3.22	1,032	4
					UR8C129DN	21.7	12,900	3,781	10.8	3.17	1,194	4
					UR8B170DN	28.8	17,200	5,041	10.8	3.16	1,593	5
					UR8BK5170D	28.8	17,200	5,041	11.0	3.23	1,564	10
					UR8B180DU	30.4	18,100	5,305	10.5	3.08	1,724	5
					UR8B200DU	32.5	19,400	5,686	10.6	3.11	1,830	5
				55	UR5A215DN	36.2	21,800	6,389	11.2	3.28	1,945	6
					UR5A260DN	44.6	27,000	7,913	10.4	3.04	2,600	7
		1φ, 220-240V	Twin	55.0	UR5T300JT	49.4	29,650	8,690	9.8	2.87	3,025	13
		3φ, 380-420V		63.0	UR3T480BU	78.6	48,500	14,214	10.9	3.19	4,450	2
					UR3T510BU	83.6	51,500	15,093	10.9	3.19	4,725	2
					UR3T510BT	83.6	51,900	15,210	10.9	3.20	4,760	2

Fixed Speed / R134a, 60Hz

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	60Hz	1φ, 115V	Single	48	UX8CR5120H	23.9	11,700	3,429	10.6	3.11	1,104	22
		1φ, 208-230V		48	UX8CR5120I	23.9	11,900	3,488	10.6	3.11	1,123	22

SPECIFICATIONS

Application for Tropical / R22

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R22	60Hz	1φ, 208-230V	Single	44	UR4B124IT	17.6	12,650	3,707	10.3	3.02	1,228	2
					UR4B135IT	18.7	13,500	3,956	10.3	3.02	1,310	13
				48	UR8D190IH	26.6	19,500	5,715	10.5	3.08	1,858	3
					UR8D200IH	27.8	20,700	6,067	10.4	3.05	1,990	3
				55	UR5A240IH	33.4	25,000	7,327	11.1	3.25	2,252	2
					UR5A260IH	36.2	27,600	8,089	10.4	3.05	2,654	2
	50Hz	1φ, 220-240V		44	UR4B092JT	16.1	9,300	2,726	10.0	2.93	930	2
					UR4D124JH	21.0	12,400	3,634	9.7	2.84	1,278	7
					UR4D129JT	21.7	12,800	3,751	9.6	2.81	1,333	16
				48	UR8B180JH	30.4	18,400	5,393	9.4	2.76	1,957	10
					UR8B200JT	32.5	19,500	5,715	9.3	2.73	2,097	11
					UR8D165JH	27.8	16,500	4,836	10.2	2.99	1,618	12
				55	UR5A250JH	41.8	25,300	7,415	10.1	2.97	2,500	5

Application for Tropical / R134a

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	60Hz	1φ, 115V	Single	39	UX9BJ6056H	11.3	5,780	1,694	10.8	3.17	535	11
		1φ, 208-230V		39	UX9AK2040I	8.1	4,000	1,172	10.4	3.04	385	30
	50Hz	1φ, 220V		39	UX9BK1042D	10.2	4,170	1,222	8.5	2.49	491	2
		1φ, 220-240V		39	UX9AK2037J	9.0	3,650	1,070	10.1	2.97	360	30
					UX9BJ2042J	10.2	4,260	1,248	10.2	2.99	418	2
					UX9B042JH	10.2	4,260	1,248	10.4	3.05	410	3

SPECIFICATIONS

Mini Rotary Compressor / R134a

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	DC24V	Twin	20	UX0T011ZNA	2.4	1,100	322	9.7	2.85	113	1
	AC220V			UX0T011FNA	2.4	1,100	322	10.0	2.93	110	1
	AC100V			UX0T011QNA	2.4	1,100	322	10.0	2.93	110	1
	DC12V			UX0TM5009S	1.9	850	249	8.1	2.37	105	1
	AC220V	Single		UX0AK5007F	1.4	630	185	9.4	2.76	67	2
	DC24V			UX0AK5007Z	1.4	630	185	9.4	2.76	67	2
	DC48V			UX0AK5007R	1.4	630	185	9.4	2.76	67	2

Application for DC Power Source / R134a

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	DC24V	Single	20	UX0AK5007Z	1.4	630	185	9.4	2.76	67	2
	DC48V			UX0AK5007R	1.4	630	185	9.4	2.76	67	2
	DC12V	Twin		UX0TM5009S	1.9	850	249	8.1	2.37	105	1
	DC24V			UX0T011ZNA	2.4	1,100	322	9.7	2.85	113	1
	DC24V	Single	39	UX9CJ5034Z	7.3	3,480	1,020	11.2	3.28	311	28
	DC24V			UX9AM5042Z	9.0	4,200	1,231	11.2	3.28	375	35
	DC24V		44	UX4AK5055Z	11.5	5,450	1,597	10.8	3.16	505	23

SPECIFICATIONS

Special Application for Heat Pump Dryer / Variable Speed

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	AC 200-240V~50Hz, 220V~60Hz	Single	39	UX9CK5034F	7.3	3,480	1,020	12.0	3.52	290	21
				UX9AR3044F	9.0	4,340	1,272	11.8	3.46	368	31
				UX9AR5044F	9.0	4,340	1,272	12.2	3.57	356	32
				UX9BR5055F	11.3	5,400	1,583	12.3	3.60	439	33

Special Application for Heat Pump Dryer / Fixed Speed

Ref.	Frequency	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	50Hz	1φ, 220-240V	Single	39	UX9AK2037J	9.0	3,650	1,070	10.1	2.96	360	30
					UX9BJ2042J	10.2	4,260	1,248	10.2	2.99	418	3
	60Hz	1φ, 208-230V	Single		UX9AK2040I	8.1	4,000	1,172	10.4	3.05	385	30

Special Application for Heat Pump Water Heater

Ref.	Power Source	Piston	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R134a	AC 200-240V~50Hz, 220V~60Hz	Twin	48	UX8TH5140F	30.0	14,500	4,250	12.0	3.51	1,210	17
			55	UX5T250FNB	49.4	24,800	7,268	12.1	3.55	2,050	21

SPECIFICATIONS

Special Application for Unitary / Variable Speed

Ref.	Power Source	Type	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	AC 200-240V~50Hz, 220V~60Hz	Twin	44	UG4TN3200F	19.5	20,500	6,008	11.4	3.34	1,798	24
			48	UG8TN3265F	25.2	26,800	7,854	11.5	3.37	2,330	24
				UG8TT3300F	30.0	31,300	9,173	11.4	3.34	2,746	19
				UG8TT3360F	36.0	37,700	11,049	11.2	3.28	3,366	19
			55	UG5TN3450F	43.0	46,000	13,481	11.4	3.34	4,035	20
				UG5TK8520F	49.4	52,800	15,474	11.4	3.34	4,632	20

