

# FORCED COOLING KITS SERIES

*Single Phase 63 Frame - 400 Frame*

*Three Phase 63 Frame - 400 Frame*

Australian Version | October 2013



# CEG

ELECTRIC MOTORS AND PUMPS

# FCK SERIES

FORCED COOLING KITS 63 FRAME - 400 FRAME

*CEG is an Australasian leader of electric motors and water pumps for the industrial and domestic market.*

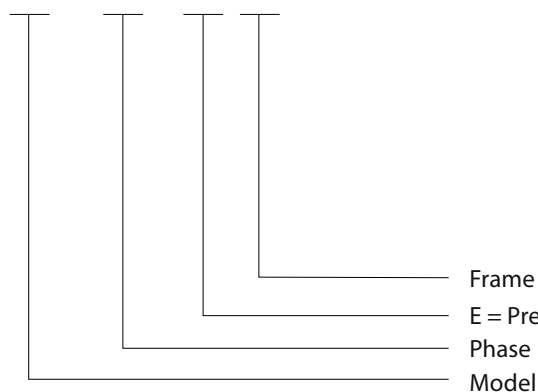
The CEG Forced Cooling Kit (FCK) Series are designed for the complete range of three phase CEG motors and also can be easily fitted to all other brands of motors from 63 frame to 400 frame. These units are predominately used in situations where the motor is driven by a Variable Speed Drive (VSD) at lower than normal synchronous speeds.

Other applications include, electric motor installations where normal speed is used but with a high frequent stop/starting duty cycle are found.

The CEG Forced Cooling Kit (FCK) Series have a separate electric motor and fan blade installed inside the fan cover to insure the appropriate cooling is obtained. This unit has a separate direct supply that is unmodified from the VSD.

The ever increasing demand on motors to be used with variable speed drive (VSD) has created the need for a means of providing constant airflow to electric motors, independent of their operating speed. The heat generated in an electric motor is proportional to the square of its current. The current drawn is ultimately a product of the driven loads demand and motor losses. If the load has a constant torque (e.g. positive displacement pumps, screw compressors, conveyors, etc), the current drawn will also be constant at any given speed. Therefore the heat generated will be the same regardless of the speed, however the cooling is reduced as the speed decreases. There are two options to prevent overheating, over sizing the motor to allow for the reduced cooling or fitting an independent cooling fan to the back of the motor. CEG has forced cooling kits available off the shelf suitable for 63 to 400 frame motors.

FCK - 3 - E - 71



FCK-E Series



FCK-S Series

## BENEFITS INCLUDE

- IP 55
- Italian ICAR Run Capacitors in single phase versions
- Available frame sizes, 63 to 400
- Single and three phase designs
- Rolled steel fan cover
- Quiet operation
- Easy fit
- Constant air flow
- Sealed for life bearings
- Other supplied voltages available on request
- Extended versions available for installation of encoder
- Fan cowls are rotatable 360° in increments of 90°
- Multi mount. Three and Four bolt hole mounting



CEG DESIGNED  
FOR INVERTER DUTY  
APPLICATIONS



## SINGLE PHASE FCK-E SERIES PERFORMANCE DATA

MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-1E-63	63	220-240	50	25	0.22	2800	45	40	62
38FCK-1E-71	71	220-240	50	25	0.22	2800	52	50	62
38FCK-1E-80	80	220-240	50	29	0.23	2800	58	60	62
38FCK-1E-90	90	220-240	50	32	0.24	2800	91	80	65
38FCK-1E-100	100	220-240	50	55	0.26	2800	142	80	67
38FCK-1E-112	112	220-240	50	80	0.28	2800	229	80	67
38FCK-1E-132	132	220-240	50	80	0.28	2800	337	35	69
38FCK-1E-160	160	220-240	50	70	0.28	1390	609	40	72

