

# POWER OFF ACTIVATED TYPE ELECTROMAGNEIC BRAKE MOTORS 无励磁动作型电磁制动电动机

## 25W

□80mm



### 规格 / 电动机 SPECS / MOTOR

没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

品名 Model 机型 Type 导线型 Lead Wire Type	额定 Rating	输出功率 Output power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor $\mu$ F
4RK25GN-AM	30min	25	1ph100	50	0.59	160	200	1200	10.0
				60		140	165	1550	
4RK25GN-EM	30min	25	1ph110 1ph120	60	0.45 0.50	140	165	1550	8.0
4RK25GN-CM	30min	25	1ph220 1ph230	60	0.29 0.30	140 160	165	1550	2.2
4RK25GN-HM	30min	25	1ph220 1ph230	60	0.35	140	165	1550	-
4IK25GN-SM	连续 Cont	25	3ph220	50	0.185 0.170	350	200	1250	-
				60		250	165	1550	

●各种安全规格以电动机铭牌上的型号取得认定。●Ⓢ:内藏热保护装置(自动复位型)。在电机因某种原因过热时会自行启动使电动机停止。●电动机温度下降后恢复运行,故在进行检查作业时请务必事先切断电源。

●When the motor is approved under various safety standards, the model name on the nameplate is the approved model name. ●Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protctor is opened and the motor stops. ●When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

### 种类 TYPE

#### ●电动机 MOTOR

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	4RK25GN-AM	4RK25A-AM
	4RK25GN-EM	4RK25A-EM
	4RK25GN-CM	4RK25A-CM
	4RK25GN-HM	4RK25A-HM
	4IK25GN-SM	4IK25A-SM

#### ●平行轴减速器(另售) PARALLEL SHAFT GEARHEAD (SOLD SEPARATELY)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命·低噪音 Long Life · Low Noise	4GN□K	3、3.6、5、6、7.5、9、12.5、15、18、25、30、36、50、60、75、90、100、120、150、180、200
	4GN10XK (中间减速器 Mid-gearbox)	

- 减速器型号的□中为减速比的数值
- Enter the gear ratio in the box (□) within the model name

## ■ 装有减速器时的容许转矩

### ALLOWABLE TORQUE WHEN BEING WITH GEARHEAD

- 减速器·中间减速器另售
- 减速器型号的□中为减速比的数值。
- 色表示与电动机同一方向运转，其他则为相反方向。
- 转速是以电动机的同步转速 (50Hz:1500r/min、60Hz:1800r/min) 为基准除以减速比而算出来的数值。  
实际转速将随负载大小变化而比所示数值减少2%~20%左右。
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速器之间安装减速比为10的中间减速器。这时的容许转矩为8N·m
- Gearhead and mid-gearbox can be sold separately.
- Enter the gear ratio in the box (□) within the model name.
- The colored background   indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a mid-gearbox (gear ratio: 10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

容许力矩单位 Allowance Torque Unit: 上段 Upside (N·m) / 下段 Belowside (kgf·cm)

机型Type 电动机/减速器 Motor/Gearhead	减速比Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200	
																							转速Speed r/min
4RK25GN-AM 4RK25GN-EM 4RK25GN-CM 4RK25GN-HM 4IK25GN-SM	4GN□K	50Hz	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.7	4.4	5.3	6.6	7.9	8	8	8	8	8	8	8
		60Hz	0.40	0.48	0.67	0.80	1.0	1.2	1.7	2.0	2.4	3.0	3.6	4.3	5.4	6.5	8	8	8	8	8	8	8

