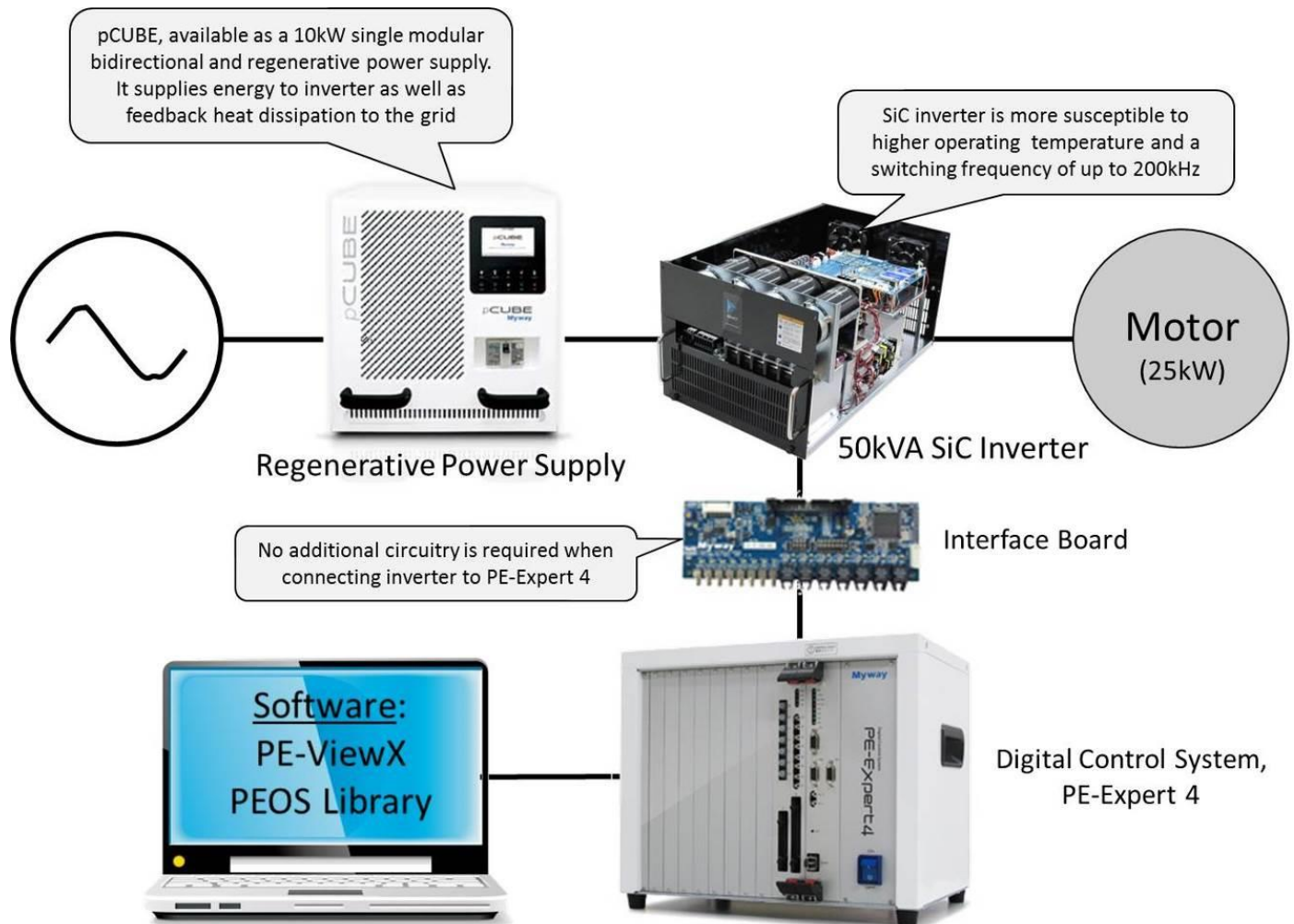# Title: 25kVA Motor Development Set Up (1)

Motor evaluation is carried out using Myway Plus Digital Control System, PE-Expert 4, SiC inverter and regenerative power supply, pCUBE. The gate signals are sent into SiC inverter to drive the IPM, which in turn provide electric power for the motor. The heat dissipated will be feedbacked into the grid to reduce energy consumption.

pCUBE, available as a 10kW single modular bidirectional and regenerative power supply. It supplies energy to inverter as well as feedback heat dissipation to the grid

SiC inverter is more susceptible to higher operating temperature and a switching frequency of up to 200kHz

Regenerative Power Supply

50kVA SiC Inverter

Motor (25kW)

No additional circuitry is required when connecting inverter to PE-Expert 4

Interface Board

Software: PE-ViewX PEOS Library

Digital Control System, PE-Expert 4

Product Information

Product Name	Model No	Main Specifications
PE-Expert 4 Rack	MWPE4-RACK12	
PE-Expert 4 DSP Board	MWPE4-C6657	DSP TMS320C6657 (1.25GHz)
PE-Expert 4 PEV	MWPE4-PEV	6ch PWM, 8ch AD, 14bit
Integrated Development Environment	MWPE-VIEW-X	Windows 7(64bit/32bit), Windows 8(64bit) Memory 2Gb and above
PE-Expert 4 Power Electronics OS	MWPE-EXP4-LIB	
Regenerative Power Supply	MWBFP-1008-C/MWBFP-1250-C	MWBFP-1008-C: 80V, 250A, 10kW MWBFP-1250-C: 500V, 35A, 11kW
50kVA SiC Inverter	MWINV-5044-SIC	50kVA, AC72.2A, ~200kHz
Interface Board	MWPE4-IFRX4-PRO	