

# STANDARD AC-MOTORS



*geared motors of*



## Which type of motor should I choose ?

### **INDUCTION MOTOR**

Types S6I, S8I... etc are standard motors for continuous use (S1).

Stock supply voltages are 1 x 230V, 3 x 230V and 3 x 400V. Protection class is either IP20 with flying leads or IP54 with terminal box.

### **REVERSIBLE MOTOR**

Types S6R, S8R...etc are reversible motors, and are suitable for instantly reversing applications. The motors produce higher torque by utilising a larger value capacitor, and hence are rated at 30 minutes continuous duty.

Reversible motors feature a small, integrated friction brake giving 0,5 - 4,0 Ncm holding torque.

### **BRAKE MOTOR**

The brake motors have an electromagnetic brake, which activates when the motor is switched OFF. This provides almost instant stopping within 1 - 4 motor revolutions and a holding torque of 0,2Nm - 1,0 Nm depending on the motor size.

### **SPEED CONTROL MOTOR**

Ideal for single-phase speed control applications. Speed control is achieved through a closed loop TRIAC controller and tacho generator. Stock versions are the SXR-types, shown at the rear of the catalogue.

### **SPUR GEAR**

For each motor size there are a corresponding range of gearboxes with many different ratios available. Furthermore the same gearbox can be used on all the motor types i.e. Induction, Reversible, Brake and Speed Control. The standard gears feature ball bearing supported output shafts, and internal metal sleeve bearings. Other options include all ball bearing and all metal sleeve types.



**15W**



## Induction Motors with spur gears

- Wide range
- Low noise level
- Thermally protected

### TECHNICAL INFORMATION

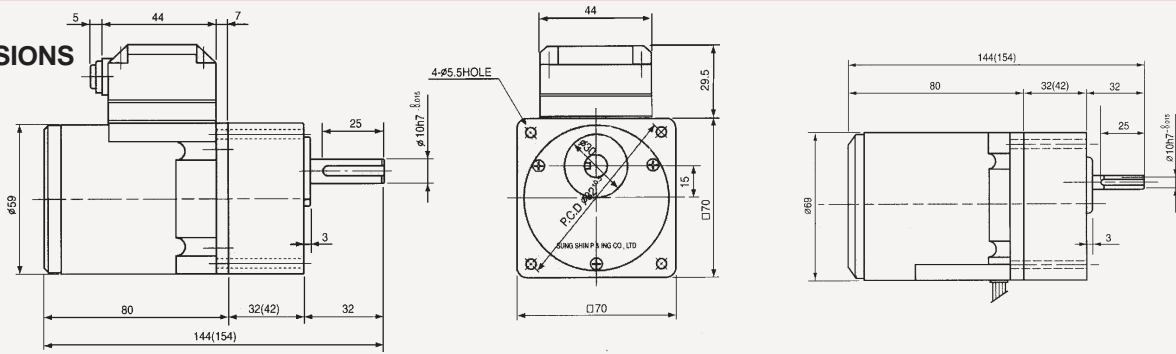
Induction Motors	Supply voltage VAC/Hz	Output Power (P2) W	Speed rpm	Torque Ncm	Current A	Capacitor uF	Mass with gear Kg
<b>S7I15GX</b>	1 x 230/50	15	1200	13	0,18	0,9	1,5
<b>Reversible Motors</b>							
<b>S7R15GX</b>	1 x 230/50	15	1200	13	0,18	1,2	1,5
<b>Brake Motors</b>							
<b>S7R15GX-E</b>	1 x 230/50	15	1200	14	0,18	1,2	1,8
<b>Speed Control Motors</b>							
<b>S7I15GX-S12</b>	1 x 230/50	15	90 - 1400	6 - 12	0,18	0,9	1,6

### TECHNICAL INFORMATION FOR GEARS

Speed rpm	500	200	167	120	100	60	41	30	20	15	8	Max Torque Ncm	
Gear ratio i	3	7,5	9	12,5	15	25	36	50	75	100	180		
Torque Ncm	31	79	95	132	159	237	342	428	490	490	490		

