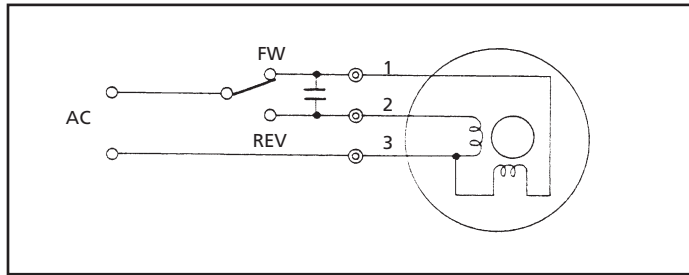


Fig 1.1: 1/50~1/6 Hp 1 Phase Wiring



Wire	Color Code 115V	Color Code 220V, 230V
1	Blue	Brown
2	Black	Black
3	Grey	Grey

Fig 1.2 UL/CSA/CE/RoHS

Voltage	Horsepower	UL/cUL File No.	RoHS	CE Details
Three Phase	1/50~1/6 Hp	E172017	Yes	Low Voltage Directive 73/23/EEC EN Standards: EN60034-1 (Regulations on motors in general)
Single Phase	1/50~1/6 Hp	E153713	Yes	

Notes:

1. Motors in File E172017 comply to UL1004 Standard for Safety Electric Motors.
2. Motors in UL File E153713 comply to UL2111 Overheating Protection for Motors.
3. Products bear the UL component recognition marking for UL and cUL (CSA).
4. Products with the cUL marking comply with CSA standards and can be legally sold in Canada.
5. Products bear the CE marking on the namplate.

Table 1.1: Single Phase 1/50~1/6 Hp Motors

Hp	G Frame	H Fame	F2 Frame	Cooling	Voltage V	Full Load (RPM)	Full Load Current (A)	Motor Torque (in-lb)	Start Torque (in-lb)	Starts per Minute	Capacitor	
						nmotor	Imotor	Tmotor	Tstart		mFd	Volts
1/50 Hp	12	15	12	TENV	115	1690	0.33	0.48	0.62	10	4	220
					220	1680	0.14	0.62	1		440	
					230	1690	0.15	0.69	1		440	
1/30 Hp	12	15	12	TENV	115	1630	0.44	0.76	0.87	10	5	220
					220	1650	0.23	0.87	1.5		440	
					230	1650	0.20	0.76	1.2		440	
	15	28	n/a	TENV	115	1650	0.45	0.82	1.15	10	5	220
					220	1650	0.23	1.15	1.5		440	
					230	1650	0.21	0.83	1.2		440	
1/20 Hp	15	18	15	TENV	115	1670	0.60	1.60	1.35	10	8	220
					220	1640	0.31	1.35	2		440	
					230	1660	0.31	1.53	2		440	
	18	n/a	n/a	TENV	115	1740	0.62	1.32	1.13	10	8	220
					220	1730	0.32	1.13	2		440	
					230	1730	0.28	1.22	2		440	
1/15 Hp	15	18	15	TEFC	115	1650	0.90	2.11	2.08	10	12	220
					220	1660	0.43	2.08	3		440	
					230	1670	0.43	2.34	3		440	
	18	n/a	n/a	TEFC	115	1700	0.87	1.97	1.91	10	12	220
					220	1700	0.45	1.91	3		440	
					230	1700	0.45	1.91	3		440	
1/10 Hp	15	18	15	TEFC	115	1600	1.20	2.96	2.78	10	15	220
					220	1630	0.62	2.78	3.5		440	
					230	1640	0.62	2.78	3.5		440	
	18	40	n/a	TEFC	115	1700	1.40	3.38	2.69	10	20	220
					220	1680	0.70	2.43	5		440	
					230	1680	0.75	2.69	5		440	
1/6 Hp	18	n/a	n/a	TEFC	115	1700	1.70	3.83	3.65	10	24	220
					220	1700	0.85	3.65	6		440	
					230	1710	0.85	3.65	6		440	

Table 1.2: Capacitors for 115V 1 Phase Motors

Part No.	mFd	Volts*	W	h	t	d	l
C4.0M220V	4	220V	1.22	1.06	0.67	1.06	0.18
C5.0M220V	5	220V	1.22	1.06	0.67	1.06	0.18
C8.0M220V	8	220V	1.50	1.14	0.75	1.14	0.18
C12M220V	12	220V	1.89	1.14	0.75	1.14	0.18
C15M220V	15	220V	2.28	1.22	0.83	1.22	0.18
C20M220V	20	220V	2.28	1.38	0.87	1.26	0.18
C24M220V	24	220V	2.28	1.46	0.93	1.52	0.28

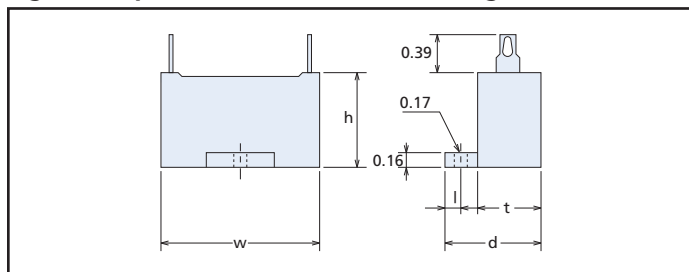
* 220V Capacitors are for operation with 115V Motors

