

Let's make full use of e-DPP / ETAP-DPP.

Utilizing User Defined Fields Part 1 (Topic #006) (Numerical Field)

e-DPP has 13 “User Defined Field” which users can utilize without any restriction.

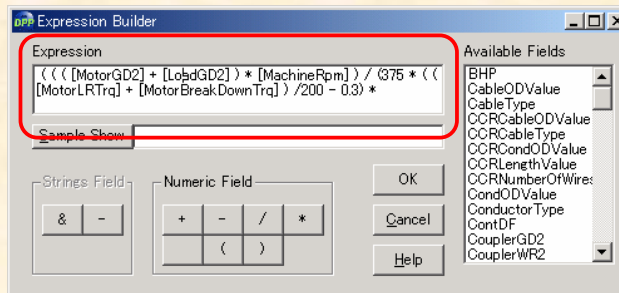
You can convert / display data which are suitable for various purposes by defining these fields in the Template Design Menu. Let us calculate motor starting time using approximate expression.

<Example> You can calculate motor starting time $t(s)$ for loads having square decreasing torque characteristics.

$$t = \frac{(GD_M^2 + GD_L^2) \times RPM}{375 \times \left\{ \frac{Tst(\%) + T_{max}(\%)}{2 \times 100} \times Tn - TI \right\}}$$

$$TI = 0.3 \times Tn$$

GD_{2M} (Motor GD_2), GD_{2L} (Motor GD_2), PRM (Rated Speed), T_{st} (Locked Rotor Torque), T_{max} (Max Torque), T_n (Motor Rated Torque) and TI (Load Torque) are all for e-DPP fields. These fields are covered by standard template DPPMotorChar so that you can copy DPPMotorChar in the Template Design menu to copy template dedicated to the user. Then you can add numerical user field UserNum_0 and define follow using Expression Builder.



When you finish Template Design and open User Template you have made, motor starting time $Ts_{Calculated}$ using approximate expression is displayed on screen.

Lock	Item No.	Cont.	Inter.	Spare	Output	Unit	Poles	$Ts_{Calculated}$	Rated(kV)
1	AM-2001	1	0	0	22,000	1	2	4.54	0.460
2	BM-1401	1	0	0	30,000	1	4	1.82	0.460
3	DM-1001A	0	1	0	7,500	1	6	1.59	0.460
4	DM-1001B	0	1	0	7,500	1	6	1.59	0.460
5	EF-2612	1	0	0	0,200	1	4	2.05	0.220
6	EF-2614	1	0	0	0,400	1	2	4.71	0.220
7	EM-2401A	1	0	0	37,000	1	4	1.47	0.460
8	EM-2401B	1	0	0	37,000	1	4	1.47	0.460
9	EM-2401C	1	0	0	37,000	1	4	1.47	0.460
10	EM-2401D	1	0	0	37,000	1	4	1.47	0.460
11	EM-2401E	1	0	0	37,000	1	4	1.47	0.460
12	EM-2401F	1	0	0	37,000	1	4	1.47	0.460
13	G-4002A-1AM	0	0	1	15,000	1	6	1.91	0.460
14	G-4002B-1AM	0	0	1	15,000	1	6	1.91	0.460
15	G-4002C-1AM	0	0	1	15,000	1	6	1.91	0.460
16	GM-4002B	1	0	0	250,000	1	4	4.39	4,000

The next issue will discuss “Using User Defined Field Part 2 (Numerical Data)”.

If you have problems or requests and need solutions, please feel free to contact:
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