Special Application for Unitary / Fixed Speed

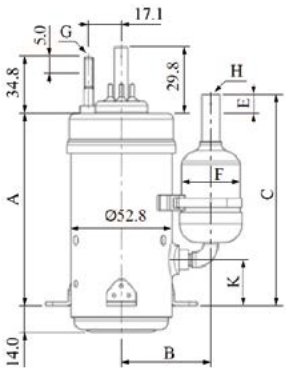
Ref.	Frequency	Power Source	Type	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Dimension
						(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	
R410A	60Hz	1φ, 208-230V	Single	48	UG8C155IN	15.2	16,100	4,718	10.6	3.11	1,519	7
				55	UG5DR8200I	19.3	20,000	5,865	10.6	3.11	1,886	24
					UG5C250IN	23.9	25,300	7,415	10.7	3.14	2,365	9
					UG5DR8250I	23.9	25,300	7,415	10.7	3.14	2,365	11
					UG5A290IN	27.9	29,500	8,646	10.6	3.11	2,783	11
					UG5DN8300I	29.3	29,400	8,616	10.8	3.15	2,735	11

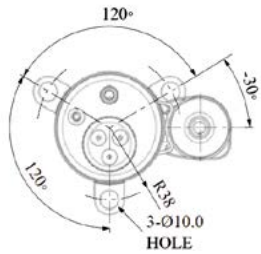
DIMENSION

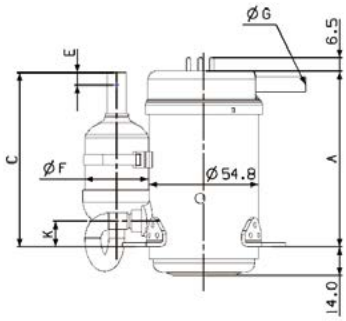
20 Frame (Mini Compressor)

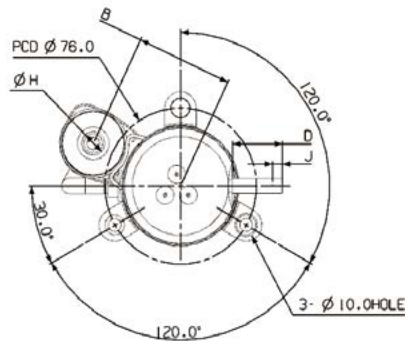
(UNIT:mm)

Type	A	B	C	D	E	F	G	H	J	K
1	101.3	48.4	111.3	-	5.0	31.8	4.95	6.54	-	24.3
2	85.2	48.4	84.6	25.0	5.0	-	-	6.54	5.00	12.5





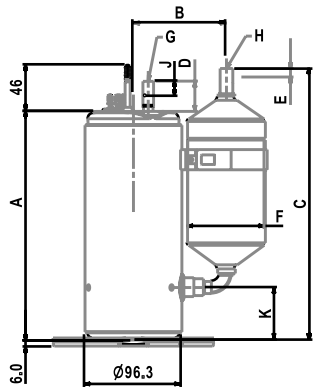


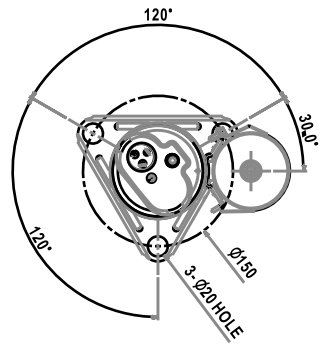


35 Frame

(UNIT:mm)

Type	A	B	C	D	E	F	G	H	J	K
1	226.5	92.5	269.0	30.0	15.0	77.4	8.15	9.64	15.00	52.0
2	241.5	92.5	269.0	30.0	15.0	77.4	8.15	9.64	15.00	52.0
3	244.0	89.3	290.0	30.0	15.0	64.0	8.15	9.64	15.00	52.0





DIMENSION

39 Frame

(UNIT:mm)

Type	A	B	C	E	F	G	H	K
1	190.3	84.6	201.6	10.0	31.8	8.15	9.64	28.8
2	206.9	86.5	227.3	15.0	41.3	8.15	9.64	37.0
3	212.9	84.6	209.8	10.0	31.8	8.15	9.64	37.0
4	193.3	86.5	220.6	15.0	41.3	8.15	9.64	30.3
5	212.9	86.5	227.3	15.0	41.3	8.15	9.64	37.0
6	218.9	86.5	227.3	15.0	41.3	8.15	9.64	37.0
7	197.3	84.6	203.1	10.0	31.8	8.15	9.64	30.3
8	200.3	86.5	219.1	15.0	41.3	8.15	9.64	28.8
9	194.3	84.6	201.6	10.0	31.8	8.15	9.64	28.8
10	207.8	86.5	226.6	15.0	41.3	8.15	9.64	36.3
11	200.3	84.6	201.6	10.0	31.8	8.15	9.64	28.8
12	201.8	86.5	226.6	15.0	41.3	8.15	9.64	36.3
13	206.3	86.5	219.1	15.0	41.3	8.15	9.64	28.8
14	283.7	97.2	303.1	15.0	77.4	8.15	12.85	42.5
15	237.3	97.2	253.3	15.0	77.4	8.15	12.85	36.3
16	246.5	97.2	261.0	15.0	77.4	8.15	12.85	44.0
17	261.5	87.9	267.0	15.0	58.4	8.15	12.85	44.0
18	236.5	87.9	267.0	15.0	58.4	8.15	12.85	44.0
19	245.9	97.2	267.7	15.0	77.4	8.15	12.85	50.7
20	223.7	87.9	259.3	15.0	58.4	8.15	12.85	36.3
21	174.3	84.6	151.0	10.0	31.8	8.15	9.64	36.3
22	226.5	97.2	261.0	15.0	77.4	8.15	12.85	44.0
23	236.5	97.2	261.0	15.0	77.4	8.15	12.85	44.0
24	223.5	87.9	263.7	15.0	58.4	8.15	12.85	42.5
25	292.7	97.2	329.6	15.0	77.0	8.15	12.85	56.1
26	277.7	97.2	329.6	15.0	77.0	8.15	12.85	56.1
27	287.7	97.2	329.6	15.0	77.0	8.15	12.85	56.1
28	139.8	84.6	143.5	10.0	31.8	8.15	9.64	28.8
29	190.3	86.5	219.1	15.0	41.3	8.15	9.64	28.8
30	193.3	84.6	203.1	10.0	31.8	8.15	9.64	30.3
31	152.5	84.6	145.0	10.0	31.8	8.15	9.64	30.3
32	162.5	84.6	203.1	10.0	31.8	8.15	9.64	30.3
34	182.3	84.6	209.8	10.0	31.8	8.15	9.64	37.0
34	256.2	97.2	318.1	15.0	77.0	8.15	12.85	57.5

