



Specifications

	Direct drive 0.8 kw		Gear reduction 1.0 kw		Gear reduction 1.4 kw	
	ND	HITACHI	ND	MITSUBA	ND	MITSUBA
Type	DFKEE	S114-396	DRDFE	SM302-07	DRKIE	SM302-04
Normal output	0.8 kw		1.0 kw		1.4 kw	
Nominal voltage	12 V					
Hour rating	30 seconds					
Direction of rotation	Clockwise as viewed from pinion gear side					
Weight	4.4 kg (9.7 lb)		3.85 kg (8.5 lb)	3.4 kg (7.5 lb)	4.6 kg (10.1 lb)	3.7 kg (8.2 lb)

		Direct drive 0.8 kw	Gear reduction 1.0 kw	Gear reduction 1.4 kw
No load	Terminal voltage V	11	11.5	
	Current A	50 max.	90 max.	
	Draw speed min ⁻¹ (rpm)	5000 min.	3000 min.	3500 min.
Load	Terminal voltage V	8		8.5
	Current A	200	230 max.	350 max.
	Torque N·m (kg·m, lb·ft)	4.6 (0.46, 3.3) min.	6.5 (0.65, 4.7)	13.5 (1.35, 9.8)
	Draw speed min ⁻¹ (rpm)	1,200 min.	1,180 min.	1,000 min.
Braked	Terminal voltage V	5 at 20°C (68°F)	3.5 at 20°C (68°F)	2.4 at 20°C (68°F)
	Current draw A	380 max.	460 max.	450 max.
	Torque N·m (kg·m, lb·ft)	7.8 (0.78, 5.6) min.	11 (1.1, 8) min.	

Starter Performance Curves

— 0.8 kw
 - - - 1.0 kw
 - - - 1.4 kw

① Voltage ② Torque ③ Output ④ Starter Speed min⁻¹ (rpm)