Table 1.3: Capacitors for 220/230V 1 Phase Motors

Part No.	mFd	Volts*	W	h	t	d	l
C1.0M440V	1	440V	1.22	1.06	0.67	1.06	0.18
C1.2M440V	1.2	440V	1.46	1.06	0.71	1.10	0.18
C1.5M440V	1.5	440V	1.50	1.22	0.83	1.22	0.18
C2.0M440V	2	440V	1.89	1.14	0.75	1.14	0.18
C3.0M440V	3	440V	2.28	1.22	0.83	1.22	0.18
C3.5M440V	3.5	440V	2.28	1.22	0.83	1.22	0.18
C5.0M440V	5	440V	2.28	1.46	0.93	1.52	0.28
C6.0M440V	6	440V	2.28	1.61	1.14	1.73	0.28

* 440V Capacitors are for operation with 220V or 230V motors.

Fig 1.3: Capacitor Dimensional Drawing

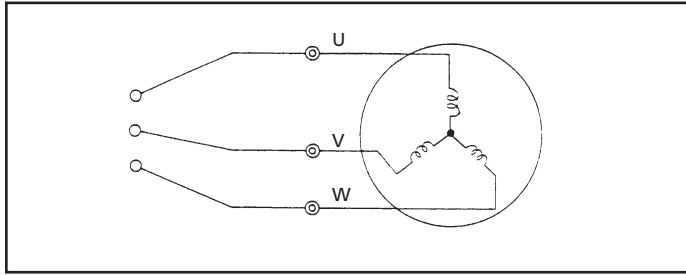


Note : Capacitors are shipped with single phase motors.

They do not need to be ordered separately with gearmotors.

The part numbers are for spare parts orders only.

Fig 1.4: 1/50~1/6 Hp 3 Phase Wiring



Wire	208/230V	460V
U	Black	Black
V	Grey	Brown
W	White	White

Table 1.4: Three Phase 1/50~1/6 Hp Motors

Hp	G Frame	H Fame	F2 Frame	Cooling	Voltage V	Full Load (RPM)	Full Load Current (A)	Motor Torque (in-lb)	Start Torque (in-lb)	Starts per Minute
						nmotor	Imotor	Tmotor	Tstart	
1/50 Hp	12 22	15 22	12	TENV	208	1610	0.13	0.71	1.58	10
					230	1650	0.13		2.03	
					460	1700	0.12		3.99	
1/30 Hp	12 22	15 22	12	TENV	208	1580	0.19	1.17	2.52	10
					230	1630	0.19		3.22	
					460	1650	0.12		3.74	
	15 28	28	n/a	TENV	208	1550	0.17	1.17	2.63	10
					230	1610	0.17		3.33	
					460	1600	0.09		3.22	
1/20 Hp	15 28 32	18 28 32	15	TENV	208	1560	0.26	1.88	5.17	10
					230	1610	0.28		6.20	
					460	1650	0.14		5.64	
	18	n/a	n/a	TENV	208	1620	0.21	1.88	4.51	10
					230	1660	0.19		5.45	
					460	1650	0.10		4.89	
1/15 Hp	15 28 32	18 28 32	15	TENV	208	1560	0.36	2.81	7.30	10
					230	1610	0.38		9.70	
					460	1600	0.17		7.36	
	18	n/a	n/a	TENV	208	1640	0.31	2.81	6.88	10
					230	1670	0.31		8.46	
					460	1650	0.16		7.13	
1/10 Hp	15 28 32	18 28 32	15	TEFC	208	1550	0.48	4.23	10.74	10
					230	1610	0.50		13.28	
					460	1600	0.26		12.06	
	18 40	40	n/a	TENV	208	1670	0.47	4.23	9.90	10
					230	1690	0.46		12.10	
					460	1650	0.24		10.70	
1/6 Hp	18	n/a	n/a	TEFC	208	1600	0.64	5.63	11.94	10
					230	1650	0.61		16.89	
					460	1650	0.31		17.73	

Note : IP-65 Models cannot be made 460V

Fig 1.5 Three Phase Special Voltages 1/50~ 1/6 Hp

Voltage	Frequency (Hz)	UL/CSA	CE
230	50	No	Yes
240	50		
360	50		
400/400/440	50/60/60		
415	50		
420	50		
440	50		
220	50	Yes	No
200/200/220	50/60/60		
380/400/400/440	50/50/60/60		
380	60		
240	60		

Note: When selecting any of the above voltages:
Use special voltage code "8" in the part number
Specify the voltage/frequency rating on your P.O.

Note: IP-65 models cannot be made in 380~460V

Fig 1.6 Single Phase Special Voltages 1/50~ 1/6 Hp

Voltage	Frequency (Hz)	UL/CSA	CE
120	60	Yes	No
220	60		
230	60		
240	60		
100/100	50/60		
200/200	50/60		
110	50	No	
115	50		
120	50		
220	50		
230	50		
240	50		

Note: When selecting any of the above voltages:
Use special voltage code "7" in the part number
Specify the voltage/frequency rating on your P.O.