## ■ 容许悬挂负载·容许轴向负载

### PERMISSIBLE OVERHUNG LOAD AND THRUST LOAD

电动机 (圆轴型) → P217  
减速器 → P217

Motor (Round Shaft) → P217  
Gearhead → P217

## ■ 减速器的容许负载惯性惯量 J

### PERMISSIBLE LOAD INERTIA J FOR GEARHEAD

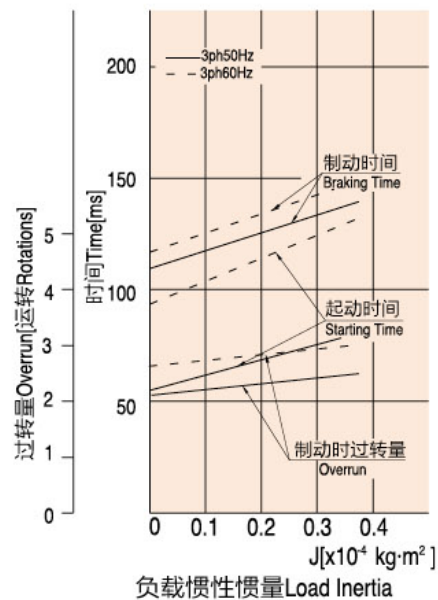
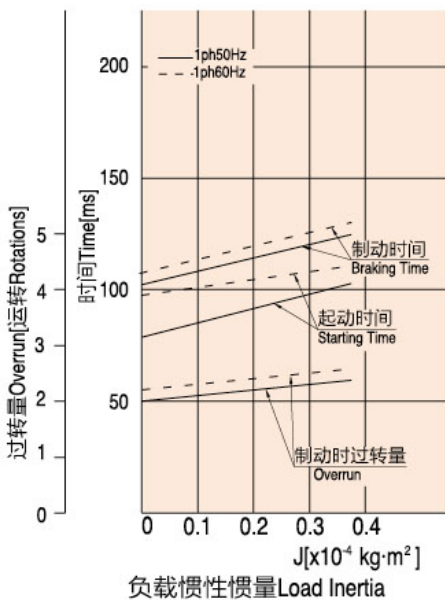
→ P218 → P218

## ■ 起动、制动特性(参考值)

### STARTING AND BRAKE CHARACTERISTICS(REFERENCE VALUES)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor

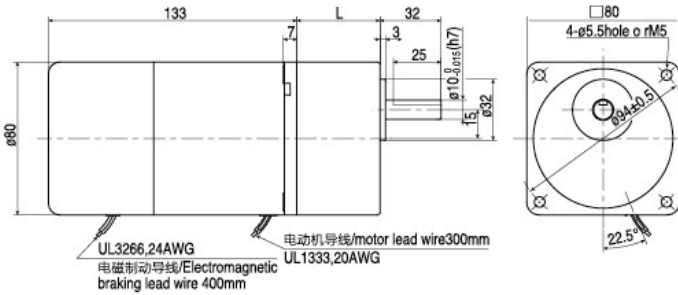


## 外形图 (单位 mm) DIMENSIONS(Unit mm)

减速器附有安装用螺丝  
Mounting screws are included with gearhead.

### ● 导线型 Lead wiring Type

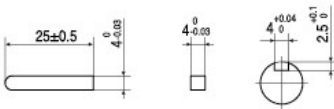
重量 Weight: 电动机 Motor 2.15kg 减速器 Gearhead 0.8kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4RK25GN-AM 4RK25GN-EM 4RK25GN-CM 4RK25GN-HM 4IK25GN-SM	4GN□K	3~18	32
		25~200	43.5

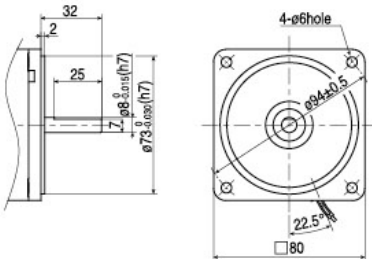
- 减速器型号的□中为减速比的数值
- Enter the gear ratio in the box (□) within the model name

### ● 键·键槽 ( 减速器附件 ) Key-keyway (The key is included with the gearhead)



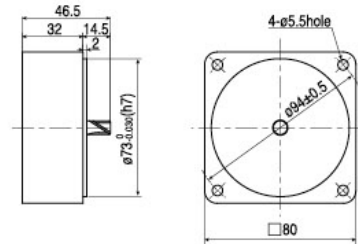
### ● 圆轴型的转轴部分 Shaft Section of Round Shaft Type

除重量及轴部外, 电动机外形与齿轮轴相同  
Excluding weight and the shaft section Motor shape are the same as those of the pinion shaft



### ● 中间减速器 Mid-gearbox

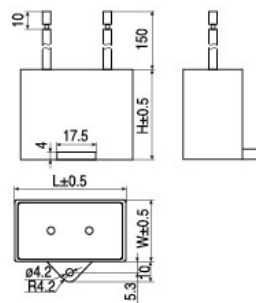
可安装在GN齿轮轴型上  
Can be connected to GN pinion Shaft type 4GN10XK  
重量 Weight: 0.41k



