

Motor Types:

SD 21 SD 41 SD 8
SD 38 SD 28 SD 29

1 or 3 Phase Induction Motors – Constant Speed

Shaded Pole, Permanent Capacitor or Synchronous

Enclosures: Standard – Ventilated Internal Fan Cooled (IP 20)
Alternative – Totally Enclosed (IP 50) with Terminal Box or T.E.F.C. (IP 54)



SD 21



SD 8



SD 38



SD 8 with brake

- **Voltage Range:** 100/120v – 220/240v A.C. single phase, 50Hz. 380/440 A.C. three phase, 50Hz. Special voltages and frequencies quoted on request.
- **Motor Type:** Single phase with separate capacitor or three phase induction, suitable for reversing. Shaded pole (not reversible) anti-clockwise rotation as standard.
- **Starting Currents:** Capacitor or three phase induction: approx 2.5 times full load. Shaded pole: approx 2 times full load.
- **Construction: Motors** – Shielded ball bearings spring loaded for quiet running.
Single Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite gear wheel, grease lubricated for life and suitable for mounting in any position.
In-Line Double Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite gear wheel, grease or oil bath lubricated for life and suitable for mounting in any position.
Spur Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite pinion wheel and multi-spur type hardened steel gears, oil bath lubricated for life. Suitable for mounting in any position.
- **Connections:** 30cm P.V.C. flexible (SD 38 and SD 29 terminal box).
- **Insulation:** Class 'F' (maximum temperature rise 115°C at a maximum ambient of 40°C).
- **Specifications:** B.S. 5000 part 11. (I.E.C. 72). (CSA C-US if required).

- **Optional Extras:** Double ended motor spindles.
Double ended gear shafts, (not available on in-line units).
Non standard shafts (stainless steel, keyways, flats, etc).
Terminal box (not available on SD 21).
Totally enclosed frame half hour rating.
Totally enclosed fan cooled frame (T.E.F.C.), continuous rating. (SD 8/SD 28 only).
Enclosure IP 65 on request.
Thermal overload protection.
- **Electro-Magnetic Brake:** Page 6.
- **Tachogenerator:** Page 117.
- **Additional Extras for Geared Units:** Non standard catalogue reductions maybe available on request.
- **Bronze Gears:** (Single and double reduction final gears).
- **Flange Mounting Gearbox Details:** Page 114.
- **Gearbox Shaft Positions:** Page 113.

SD 21	Single Phase						
	Shaded Pole						
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS	RATING
					240V		
1400	3.7	50%	0.22	0.2	30	TOTALLY ENCLOSED CONTINUOUS	
1400	8	80%	0.3	0.29	45	VENTILATED – CONTINUOUS TOTALLY ENCLOSED – 1/2 HR	
Permanent Capacitor							
			M.F.D.				
			240V	220V			
1400	8	100%	0.18	0.16	40	2.5	
2800	20	85%	0.34	0.3	80	2	

SD 41	Single Phase						
	Permanent Capacitor						
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS	CAPACITOR (M.F.D.)
					240V		220V
1400	10	100%	0.2	0.19	40	3	3
2800	25	100%	0.25	0.24	65	2.5	2.5
Three Phase							
			440V	380V			
1400	10	150%	0.14	0.12	47		
2800	25	150%	0.14	0.12	58		

