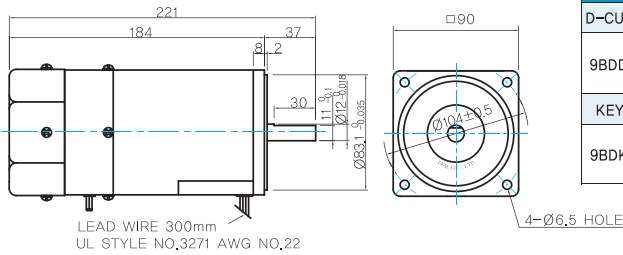


### Dimensions

#### MOTOR ONLY

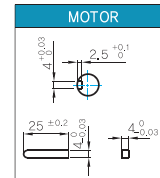
- MOTOR MODEL:  
9BDD□-120F (GENERAL FAN)



#### MOTOR OUTPUT SHAFT

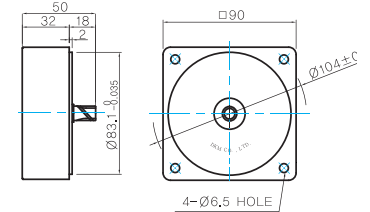
MODEL	SPEC
D-CUT TYPE	
9BDD□-120F	
KEY TYPE	
9BDK□-120F	

#### KEY SPEC



#### INTER-DECIMAL GEARHEAD

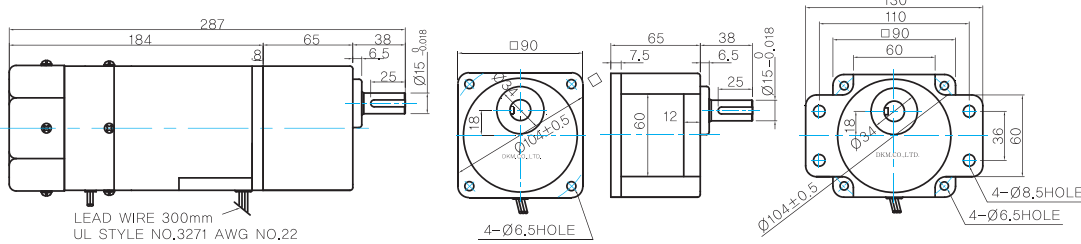
- MODEL:  
9XD10M□



### GEARED MOTOR

#### P TYPE GEARHEAD

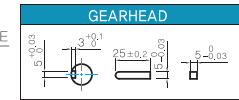
- MOTOR MODEL:  
9BDG□-120FP (GENERAL FAN)
- GEARHEAD MODEL:  
9PBK□BH
- GEARHEAD MODEL:  
9PFK□BH



#### GEARHEAD OUTPUT SHAFT

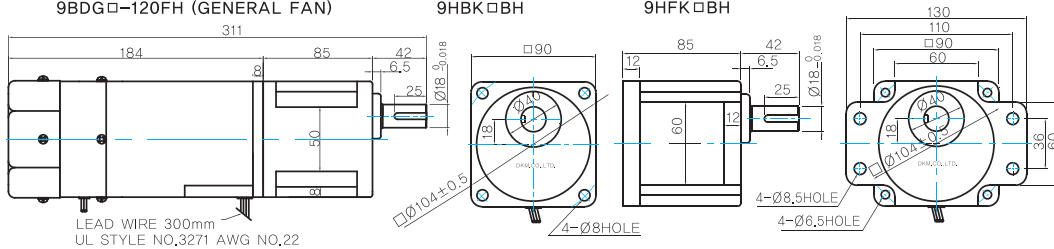
MODEL	SPEC
KEY TYPE	
9PBK□BH	
9PFK□BH	

#### KEY SPEC



#### H TYPE GEARHEAD

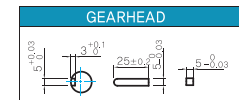
- MOTOR MODEL:  
9BDG□-120FH (GENERAL FAN)
- GEARHEAD MODEL:  
9HBK□BH
- GEARHEAD MODEL:  
9HFK□BH



