

Electrical Specifications

High Back Pressure

Commercial Back Pressure

Model	Power (W)	Current (A)	LRA (A)	Voltage Range	Motor Type	Start Capacitor (Mrd)	Run Capacitor (Mrd)	Relay		OLP
								Potential / PTC	Current	
R404A, 50 Hz, 1 Phase										
KCJ422CAL	400	2.40	16	180-260	CSIR	80/100	-	-	KARP4741	KAT0463/B2
KCJ438CAL	625	3.70	24	180-260	CSIR	80/100	-	-	KARP5641/ MTRP5641	T0732/B2
KCJ461CAL	925	4.50	25	180-260	CSCR	80/100	25	LT85002	-	INTERNAL
KCJ484CAL	1250	6.20	37	180-260	CSCR	80/100	25	AC85001	-	INTERNAL
KCM511CAL	1385	6.30	54	180-260	CSCR	80/100	36	AC85004	-	INTERNAL
KCM514CAL	1840	8.70	72	180-260	CSCR	150/200	45	AC85001	-	INTERNAL
KCM519CAL	2360	12.30	85	180-260	CSCR	130/156 OR 120/150	40 OR 45	AC85004	-	INTERNAL
KCM522CAL	2600	12.00	104	180-260	CSCR	189/227 OR 150/200	60 OR 65	AC85005	-	INTERNAL
R404A, 50 Hz, 3 Phase										
KCM519CAL	2325	4.70	41	342-460	3PH	-	-	-	-	INTERNAL
KCM522CAL	2600	5.20	45	342-460	3PH	-	-	-	-	INTERNAL

Low Back Pressure

Model	Power (W)	Current (A)	LRA (A)	Voltage Range	Motor Type	Start Capacitor (Mrd)	Run Capacitor (Mrd)	Relay		OLP
								Potential / PTC	Current	
KCE334LAG	110	1.1	9	150-260	RSIR	-	-	-	KARP 2827	TAE7/H3
KCE345LAG	135	1.2	9	180-260	RSIR	-	-	-	KARP3227	TAE7/H3
KCN372LAG	159	1.34	10	180-260	CSIR	40/60	-	-	KARP3141	TAE15/H3
	159	1.34	11	180-260	RSIR	40/60	-	-	KARP3227	TAE15/H3
KCN396LAG	205	1.85	10	180-260	CSIR	40/60	-	-	KARP4141/MTRP14141	TAE15/H3
KCN411LAG	245	2.10	10	180-260	CSIR	40/60	-	-	KARP4241 OR MTRP4241	KAT0072/H3
	245	2.10	10	180-260	RSIR	-	-	KCP15-RO	-	KAT0072/H3
KCJ411LAG	280	2.20	22	180-260	CSIR	80/100	-	-	KARP4841	KAT0159/B2
KCJ412LAG	310	2.75	24	180-260	CSIR	80/100	-	-	KARP5641	KAT0159/B2
KCN415LAG	325	2.00	14	180-260	CSCR	80/100	10	LT85002	-	KAT0072/B2
KCJ423LAG	485	3.00	30	198-264	CSCR	150/200	10	LT85003	-	KAT0732/B2
R404A, 50Hz, 1 Phase										
KCN414LAL	325	2.3	16	180-260	CSIR	60/80	-	-	KARP4241	KAT0072/H3
KCN418LAL	375	2	14	180-260	CSCR	80/100	10	LT85002	-	KAT0072/B2
KCN422LAL	455	2.22	16	180-260	CSCR	80/100	15	LT85003	-	KAT164/B2
KCJ430LAL	580	3.2	30	180-260	CSCR	150/200	10	LT85003	-	INTERNAL
KCJ450LAL	975	5	50	180-260	CSCR	150/200	25	AC85004	-	INTERNAL

* These are optional Accessories to be used for CSCR Circuit

Performance Nominals

High Back Pressure

Commercial Back Pressure

Model	HP	Displacement cc per Rev	Capacity						Cooling Type (CFM)	Oil Charge Qty (cc)	Net Wt. (Kg.)
			7.2°C			-6.7°C					
			Btu/Hr.	kCal/Hr.	Watt	Btu/Hr.	kCal/Hr.	Watt			
R404A, 50 Hz, 1 Phase											
KCJ422CAL	1/4	8.00	-	-	-	1800	454	527	Fan 350	890	20.0
KCJ438CAL	1/2	11.50	-	-	-	3200	807	937	Fan 350	890	21.5
KCJ461CAL	3/4	18.27	-	-	-	5100	1285	1495	Fan 350	890	21.5
KCJ484CAL	1	25.91	-	-	-	7000	1763	2052	Fan 350	890	22.5
KCM511CAL	1 3/8	40.80	-	-	-	9000	2268	2637	Fan 400	1330	29.8
KCM514CAL	1 3/4	51.47	-	-	-	12000	3025	3515	Fan 400	1330	32.5
KCM519CAL	2 3/8	59.65	-	-	-	16100	4057	4717	Fan 400	1330	34.9
KCM522CAL	2 3/4	72.08	-	-	-	18300	4610	5360	Fan 400	1330	34.9
R404A, 50 Hz, 3 Phase											
KCM519CAL	2 3/8	59.65	-	-	-	15800	3981	4630	Fan 400	1330	31.0
KCM522CAL	2 3/4	72.08	-	-	-	18300	4610	5360	Fan 400	1330	32.7

Performance Nominals

Low Back Pressure

Model	HP	Displacement cc per Rev	Capacity			Cooling Type (CFM)	Oil Charge Qty (cc)	Net Wt. (Kg.)
			-23.3°C					
			Btu/Hr.	kCal/Hr.	Watt			
R404A, 50 Hz, 1 Phase								
KCN414LAL	1/3	7.31	1150	290	337	Fan 350	340	10.2
KCN418LAL	1/2	9.00	1500	378	439	Fan 350	380	11.5
KCN422LAL	1/2	11.1	1800	454	527	Fan 350	380	11.5
KCJ430LAL	3/4	16.35	2425	611	710	Fan 350	890	22.5
KCJ450LAL	1 1/4	32.64	4100	1033	1201	Fan 350	890	25.0

Rating Conditions

Ambient Temperature	Evaporating Temperature	Condensing Temperature	Sub Cooled Liquid Temp Expansion Device	Suction Gas Temperature	Suction Pressure				Discharge Pressure				
					R134a	R12	R22	R404A	R134a	R12	R22	R404A	
°C	°C	°C	°C	°C	psig	psig	psig	psig	psig	psig	psig	psig	psig
High Back Pressure													
35	7.2	54.4	46.1	35	40	42	77	93.7	196	180	300	354	
Commercial Back Pressure													
35	-6.7	54.4	46.1	35	18	----	----	55.6	196	----	----	354	
Low Back Pressure													
32	-23.3	54.4	32	32	1.9	4.5	----	24.6	196	180	----	354	

Permitted Evaporating Temperature Range in °C

KCE, KCJ, KCN, KCM KCG, CR	HBP	CBP	LBP
R134a	-17.8 to 12.8 *	-17.8 to 12.8	-28.8 to -6.7 **
R22	-6.7 to 12.8	N.A.	N.A.
R404A	N.A.	-17.8 to 10.0	-40.0 to -6.7
R12	-6.7 to 12.8	N.A.	-28.8 to -6.7

* Except KCN463HAG / KCJ498HAG : -6.7 to 12.8

** Except KCN : -35 to -6.7