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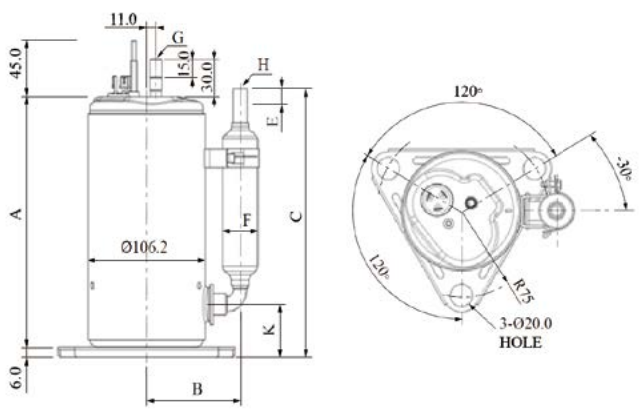

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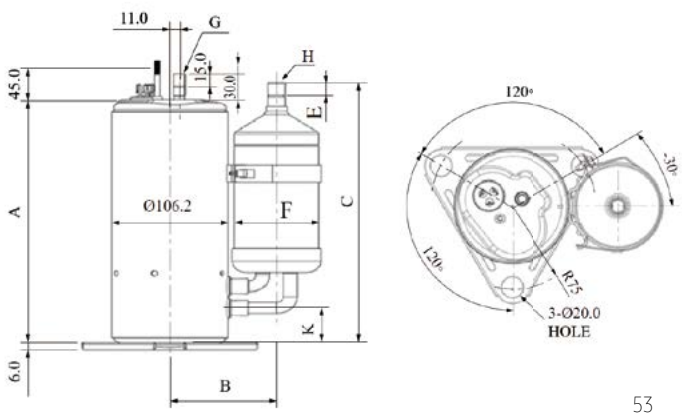


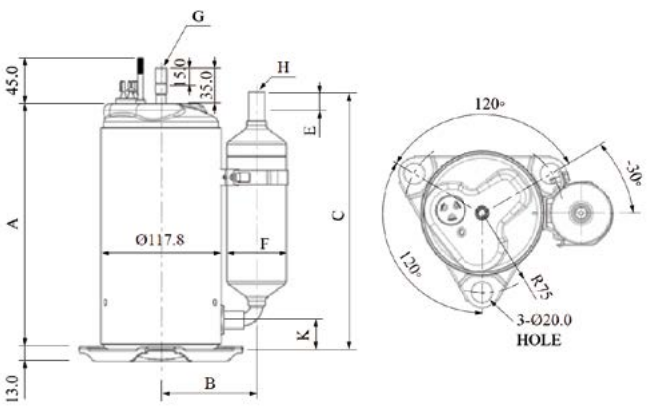
DIMENSION

44 Frame

(UNIT:mm)

Type	A	B	C	E	F	G	H	K
1	215.1	93.7	251.6	15.0	58.4	8.15	12.85	28.6
2	240.7	93.7	274.0	15.0	58.4	8.15	12.85	37.0
3	240.1	93.7	249.8	15.0	58.4	8.15	9.64	28.6
4	240.1	93.7	251.6	15.0	58.4	8.15	12.85	28.6
5	252.7	93.7	274.0	15.0	58.4	8.15	12.85	37.0
6	235.1	93.7	251.6	15.0	58.4	8.15	12.85	28.6
7	257.4	93.7	276.2	15.0	58.4	8.15	12.85	39.2
8	270.8	93.7	289.6	15.0	58.4	8.15	12.85	52.6
9	226.1	93.7	251.6	15.0	58.4	8.15	12.85	28.6
10	222.8	93.7	257.3	15.0	58.4	8.15	12.85	34.3
11	215.1	95.9	231.1	15.0	47.6	8.15	12.85	26.6
12	233.2	93.7	258.7	15.0	58.4	8.15	12.85	35.7
13	247.7	93.7	274.0	15.0	58.4	8.15	12.85	37.0
14	247.2	102.6	252.7	15.0	77.4	8.15	12.85	35.7
15	222.1	92.1	216.9	15.0	41.3	8.15	9.64	26.6
16	252.4	93.7	276.2	15.0	58.4	8.15	12.85	39.2
17	243.2	102.6	294.9	15.0	77.0	8.15	12.85	34.3
18	246.5	102.6	308.2	15.0	77.0	8.15	12.85	47.6
19	259.5	102.6	322.2	15.0	77.0	8.15	12.85	49.0
20	264.0	102.6	322.5	15.0	77.0	8.15	12.85	49.0
21	263.5	102.6	308.2	15.0	77.0	8.15	12.85	47.6
22	281.0	102.6	322.2	15.0	77.0	8.15	12.85	49.0
23	152.6	93.7	190.6	15.0	58.4	8.15	12.85	28.6
24	299.0	102.6	322.5	15.0	77.0	8.15	12.85	49.0
25	303.0	102.6	326.4	15.0	77.0	8.15	12.85	52.9

< 44 Frame Single >



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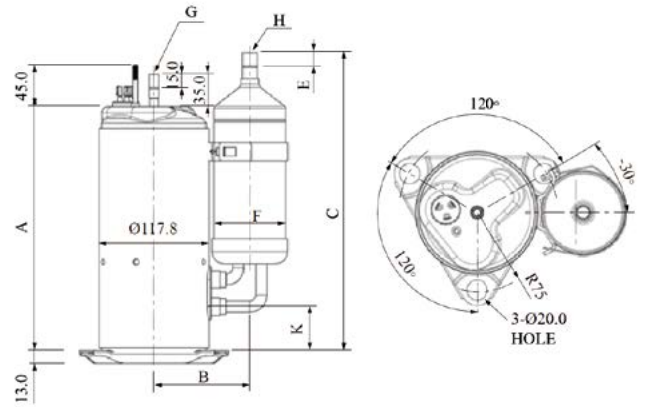


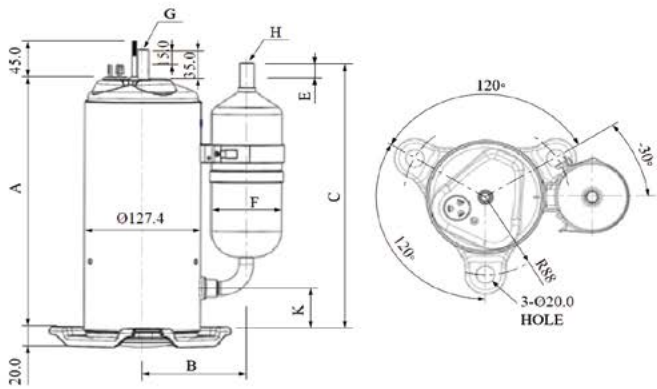
DIMENSION

48 Frame

(UNIT:mm)

