



22S78 \*\*\*\* .1

Electrical Data	****	210E	208E	
1 Nominal Voltage	V	18	24	Volt
2 No-Load Speed	$n_0$	7,780	8,550	rpm
3 No-Load Current	$I_0$	4.5	3.3	mA
4 Terminal Resistance	R	18.0	35.0	$\Omega$
5 Output Power	$P_{2max}$	5.5	4.6	W
6 Stall Torque	mNm	22 (3.12)	18.3 (2.6)	mNm (oz-in)
7 Efficiency	$\eta_{max}$	87	87	%
8 Max continuous speed	$n_{e max.}$	12,000	12,000	rpm
9 Max continuous torque	$M_{e max.}$	8.9 (1.1)	7.7 (1.1)	mNm (oz-in)
10 Max continuous current	$I_{e max.}$	0.41	0.29	A
11 Back-EMF Constant	$k_E$	2.30	2.80	mV/rpm
12 Torque Constant	$k_M$	22.00	26.70	mNm/A
13 Motor Regulation	$R/k^2$	37.0	49.0	$10^3/Nms$
14 Friction Torque	$T_F$	0.09 (0.02)	0.09 (0.02)	mNm (oz-in)
15 Rotor Inductance	L	0.50	0.92	mH
16 Mechanical Time Constant	$\tau_m$	7.0	7.8	ms
17 Rotor Inertia	J	1.90	1.60	g.cm <sup>2</sup>
18 Thermal Resistance (rotor/body)	$R_{th1} / R_{th2}$	5/30	5/30	$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	$\tau_{w1}/\tau_{w2}$	5/480	5/480	$^{\circ}C/W$
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		$^{\circ}C (^{\circ}F)$
	rotor	100°C (212°F)		$^{\circ}C (^{\circ}F)$
21 Shaft Load max.:		With sleeve bearings		
at 3,000 rpm (5mm from bearing)	-radial	1.5 (5.4)		N (oz)
at 3,000 rpm	-axial	100 (359.6)		N (oz)
22 Shaft play:	-radial	<0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	49 (1.73)		g (oz)

Execution		
Gearbox	Single Shaft	MR2
R22	Contact Us	Contact Us
M22	Contact Us	Contact Us
K24	Contact Us	Contact Us
K27	Contact Us	Contact Us

Max. Recommended Speed

