

**Software Controlled Switched Reluctance Motors**

Date reviewed: 05/04/2020

Description of Technology		Energy Saving Opportunity	
<p>These are high rotor pole switched reluctance motors that are controlled by a proprietary software drive. They are intended as a replacement for induction motors at constant speed or with variable frequency drives.</p>	Sector(s):	<input type="checkbox"/> Residential	<input checked="" type="checkbox"/> Commercial & Industrial
	Applicability Criteria:	1-5hp motors	
	Efficiency Improvement:	Higher efficiency than induction motors	
	Energy (%) Savings Potential:	Variable	
	Demand (%) Reduction Potential:	Variable	
Strengths		Weakness	
<ul style="list-style-type: none"> <li>Significant reduction in energy usage for the same loads</li> <li>Motor lifetime may be longer</li> </ul>		<ul style="list-style-type: none"> <li>Limited number of vendors</li> <li>Requires combined purchase of drive and motor</li> <li>May result in increased noise</li> <li>No improvement in power factor compared to induction</li> </ul>	
Third Party Analysis/ Previous MTAC Reviews		Suppliers Known to MTAC	MTAC Status
<ul style="list-style-type: none"> <li>Southern Cal Edison, Emerging Products ET15SCE1330 (2018)</li> <li>NREL, Technical Report NREL/TP-5500-72476 (2019)</li> <li>Energy Trust of Oregon, Technical Analysis Study, PE14314 (2018)</li> </ul>		Software Motor Company	Acknowledged to have energy savings potential and referred to individual PA for their own EE program consideration
Market Development Issues			
Cost:	\$Unknown		
Market Risk and Barriers:	Drive must be included, market inertia		
Time to Market:	Currently on market		
Simple Pay-back: (Years)	Unknown		
			