Type	A	B	C	E	F	G	H	K
1	285.8	98.0	285.4	15.0	58.4	9.70	12.85	48.4
2	285.8	114.5	308.4	15.0	77.4	9.70	12.85	48.4
3	300.3	114.5	310.6	15.0	77.4	9.70	12.85	50.6
4	295.8	98.0	285.4	15.0	58.4	9.70	12.85	48.4
5	301.3	114.5	310.6	15.0	77.4	9.70	12.85	50.2
6	275.8	114.5	308.4	15.0	77.4	9.70	12.85	48.4
7	342.0	114.5	369.6	15.0	77.4	9.70	12.85	109.6
8	290.8	114.5	308.4	15.0	77.4	9.70	12.85	48.4
9	275.8	98.0	285.4	15.0	58.4	9.70	12.85	48.4
10	306.3	114.5	310.6	15.0	77.4	9.70	12.85	50.2
11	291.3	114.5	310.6	15.0	77.4	9.70	12.85	50.2
12	295.3	114.5	310.6	15.0	77.4	9.70	12.85	50.6
13	266.1	115.2	316.0	15.0	77.0	9.70	12.85	44.5
14	271.1	115.2	316.0	15.0	77.0	9.70	12.85	44.5
15	281.1	115.2	316.0	15.0	77.0	9.70	12.85	44.5
16	286.1	115.2	329.9	15.0	77.0	9.70	12.85	47.8
17	325.0	115.2	368.8	15.0	77.0	9.70	12.85	86.8
18	332.5	115.2	368.8	15.0	77.0	9.70	12.85	86.8
19	355.0	115.2	368.8	15.0	77.0	9.70	12.85	86.8
20	311.1	115.2	316.0	15.0	77.0	9.70	12.85	86.8
21	365.0	115.2	368.8	15.0	77.0	9.70	12.85	86.8
22	268.8	114.5	308.4	15.0	77.4	9.70	12.85	48.4
23	295.8	114.5	308.4	15.0	77.4	9.70	12.85	48.4

< 48 Frame Single >



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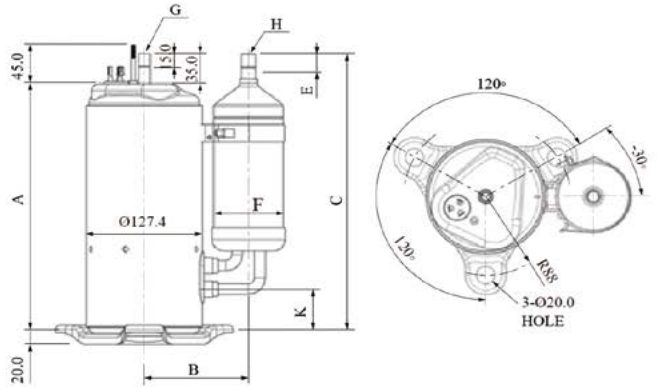


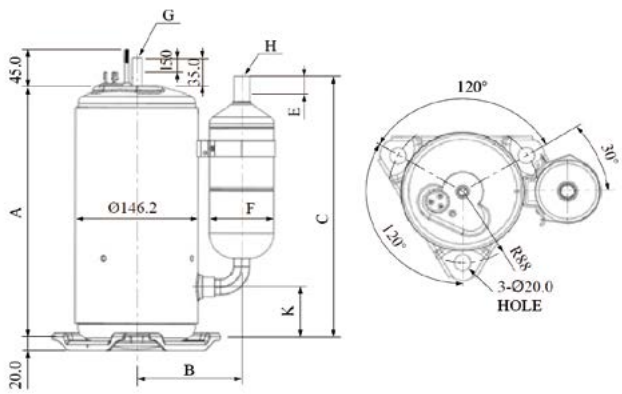
DIMENSION

55 Frame

(UNIT:mm)

Type	A	B	C	E	F	G	H	K
1	294.4	124.8	306.7	15.0	77.4	9.70	16.0	42.7
2	311.4	124.8	349.7	15.0	77.4	9.70	16.0	59.7
3	286.4	124.8	349.7	15.0	77.4	9.70	16.0	59.7
4	303.7	124.8	349.7	15.0	77.4	9.70	16.0	59.7
5	318.7	124.8	349.7	15.0	77.4	9.70	16.0	59.7
6	301.4	124.8	349.7	15.0	77.4	9.70	16.0	59.7
7	323.8	124.8	349.7	15.0	77.4	9.70	16.0	59.7
8	345.9	132.4	358.7	15.0	90.0	9.70	19.2	87.8
9	370.8	132.4	370.0	15.0	90.0	9.70	19.2	99.1
10	296.4	124.8	349.7	15.0	77.4	9.70	16.0	59.7
11	360.9	132.4	360.1	15.0	90.0	9.70	19.2	89.2
12	306.4	124.8	348.3	15.0	77.4	9.70	16.0	58.3
13	323.4	132.4	362.2	15.0	90.0	9.70	19.2	58.3
14	341.2	132.4	361.0	15.0	90.0	9.70	19.2	57.2
15	395.8	125.5	455.4	15.0	77.0	9.70	16.0	104.6
16	386.0	125.5	445.6	15.0	77.0	9.70	16.0	94.8
17	311.5	125.5	351.0	15.0	77.0	9.70	16.0	55.2
18	371.0	125.5	390.5	15.0	77.0	9.70	16.0	94.8
19	323.5	132.4	362.1	15.0	90.0	9.70	19.2	58.3
20	383.0	132.4	401.6	15.0	90.0	9.70	19.2	97.8
21	393.0	132.4	401.6	15.0	90.0	9.70	19.2	97.8
22	363.0	132.4	401.6	15.0	90.0	9.70	19.2	97.8
23	363.0	132.4	401.6	15.0	90.0	9.70	19.2	97.8
24	353.0	132.4	401.6	15.0	90.0	9.70	19.2	97.8

< 55 Frame Single >



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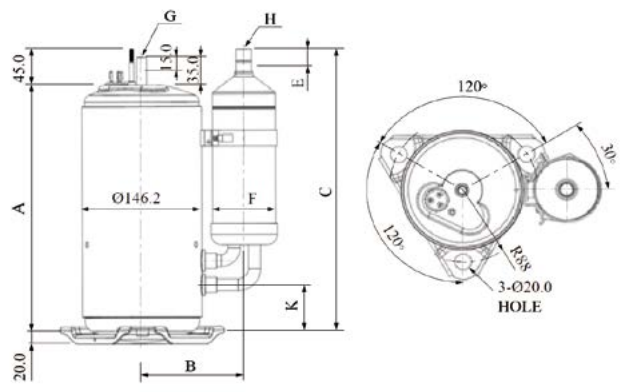
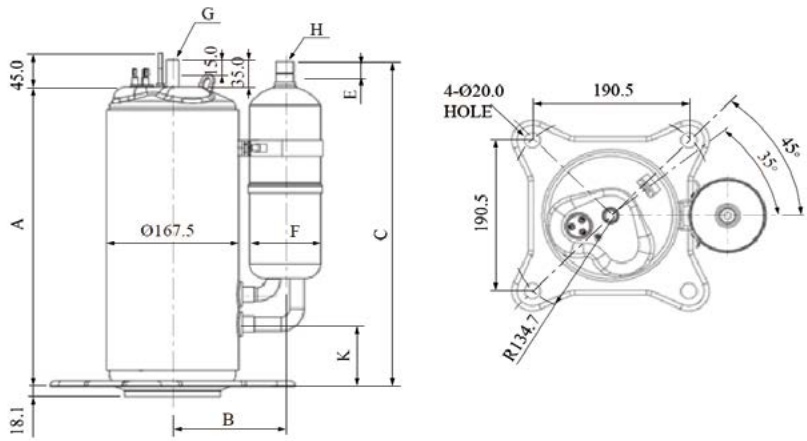


