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MW $\text{C}_3\text{H}_3\text{F}_5$

1,1,1,2,2-Pentafluoropropane

 C_s
 $\text{F}_3\text{C}-\text{CF}_2-\text{CH}_3$

r_0	\AA^a	θ_0	deg^a
C(1)–C(2)	1.531(5)	C(1)–C(2)–C(3)	115.7(5)
C(2)–C(3)	1.534 ^b	C(2)–C(3)–H(a)	108.0 ^b
C(1)–F(s)	1.330 ^b	C(2)–C(3)–H(s)	109.9 ^b
C(1)–F(a)	1.338 ^b	C(2)–C(1)–F(s)	111.1 ^b
C(2)–F	1.349(5)	C(2)–C(1)–F(a)	109.9 ^b
C(3)–H(s)	1.091 ^b	C(1)–C(2)–F	106.9 ^b
C(3)–H(a)	1.090 ^b	F–C(2)–F	107.7 ^b

The barrier height to internal rotation of CF_3 was determined to be $V_3 = 2.86 \pm 0.72 \text{ kcal mol}^{-1}$.

^a) Uncertainties were not estimated in the original paper.

^b) Assumed.

Fuchigami, K., Tatamitani, Y., Liu, B., Shimada, J., Oe, S., Ogata, T.: J. Mol. Struct. **599** (2001) 305.

