



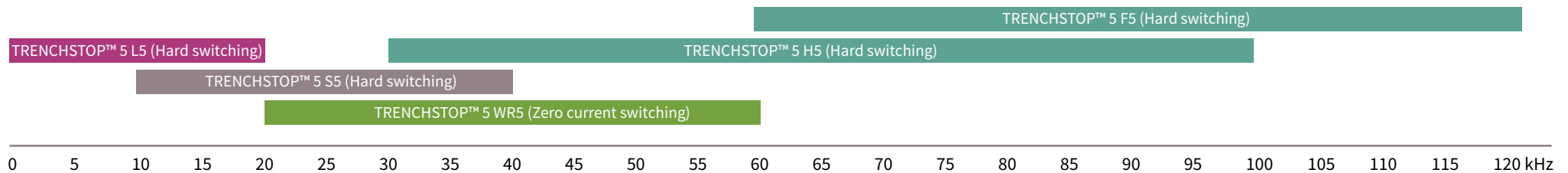


Selection Guide

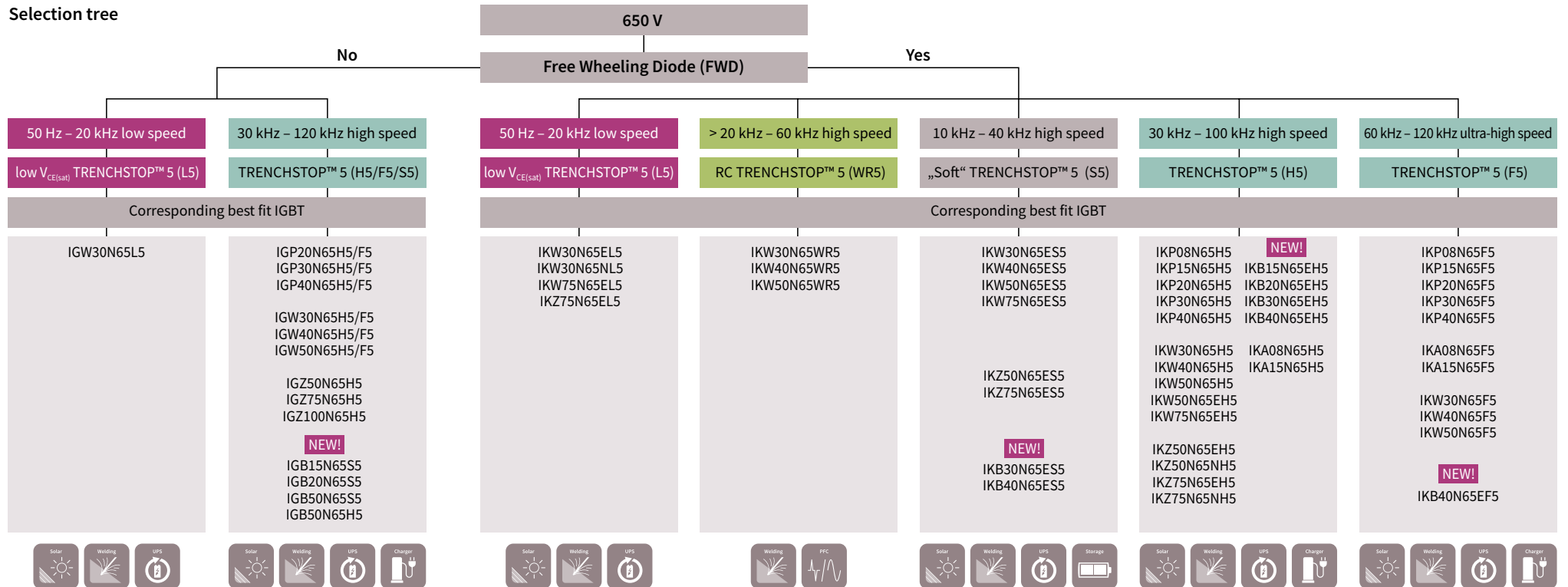
TRENCHSTOP™ 5 Selection Guide

Product family	Value	Industrial applications focus	Applications
TRENCHSTOP™ 5 L5	Best-in-class low $V_{CE(sat)}$ IGBT › Low $V_{CE(sat)}$ – 1.05 V at 25°C › Best trade-off $V_{CE(sat)}$ versus E_{ts} for frequencies below 20 kHz › High thermal stability of electrical parameters	› Ultra-low frequency converters › 3-level inverter type I NPC 1 and NPC 2 › Modified HERIC inverter › AC output (Aluminum/Magnesium welding)	
TRENCHSTOP™ 5 S5	Best-in-class ease of use IGBT › Low $V_{CE(sat)}$ of 1.35 V at 25°C › Soft current fall characteristic with no tail current, low EMI › Allows to reduce circuit complexity – single R_G , no Zener diode, no gate capacitor, no snubber capacitor	› Medium frequency converters › Multilevel inverter stages › Output stages › PFC	
TRENCHSTOP™ 5 H5/F5	Best-in-class high frequency IGBT › Cross over to SuperJunction MOSFETs › Highest efficiency, especially under light load conditions › Lowest switching losses in low stray inductance environment	› High frequency converters › Multilevel inverter stages › Output stages › PFC and battery charger	
TRENCHSTOP™ 5 WR5	Price optimized, application specific IGBT for resonant topologies Zero Current Switching (ZCS) › Optimized full rated hard switching turn-off typically found in welding › Excellent R_G controllability › Soft recovery plus low Q_{rr} for diode	› Medium frequency converters › Zero current switching › PFC	



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Selection tree



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