Speed is based on synchronic speed and the actual speed is 2-20% lower depending on the load

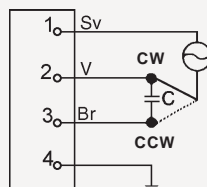
### DIMENSIONS



(gear. >25:1 = 42)

leads 300 mm

### CONNECTION



ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
<b>S7I15GX</b>	Motor with flying lead	<b>S7KA3B</b>	Gear 3:1
<b>S7I15GX-T</b>	Motor with terminal box	<b>S7KA7,5B</b>	Gear 7,5:1
<b>S7R15GX</b>	Reversible motor, flying leads	<b>S7KA12,5B</b>	Gear 12,5:1
<b>S7R15GX-E</b>	Brake Motor, flying leads	<b>S7KA25B</b>	Gear 25:1
<b>S7I15GX-S12</b>	Speed Control Motor	<b>S7KA36B</b>	Gear 36:1
		<b>S7KA50B</b>	Gear 50:1
		<b>S7KA75B</b>	Gear 75:1
		<b>S7KA100B</b>	Gear 100:1
		<b>S7KA180B</b>	Gear 180:1
		<b>S7GX10B</b>	Inter desimal gear 10:1



**25W**



## Induction Motors with spur gears

- Wide range
- Low noise level
- Thermally protected

### TECHNICAL INFORMATION

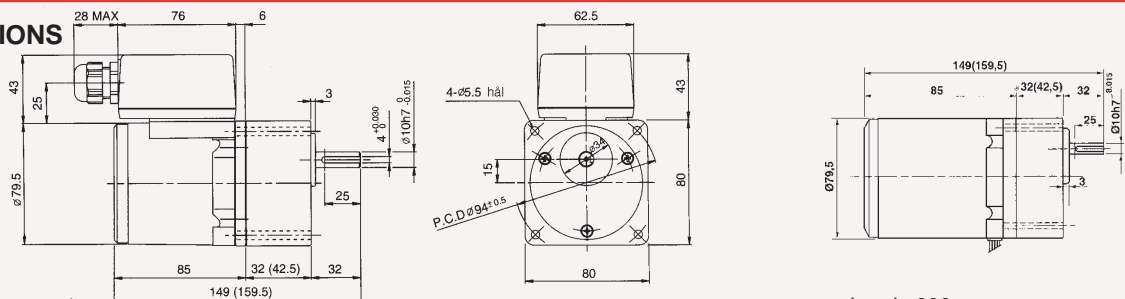
Induction Motors	Supply voltage VAC/Hz	Output Power (P2) W	Speed min-	Torque Ncm	Current A	Capacitor uF	Mass with gear Kg
<b>S8I25GX</b>	1-fas 230/50	25	1200	21	0,24	1,3	2
<b>S8I25GT</b>	3-fas 230/50	25	1200	19	0,26	-	2
Reversible Motors							
<b>S8R25GX</b>	1-fas 230/50	25	1200	21	0,27	2,0	2
Brake Motors							
<b>S8R25GX-E</b>	1-fas 230/50	25	1200	21	0,26	2,0	2,5
Speed Control Motors							
<b>S8I25GX-S12</b>	1-fas 230/50	25	90 - 1400	5 – 17	0,24	1,5	2,2

### TECHNICAL INFORMATION FOR GEARS

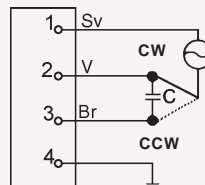
Speed rpm	500	200	167	120	100	60	41	30	20	15	8	Max Torque 784 Ncm
Gear ratio i	3	7,5	9	12,5	15	25	36	50	75	100	180	
Torque Ncm	52	131	157	219	262	394	566	712	784	784	784	

Speed is based on synchronic speed and the actual speed is 2-20% lower depending on the load