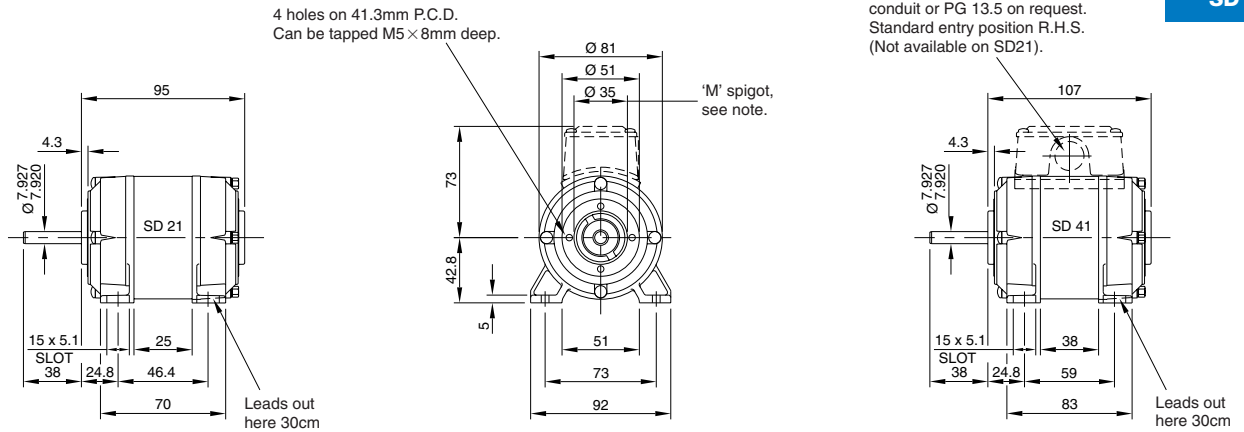
SD 8 SD 38	Single Phase						
	Permanent Capacitor						
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS	CAPACITOR (M.F.D.)
					240V		220V
900	10	100%	0.2	0.22	45	2	2
1400	35	85%	0.3	0.3	75	2.5	2.5
2800	60	75%	0.57	0.53	127	4	4
Two Speed Permanent Capacitor							
1400	30	50%	0.43	0.4	85	6	6
2800	50	50%	0.47	0.48	110	6	6
Synchronous Permanent Capacitor							
1500 (syn)	10	100%	0.26	0.23	55	5	5

SD 8 SD 38	Three Phase					
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS
				440V	380V	
900	15	100%	0.2	0.17	80	
1400	35	200%	0.24	0.22	80	
2800	60	200%	0.24	0.22	105	
Two Speed						
1400	30	100%	0.21	0.18	90	
2800	50	100%	0.16	0.17	90	
Synchronous						
1500 (syn)	10	100%	0.22	0.21	60	

SD 28 SD 29	Single Phase						
	Permanent Capacitor						
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS	CAPACITOR (M.F.D.)
					240V		220V
1400	55	85%	0.41	0.46	100	3	4
2800	100	85%	0.76	0.75	185	6	6
Three Phase							
			440V	380V			
1400	55	150%	0.28	0.25	120		
2800	120	150%	0.36	0.38	210		

**SD 21
SD 41**

Dimensions in mm. Scale 1:5



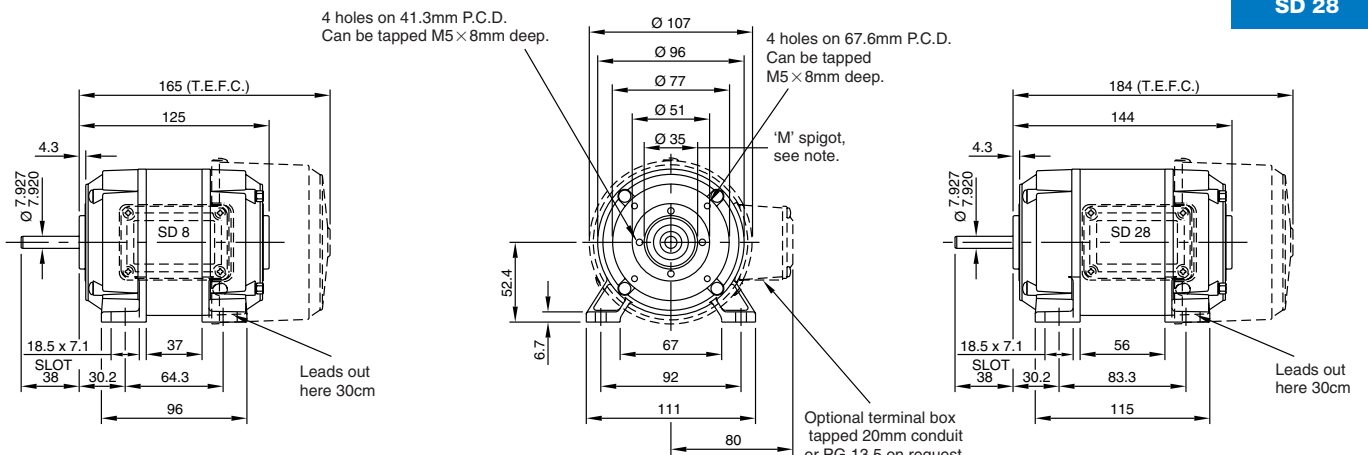
Optional terminal box tapped 20mm conduit or PG 13.5 on request. Standard entry position R.H.S. (Not available on SD21).

Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R. Optional shaft at lead end, 7.93mm dia. x 33mm long.

Approx. weight: SD 21 – 1.54 Kg
SD 41 – 2.10 Kg

**SD 8
SD 28**

Dimensions in mm. Scale 1:5



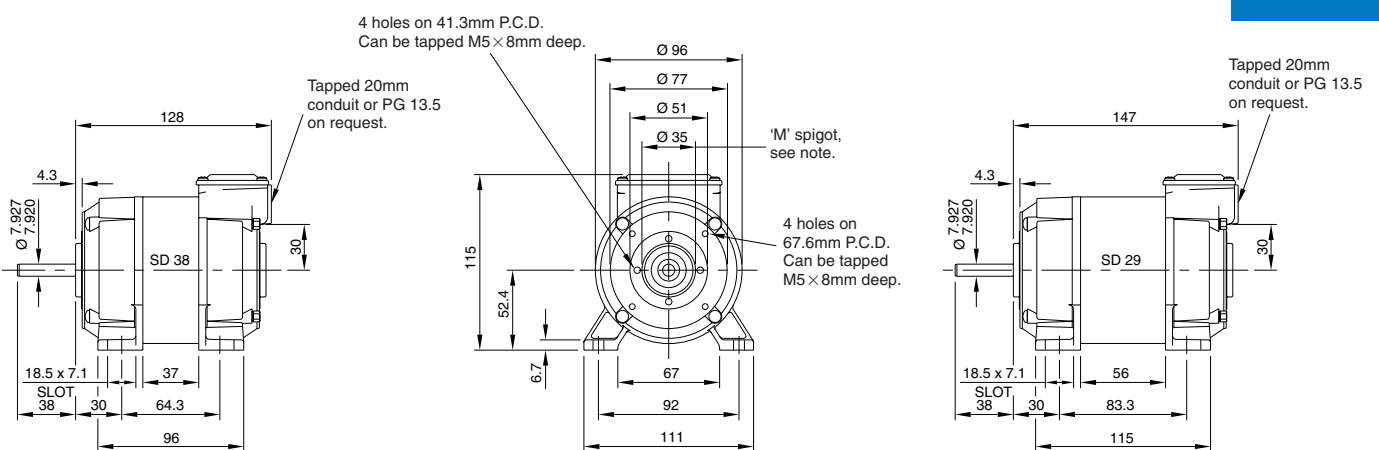
Optional terminal box tapped 20mm conduit or PG 13.5 on request. Shown standard position R.H.S. entry down. (Standard on T.E.F.C. units).

Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R. Optional shaft at lead end see separate drawing for details. Not applicable to T.E.F.C. units.

Approx. weight: SD 8 – 2.80 Kg
SD 28 – 3.60 Kg

**SD 38
SD 29**

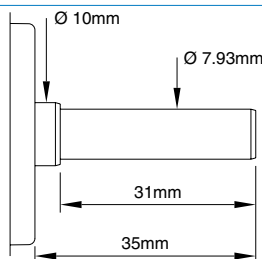
Dimensions in mm. Scale 1:5



Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R. Optional shaft at terminal box end see separate drawing for details.

