

Table S2: Objective functions calculated in the case of considering phase changes.

individual	obj1 $Q_n(^{\circ}C \cdot s)$	obj2 Peak( $^{\circ}C$ )	obj3 $\Delta t(s)$
1	445.798125864575	240.000000374979	57
20	445.836849209203	240.00000028353	57
22	445.839262016199	240.00000067790	57
23	445.839270170281	240.00000006735	57
28	445.915545051896	240.00000003186	57
29	445.918071537701	240.00000044239	57
30	445.918077119023	240.00000001474	57
32	445.918077243486	240.00000001169	57
37	445.918079847786	240.000000000001	57
78	445.918079847786	240.000000000000	57