#### GEARHEAD OUTPUT SHAFT

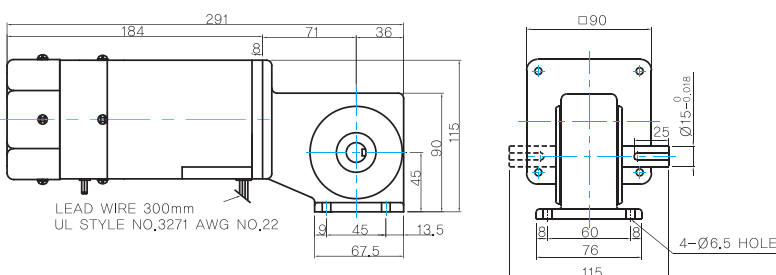
MODEL	SPEC
KEY TYPE	
9HBK□BH	
9HFK□BH	

#### KEY SPEC

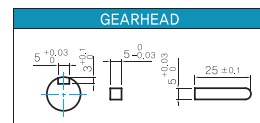


#### W TYPE GEARHEAD

- MOTOR MODEL:  
9BDG□-120FW (GENERAL FAN)
- GEARHEAD MODEL:  
9WD□BL/BR/BRL

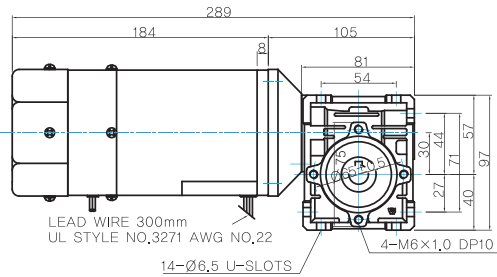


#### KEY SPEC

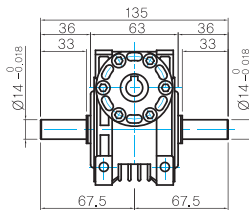


### WH TYPE GEARHEAD

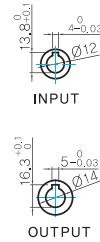
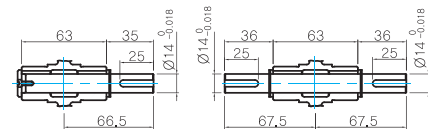
- MOTOR MODEL:  
9BDG□-120FWH (GENERAL FAN)



- GEARHEAD MODEL:  
9WHD□



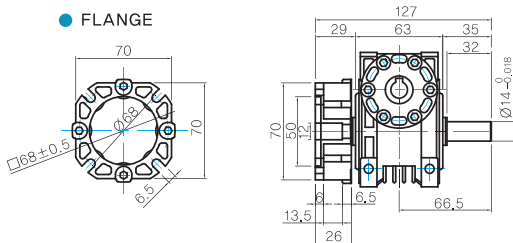
- SHAFT(Unidirectional, Bi-directional)



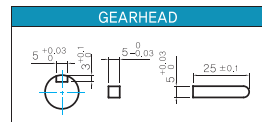
### WEIGHT

	PART	WEIGHT(Kg)
	MOTOR	3,5
GEAR HEAD	9PB(F)K2BH ~ 9PB(F)K18BH	1,3
	9PB(F)K20BH ~ 9PB(F)K180BH	1,4
	9HB(F)K3BH ~ 9HB(F)K9BH	1,45
	9HB(F)K12,5BH ~ 9HB(F)K18BH	1,5
	9HB(F)K20BH ~ 9HB(F)K60BH	1,7
	9HB(F)K75BH ~ 9HB(F)K180BH	1,8
	9WD□BL/BR/BRL	1,0
	9WHD□	1,13
	9XD10M□	0,5

- FLANGE



- KEY SPEC



\* The output flange and shafts are sold separately.