Approx. weight: SD 38 – 2.85 Kg
SD 29 – 3.62 Kg

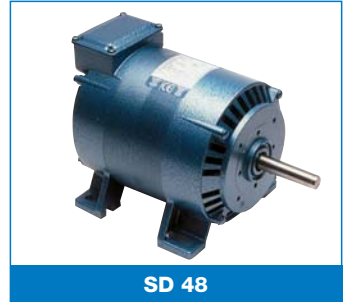
Non-drive end extension (optional)



**SD 8 SD 38
SD 28 SD 29**

Motor Types:
SD 13 SD 18
SD 48

1 or 3 Phase Induction Motors – Constant Speed
Permanent Capacitor, Capacitor Start Induction Run, or Synchronous
 Enclosures: Standard – Ventilated Internal Fan Cooled (IP 20)
 Alternative – Totally Enclosed (IP 50) with Terminal Box or T.E.F.C. (IP 54)



- Voltage Range:** 100/120v – 220/240v A.C. single phase, 50Hz. 380/440 A.C. three phase, 50Hz. Special voltages and frequencies quoted on request.
- Motor Type:** Single phase with separate capacitor or three phase induction, suitable for reversing. (Capacitor start induction run – SD 18 and SD 48, both reversible but must be allowed to come to rest).
- Starting Currents:** Capacitor or three phase induction: approx 2.5 times full load. Capacitor start induction run: 3 times full load.
- Construction: Motors** – Shielded ball bearings spring loaded for quiet running.
Single Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite gear, grease lubricated for life and suitable for mounting in any position.
In-Line Double Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite gears, oil bath lubricated for life and suitable for mounting in any position.
Spur Reduction Gearboxes: Fitted with ball bearings, alloy gearbox with composite pinion gear and multi-spur type hardened steel gears, oil bath lubricated for life. Suitable for mounting in any position.
- Connections:** 30cm P.V.C. flexible (SD 18 and SD 48 terminal box).
- Insulation:** Class 'F' (maximum temperature rise 115°C at a maximum ambient of 40°C).
- Specifications:** B.S. 5000 part 11. (I.E.C. 72). (CSA C-US if required).

- Optional Extras:** Double ended motor spindles. Double ended gear shafts, (not available on in-line gearboxes). Non standard shafts (stainless steel, keyways, flats, etc). Terminal box. Totally enclosed frame half hour rating. Totally enclosed fan cooled frame (T.E.F.C.), continuous rating. (Not SD 18). Enclosure IP 65 on request. Thermal overload protection.
- Electro-Magnetic Brake:** Page 6.
- Tachogenerator:** Page 117.
- Additional Extras for Geared Units:** Non standard catalogue reductions available on request.
- Bronze Gears:** (Single and double reduction final gears).
- Flange Mounting Gearbox Details:** Page 114.
- Gearbox Shaft Positions:** Page 113.

Single Phase								
SD 13 SD 18	Permanent Capacitor							
	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS	CAPACITOR (M.F.D.)	
				240V	220V		240V	220V
900	38	100%	0.46	0.43	119	4	4	
1400	100	75%	0.76	0.74	180	6	6	
2800	150	80%	1.2	1.2	290	8.4	8.4	
Capacitor Start Induction Run (SD 18 only)								
1400	95	150%	1.2	1.1	180	40/50 M.F.D. 280 – 350V R.M.S. Electrolytic		
2800	125	130%	1.2	1.2	240			
Two Speed Permanent Capacitor								
1400 / 2800	50 / 100	50%	1.0 / 0.72	0.9 / 0.8	170 / 190	10	10	
Synchronous Permanent Capacitor								
1500 (Syn)	25	100%	0.5	0.55	100	6	6	