### DIMENSIONS



### CONNECTION



ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
<b>S8I25GX</b>	Motor with flying leads	<b>S8KA3B</b>	Gear 3:1
<b>S8I25GX-T</b>	Motor with terminal box	<b>S8KA5B</b>	Gear 5:1
<b>S8I25GT-T</b>	3 x 230V Motor, terminal box	<b>S8KA7,5B</b>	Gear 7,5:1
<b>S8R25GX</b>	Reversible motor, flying leads	<b>S8KA12,5B</b>	Gear 12,5:1
<b>S8R25GX-E</b>	Brake motor, flying leads	<b>S8KA18B</b>	Gear 18:1
<b>S8I25GX-S12</b>	Speed control Motor	<b>S8KA25B</b>	Gear 25:1
		<b>S8KA36B</b>	Gear 36:1
		<b>S8KA50B</b>	Gear 50:1
		<b>S8KA75B</b>	Gear 75:1
		<b>S8KA100B</b>	Gear 100:1
		<b>S8KA180B</b>	Gear 180:1
		<b>S8GX10B</b>	Inter desimal gear 10:1



**40W**



## Induction Motors with spur gears

- Wide range
- Low noise level
- Thermally protected

### TECHNICAL INFORMATION

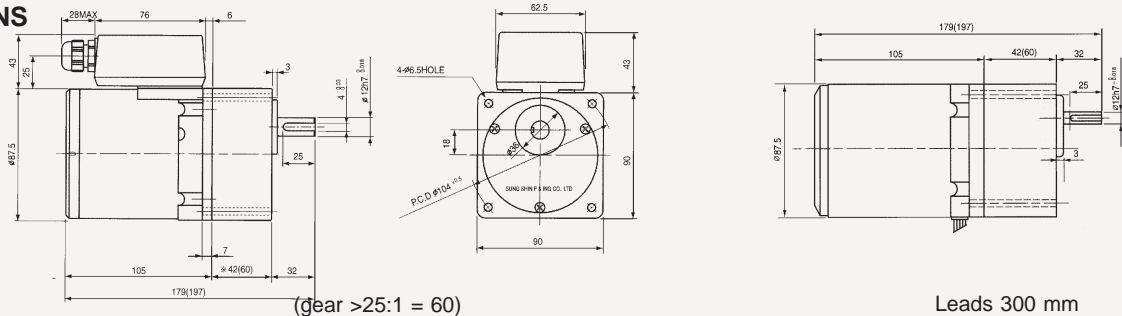
Induction Motors	Supply voltage VAC/Hz	Output Power (P2) W	Speed min-	Torque Ncm	Current A	Capacitor uF	Mass with gear Kg
<b>S9I40GXH</b>	1 x 230/50	40	1250	33	0,36	2,0	3,4
<b>S9I40GTH-T</b>	3 x 230/50	40	1450	28	0,36	-	3,4
<b>Reversible Motors</b>							
<b>S9R40GXH</b>	1 x 230/50	40	1250	33	0,41	3,0	3,5
<b>Brake Motors</b>							
<b>S9R40GXH-E</b>	1 x 230/50	40	1250	33	0,42	3,0	3,9
<b>Speed Control Motors</b>							
<b>S9I40GXH-S12</b>	1 x 230/50	40	90 - 1400	7 - 28	0,36	2,0	3,7

### TECHNICAL INFORMATION FOR GEARS

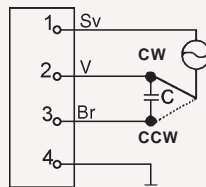
Speed rpm	500	200	167	120	100	60	41	30	20	15	8	Max Torque Ncm
Gear ratio i	3	7,5	9	12,5	15	25	36	50	75	100	180	
Torque Ncm	81	203	243	337	405	609	876	980	980	980	980	

Speed is based on synchronic speed and the actual speed is 2-20% lower depending on the load