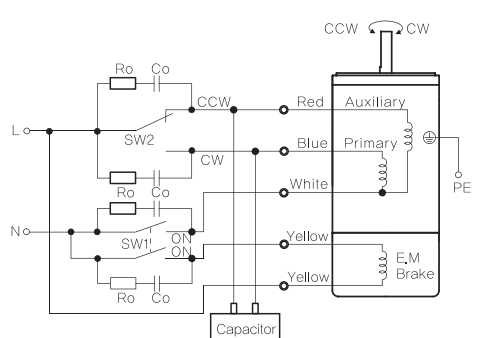
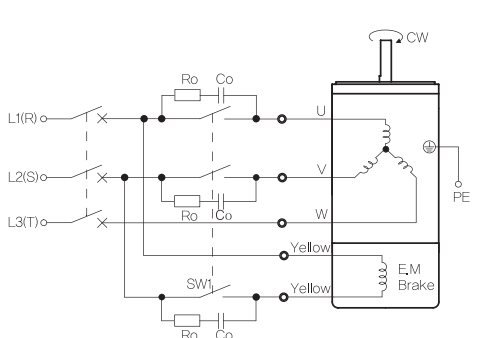
### Motor Images



# B AC Motors

## E.M. Brake Motor 120W (□90mm)

### Connection Diagrams

Single Phase	Three Phase																				
 <p>The diagram shows a single-phase AC input (L and N) connected to a motor. The motor has an Auxiliary winding (Red), Primary winding (Blue), and E.M. Brake winding (Yellow). A capacitor is connected to the Yellow wires. Two switches, SW1 and SW2, are used for control. SW2 is a direction selector switch (CCW/CW). SW1 is a simultaneous switch for the motor and brake. Surge suppression components (Ro, Co) are shown at the input and for the brake circuit.</p> <p><b>* Rotation Direction:</b>            To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.            To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th rowspan="2">Switch No.</th> <th colspan="2">Specifications</th> <th rowspan="2">Note</th> </tr> <tr style="background-color: #0070C0; color: white;"> <th>Single Phase 110V/115V Input</th> <th>Single Phase 220V/230V Input</th> </tr> </thead> <tbody> <tr> <td>SW1</td> <td>AC 125V 3A minimum (Inductive load)</td> <td>AC 250V 1.5A minimum (Inductive load)</td> <td>Switched Simultaneously</td> </tr> <tr> <td>SW2</td> <td></td> <td></td> <td>-</td> </tr> </tbody> </table>	Switch No.	Specifications		Note	Single Phase 110V/115V Input	Single Phase 220V/230V Input	SW1	AC 125V 3A minimum (Inductive load)	AC 250V 1.5A minimum (Inductive load)	Switched Simultaneously	SW2			-	 <p>The diagram shows a three-phase AC input (L1(R), L2(S), L3(T)) connected to a motor. The motor has three main windings (U, V, W) and an E.M. Brake winding (Yellow). A switch SW1 is used for simultaneous motor and brake control. Surge suppression components (Ro, Co) are shown for the brake circuit. The motor is grounded (PE).</p> <p><b>* CCW Direction:</b>            Change any two connections between R, S and T.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th>Switch No.</th> <th>Specifications</th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>SW1</td> <td>AC 250V 1.5A minimum (Inductive load)</td> <td>Switched Simultaneously</td> </tr> </tbody> </table>	Switch No.	Specifications	Note	SW1	AC 250V 1.5A minimum (Inductive load)	Switched Simultaneously
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SW2			-																		
Switch No.	Specifications	Note																			
SW1	AC 250V 1.5A minimum (Inductive load)	Switched Simultaneously																			

- 1) The direction of motor rotation is as viewed from the shaft end of the motor.
- 2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 3) SW1 operates both motor and electromagnetic brake action.
- 4) The electromagnetic brake will be released and the motor will rotate when SW1 is switched simultaneously to ON. When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.
- 5) If you wish to release the brake while the motor is stopped, apply voltage between the two brake lead wires (yellow).
- 6) Ro and Co indicate CR circuit for surge suppression. [Ro=5~200Ω, Co=0.1~0.2μF, 200WV (400WV)]