DIMENSION

63 Frame

(UNIT:mm)

Type	A	B	C	E	F	G	H	K
1	379.8	142.2	422.5	15.0	90.0	12.90	19.20	77.7
2	392.7	142.2	432.5	15.0	90.0	12.90	19.20	81.5
3	389.8	142.2	455.5	15.0	90.0	12.90	19.20	77.7
4	358.5	143.9	360.9	15.0	90.0	12.90	19.20	90.0
5	363.5	143.9	360.9	15.0	90.0	12.90	19.20	90.0



INVERTER CONTROLLER

Series		SBMC (for 20Fr._Mini Compressor)					
		SBMC1				SBMC2	
		-V1	-V2	-V3	-V4	-V1	-V2
Compressor Model		UX0T011ZNAE5 (2.4cc)			UX0TM5009SE9 (1.9cc)	UX0T011FNAE5 (2.4cc)	UX0T011QNAE5 (2.4cc)
Image							 
Power Supply	Rated Voltage	24V		24/48V	12V	AC 230V	AC 100V
	Frequency	(DC)				50/60HZ	
	Max Input Arms	10A			15A	4A	3A
	Max Input Power	250W			180W	230W	210W
Interface	Type	Frequency input or Resistor				Frequency input	
Structure	PBA or Case	PBA	Case (Seperated)	PBA		Case (Seperated)	
	Size	104*58.2*34.9	107.6*62.4*39.6		104*58.2*34.9	107.6*62.4*47.5	
	Cooling	Static				Static	
Environment	Ambient Temp.	-20~43℃				-5~43℃	
	Storage Temp.	-40~85℃				-25~85℃	
	Max. Storage Relative Humidity	85%				85%	
Protection		Voltage /Current	Voltage /Current /Temp.			Voltage /Current	

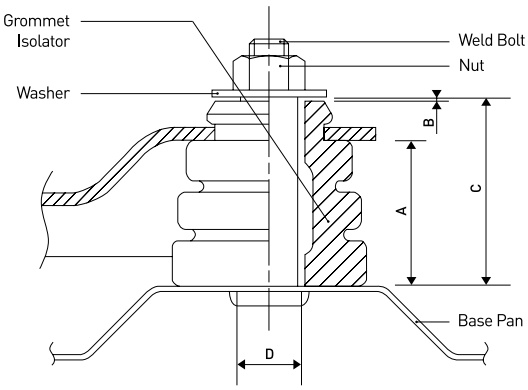
INVERTER CONTROLLER

SBMC (for 39Fr_7.2cc)		SBMC (for 44Fr_11.2cc)	SBMC (for 39Fr_9.0cc)	SBHC (for Rotary Compressor)		
SBMC3		SBMC5		SBHC3	SBHC4	SBHC5
-V1	-V2	-V1	-V2	-V1	-V1	-V1
UX9CJ5034ZJ7 (7.2cc)		UX4AK5055ZJD** (11.2cc)	UX9AM5042ZJD (9.0cc)	2/3Ton	4Ton	5Ton
						
24V	12/24/48V	12/24/48V		AC 208-240V		
(DC)		(DC)		50/60HZ		
25A		45A	30A	20A	22A	32A
620W		1.1kW	720W	4.6kW	4.8kW	7kW
Frequency input or Resistor		Frequency input or Resistor		RS-485 or UART TTL		
Case (Seperated)		PBA		PBA		
97.6*65.4*122.6		152*119*53.2		280*200*138.7		
Static		Static		Fan		
-20~43℃		-20~43℃		-30~60℃		
-40~85℃		-40~85℃		-40~85℃		
85%		85%		95%		
Voltage /Current /Temp.		Voltage /Current /Temp. /Comp temp.		Voltage /Current /Temp.		

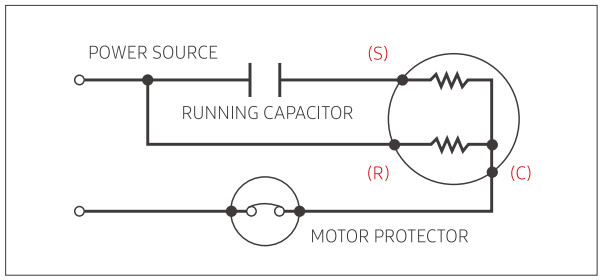
MOUNTING SYSTEM

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

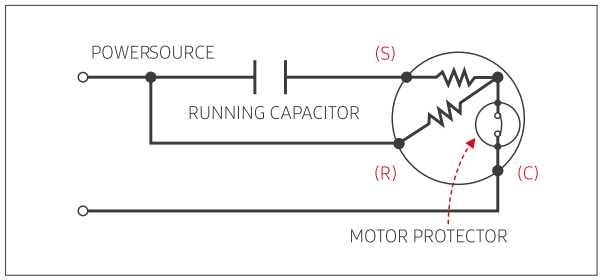
FRAME	A	B	C	D
20F	18.0	0.5 ~ 2.0	23.7	6.6
35F / 39F	14.0	0.5 ~ 2.0	22.0	10.5
44, 48, 55, 63F	25.5	0.5 ~ 2.0	33.5	11.5



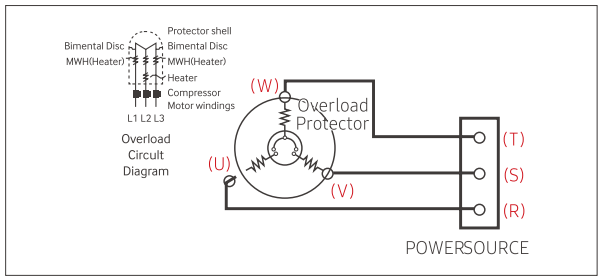
WIRING DIAGRAM



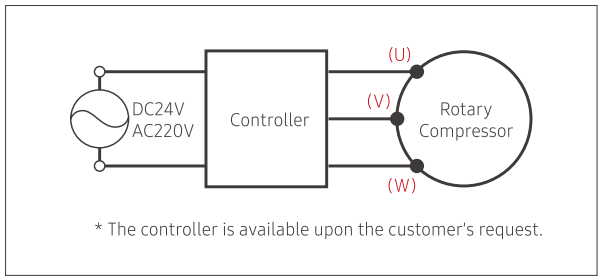
External OLP Type



Internal OLP Type



3 Phase Internal OLP Type



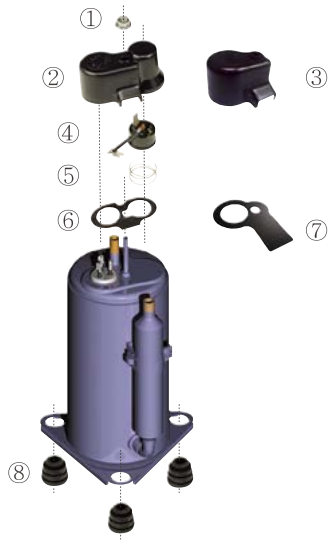
Miniature Rotary Compressor

TEST CONDITIONS

REFRIGERANT	ROTARY COMPRESSOR	
	R22/ R407C/ R410A/ R134a	R32
Condensing Temp.(°C)	54.4	54.4
Evaporating Temp.(°C)	7.2	7.2
Ambient Temp.(°C)	35.0	35.0
Return Gas Temp.(°C)	35.0	18.3
Liquid Temp.(°C)	46.1	46.1