### DIMENSIONS



### CONNECTION



ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
<b>S9I40GXH</b>	Motor with flying leads	<b>S9KB3BH</b>	Gear 3:1
<b>S9I40GXH-T</b>	Motor with terminal box	<b>S9KB7,5BH</b>	Gear 7,5:1
<b>S9I40GTH-T</b>	3 x 230V Motor, terminal box	<b>S9KB12,5BH</b>	Gear 12,5:1
<b>S9R40GXH</b>	Reversible motor, flying leads	<b>S9KB15BH</b>	Gear 15:1
<b>S9R40GXH-E</b>	Brake motor, flying leads	<b>S9KB25BH</b>	Gear 25:1
<b>S9I40GXH-S12</b>	Speed Control Motor	<b>S9KB36B</b>	Gear 36:1
		<b>S9KB50BH</b>	Gear 50:1
		<b>S9KB75BH</b>	Gear 75:1
		<b>S9KB100BH</b>	Gear 100:1
		<b>S9KB120BH</b>	Gear 120:1
		<b>S9KB180BH</b>	Gear 180:1
		<b>S9GX10BH</b>	Inter desimal gear 10:1



**60W**



S9I60GXH with a non-standard S-type gearbox

## Induction Motors with spur gears

- Widerange
- Low noise level
- Thermally protected

### TECHNICAL INFORMATION

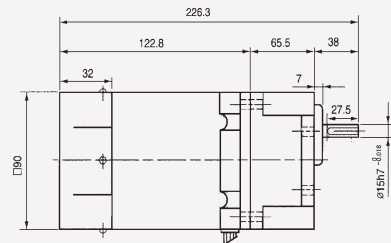
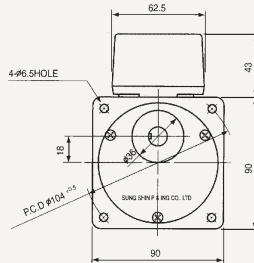
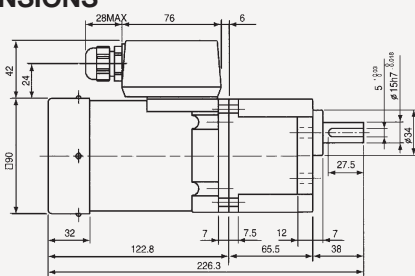
Induction Motors	Supply voltage VAC/Hz	Output Power (P2) W	Speed min-	Torque Ncm	Current A	Capacitor uF	Mass with gear Kg
<b>S9I60GXH</b>	1 x 230/50	60	1300	48	0,49	3,5	3,9
<b>S9I60GTH</b>	3 x 230/50	60	1450	42	0,65	-	3,9
<b>Reversible motors</b>							
<b>S9R60GXH</b>	1 x 230/50	60	1250	49	0,65	5,0	3,9
<b>Brake Motors</b>							
<b>S9R60GXH-E</b>	1 x 230/50	60	1300	48	0,60	5,0	4,4
<b>Speed Control Motors</b>							
<b>S9I60GXH-S12</b>	1 x 230/50	60	90 - 1400	9 - 56	0,49	3,5	4,3

### TECHNICAL INFORMATION FOR GEARS

Speed rpm	500	200	167	120	100	60	41	30	20	15	8	Max Torque 1960 Ncm
Gear ratio i	3	7,5	9	12,5	15	25	36	50	75	100	180	
Torque Ncm	120	299	358	447	537	809	1166	1617	1960	1960	1960	

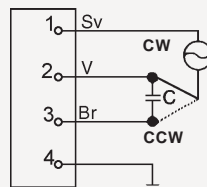
Speed is based on synchronic speed and the actual speed is 2-20% lower depending on the load