## THREE PHASE FCK-E SERIES PERFORMANCE DATA

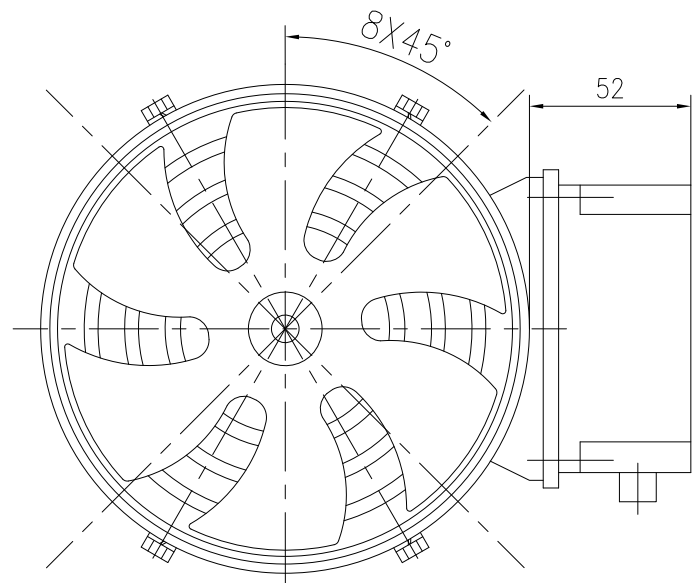
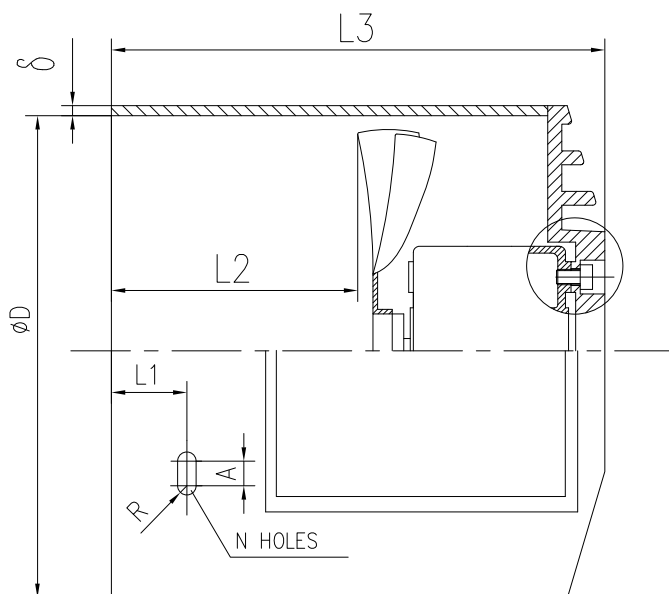
MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-3E-63	63	380-415	50	25	0.08	2800	45	40	62
38FCK-3E-71	71	380-415	50	25	0.08	2800	52	50	62
38FCK-3E-80	80	380-415	50	29	0.08	2800	58	60	62
38FCK-3E-90	90	380-415	50	32	0.086	2800	91	80	65
38FCK-3E-100	100	380-415	50	55	0.22	2750	142	80	67
38FCK-3E-112	112	380-415	50	80	0.23	2750	229	80	67
38FCK-3E-132	132	380-415	50	50	0.25	2750	337	35	69
38FCK-3E-160	160	380-415	50	70	0.26	1390	609	40	72
38FCK-3E-180	180	380-415	50	90	0.27	1330	668	55	72
38FCK-3E-200	200	380-415	50	120	0.3	1300	1679	65	72





## FCK-E DIMENSIONS

FRAME	ΦD	L1	L2	L3	R	A	N	φ
38FCK-E-63	120	12.5	55	175	3	4	7	1.2
38FCK-E-71	136	12.5	55	180	3	4	7	1.2
38FCK-E-80	154	15	70	195	3	4	7	1.2
38FCK-E-90	175	15	70	195	3	4	7	1.2
38FCK-E-100	193	18	70	200	3	4	7	1.2
38FCK-E-112	216	16	70	205	3	4	7	1.2
38FCK-E-132	255	23	90	240	3	4	7	1.2
38FCK-E-160	307	25	110	255	3.5	5	7	1.5
38FCK-E-180	345	35	110	275	3.5	5	7	1.5
38FCK-E-200	382	38	150	310	4.5	6	7	1.5