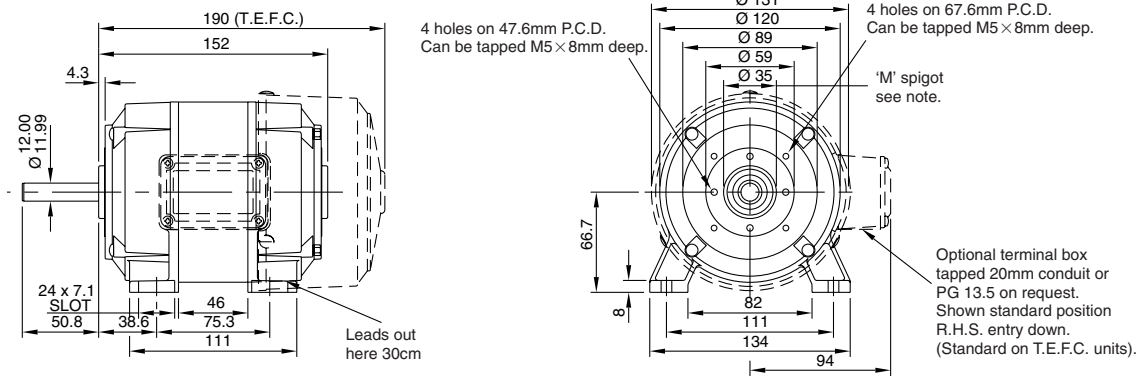
Three Phase						
SD 13 SD 18	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS
				440V	380V	
				900	60	
1400	125	150%	0.44	0.41	210	
2800	190	150%	0.46	0.45	273	
Two Speed						
1400 / 2800	50 / 100	150%	0.38	0.32	120 / 160	
Synchronous						
1500 (Syn)	30	100%	0.3	0.34	110	

Single Phase							
SD 48	Capacitor Start – Induction Run						
	FULL LOAD R.P.M.	OUTPUT WATTS	ENCLOSURE	STARTING TORQUE FULL LOAD	CURRENT AMPS 220/240V	INPUT WATTS	CAPACITOR (M.F.D.)
							220/240V
1400	125	Ventilated (IP 20)	175%	1.5	250	40/50 M.F.D.	
1400	150	T.E.F.C. (IP 54)	150%	1.7	308	280-350V R.M.S.	
2800	190	Vent or T.E.F.C.	130%	1.7	324	ELECTROLYTIC	

Three Phase						
SD 48	FULL LOAD R.P.M.	OUTPUT WATTS	STARTING TORQUE FULL LOAD	CURRENT (AMPS)		INPUT WATTS
				440V	380V	
				1400	190	
2800	250	150%	0.75	0.74	400	

Dimensions in mm. Scale 1:5

SD 13



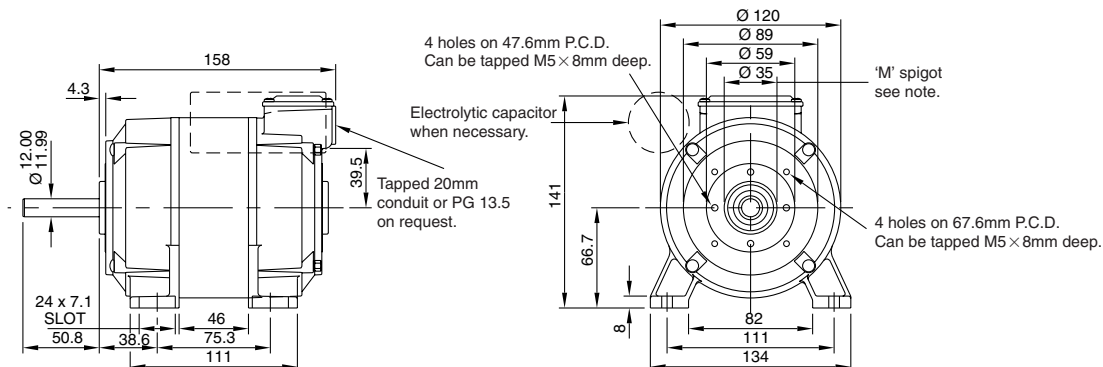
Spigot 'M' can be machined to 34.54/34.49 mm dia. concentric with shaft 0.05 mm T.I.R.
Optional shaft at lead end, 12 mm dia. x 51 mm long. Not applicable to T.E.F.C. units.