### DIMENSIONS



Leads 300 mm

### CONNECTIONS



ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
<b>S9I60GXH</b>	Motor with flying leads	<b>S9KC3BH-S</b>	Gear 3:1
<b>S9I60GXH-T</b>	Motor with terminal box	<b>S9KC7,5BH-S</b>	Gear 7,5:1
<b>S9I60GTH-T</b>	3 x 230V motor, flying leads	<b>S9KC12,5BH-S</b>	Gear 12,5:1
<b>S9R60GXH</b>	Reversible motor, terminal box	<b>S9KC18BH-S</b>	Gear 18:1
<b>S9R60GXH-E</b>	Brake motor, flying leads	<b>S9KC25BH-S</b>	Gear 25:1
<b>S9I60GXH-S12</b>	Speed Control Motor	<b>S9KC36BH-S</b>	Gear 36:1
		<b>S9KC50BH-S</b>	Gear 50:1
		<b>S9KC75BH-S</b>	Gear 75:1
		<b>S9KC100BH-S</b>	Gear 100:1
		<b>S9KC180BH-S</b>	Gear 180:1
		<b>S9GX10BH-S</b>	Inter desimal gear 10:1



90W



S9I90GXH with a non-standard S-type gearbox

## Induction Motors with spur gears

- Wide range
- Low noise level
- Thermally protected

### TECHNICAL INFORMATION

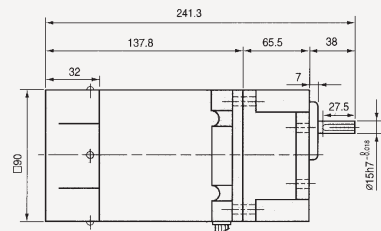
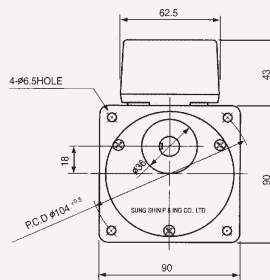
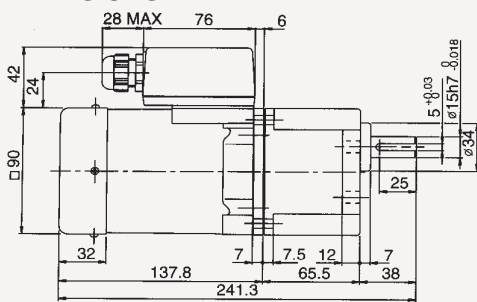
Induction Motors	Supply voltage VAC/Hz	Output Power (P2) W	Speed min <sup>-1</sup>	Torque Ncm	Current A	Capacitor uF	Mass with gear Kg
S9I90GXH	1 x 230/50	90	1300	71	0,70	5,0	4,4
S9I90GTH	3 x 230/50	90	1350	68	0,62	-	4,4
<b>Reversible Motors</b>							
S9R90GXH	1 x 230/50	90	1250	73	0,84	6,0	4,4
<b>Brake Motors</b>							
S9R90GXH-E	1 x 230/50	90	1300	71	0,73	6,0	4,9
<b>Speed Control Motors</b>							
S9I90GXH-S12	1 x 230/50	90	90 - 1400	22 - 58	0,70	5,0	4,7

### TECHNICAL INFORMATION FOR GEARS

Speed rpm	500	200	167	120	100	60	41	30	20	15	8	Max Torque Ncm
Gear ratio i	3	7,5	9	12,5	15	25	36	50	75	100	180	
Torque Ncm	178	447	536	670	805	1215	1744	1960	1960	1960	1960	

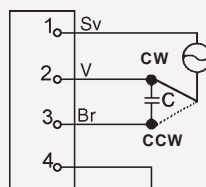
Speed is based on synchronic speed and the actual speed is 2-20% lower depending on the load

### DIMENSIONS



Leads 300 mm

### CONNECTION



ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
S9I90GXH	Motor with flying leads	S9KC3BH-S	Gear 3:1
S9I90GXH-T	Motor with terminal box	S9KC7,5BH-S	Gear 7,5:1
S9I90GTH-T	3 x 230V motor, terminal box	S9KC12,5BH-S	Gear 12,5:1
S9R90GXH	Reversible motor, flying leads	S9KC18BH-S	Gear 18:1
S9R90GXH-E	Brake motor, flying leads	S9KC25BH-S	Gear 25:1
S9I90GXH-S12	Speed Control Motor	S9KC36BH-S	Gear 36:1
		S9KC50BH-S	Gear 50:1
		S9KC75BH-S	Gear 100:1
		S9KC180BH-S	Gear 180:1
		S9GX10BH-S	Inter desimal gear 10:1