## SINGLE PHASE FCK-S SERIES PERFORMANCE DATA

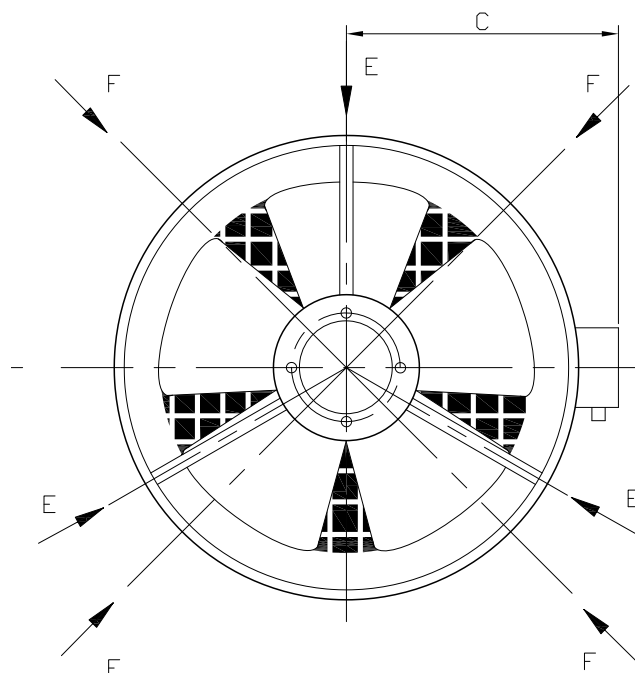
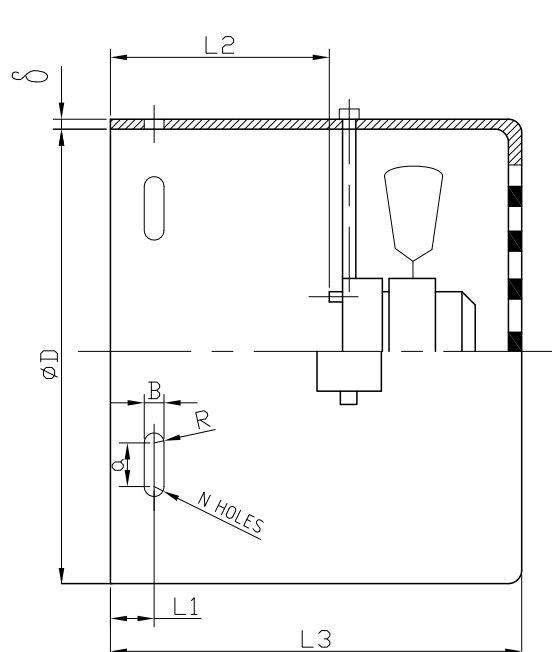
MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-1S-180	180	220-240	50	8	0.29	1350	686	55	72
38FCK-1S-200	200	220-240	50	110	0.37	1250	1679	65	72
38FCK-1S-225	225	220-240	50	110	0.37	1430	1786	70	74
38FCK-1S-250	250	220-240	50	115	0.4	1420	1813	80	75
38FCK-1S-280	280	220-240	50	180	0.56	1360	2415	85	78
38FCK-1S-315	315	220-240	50	480	0.78	1320	2820	110	81
38FCK-1S-355	355	220-240	50	600	1.9	1350	3500	150	85
38FCK-1S-400	400	220-240	50	1000	3.05	1350	6000	150	90

## THREE PHASE FCK-S SERIES PERFORMANCE DATA

MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-3S-180	180	380-415	50	80	0.29	1350	686	55	72
38FCK-3S-200	200	380-415	50	110	0.37	1250	1679	65	72
38FCK-3S-225	225	380-415	50	110	0.37	1430	1786	70	74
38FCK-3S-250	250	380-415	50	115	0.4	1420	1813	80	75
38FCK-3S-280	280	380-415	50	180	0.56	1360	2415	85	78
38FCK-3S-315	315	380-415	50	480	0.78	1320	2820	110	81
38FCK-3S-355	355	380-415	50	600	1.9	1350	3500	150	85
38FCK-3S-400	400	380-415	50	1000	3.05	1350	6000	150	90