Approx. weight: SD 13 – 5.40 Kg

Induction 1 & 3 Ph

Dimensions in mm. Scale 1:5

SD 18

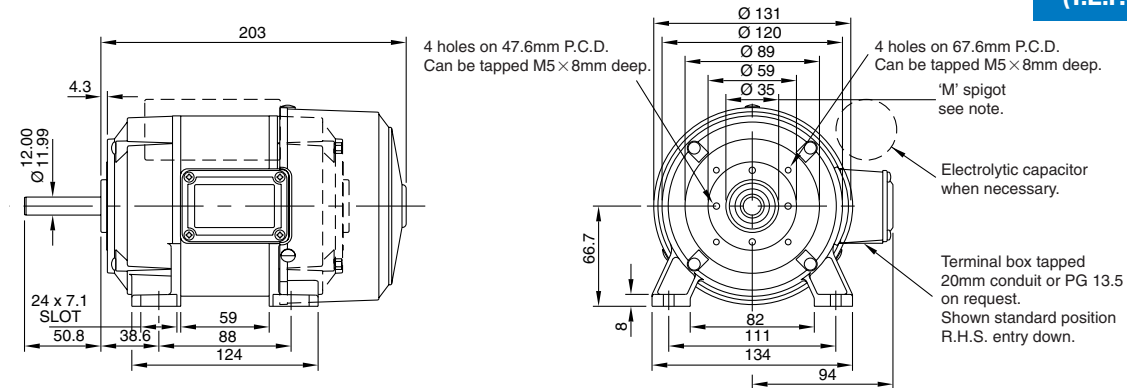


Spigot 'M' can be machined to 34.54/34.49 mm dia. concentric with shaft 0.05 mm T.I.R.
Optional shaft at terminal box end, 12 mm dia. x 51 mm long.

Approx. weight: SD 18 – 5.40 Kg

Dimensions in mm. Scale 1:5

SD 48
(T.E.F.C.)

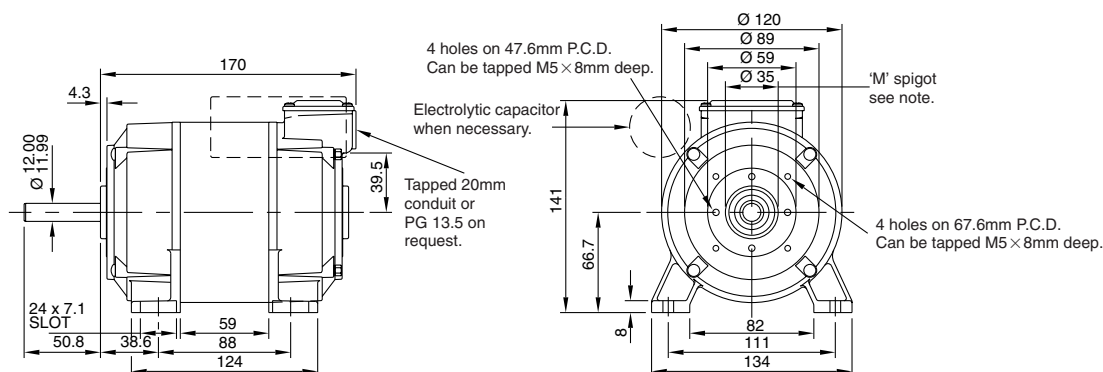


Spigot 'M' can be machined to 34.54/34.49 mm dia. concentric with shaft 0.05 mm T.I.R.

Approx. weight: SD 48 T.E.F.C. – 6.50 Kg

Dimensions in mm. Scale 1:5

SD 48



Spigot 'M' can be machined to 34.54/34.49 mm dia. concentric with shaft 0.05 mm T.I.R.
Optional shaft at terminal box end, 12 mm dia. x 51 mm long.

Approx. weight: SD 48 – 6.40 Kg