



23GST2R82 **** .1

Electrical Data	****	216P	216E	
1 Nominal Voltage	V	12	24	Volt
2 No-Load Speed	n_0	8,690	9,010	rpm
3 No-Load Current	I_0	90.0	60.0	mA
4 Terminal Resistance	R	2.0	6.9	Ω
5 Output Power	$P_{2max.}$	17.2	18.0	W
6 Stall Torque	mNm	80 (11.33)	87 (12.33)	mNm (oz-in)
7 Efficiency	$\eta_{max.}$	77	76	%
8 Max continuous speed	$n_{e max.}$	12,000	12,000	rpm
9 Max continuous torque	$M_{e max.}$	21 (3.12)	22 (3.12)	mNm (oz-in)
10 Max continuous current	$I_{e max.}$	1.70	0.90	A
11 Back-EMF Constant	k_E	1.36	2.62	mV/rpm
12 Torque Constant	k_M	13.00	25.00	mNm/A
13 Motor Regulation	R/k^2	12.0	11.0	$10^3/Nms$
14 Friction Torque	T_F	1.17 (0.17)	1.5 (0.22)	mNm (oz-in)
15 Rotor Inductance	L	0.08	0.30	mH
16 Mechanical Time Constant	τ_m	5.6	5.2	ms
17 Rotor Inertia	J	4.70	4.70	g.cm ²
18 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}	7/16	7/16	$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	τ_{w1}/τ_{w2}	12/460	12/460	$^{\circ}C/W$
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		$^{\circ}C (^{\circ}F)$
	rotor	155°C (311°F)		$^{\circ}C (^{\circ}F)$
21 Shaft Load max.:		With ball bearings		
at 3,000 rpm (5mm from bearing)	-radial	6.0 (21.6)		N (oz)
at 3,000 rpm	-axial	250 (899.2)		N (oz)
22 Shaft play:	-radial	<0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	80 (2.83)		g (oz)

		Execution		
Gearbox	Single Shaft	E9	HEDS	MR2
R22	2	Contact Us	Contact Us	Contact Us
M22	2	Contact Us	6	8
K27	2	Contact Us	Contact Us	Contact Us

Max. Recommended Speed