ACCESSORY PARTS

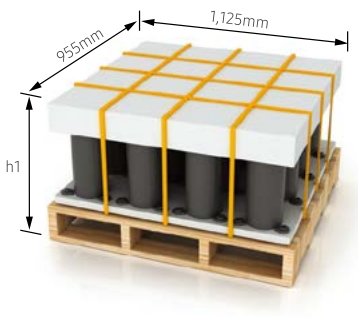
ITEMS	APPLICATION				QUANTITY (PCS)
	COMP. WITH EXTERNAL OLP	COMP. WITH INTERNAL OLP	BLDC COMPRESSOR		
			TYPE 1	TYPE 2	
Nut	①				1
Cover Terminal	②	③	②	③	1
Overload Protector	④	–	–	–	1
Spring etc OLP	⑤	–	–	–	1
Gasket	⑥	⑦	⑥	⑦	1
Grommet Isolator	⑧				3 (63F 4Pcs)



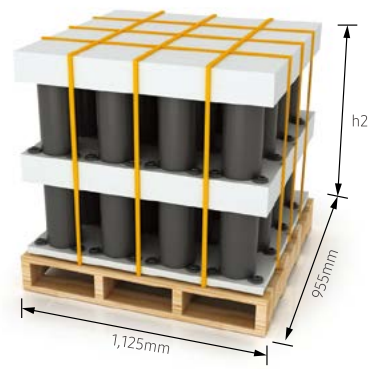
PACKING INFORMATION

FRAME	COMPRESSOR QUANTITY/CARTON(PCS)		CARTON QUANTITY (CARTON)		ACCESSORY BOX (E)	LOADING QUANTITY (T) (PCS)	PACKING HEIGHT	
	TYPE 1 (A)	TYPE 2 (B)	TYPE 1 (C)	TYPE 2 (D)			TYPE 1 (h1)	TYPE 2 (h2)
20F	182	364	6	12	42	5,460	418	630
20F(Twisted Tube)	154	308	2	22	6	7,084	235	395
39F	36	72	2	24	6	1,800	477	788
35F / 39F BLDC	35	70	2	22	5	1,610	562	962
44F Ex(In)OLP	36	72	4	16	6(5)	1,296	521	880
44BLDC	30	60	5	19	4	1,290	559	956
48F Ex(In)OLP	30	60	4	14	4(3)	960	611	1,059
55F	20	40	4	16	2	720	671	1,180
63F	12	24	12	12	2	432	676	1,190

ex.) Compressor Total Quantity of 44Frame Model : (a)X(c)+(b)X(d)= (t) / 1,296 pcs
ex.) Carton Total Quantity of 44Frame Model : (c)+(d)+(e)= 26 / (25) Cartons
* 20 Frame is 1 type of 2 stacks. (Packed in boxes)
* Korean sale is exception in upside standard.



TYPE 1 PACKING



TYPE 2 PACKING

WARNING / DANGER

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

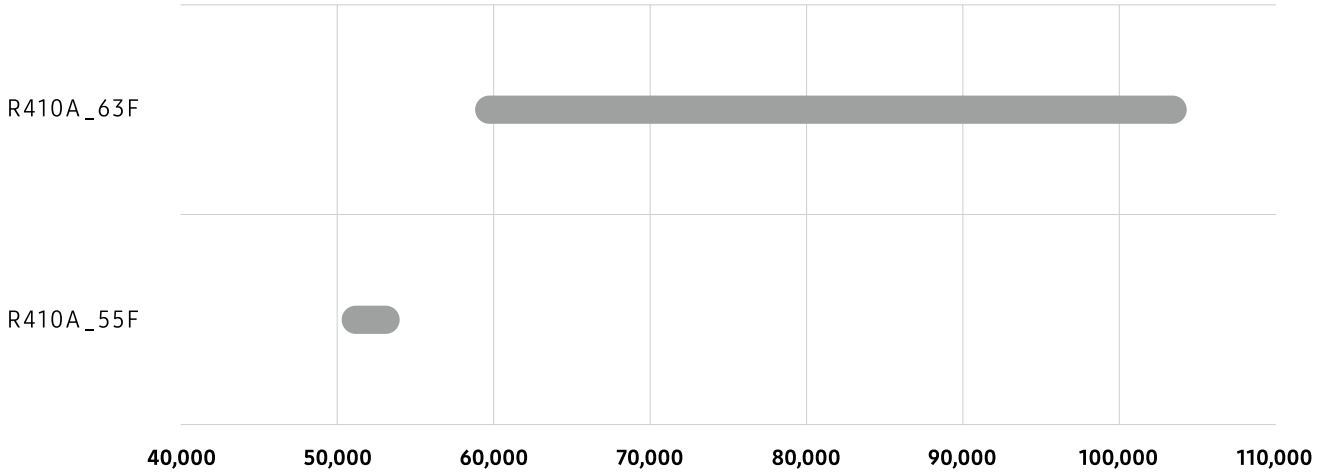
1.Ground the equipment securely.
2.Turn off power before servicing.
3.Mount the terminal cover in place whenever Power is applied to this compressor.
4.Wear protective goggles when servicing.
5.Before brazing, remove pressure from both High and low side.
6.Do not use this compressor to compress air.
7.Use only approved refrigerants and lubricants.
8.Do not touch with bare hands during running Or after stopping instantly.

Scroll Compressor

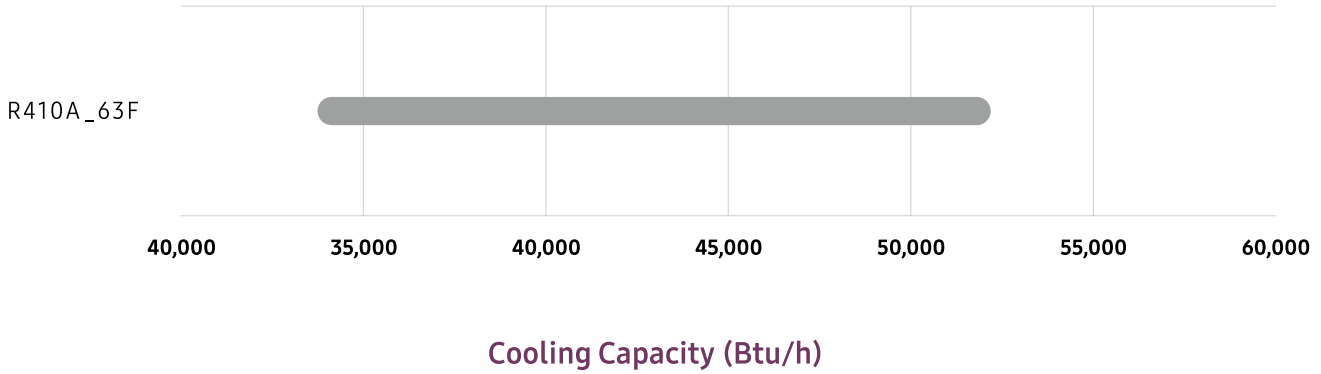
CONTENTS

PRODUCT RANGE

Variable Speed



Fixed Speed



MODEL IDENTIFICATION

Type 1

DS	—	G	B	066	F	A	V	A
Product Categories		Refrigerant	Frame (A~Z)	Displacement	Model Type	Generation Code (A~Z)	Model Type	Option (A~Z)

