

## DC MOTOR / GEARMOTOR OVERLOAD-TIME CHART

(Percent Rated Power vs Maximum "On Time" at load)

% Rated Power	Time on (Max) /TC	% of Rated I
100	infinite	100%
105	3.04	102%
110	2.39	105%
115	2.04	107%
120	1.79	110%
125	1.61	112%
130	1.47	114%
140	1.25	118%
150	1.1	122%
175	0.85	132%
200	0.69	141%
250	0.51	160%
300	0.4	173%
400	0.29	200%
500	0.22	223%
600	0.18	235%
700	0.13	237%
800	0.086	227%
900	0.042	207%
1000	NOT RECOMMENDED	176%

Time Constant times "factor" (middle column above) = Time allowed (in minutes)

### Typical Thermal Time Constants by motor diameter:

Motor Diameter	Time Constant
1"-2"	20
2"-3"	30
3"-4"	40

Note:

Use 6 Thermal Time constants to allow adequate cooling once motor is stopped.