## FCK-S DIMENSIONS

FRAME	ΦD	L1	L2	X	L3	Q	B	N	C	∞
38FCK-S-180	352	35 ± 1	118 ± 5	10	230	15	7	7	231	1.5
38FCK-S-200	393	40 ± 1	130 ± 5	10	255	15	9	7	252	1.5
38FCK-S-225	443	45 ± 1	141 ± 5	12	295	15	9	7	276	2.0
38FCK-S-250	482	55 ± 1	158 ± 5	12	315	15	9	7	296	2.0
38FCK-S-280	546	65 ± 1	167 ± 5	12	330	20	11	7	362	2.0
38FCK-S-315	614	75 ± 1	185 ± 5	20	380	20	11	7	398	2.0
38FCK-S-355	694	82 ± 1	195 ± 5	20	480	20	13	7	437	2.5
38FCK-S-400	786	145 ± 1	330 ± 5	40	510	20	13	7	485	3.0







## SINGLE PHASE FCK-L SERIES PERFORMANCE DATA

MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-1L-63	63	220-240	50	20	0.075	2800	45	40	62
38FCK-1L-71	71	220-240	50	25	0.22	2800	52	50	62
38FCK-1L-80	80	220-240	50	29	0.23	2800	58	60	62
38FCK-1L-90	90	220-240	50	32	0.24	2800	91	80	65
38FCK-1L-100	100	220-240	50	55	0.26	2750	142	80	67
38FCK-1L-112	112	220-240	50	80	0.28	2750	229	80	67
38FCK-1L-132	132	220-240	50	50	0.56	1400	337	35	69