Type 2

Product Categories
Scroll

Frame	
1	52Frame
2	55Frame
3	57Frame
4	63Frame
5	67Frame
6	71Frame

Launching Year	
K	2016
M	2017
N	2018
R	2019
T	2020
A	2021

Displacement
ex) 066 → 66cc

Function	
N	Basic
V	V/Injection

DS	4	G	M	5	066	F	V	A

Refrigerant	
R	R22
F	R407C
G	R410A
B	R32
X	R134a

Series

Power Source	
H	1Φ 115V, 60Hz
I	1Φ 208-230V, 60Hz
M	1Φ 200-220V, 50Hz
J	1Φ 220-240V, 50Hz
D	1Φ 220V, 50Hz
G	1Φ 127V, 60Hz
K	1Φ 100V, 50/60Hz
Y	1Φ 265V, 60Hz
Q	3Φ 115V, 60Hz (44F AC INV)
R	3Φ 125/130V,60Hz (48F AC INV)
A	3Φ 380-440V, 60Hz
B	3Φ 380-420V, 50Hz
C	3Φ 220V, 60Hz
E	3Φ 220V BLDC (Nd)
F	3Φ 380V BLDC (Nd)
L	3Φ 380V BLDC (Ferrite)
N	3Φ 220V BLDC (Ferrite)

Minor Change (A~Z)

SPECIFICATIONS

Variable Speed / R410A

Ref.	Power Source	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Oil Charge	Net Weight	Dimension
				(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	(cc)	(kg)	
R410A	3Φ 380-460V	55	DS2GN5046FVT	45.7	52,000	15,240	11.4	3.34	4,561	1,400	24.8	1
		63	DS4GM5052FVT	52.0	60,500	17,732	11.3	3.31	5,354	1,700	32.4	2
			DS4GM5066FVT	65.8	76,000	22,274	11.5	3.37	6,610	1,700	36.0	3
			DS4GR5070FVT	70.0	80,300	23,535	11.5	3.37	6,985	1,700	37.3	3
			DS4GR5080FVT	80.0	90,500	26,524	11.2	3.28	8,080	2,000	41.3	4
			DS4GM7090FVT	90.0	103,000	30,116	11.2	3.28	9,196	2,000	40.8	5
	3Φ 220V	55	DS2GT7046EVT	45.7	52,000	15,240	11.3	3.31	4,602	1,400	24.8	1
		63	DS4GT5052EVT	52.0	60,500	17,732	11.3	3.31	5,354	1,700	32.2	2
			DS4GT5066EVT	65.8	76,000	22,274	11.4	3.34	6,667	1,700	36.0	3

Fixed Speed / R410A (Under Development)

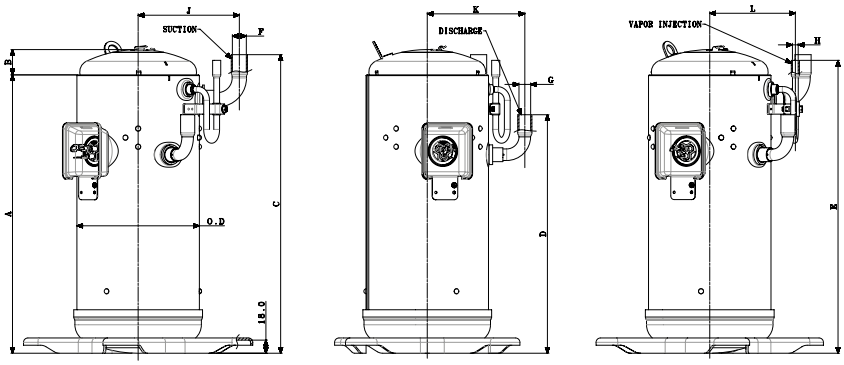
Ref.	Frequency	Power Source	Frame	Model	Displacement	Cooling Capacity		EER	COP	Input	Oil Charge	Net Weight	Dimension
					(cc/rev)	(Btu/h)	(Watts)	(Btu/Wh)	(W/W)	(Watts)	(cc)	(kg)	
R410A	60Hz	1Φ 208-230V	63	DS4GA5033INA	32.4	34,300	10,053	10.5	3.14	3,270	1,100	33.0	6
				DS4GA5038INA	38.0	40,500	11,870	10.6	3.17	3,820	1,100	33.0	6
				DS4GA5048INA	47.6	51,500	15,094	10.7	3.22	4,810	1,100	34.0	6

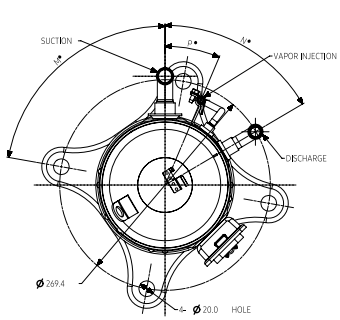
DIMENSION

Variable Speed

(UNIT:mm)

Type	FOOT TYPE	O.D	A	B	C	D	E	F	G	H	J	K	L	M	N	P
1	I	Ø146.2	379.8	29.1	406.5	327.8	399.8	22.40	16.05	8.15	127.9	123.6	106.8	80°	59.5°	21.4°
2	I	Ø168.4	382.8	34.8	410.6	328.0	402.8	22.40	16.05	8.15	139.2	134.2	116.8	80°	59.5°	22.8°
3	I	Ø168.4	419.8	34.8	441.4	358.8	439.8	22.40	16.05	8.15	139.2	134.2	116.8	80°	59.5°	22.8°
4	I	Ø168.4	462.2	34.8	482.4	391.8	482.2	25.58	16.05	8.15	142.2	134.2	116.8	80°	59.5°	22.8°
5	I	Ø168.4	462.2	34.8	484.7	391.8	482.2	31.92	16.05	8.15	142.2	134.2	116.8	80°	59.5°	22.8°





