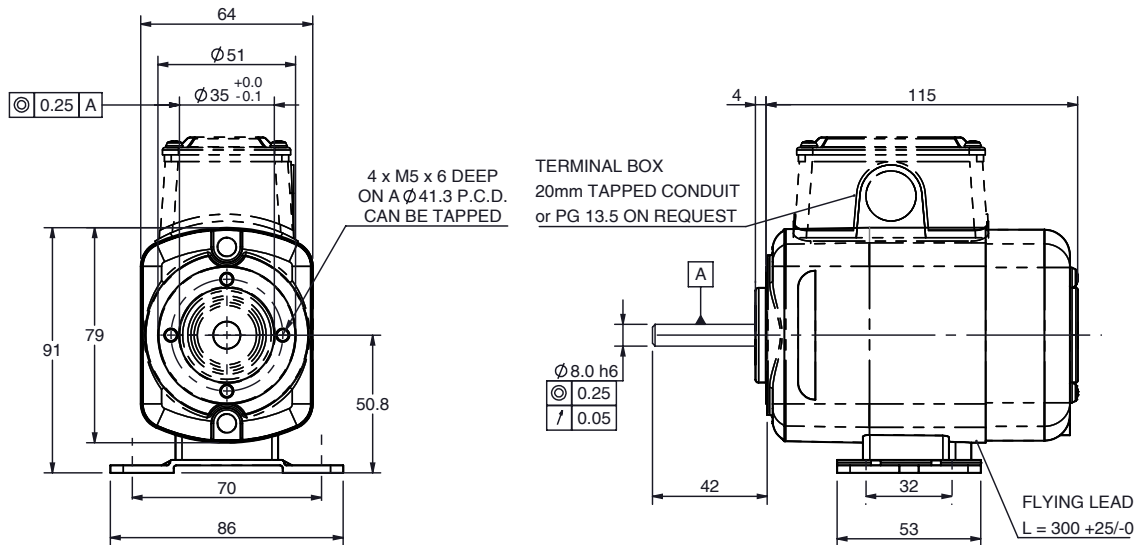


# SD1 (SHUNT) AC/DC motor

80 x 64 mm frame

all dimensions in mm

**parvalux**  
by **maxon**



## Part number key

Modular	#####
Standard	#####
Calculated data	#####

Please see our customisation options page for details on the modifications available on our products. Advice and guidance on these options are available from your local sales engineer.

**Note:** Terminal box and feet optional on this motor - please contact your local sales engineer for more information.

## Technical data

1 Part number		-	-	-	-	-
2 Minimum voltage available	<b>V</b>	12	12	12	12	24
3 Nominal power	<b>W</b>	10	15	38	50	75
4 Nominal speed	<b>rpm</b>	2000	2500	3000	4000	5000
5 Nominal continuous torque (S1)	<b>Nm</b>	0.05	0.06	0.12	0.12	0.14
6 Input current 240 V AC	<b>A</b>	0.23 <sup>1</sup>	0.25	0.36	0.44	0.60
7 Input current 220 V AC	<b>A</b>	0.25 <sup>2</sup>	0.30	0.41	0.50	0.70
8 Approximate starting current <sup>3</sup>	<b>A</b>	3 x F.L.	3 x F.L.	3 x F.L.	3 x F.L.	3 x F.L.
9 Input power	<b>W</b>	37	40	80	100	140

<sup>1</sup>120 V DC not 240 V DC <sup>2</sup>110 V DC not 220 V DC <sup>3</sup>3 x F.L. = 3 x Full Load

## Thermal data

10 Ambient temperature	<b>°C</b>	40
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## Mechanical data

11 Radial load [distance from flange]	<b>N [mm]</b>	110 [15]
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## Other data

12 Weight	<b>Kg</b>	1.22
13 Enclosure		VENT/TENC
14 IP Rating - Ventilated		IP20
15 IP Rating - TENC [with terminal box]		IP50 [IP54]
16 Insulation Class		F
17 Type		Shunt wound
18 Direction		Reversible

## Compatible products

Gearbox	Page	Brake	Page #
S Box	216	1.5 Nm	258
SWS	220	2.0 Nm	259
M Box	222		
MWS	230	<b>Encoder</b>	<b>Page #</b>
LWS	236	On request	-

## Key

Standard combination

**Modular combination**

# SD1 (SHUNT) combinations

Quickview - combination drawing and technical data

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by **maxon**

Combination drawing		Technical data							
SD1-S Box		Gear material <sup>1</sup>	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio <sup>2</sup>	:1	4	30	70	4	30	70
		Speed rpm	1250.0	166.7	71.4	1250.0	166.7	71.4	
		Nominal torque Nm	0.4	2.7	2.0	0.4	2.4	3.0	
SD1-SWS		Gear material <sup>1</sup>	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio <sup>2</sup>	:1	36	207	1364	-	-	-
		Speed rpm	138.9	24.2	3.7	-	-	-	
		Nominal torque Nm	3.6	11.0	11.0	-	-	-	
SD1-M Box		Gear material <sup>1</sup>	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio <sup>2</sup>	:1	4	30	72	4	30	72
		Speed rpm	1250.0	166.7	69.4	1250.0	166.7	69.4	
		Nominal torque Nm	0.5	2.9	4.6	0.4	2.6	4.0	
SD1-MWS		Gear material <sup>1</sup>	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio <sup>2</sup>	:1	24	120	1400	-	-	-
		Speed rpm	208.3	41.7	3.6	-	-	-	
		Nominal torque Nm	2.6	12.4	45.0	-	-	-	
SD1-LWS		Gear material <sup>1</sup>	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio <sup>2</sup>	:1	48	672	3450	-	-	-
		Speed rpm	104.2	7.4	1.4	-	-	-	
		Nominal torque Nm	4.6	61.2	100.0	-	-	-	

## Key

Standard combination / standard gear ratio

**Modular combination / modular gear ratio**

## Notes

<sup>1</sup> Comp. = Composite gears

<sup>2</sup> Full gear ratio options displayed on individual gearbox datasheets

→ Technical data displayed above calculated based on **SD1 (SHUNT) 24V 5500 rpm** motor.

→ Simplified drawings displayed above show overall envelope size of the combination. Please see individual motor and gearbox datasheets for detailed technical drawings.