## THREE PHASE FCK-L SERIES PERFORMANCE DATA

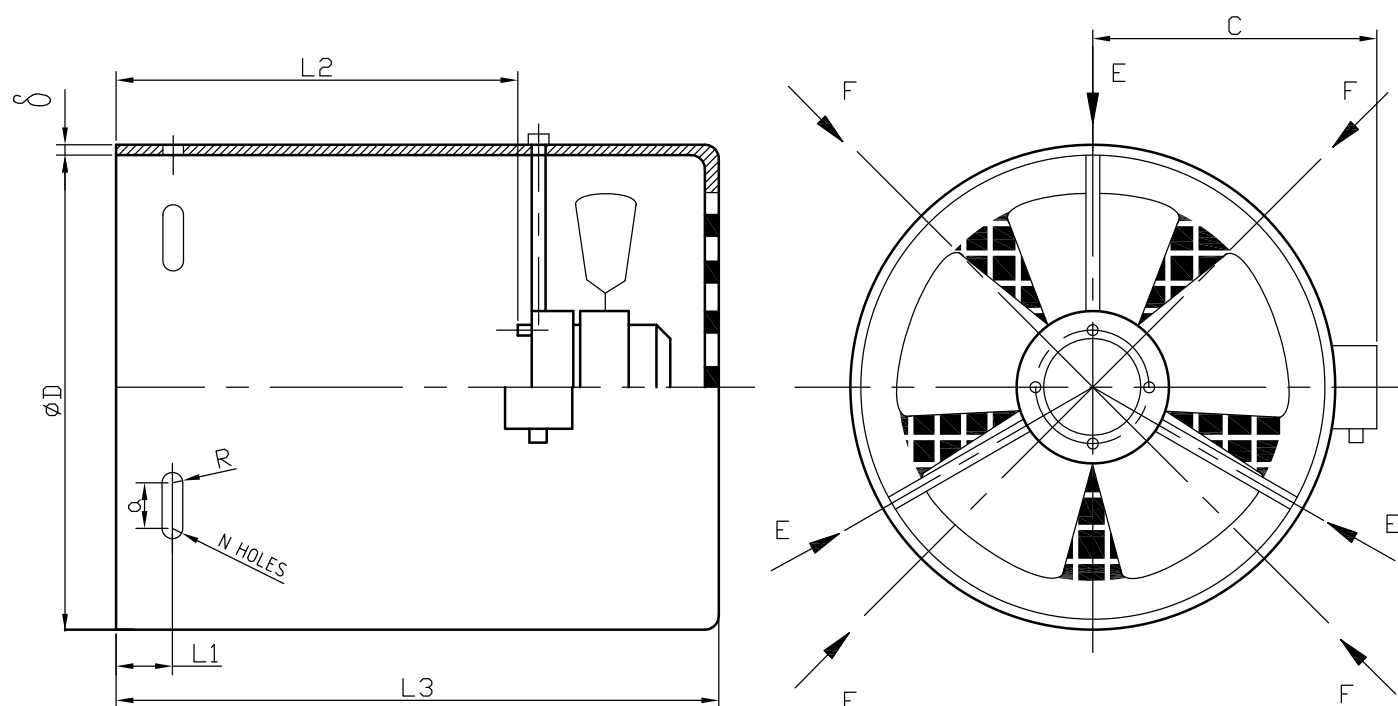
MODEL	FRAME SIZE	VOLTAGE	HZ	WATTS	AMPS	RPM	M3/H AIR FLOW	PA AIR PRESSURE	DB (A) NOISE
38FCK-3L-63	63	380-415	50	20	0.075	2800	45	40	62
38FCK-3L-71	71	380-415	50	25	0.08	2800	52	50	62
38FCK-3L-80	80	380-415	50	29	0.08	2800	58	60	62
38FCK-3L-90	90	380-415	50	32	0.086	2800	91	80	65
38FCK-3L-100	100	380-415	50	58	0.176	2750	142	80	67
38FCK-3L-112	112	380-415	50	69	0.18	2600	229	80	67
38FCK-3L-132	132	380-415	50	52	0.2	1400	337	35	69
38FCK-3L-160	160	380-415	50	75	0.26	1390	609	40	72
38FCK-3L-180	180	380-415	50	75	0.26	1330	686	55	72
38FCK-3L-200	200	380-415	50	85	0.27	1230	1679	65	72
38FCK-3L-225	225	380-415	50	105	0.37	1430	1786	70	74
38FCK-3L-250	250	380-415	50	115	0.4	1420	1813	80	75
38FCK-3L-280	280	380-415	50	180	0.56	1360	2415	85	78
38FCK-3L-315	315	380-415	50	480	0.78	1320	2820	110	81
38FCK-3L-355	355	380-415	50	600	1.9	1350	3500	80	85





## FCK-L DIMENSIONS

FRAME	ΦD	L1	L2	X	L3	Q	B	N	C	∞
38FCK-L-63	121	10 ± 1	48	7	138	10	6	7	115	1.0
38FCK-L-71	138	13 ± 1	60	7	150	10	6	7	120	1.2
38FCK-L-80	154	16.5 ± 1	85	7	175	10	6	7	130	1.2
38FCK-L-90	173	17 ± 1	96	7	188	10	6	7	140	1.2
38FCK-L-100	195	19 ± 1	96	10	196	12	7	7	151	1.2
38FCK-L-112	219	18.5 ± 1	100	10	200	12	7	7	163	1.2
38FCK-L-132	256	18.5 ± 1	110	10	217	12	7	7	182	1.2
38FCK-L-160	311	20 ± 1	149	10	266	12	7	7	210	1.5
38FCK-L-180	352	35 ± 1	190	10	312	12	7	7	231	1.5
38FCK-L-200	393	40 ± 1	190	10	314	15	9	7	252	1.5
38FCK-L-225	443	45 ± 1	220	12	374	15	9	7	276	2.0
38FCK-L-250	482	55 ± 1	240	12	399	15	9	7	296	2.0
38FCK-L-280	546	65 ± 1	265	12	429	20	11	7	362	2.0
38FCK-L-315	614	75 ± 1	310	20	505	20	11	7	398	2.0
38FCK-L-355	694	82 ± 1	380	20	585	20	13	7	437	2.5





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