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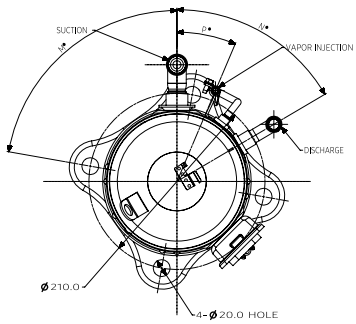
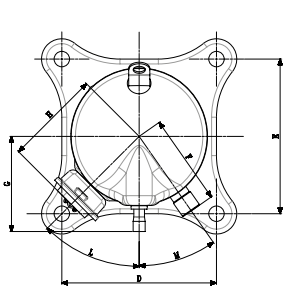


<FOOT TYPE II>

Fixed Speed

(UNIT:mm)

Type	FOOT TYPE	O.D	A	B	C	D	E	F	G	H	J (I.D)	K(I.D)	L	M
6	III	Ø166.4	430.0	403.0	313.0	190.5	190.5	112.0	115.4	118.4	Φ22.4	Φ12.9	45°	31°



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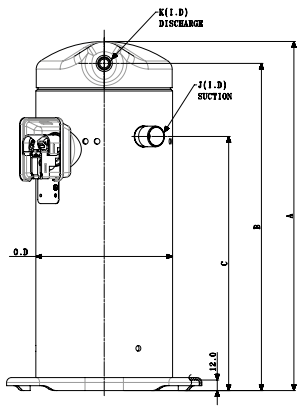
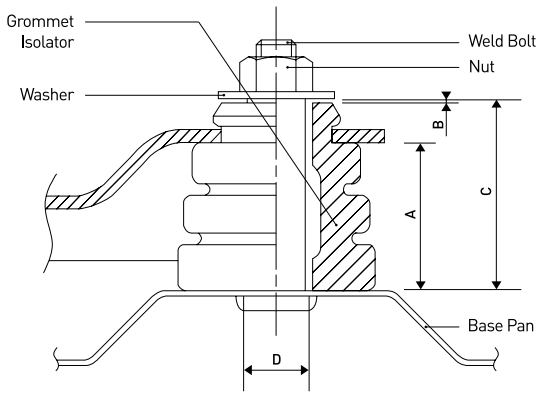


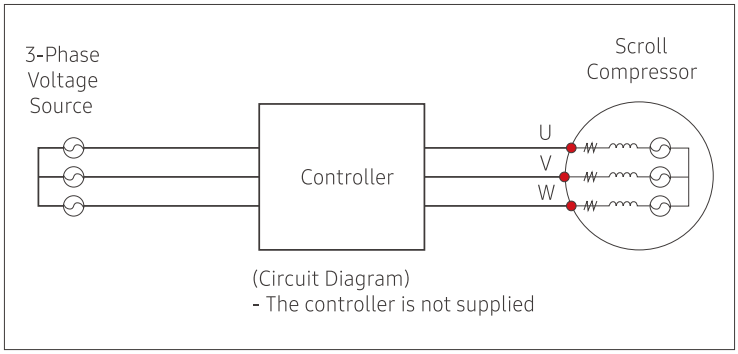
MOUNTING SYSTEM

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

FRAME	A	B	C	D
55, 63F	29.0	0.5~2.0	Max38.0	11.5



WIRING DIAGRAM

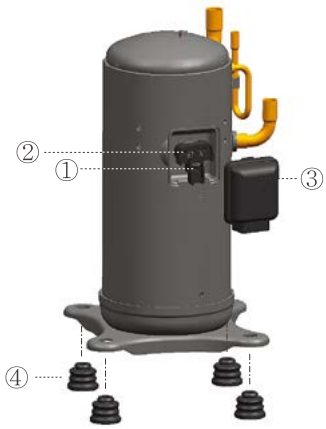


TEST CONDITIONS

REFRIGERANT	SCROLL COMPRESSOR
	R410A
Condensing Temp.(℃)	54.4
Evaporating Temp.(℃)	7.2
Ambient Temp.(℃)	35.0
Return Gas Temp.(℃)	18.3
Liquid Temp.(℃)	46.1

ACCESSORY PARTS

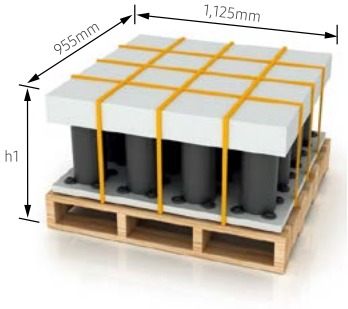
ITEMS	APPLICATION		QUANTITY (PCS)
	ALL SCROLL COMPRESSOR MODEL		
Terminal Block Connector	①	Attached to Compressor	1
Screw-Hex	②		3
Cover Terminal	③		1
Grommet Isolator	④	Supplied in accessory boxes	4



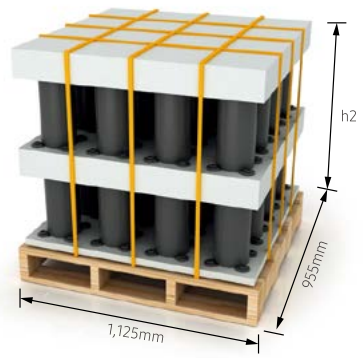
PACKING INFORMATION

MODEL	COMPRESSOR QUANTITY/CARTON (PCS)		CARTON QUANTITY (CARTON)		ACCESSORY BOX (E)	LOADING QUANTITY (T) (PCS)	PACKING HEIGHT	
	TYPE1 (A)	TYPE2 (B)	TYPE1 (C)	TYPE2 (D)			TYPE 1 (h1)	TYPE 2 (h2)
DS2GN5046FVT	12	24	1	23	5	564	628	1090
DS2GT7046EVT								
DS4GM5052FVT	12	24	4	20	2	528	631	1094
DS4GT5052EVT								
DS4GM5066FVT	12	24	11	12	4	420	672	1169
DS4GT5066EVT								
DS4GR5070FVT								
DS4GR5080FVT	12	24	11	12	4	420	710	1253
DS4GM7090FVT								

ex.) Compressor Total Quantity of 'DS2GN5046FVT' Model : (A) X (C) + (B) X (D) = (T) / 564 pcs
ex.) Carton Total Quantity of 'DS2GN5046FVT' Model : (C)+(D)+(E) = 29 Cartons
Korean sale is exception in upside standard.



TYPE 1 PACKING



TYPE 2 PACKING

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 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.

VDE, TUV or NEMKO for Europe Market

GOST for Russia Market

CCC for China Market

China Factory
• Ro/Re/Sc

Korea
• HQ, Re Factory

KC for South Korea Market

SASO for Saudi Arabia Market

C-UL for North American Market

Office, Agent
• Chicago, New Jersey

INMETRO for Brazil Market

Gwangju, Korea(SEC)

Suzhou, China(SSEC)

Korea

Head Office (Suwon)
- Marketing, R&D, Quality, Global Manufacturing Technology

Factory (Gwangju)
- Reciprocating Compressor Manufacturing

China

Factory (Suzhou)
- Reciprocating Compressor Manufacturing
- Rotary Compressor Manufacturing
- Scroll Compressor Manufacturing