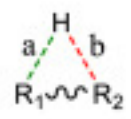
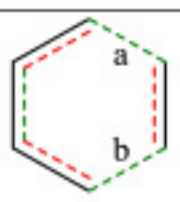
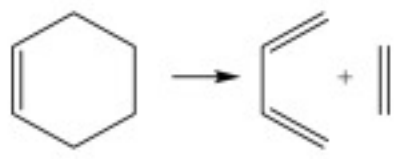
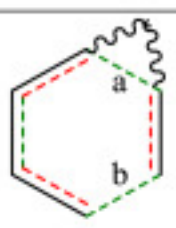
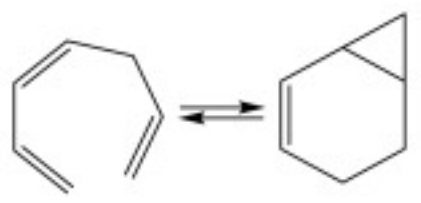
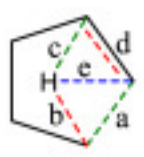
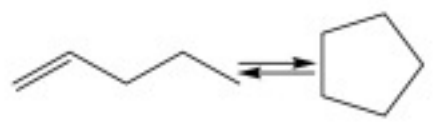
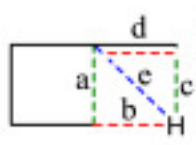
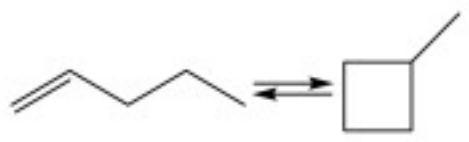
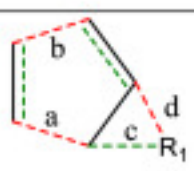
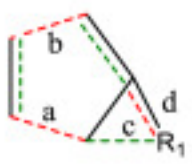
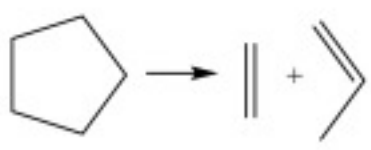
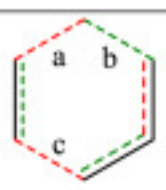
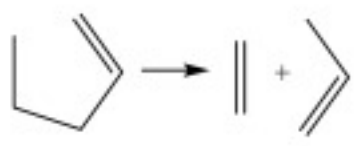
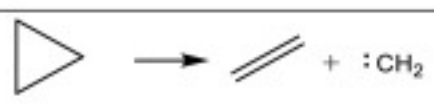
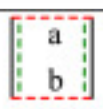
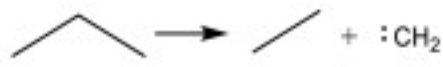
Reaction	Template geometries	Example

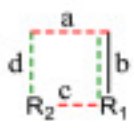
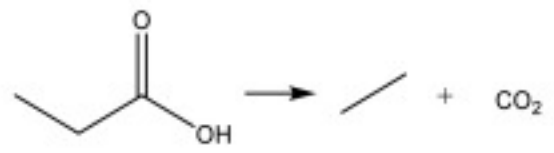
H migration in closed-shell molecules
`intra_H_migration_suprafacial`
`ketoenol`
`cpd_H_migration`
	 R1=C: a = 1.35
	R2=C: b = 1.35
	R1=O: a = 1.20
	R2=O: b = 1.20
		

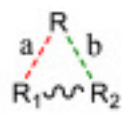
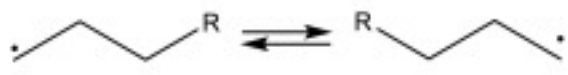
Reverse Diels-Alder `Diels_alder_addition`	 a = 2.2 b = 2.2	
Intra Diels-Alder `Intra_Diels_alder_R`	 a = 1.8 b = 2.2	

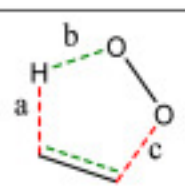
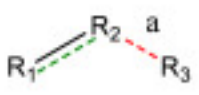
Endocyclic closed-shell cyclization
`Intra_RH_Add_Endocyclic_F`
`Intra_RH_Add_Endocyclic_R`
	 a = 2.0
	b = 1.3
	c = 1.3
	d = 1.4
	e = 1.8
		

