



28LT12 \*\*\*\* .49

Electrical Data	****	219	416E	
1 Nominal Voltage	V	18	32	Volt
2 No-Load Speed	$n_0$	7,860	7,345	rpm
3 No-Load Current	$I_0$	65.0	35.0	mA
4 Terminal Resistance	R	6.2	19.9	$\Omega$
5 Output Power	$P_{2max}$	19.0	20.0	W
6 Stall Torque	mNm	63 (8.93)	65 (9.21)	mNm (oz-in)
7 Efficiency	$\eta_{max}$	72	73	%
8 Max continuous speed	$n_{e max.}$	12,000	12,000	rpm
9 Max continuous torque	$M_{e max.}$	23 (3.4)	24 (3.4)	mNm (oz-in)
10 Max continuous current	$I_{e max.}$	1.13	0.63	A
11 Back-EMF Constant	$k_E$	2.24	4.26	mV/rpm
12 Torque Constant	$k_M$	21.40	40.70	mNm/A
13 Motor Regulation	$R/k^2$	13.0	12.0	$10^3/Nms$
14 Friction Torque	$T_F$	1.39 (0.2)	1.42 (0.21)	mNm (oz-in)
15 Rotor Inductance	L	0.50	2.40	mH
16 Mechanical Time Constant	$\tau_m$	13.9	21.4	ms
17 Rotor Inertia	J	10.70	17.80	g.cm <sup>2</sup>
18 Thermal Resistance (rotor/body)	$R_{th1} / R_{th2}$	5 /12	5 /12	$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	$\tau_{w1}/\tau_{w2}$	27/760	27/760	$^{\circ}C/W$
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 sleeve 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	<0.018 (0.0007)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	135 (4.77)		g (oz)

Execution			
Gearbox	Single Shaft	Double Shaft for E9	HEDS
R22	164	319	Contact Us
M22	164	-	Contact Us
R32	49	316	Contact Us