### ● 电容器外形尺寸 Formal Dimension of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
4RK25GN-AM	4RK25A-AM	ZD100CFAUL	38	19	29
4RK25GN-EM	4RK25A-EM	ZD80CFAUL	38	17	28
4RK25GN-CM	4RK25A-CM	ZD22BFAUL	38	15	27

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
- Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



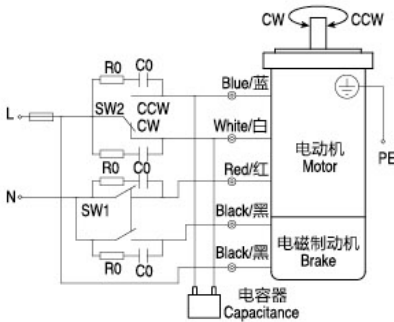
## 连接图 CONNECTION DIAGRAMS

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
- 表中所记品名为齿轮轴型，圆轴型亦同。
- The direction of motor rotation is as viewed from the shaft end of motor.  
CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- Name indicated in the list is pinion shaft type, also valid for the equivalent round.

### 单相电动机 Single-phase Motor

4RK25GN-AM、4RK25GN-EM、4RK25GN-CM、4RK25GN-HM

- SW1为电动机的运行/停止及电磁制动操作开关。(连动) ● SW1设定ON时，电磁制动解除，电动机开始运作。
- SW1设定定期OFF时，电动机停止，电磁制动开始工作。
- 在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将□色导线侧的接触点设定ON。
- 运转方向 ● 将SW2转换至CW侧时，电动机作顺时针方向运转。 ● 将SW2转换至CCW侧时，电动机作逆时针方向运转。
- SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)
- The motor will rotate when SW1 is switched simultaneously to ON
- When SW1 is switched simultaneously to OFF, the motor is stopped, set the electromagnetic brake and holds the load.
- If you wish to release the brake while the motor is stopped, set the SW1 to be off and connection point at the side of black lead to be on.
- Direction of Rotation. ● 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.

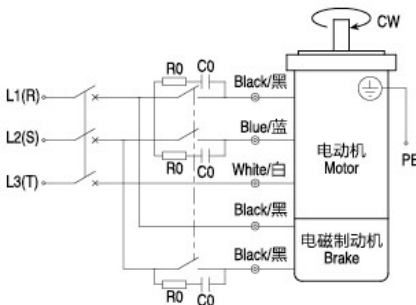


开关号码 Switch NO.	开关的接触点容量Contact capacity switch		参考 Note
	单相100V、110/120V输入 Single-Phase 100VAC, 110/120VAC Input	单相220V、230V输入 Single-Phase 200VAC, 220/230VAC Input	
SW1	AC125V 3A以上 (感应负载) 125 VAC 3A	AC250V 1.5A以上 (感应负载) 250 VAC 1.5A	连动Switched Simultaneously
SW2	minimum Switched Simultaneously (Inductive Load)	minimum Switched Simultaneously (Inductive Load)	-

### 三相电动机 Three-phase Motor

4IK25GN-SM

- SW1为电动机的运行/停止及电磁制动操作开关。(连动) ● SW1设定ON时，电磁制动解除，电动机开始运作。
- SW1设定定期OFF时，电动机停止，电磁制动开始工作。
- 在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将 □ 色导线侧的接触点设定ON。
- 运转方向 ● 若对换R、S、T中任意二条，电动机逆时针方向运转
- SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)
- The motor will rotate when SW1 is switched simultaneously to ON
- When SW1 is switched simultaneously to OFF, the moto is stopped, set the electromagnetic brake and holds the load.
- If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to on.
- Direction of Rotation. ● To change the rotation direction, change any two connections among R, S and T.



开关号码 Switch NO.	开关的接触点容量Contact capacity switch	参考 Note
SW1	AC250V 1.5A以上 (感应负载) AC250 VAC 1.5A minimum Switched Simultaneously (Inductive Load)	连动Switched Simultaneously

#### ● 请注意 Note:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω C0=0.1~0.2μF、200WV(400WV)]
- 请使用选购配件EPCR1201-2
- R0 and C0 indicate surge suppressor circuit.[R0=5~200Ω C0=0.1~0.2μF, 200WV(400WV)]
- EPCR1201-2 is available as an optional surge suppressor.