## Speed Controller for Speed Control Motors

- DIN-rail mounting
- CE-mark
- Small dimensions

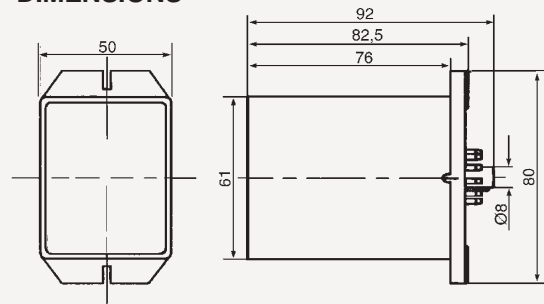
### FUNCTION

These TRIAC-type speed controllers are used with Speed Control Motors. The tachogenerator of the motor gives a speed feedback to the controller providing a stable speed.

### TECHNICAL INFORMATION

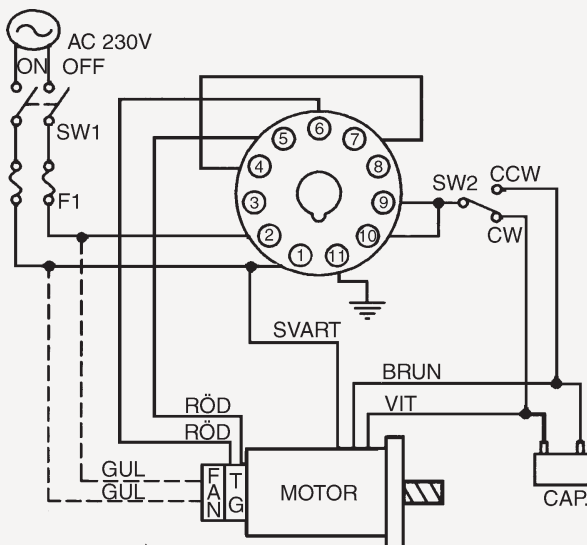
Controller type	SRX01	SRX02
Supply voltage	230VAC/ 50Hz	
Current	0,1 - 0,4 A	0,4 - 1,2 A
Output power	6 - 15W	25 - 90W
Speed range	90 - 1200 v/ min-	
Speed variation	5%	
Speed adjusting	Internal potentiometer (ext. possible)	

### DIMENSIONS

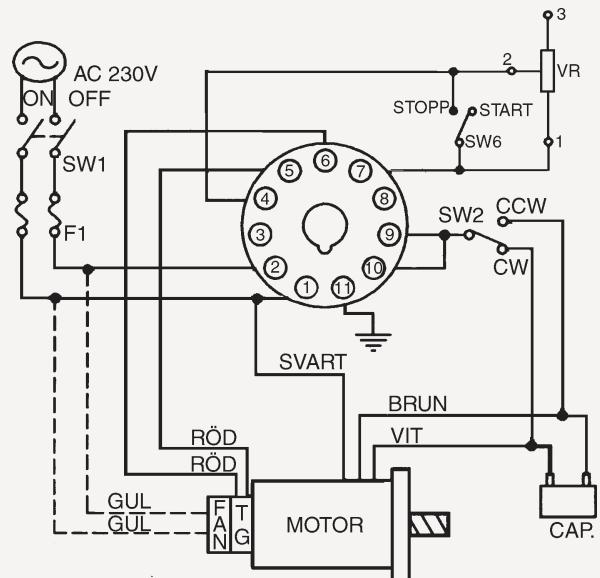


### CONNECTION

Internal potentiometer



External potentiometer



### ITEM NUMBER

SRX01

SRX02

### DESCRIPTION

Speed controller for motors 6 – 15W

Speed controller for motors 25 - 90W