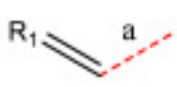
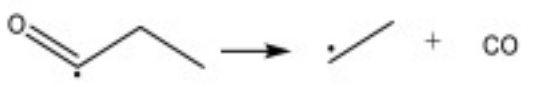
Exocyclic closed-shell cyclization
`Intra_RH_Add_Exocyclic_F`
`Intra_RH_Add_Exocyclic_R`
	 a = 2.0
	b = 1.9
	c = 1.4
	d = 1.4
	e = 1.3
		

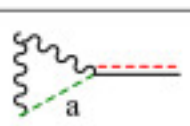
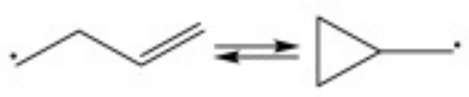
Generalized Korcek step 2 reaction `Korcek_step2`	 a = b = 2.0 R1 = H: c = d = 1.35 R1 = C,O: c = d = 1.8  a = b = 2.0 c = 1.8 d not specified	
Retro-ene reaction `Retro_Ene`	 a = 1.35 b = 1.35 c = 2.0	
Reverse 1,2 cycloaddition `r12_cycloaddition`	 a = b = scan	
Reverse 2,2 cycloaddition `r22_cycloaddition`	 a = 2.2 b = 2.2	
Reverse 1,2 R insertion `r12_insertion_R`	 Rn = C: a = 1.67; b = 2.2; c = 1.9 R1 = H: a = 1.7; b = 1.09; c = 2.2 R1 = O: a = 1.67; b = 1.8; c = 1.9	

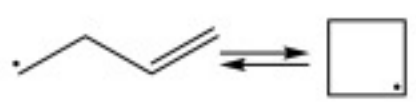
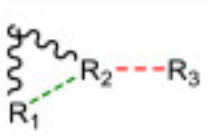
Reverse 1,3 insertion
`r13_insertion_CO2`
`r13_insertion_ROR`
`r13_insertion_RSR`
	 a = 2.0
	R1 = O: b = 1.3
	R1 = C: b = 1.45
	R2 = H: c = d = 1.3
	R2 = C, O: c = d = 2.0
		

R migration in radicals
`intra_R_migration`
`intra_OH_migration`
`intra_H_migration`
`12_shift_S_F`
`12_shift_S_R`
	 R1=C: a = 1.35
	R2=C: b = 1.35
	R1=O: a = 1.20
	R2=O: b = 1.20
		

HO_2 elimination `HO2_Elimination_from_PeroxyRadical`	 a = 1.3 b = 1.3 c = 2.0	
Radical β-scission `R_Addition_MultipleBond`	 R_1-R_2-R_3 C-C-C: a = 2.20 C-C-H: a = 1.79 C-C-O: a = 2.04 O-C-C: a = 2.12 O-C-H: a = 1.84 O-C-O: a = 2.04 C-O-C: a = 2.04 C-O-H: a = 1.42 C-O-O: a = 2.04 O-O-C: a = 2.04	

Radical α-scission
`R_Addition_COm3_R`
`R_Addition_CSm3_R`
	 a = 2.2	

Exocyclic intramolecular radical addition
`Intra_R_Add_ExoTetCyclic_F`
`Intra_R_Add_Exocyclic_F`
	 a = 2.2	

Endocyclic intramolecular radical addition `Intra_R_Add_Endocyclic_F`	 a = 2.2	
Cyclization-elimination `Cyclic_Ether_Formation`	 Ri=C, Rj=C: Ri-Rj = 1.80 Ri=C, Rj=O: Ri-Rj = 1.68 Ri=C, Rj=H: Ri-Rj = 1.31 Ri=O, Rj=O: Ri-Rj = 1.78 Ri=O, Rj=H: Ri-Rj = 1.14	
Homolytic scission (note that this reaction type does not include a saddle point search, KinBot only lists the energies of the products. Invoked with the `homolytic_scissions` keyword)